

DATE 14-Dec-17

Cascade Commodity Consulting Company

All information is provided as a reference only and not intended to be used for trading.

US Basis and Flat Price Values FOB Vessel

Month	Futures	CBOT	KCBT	MGE	Matiff Euro/mt	Euro	Corn CBOT	\$ AUD	Beans CBOT
Sep-18	U	457.25	462.50	623.00	167.50	1.20	372.00	0.7670	994.00
Dec-18	Z	475.50	484.75	633.75	170.50	1.21	380.75	0.7668	987.50
Mar-18	H	418.25	418.25	617.00	160.00	1.19	348.50	0.7671	978.75
May-18	K	430.75	431.25	624.50	164.00	1.19	356.75	0.7670	989.75
Jul-18	N	443.50	447.50	628.75	167.50	1.20	365.00	0.7670	999.50

Gulf Export		HRW				HRS		SRW	LAKES		
Basis (ct/bu)	Futures	10.0%	11.0%	11.5%	12.0%	13.0%	13.5%		13%	HRS 13.5%	14%
	New Crop	-110.00	-80.00	-50.00		TX Gulf +0					
	Old Crop	-155.00	-120.00	-60.00		-20.00	14% +30		0.00		20.00
Shipment	Futures	Basis NOLA				HRS		SRW	LAKES		
Jun	N	95.00	125.00	155.00	205.00	-	-	50.00	-	-	-
Jul	N	95.00	125.00	155.00	205.00	-	-	55.00	-	-	-
Aug	U	85.00	115.00	145.00	195.00	-	-	-	-	-	-
Sep	U	90.00	120.00	150.00	200.00	-	-	-	-	-	-
Oct	Z	-	-	-	-	-	-	-	-	-	-
Nov	Z	-	-	-	-	-	-	-	-	-	-
Dec	Z	-	-	-	-	-	-	-	-	-	-
Jan	H	80.00	115.00	175.00	235.00	120.00	140.00	70.00	-	-	-
Feb	H	80.00	115.00	175.00	235.00	120.00	140.00	65.00	-	-	-
Mar	H	80.00	115.00	175.00	235.00	120.00	140.00	65.00	-	-	-
Apr	K	75.00	110.00	170.00	230.00	120.00	140.00	55.00	-	-	-
May	K	75.00	110.00	170.00	230.00	120.00	140.00	60.00	-	-	-
Flat Price FOB Vessel		HRW				HRS		SRW	LAKES		
Shipment	Futures	10.0%	11.0%	11.5%	12.0%	13.0%	13.5%		13%	HRS 13.5%	14%
Jun	N	199.33	210.36	221.38	239.75	-	-	181.33	-	-	-
Jul	N	199.33	210.36	221.38	239.75	-	-	183.17	-	-	-
Aug	U	201.17	212.19	223.22	241.59	-	-	-	-	-	-
Sep	U	203.01	214.03	225.06	243.43	-	-	-	-	-	-
Oct	Z	-	-	-	-	-	-	-	-	-	-
Nov	Z	-	-	-	-	-	-	-	-	-	-
Dec	Z	-	-	-	-	-	-	-	-	-	-
Jan	H	183.08	195.94	217.98	240.03	270.80	278.15	179.40	-	-	-
Feb	H	183.08	195.94	217.98	240.03	270.80	278.15	177.56	-	-	-
Mar	H	183.08	195.94	217.98	240.03	270.80	278.15	177.56	-	-	-
Apr	K	186.01	198.88	220.92	242.97	273.56	280.91	178.48	-	-	-
May	K	186.01	198.88	220.92	242.97	273.56	280.91	180.32	-	-	-

PNW CASH BASIS FOB (S&T+S&F) US c/bu		HRW				NS 50 DHV			SWW	CANADA CASH BASIS	
Basis (ct/bu)	Futures	10.50%	11.0%	11.5%	12.0%	13%	13.5%	14.0%	Max 10.5% pro	Vancouver Canada	Vancouver Canada
	Old Crop					-25.00	-20.00	+25 14.5%			
	New Crop	-60.00	-30.00		25.00				ords-5 ct	#2 13.5%	#2 13.8%
										13.0% -30	
Shipment	Futures	20 ct/bu prem DNS				HRS			SWW	Vancouver Canada	Vancouver Canada
Jun	N	85.00	115.00	145.00	170.00	110.00	115.00	135.00	85	-	120.00
Jul	N	85.00	115.00	145.00	170.00	110.00	115.00	135.00	85	-	-
Aug	U	-	-	-	-	-	-	-	-	-	-
Sep	U	-	-	-	-	-	-	-	-	-	-
Oct	Z	-	-	-	-	-	-	-	-	-	-
Nov	Z	-	-	-	-	-	-	-	-	-	-
Dec	Z	-	-	-	-	-	-	-	-	-	-
Jan	H	100.00	130.00	160.00	185.00	110.00	115.00	135.00	110	85.00	110.00
Feb	H	100.00	130.00	160.00	185.00	110.00	115.00	135.00	110	85.00	110.00
Mar	H	105.00	135.00	165.00	190.00	110.00	115.00	135.00	110	90.00	115.00
Apr	K	95.00	125.00	155.00	180.00	110.00	115.00	135.00	95	85.00	110.00
May	K	95.00	125.00	155.00	180.00	110.00	115.00	135.00	95	90.00	115.00
Flat Price FOB Vessel (USD/mt)		HRW				HRS			SWW	Vancouver Canada	Vancouver Canada
Shipment	Futures	10.50%	11.0%	11.5%	12.0%	13%	13.5%	14%	12%	#2 13.5%	#2 13.8%
Jun	N	195.66	206.68	217.71	226.89	271.44	273.28	280.63	194.19	265.93	275.12
Jul	N	195.66	206.68	217.71	226.89	271.44	273.28	280.63	194.19	-	-
Aug	U	-	-	-	-	-	-	-	-	-	-
Sep	U	-	-	-	-	-	-	-	-	-	-
Oct	Z	-	-	-	-	-	-	-	-	-	-
Nov	Z	-	-	-	-	-	-	-	-	-	-
Dec	Z	-	-	-	-	-	-	-	-	-	-
Jan	H	190.42	201.45	212.47	221.66	267.13	268.96	276.31	194.10	257.94	267.13
Feb	H	190.42	201.45	212.47	221.66	267.13	268.96	276.31	194.10	257.94	267.13
Mar	H	192.26	203.28	214.31	223.49	267.13	268.96	276.31	194.10	259.78	268.96
Apr	K	193.36	204.39	215.41	224.60	269.88	271.72	279.07	193.18	260.70	269.88
May	K	193.36	204.39	215.41	224.60	269.88	271.72	279.07	193.18	262.53	271.72

DNS vs. HRW spot market Chicago gateway							Spring Wheat vs HRW Basis Chicago gateway						
Spot	DNS 14%	HRW 14%	DNS 13.5%	HRW 13%	DNS 13%	HRW 12%	J/F/M	DNS 14%	HRW 14%	DNS 13.5%	HRW 13%	DNS 13%	HRW 12%
Basis	100.00	267.00	75.00	263.00	50.00	222.00	Basis	125.00	275.00	85.00	275.00	50.00	230.00
Futures	617.00	418.25	617.00	418.25	617.00	418.25	Futures	617.00	418.25	617.00	418.25	617.00	418.25
Del Chicago	717.00	685.25	692.00	681.25	667.00	640.25	Del Chicago	742.00	693.25	702.00	693.25	667.00	648.25

Spring Wheat + HRW Milling Blend						
14% Protein Blend						
	Spot Basis	Futures	Flat Price	<u>Blend</u>	Blended Price	Basis MW
15% HRS	145	617.00	762.00	2.5	716.07	99.07
11.5% HRW	183	418.25	601.25	1		
14% HRS Comparison	100	617.00	717.00			
Blended Discount (ct/bu)	0.93					

13% Protein Blend (Western Mills)						
	Spot Basis	Futures	Flat Price	<u>Blend</u>	Blended Price	Basis MW
14% HRS	100	617.00	717.00	1.5	670.70	53.70
11.5% HRW	183	418.25	601.25	1		
13% HRS Comparison	50	617.00	667.00			
Blended Discount (ct/bu)	-3.70					

13% Protein Blend (Eastern Mills)						
	Spot Basis	Futures	Flat Price	<u>Blend</u>	Blended Price	Basis MW
14% HRS	100	617.00	717.00	2	664.08	47.08
11.0% HRW	140	418.25	558.25	1		
13% HRS Comparison	50	617.00	667.00			
Blended Discount (ct/bu)	2.92					

14-Dec-17

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US Grain Basis and Flat Price Values FOB Vessel

Month	Futures	CBOT	KCBT	MGE	Matiff Euro/mt	Euro	Corn CBOT	Beans CBOT
Mar-18	H	418.25	418.25	617.00	160.00	1.19	348.50	978.75
May-17	K	430.75	431.25	624.50	164.00	1.19	356.75	989.75
Jul-18	N	443.50	447.50	628.75	167.50	1.20	365.00	999.50
Sep-18	U	457.25	462.50	623.00	167.50	1.20	372.00	994.00
Dec-17	Z	475.50	484.75	633.75	170.50	1.21	380.75	987.50

Basis (ct/bu)		US GULF			Basis (ct/bu)		PNW		
		Corn #2 YC	Sorghum	Soybeans			Corn #2 YC	Corn #3 YC	Soybeans
Shipment	Futures	CBOT			Shipment	Futures	CBOT		
Dec	Z	50.00	130.00	45.00	Dec	Z	75.00	75.00	80.00
J/F/M	H	50.00	130.00	50.00	J/F/M	H	75.00	75.00	80.00
A/M	K	45.00	130.00	50.00	A/M	K	70.00	70.00	80.00
Flat Price FOB Vessel (USD/mt)		US GULF			Flat Price FOB Vessel (USD/mt)		PNW		
Shipment	Futures	Corn #2 YC	Sorghum	Soybeans	Shipment	Futures	Corn #2 YC	Corn #3 YC	Soybeans
Dec	Z	169.58	201.07	379.38	Dec	Z	179.42	179.42	392.24
J/F/M	H	156.88	188.38	378.00	J/F/M	H	166.72	166.72	389.02
A/M	K	158.16	191.62	382.04	A/M	K	168.00	168.00	393.07

Cash and Carrying Charges

BNSF Rail: Cash Carrying Charges to Warehousemen						
HRW 11%	Jan	Mar	May	Jul	Sep	Nov
Basis ct/bu	100.00	110.00	100.00	95.00	90.00	90.00
Futures ct/bu	418.25	418.25	431.25	447.50	462.50	484.75
Flat Price	518.25	528.25	531.25	542.50	552.50	574.75
Rail Freight	-1.35	-1.35	6.08	2.70	1.35	-6.08
Delivered Gulf	516.90	526.90	537.33	545.20	553.85	568.67
Cash Carry	Storage Revenue ct/bu					
Jan-Mar	10.00					
Jan-May	20.4					
Jan-Jul	28.30					
Jan-Sep	36.95					
Jan-Nov	51.77					
Cash Carry	Monthly Storage Revenue ct/bu					
Jan-Mar	5.00					
Jan-May	5.1					
Jan-Jul	4.72					
Jan-Sep	4.62					
Jan-Nov	5.18					

SRW	Jan	Mar	May	Jul	Sep	Nov
Basis ct/bu	60.00	60.00	55.00	50.00	45.00	45.00
Futures ct/bu	418.25	418.25	430.75	443.50	457.25	475.50
Flat Price	478.25	478.25	485.75	493.50	502.25	520.50
Barge Freight	-28.80	-25.80	-25.20	-25.80	-30.00	-33.00
FOB Shipper	449.45	452.45	460.55	467.70	472.25	487.50
Cash Carry	Storage Revenue ct/bu					
Jan-Mar	3.00					
Jan-May	11.1					
Jan-Jul	18.25					
Jan-Sep	22.80					
Jan-Nov	38.05					
Cash Carry	Monthly Storage Revenue ct/bu					
Jan-Mar	1.50					
Jan-May	2.8					
Jan-Jul	3.04					
Jan-Sep	2.85					
Jan-Nov	3.81					

UP Rail: Cash Carrying Charges to Warehousemen						
HRW 11%	Jan	Mar	May	Jul	Sep	Nov
Basis ct/bu	100.00	110.00	100.00	95.00	90.00	90.00
Futures ct/bu	418.25	418.25	431.25	447.50	462.50	484.75
Flat Price	518.25	528.25	531.25	542.50	552.50	574.75
Rail Freight	4.73	4.73	5.41	4.73	3.38	-3.38
Delivered Gulf	522.98	532.98	536.66	547.23	555.88	571.37
Cash Carry	Storage Revenue ct/bu					
Jan-Mar	10.00					
Jan-May	13.7					
Jan-Jul	24.25					
Jan-Sep	32.90					
Jan-Nov	48.39					
Cash Carry	Monthly Storage Revenue ct/bu					
Jan-Mar	5.00					
Jan-May	3.4					
Jan-Jul	4.04					
Jan-Sep	4.11					
Jan-Nov	4.84					

Domestic Freight				
Rail Freight	Rail Freight	Barge Freight	Barge Freight	Rail Freight
	BN Shuttle	Lower OH R.	Il. River	UP Shuttle
	\$bu/car over tariff	% of tariff	% of tariff	\$bu/car over tariff
	3700	12.00	17.30	3700
Jun '18	-100	210%	270%	-175
Jul '18	-100	215%	270%	-175
Aug '18	-50	225%	285%	-125
Sep '18	-50	250%	300%	-125
Oct '18	250	300%	350%	150
Nov '18	225	275%	325%	125
Dec '17	25	240%	285%	-325
Jan '18	50	240%	305%	-175
Feb '18	50	225%	295%	-175
Mar '18	50	215%	280%	-175
Apr '18	-225	210%	270%	-200
May '18	-225	210%	270%	-200
Cents/Bushel Equivalent				
Jun '18	-2.70	25.20	46.71	-4.73
Jul '18	-2.70	25.80	46.71	-4.73
Aug '18	-1.35	27.00	49.31	-3.38
Sep '18	-1.35	30.00	51.90	-3.38
Oct '18	6.76	36.00	60.55	4.05
Nov '18	6.08	33.00	56.23	3.38
Dec '17	0.68	28.80	49.31	-8.78
Jan '18	1.35	28.80	52.77	-4.73
Feb '18	1.35	27.00	51.04	-4.73
Mar '18	1.35	25.80	48.44	-4.73
Apr '18	-6.08	25.20	46.71	-5.41
May '18	-6.08	25.20	46.71	-5.41

Corn	Jan	Mar	May	Jul	Sep	Nov
Basis ct/bu	36.00	36.00	35.00	31.00	32.00	30.00
Futures ct/bu	348.50	348.50	356.75	365.00	372.00	380.75
Flat Price	384.50	384.50	391.75	396.00	404.00	410.75
Barge Freight	-52.77	-48.44	-46.71	-46.71	-51.90	-56.23
FOB Shipper	331.74	336.06	345.04	349.29	352.10	354.53
Cash Carry	Storage Revenue ct/bu					
Jan-Mar	4.32					
Jan-May	13.30					
Jan-Jul	17.55					
Jan-Sep	20.37					
Jan-Nov	22.79					
Cash Carry	Monthly Storage Revenue ct/bu					
Jan-Mar	2.16					
Jan-May	3.33					
Jan-Jul	2.93					
Jan-Sep	2.55					
Jan-Nov	2.28					

14-Dec-17

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Foreign Basis and Flat Price Values FOB Vessel

Month	Futures	CBOT	KCBT	MGE	Matiff Euro/mt	Euro	\$ AUD	AUW
Mar-18	H	418.25	418.25	617.00	160.00	1.1875	0.7671	227.25
May-18	K	430.75	431.25	624.50	164.00	1.1945	0.7670	227.25
Jul-18	N	443.50	447.50	628.75	167.50	1.2021	0.7670	227.75
Sep-18	U	457.25	462.50	623.00	167.50	1.2021	0.7670	228.00
Dec-18	Z	475.50	484.75	633.75	170.50	1.2099	0.7668	227.00

Basis (ct/bu)		Argentine	S. Australia	S. Australia	W. Aust.	FSU	French	German	Baltic	
Shipment	Futures	11.5% KCBT Upriver	APW 10.5% CBOT	AH 11.5% CBOT	W. Aust. APW 10.5% CBOT	ASW 9% CBOT	12.50% Matiff Feed -8 Rouen	11.50% Matiff	12.50% Matiff	12.50% Matiff
Jun	N	-	-	-	-	-	-	-	-	
Jul	N	-	-	-	-	-	-	-	-	
Aug	U	-	-	-	-	-	-	-	-	
Sep	U	-	-	-	-	-	-	-	-	
Oct	Z	-	-	-	-	-	-	-	-	
Nov	Z	-	-	-	-	-	-	-	-	
Dec	Z	-	-	-	-	-	-	-	-	
Jan	H	55	198	249	208	189	1	1.00	7.00	6.00
Feb	H	66	200	252	211	192	2	2.00	9.00	8.00
Mar	H	74	203	255	214	195	3	3.00	11.00	10.00
Apr	K	70	185	237	196	177	-2	-	8.00	7.00
May	K	-	188	239	199	180	-	-	-	-
Flat Price FOB Vessel (USD/mt)		Argentine	S. Australia	S. Australia	W. Aust.	FSU	French	German	Baltic	
Shipment	Futures	11.5% KCBT	APW 10.5% CBOT	AH 11.5% CBOT	W. Aust. APW 10.5% CBOT	ASW 9% CBOT	12.50% Matiff	11.50% Matiff	12.50% Matiff	12.50% Matiff
Jun	N	-	-	-	-	-	-	-	-	
Jul	N	-	-	-	-	-	-	-	-	
Aug	U	-	-	-	-	-	-	-	-	
Sep	U	-	-	-	-	-	-	-	-	
Oct	Z	-	-	-	-	-	-	-	-	
Nov	Z	-	-	-	-	-	-	-	-	
Dec	Z	-	-	-	-	-	-	-	-	
Jan	H	174.00	226.25	245.25	230.25	223.25	191.00	191.19	198.31	197.13
Feb	H	178.00	227.25	246.25	231.25	224.25	192.00	192.38	200.69	199.50
Mar	H	181.00	228.25	247.25	232.25	225.25	193.00	193.56	203.06	201.88
Apr	K	184.00	226.25	245.25	230.25	223.25	194.00	195.89	205.45	204.25
May	K	-	227.25	246.25	231.25	224.25	-	-	-	-

Basis (ct/bu)		Canada T. B.	St. Law	Vancouver	Vancouver	Vancouver
Shipment	Futures	13.50% MGEX	#2, 13.5% MGEX	Canada #2 13.0% -35.00	Canada #2 13.5% #2 13.5%	Canada #2 13.8% 25.00
Jun	N	35.00	95.00	60.00	95.00	120.00
Jul	N	-	-	-	-	-
Aug	U	-	-	-	-	-
Sep	U	-	-	-	-	-
Oct	Z	-	-	-	-	-
Nov	Z	-	-	-	-	-
Dec	Z	-	-	-	-	-
Jan	H	-	80.00	50.00	85.00	110.00
Feb	H	-	85.00	50.00	85.00	110.00
Mar	H	-	90.00	55.00	90.00	115.00
Apr	K	20.00	80.00	50.00	85.00	110.00
May	K	25.00	85.00	55.00	90.00	115.00
Flat Price FOB Vessel (USD/mt)		Canada T. B.	St. Law	Vancouver	Vancouver	Vancouver
Shipment	Futures	13.00% MGEX	#2, 13% MGEX	Canada #2 13.0%	Canada #2 13.5%	Canada #2 13.8%
Jun	N	243.89	265.93	253.07	265.93	275.12
Jul	N	-	-	-	-	-
Aug	U	-	-	-	-	-
Sep	U	-	-	-	-	-
Oct	Z	-	-	-	-	-
Nov	Z	-	-	-	-	-
Dec	Z	-	-	-	-	-
Jan	H	-	256.10	245.08	257.94	267.13
Feb	H	-	257.94	245.08	257.94	267.13
Mar	H	-	259.78	246.92	259.78	268.96
Apr	K	236.81	258.86	247.84	260.70	269.88
May	K	238.65	260.70	249.67	262.53	271.72

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14-Dec-17

Based upon 8 kmt/day load & 5 kmt/day unload, 3.75% commission, SHEX EIU

Destination Country (Port) (Vessel Size)	Wheat Freight												
	Origin (Port)												
	S. Aust. (Adelaide)	W. Aust. (Kwinana)	PNW (Portland)	Gulf (New Orleans)	Gulf (Houston)	Canada (Vancouver)	Canada (Montreal)	Russia (Novo)	Germany (Hamburg)	Poland (Gdansk)	France (La Pallice)	Argentina (UP+BB)	
China (Shanghai) (60 kmt)	\$20	\$17	\$24	\$43	\$42	\$19	\$34	-	-	-	-	-	
Japan (Tokyo) (40 kmt)	\$16	\$17	\$25	\$44	\$43	\$23	\$39	-	-	-	-	-	
Malaysia (Singapore) (50 kmt)	\$17	\$15	\$26	\$40	\$39	\$24	\$35	\$29	\$29	\$29	\$31	\$40	
Indonesia (Jakarta) (50 kmt)	\$16	\$14	\$26	\$41	\$40	\$24	\$36	\$30	\$30	\$29	\$32	\$40	
Mexico (Veracruz) (30 kmt)	-	-	\$29	\$16	\$15	\$27	\$21	\$21	\$18	\$17	\$16	\$26	
Colombia (Cartagena) (30 kmt)	-	-	-	\$21	\$20	\$25	\$24	\$19	\$16	\$15	\$14	\$23	
Peru (Callao) (30 kmt)	-	-	-	\$25	\$24	\$19	\$31	\$36	\$34	\$33	\$31	\$26	
Brazil (Fortaleza) (30 kmt)	\$30	\$29	\$22	\$19	\$17	\$21	\$20	\$17	\$16	\$15	\$15	\$17	
Egypt (Damietta) (60 kmt)	\$21	\$20	\$28	\$28	\$27	-	-	\$13	\$18	\$19	\$16	\$31	
Saudi Arabia (Jeddah) (60 kmt)	\$21	\$19	\$29	\$33	\$32	\$25	\$26	-	\$21	\$21	-	-	
Saudi Arabia (Dammam) (60 kmt)	\$27	\$24	\$36	\$47	\$46	\$33	\$30	-	\$26	\$25	-	-	
Algeria (Algiers) (30 kmt)	-	-	-	\$35	\$34	-	-	-	\$23	\$23	\$19	\$39	
Morocco (Casa Blanca) (30 kmt)	-	-	-	\$31	\$30	-	-	-	\$21	\$23	\$18	\$38	
Nigeria (Lagos) (40 kmt)	\$21	\$21	\$29	\$24	\$23	\$15	\$28	\$19	\$19	\$19	\$17	\$22	
South Africa (Cape Town) (40 kmt)	\$13	\$13	\$30	\$24	\$23	\$29	\$25	\$25	\$21	\$21	\$19	\$18	

Destination Protein/Class	C & F Rates														
	Origin														
	S. Aust. APW	W. Aust. APW	W. Aust. ASW	PNW SWW	PNW HRW	PNW HRS	Gulf SRW	Gulf 10.5% HRW	Vancouver 13.5%	Montreal 13.5%	Russia 12.5%	Germany 12.5%	Poland 12.5%	France 11%	Argentina 11.5%
FOB	\$226	\$230	\$223	\$193	\$215	\$272	\$178	\$186	\$261	\$259	\$194	\$205	\$204	\$196	\$184
China (Shanghai) (60 kmt)	\$246	\$247	\$240	\$217	\$239	\$296	\$221	\$228	\$280	\$293	-	-	-	-	-
Japan (Tokyo) (40 kmt)	\$242	\$247	\$240	\$218	\$240	\$297	\$222	\$229	\$284	\$298	-	-	-	-	-
Malaysia (Singapore) (50 kmt)	\$243	\$245	\$238	\$219	\$241	\$298	\$218	\$225	\$285	\$294	\$223	\$234	\$233	\$227	\$224
Indonesia (Jakarta) (50 kmt)	\$242	\$244	\$237	\$219	\$241	\$298	\$219	\$226	\$285	\$295	\$224	\$235	\$233	\$228	\$224
Mexico (Veracruz) (30 kmt)	-	-	-	\$222	\$244	\$301	\$194	\$201	\$288	\$280	\$215	\$223	\$221	\$212	\$210
Colombia (Cartagena) (30 kmt)	-	-	-	-	-	-	\$199	\$206	\$286	\$283	\$213	\$221	\$219	\$210	\$207
Peru (Callao) (30 kmt)	-	-	-	-	-	-	\$203	\$210	\$280	\$290	\$230	\$239	\$237	\$227	\$210
Brazil (Fortaleza) (30 kmt)	\$256	\$259	\$252	\$215	\$237	\$294	\$197	\$203	\$282	\$279	\$211	\$221	\$219	\$211	\$201
Egypt (Damietta) (60 kmt)	\$247	\$250	\$243	\$221	\$243	-	\$206	\$213	-	-	\$207	\$223	\$223	\$212	\$215
Saudi Arabia (Jeddah) (60 kmt)	\$247	\$249	\$242	\$222	\$244	\$301	\$211	\$218	\$286	\$285	-	\$226	\$225	-	-
Saudi Arabia (Dammam) (60 kmt)	\$253	\$254	\$247	\$229	\$251	\$308	\$225	\$232	\$294	\$289	-	\$231	\$229	-	-
Algeria (Algiers) (30 kmt)	-	-	-	-	-	-	\$213	\$220	-	-	-	\$228	\$227	\$215	\$223
Morocco (Casa Blanca) (30 kmt)	-	-	-	-	-	-	\$209	\$216	-	-	-	\$226	\$227	\$214	\$222
Nigeria (Lagos) (40 kmt)	\$247	\$251	\$244	\$222	\$244	\$301	\$202	\$209	\$276	\$287	\$213	\$224	\$223	\$213	\$206
South Africa (Cape Town) (40 kmt)	\$239	\$243	\$236	\$223	\$245	\$302	\$202	\$209	\$290	\$284	\$219	\$226	\$225	\$215	\$202

World Wheat FOB Comparisons										
Origin	<u>Russian</u>	<u>German</u>	<u>Baltic</u>	<u>Argentina</u>	<u>HRW</u>	<u>HRW</u>	<u>HRW</u>	<u>French</u>	<u>UK</u>	<u>SRW</u>
Protein (dmb)	12.50%	12.50%	12.50%	11.50%	12.50%	11.00%	10.20%	11.00%	11.00%	10.20%
Protein (12% mb)	11.00%	11.00%	11.00%	10.12%	11.00%	9.68%	9.00%	9.68%	9.68%	9.00%
Jan	\$191	\$198	\$197	\$174	\$196	\$183	\$176	\$191	\$203	\$179
Feb	\$192	\$201	\$200	\$178	\$196	\$183	\$176	\$192	\$204	\$178
Mar	\$193	\$203	\$202	\$181	\$196	\$183	\$176	\$194	\$205	\$178
Apr	\$194	\$205	\$204	\$184	\$199	\$186	\$179	\$196	\$206	\$178

World Wheat FOB Comparisons										
Origin	<u>APW</u>	<u>AH2</u>	<u>ASW</u>	<u>HRW PNW</u>	<u>HRW PNW</u>	<u>SWW</u>	<u>NS</u>	<u>NS</u>	<u>CWRS</u>	<u>CWRS</u>
Protein (dmb)	11.80%	12.90%	10.10%	12.00%	13.10%	12.00%	15.30%	15.90%	15.50%	15.90%
Protein (local)	10.50%	11.50%	9.00%	10.50%	11.50%	10.50%	13.50%	14.00%	13.50%	13.80%
Jan	\$230	\$245	\$223	\$190	\$212	\$194	\$269	\$276	\$258	\$267
Feb	\$231	\$246	\$224	\$190	\$212	\$194	\$269	\$276	\$258	\$267
Mar	\$232	\$247	\$225	\$192	\$214	\$194	\$269	\$276	\$260	\$269
Apr	\$230	\$245	\$223	\$193	\$215	\$193	\$272	\$279	\$261	\$270

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Spread Analysis

Price=USD

Delivery Month	H	K	N
Starts	1-Mar	1-May	1-Jul
Ends	1-May	1-Jul	1-Sep
Total Days	61	61	62
Corn Closing Price	348.50	356.75	365.00
Storage rate	0.165	0.165	0.165
Total Storage	10.07	10.07	10.23
Total Interest	2.12	2.17	2.26
Full Carry	12.18	12.23	12.49
Spread Close	-8.25	-8.25	-7.00
% Full Carry	68%	67%	56%
CME W Closing Price	418.25	430.75	443.5
Storage rate	0.365	0.365	0.365
Total Storage	22.27	22.27	22.63
Total Interest	2.54	2.62	2.74
Full Carry	24.81	24.88	25.37
Spread Close	-12.50	-12.75	-13.8
% Full Carry	50%	51%	54%
KCBT Closing Price	418.25	431.25	447.50
Storage rate	0.197	0.197	0.197
Total Storage	12.02	12.02	12.21
Total Interest	2.54	2.62	2.77
Full Carry	14.56	14.64	14.98
Spread Close	-13.00	-16.25	-15.00
% Full Carry	89%	111%	100%
MGEX Closing Price	617.00	624.50	628.75
Storage rate	0.233	0.233	0.233
Total Storage	14.21	14.21	14.45
Total Interest	3.75	3.80	3.89
Full Carry	17.96	18.01	18.33
Spread Close	-7.50	-4.25	5.75
% Full Carry	42%	24%	-31%

VSR INCREASES		H	K	N	U	Z
CME VSR (ct/bu)	Spread	H-K	K-N	N-U	U-Z	Z-H
Futures Close Price	Days	418.25	430.75	443.50	457.25	475.50
Base Storage	0.365	22.27	22.27	22.63	33.22	32.85
H-K (increase .10)	61	4.40	6.10	6.20	9.10	9.00
K-N (increase .10)	61		4.40	6.20	9.10	9.00
N-U (increase .10)	62			4.50	9.10	9.00
U-Z (increase .10)	91				7.40	9.00
Z-H (increase .10)	90					7.30
Total Storage		26.67	32.77	39.53	67.92	76.15
Interest Charge	3.59%	2.54	2.62	2.74	4.15	4.27
Full Carry B4 VSR		24.81	24.88	25.37	37.36	37.12
Closing Board Spread		12.50	12.75	13.75	18.25	14.25
Closing Spread % FC		50%	51%	54%	49%	38%

VSR INCREASES		H	K	N	U	Z
KCBT VSR (ct/bu)	Spread	H-K	K-N	N-U	U-Z	Z-H
Futures Close Price	Days	418.25	431.25	447.50	462.50	484.75
Base Storage	0.197	12.02	12.02	12.21	17.93	17.73
H-K (increase .068)	61	2.99	4.15	4.22	6.19	6.12
K-N (increase .10)	61		4.40	6.20	9.10	9.00
N-U (increase .10)	62			4.50	9.10	9.00
U-Z (increase .10)	91				7.40	9.00
Z-H (increase .10)	90					7.30
Total Storage		15.01	20.57	27.13	49.72	58.15
Interest Charge	3.59%	2.54	2.62	2.77	4.20	4.35
Full Carry B4 VSR		14.56	14.64	14.98	22.12	22.08
Closing Board Spread		13.00	16.25	15.00	22.25	15.50
Closing Spread % FC		89%	111%	100%	101%	70%

VSR DECREASES		H	K	N	U	Z
CME VSR (ct/bu)	Spread	H-K	K-N	N-U	U-Z	Z-H
Futures Close Price	Days	418.25	430.75	443.50	457.25	475.50
Base Storage	0.365	22.27	22.27	22.63	33.22	32.85
H-K (decrease .10)	61	-4.40	-6.10	-6.20	-9.10	-9.00
K-N (decrease .10)	61		-4.40	-6.20	-9.10	-9.00
N-U (decrease .10)	62			*	*	*
U-Z (decrease .10)	91				*	*
Z-H (decrease .10)	90					*
Total Storage		17.87	11.77	10.23	15.02	14.85
Interest Charge	3.59%	2.54	2.62	2.74	4.15	4.27
Full Carry B4 VSR		24.81	24.88	25.37	37.36	37.12
Closing Board Spread		12.50	12.75	13.75	18.25	14.25
Closing Spread % FC		50%	51%	54%	49%	38%

489.75

489.75

500.25

* VSR could not decrease any further because it would already be at the minimum storage rate of 0.165 ct/bu/day

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Cascade Commodity Consulting Company

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Wheat vs Corn Feeding Relationship

	SW Kansas			Texas Panhandle		North Carolina	
	HRW	Milo	Corn	HRW	Corn	SRW	Corn
Basis	-80.00	-40.00	-21.00	-55.25	34.50	-14.25	60.50
Dec-17	418.25	348.50	348.50	418.25	348.50	418.25	348.50
Flat Price	338.25	308.50	327.50	363.00	383.00	404.00	409.00
Flat Price (mt)	124.29	122.38	129.92	133.38	151.94	148.44	162.25
Wheat/Corn	96%	94%		88%		91%	

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Price=USD						
KCBT Delivery Calculations for December Delivery (BN Freight)						
11% Protein Delivery	Taker (single light cars)			Delivery (Shuttle/Heavy)		
	Hutchinson	Salina	Wichita	Hutchinson	Salina	Wichita
Delivery Differential	-9.00	-12.00	-6.00	-9.00	-12.00	-6.00
Protein Discount for 10.5% (-10 ct)	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00
Del. Loadout Charge	8.00	8.00	8.00	8.00	8.00	8.00
Misc. Costs	2.00	2.00	2.00	2.00	2.00	2.00
Delivery Value	-9.00	-12.00	-6.00	-9.00	-12.00	-6.00
Tariff Rate (\$/car)	5277.00	5371.00	5189.00	4264.00	4365.00	4171.00
Tariff Rate (c/bu)	157.52	160.33	154.90	115.24	117.97	112.73
Mileage Houston, TX	688.00	761.00	632.00	688.00	761.00	632.00
Fuel Surcharge (c/mi)	0.00	0.00	0.00	0.00	0.00	0.00
Mileage Charge (c/bu)	0.00	0.00	0.00	0.00	0.00	0.00
Rail Cost (c/bu)	0.00	0.00	0.00	1.35	1.35	1.35
Freight Cost (c/bu)	157.52	160.33	154.90	116.59	119.32	114.08
Delivered Value	148.52	148.33	148.90	107.59	107.32	108.08
Delivered gulf bid	85.00	85.00	85.00	85.00	85.00	85.00
Cash vs. Delivery	-63.52	-63.33	-63.90	-22.59	-22.32	-23.08
# of Days in Storage	31	31	31	31	31	31
Storage Cost	6.00	6.00	6.00	6.00	6.00	6.00
Futures	418.25	418.25	418.25	418.25	418.25	418.25
Interest Cost	1.29	1.29	1.29	1.29	1.29	1.29
TTL Est. Carry Cost	7.29	7.29	7.29	7.29	7.29	7.29
Cash vs. Delivery	-70.81	-70.62	-71.19	-29.89	-29.62	-30.37

Cascade Commodity Consulting Company

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CBOT Wheat Delivery Calculations

<i>Price=USD</i>	Ohio River	MTCT	Chicago (river)	St. Louis	Chicago (domestic)	Toledo / Bellevue	NW OH
Delivery Differential	0.00	20.00	0.00	10.00	0.00	0.00	-10.00
Del. Loadout Charge	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Misc. Costs	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Delivery Value	8.00	28.00	8.00	18.00	8.00	8.00	-2.00
Barge Freight	215%	185%	280%	195%	NA	NA	NA
Tarriff	12.00	9.40	17.30	12.00	NA	NA	NA
Barge Freight (c/bu)/ Lakes	25.80	17.39	48.44	23.40	NA	NA	NA
Delivered Value	33.80	45.39	56.44	41.40	8.00	8.00	-2.00
Delivered Gulf / FOB Elevator	53.00	53.00	53.00	53.00	10.00	10.00	5.00
Cash vs. Delivery	19.20	7.61	-3.44	11.60	2.00	2.00	7.00
# of Days in Storage	31	31	31	31	31	31	31
Storage Cost	11.32	11.32	11.32	11.32	11.32	11.32	11.32
Futures	418.25	418.25	418.25	418.25	457.25	457.25	457.25
Interest Cost	1.29	1.29	1.29	1.29	1.29	1.29	1.29
TTL Est. Carry Cost	12.61	12.61	12.61	12.61	12.61	12.61	12.61
Cash vs. Delivery	6.59	-5.00	-16.05	-1.01	-10.61	-10.61	-5.61

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Cascade Commodity Consulting Company

MGEX Delivery Calculations

Price=USD	Delivered Chicago Gateway		Duluth Replacement*
	Duluth (BNSF) 110 cars	Duluth (CP) Single/25 cars	Duluth (CP) DETS (FOB Dul/Sup)*
13.5% Protein			
Delivery Differential	3.00	3.00	3.00
Protein discount for 13.0% (-3 ct)	-3.00	-3.00	-3.00
Del. Loadout Charge	8.00	8.00	8.00
Test Wt	2.00	2.00	2.00
Misc. Costs	2.00	2.00	2.00
Delivery Value	12.000	12.000	12.000
Tariff Rate	2283.00	2299.00	N/A
Tariff Rate (c/bu)	61.70	62.14	0.00
Rail Cost	1.35	-4.73	N/A
Freight Cost (c/bu) (Dul -18.25)	63.05	57.41	-35.00
Delivered Value	75.05	69.41	0.00
Del. Chicago Gateway Bid	35.00	35.00	35.00
Cash vs. Delivery	-40.05	-34.41	-12.00
# of Days in Storage	31.00	31.00	31.00
Storage Cost	7.00	7.00	7.00
Futures	617.00	617.00	617.00
Interest Cost	1.91	1.91	N/A
TTL Est. Carry Cost	8.91	8.91	N/A
Cash vs. Delivery	-48.96	-43.31	N/A

* Duluth replacement = Chicago Gateway Delivery less \$1,300/car (-35.00 ct/bu) for single cars
 FOB Lakes = Duluth replacement + Elevation

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Price=USD

CBOT Corn Delivery Calculations

Illinois River	Zone 1	Zone 2	Zone 3	Zone 4
Delivery Differential	0.00	2.00	2.50	3.00
Del. Loadout Charge	6.00	6.00	6.00	6.00
Misc. Costs	0.00	0.00	0.00	0.00
Delivery Value	6.00	8.00	8.50	9.00
Barge Rate	280%	280%	280%	280%
Tarriff	16.20	14.70	14.25	13.50
Barge Freight (ct/bu)	45.36	41.16	39.90	37.80
Delivered Value	51.36	49.16	48.40	46.80
Delivered Bid	30.00	30.00	30.00	30.00
Cash vs. Delivery	-21.36	-19.16	-18.40	-16.80
# of Days in Storage	31.00	31.00	31.00	31.00
Storage Cost	5.00	5.00	5.00	5.00
Futures	348.50	348.50	348.50	348.50
Interest Cost	1.077	1.077	1.077	1.077
TTL Est. Carry Cost	6.08	6.08	6.08	6.08
Cash vs. Delivery	-27.44	-25.24	-24.48	-22.88

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Deliverable Stocks as of December 1, 2017

Date	1-Dec	Wk Ago	Change	YR Ago
KCBT	115,797	117,203	(1,406)	106,892
CBOT	93,149	94,127	(978)	95,050
MGEX	21,978	23,506	(1,528)	24,583

KCBT Deliverable Wheat Stocks

Date	1-Dec	Wk Ago	Change	YR Ago
Hutchinson	29,721	30,119	(398)	28,576
KC	11,001	11,059	(58)	10,474
Salina	32,524	33,284	(760)	28,516
Wichita	42,551	42,741	(190)	39,326
Total	115,797	117,203	(1,406)	106,892

CBOT Deliverable & Non-Deliverable Wheat Stocks

Date	1-Dec	Wk Ago	Change	YR Ago
Chicago	10,806	10,830	(24)	13,111
Miss. River	16,367	16,721	(354)	14,894
NW Ohio	11,674	11,773	(99)	12,070
Ohio River	20,140	20,251	(111)	19,413
St. Louis	4,380	4,595	(215)	4,485
Toledo	29,782	29,957	(175)	31,077
Total	93,149	94,127	(978)	95,050
Non-Deliver	7,034	7,131	(97)	7,417
Net-Deliver	86,115	86,996	(881)	87,633

MGEX Deliverable Wheat Stocks

Date	1-Dec	Wk Ago	Change	YR Ago
Mpls	2,820	2,885	(65)	9,546
Duluth	19,158	20,621	(1,463)	15,037
Total	21,978	23,506	(1,528)	24,583

12/14/2017

Variable Storage Rate December 2017 - March 2018 Calculation Period

December 2017 First Delivery Day 12/1/2017
 March 2018 First Delivery Day 3/1/2018
 Number of Carry Days 90
 Storage Rate Used in Calculation \$0.00365/bu/day
 Running Average Percent of Full Carry 50.39%

Date	December 2017 Contract Price	March 2018 Contract Price	3M LIBOR Plus 200 Basis Points	Financial Full Carry	Dec17-Mar18 Spread	Dec-Mar Spread as % of Full Carry
9/19/2017	\$4.4300	\$4.6400	3.32500	0.365324	0.2100	57.5%
9/20/2017	\$4.4975	\$4.6975	3.32611	0.365898	0.2000	54.7%
9/21/2017	\$4.5250	\$4.7200	3.32306	0.366092	0.1950	53.3%
9/22/2017	\$4.4950	\$4.6950	3.32833	0.365902	0.2000	54.7%
9/25/2017	\$4.5400	\$4.7375	3.32944	0.366289	0.1975	53.9%
9/26/2017	\$4.5375	\$4.7350	3.32972	0.366272	0.1975	53.9%
9/27/2017	\$4.6150	\$4.8075	3.33083	0.366929	0.1925	52.5%
9/28/2017	\$4.5500	\$4.7425	3.33278	0.366410	0.1925	52.5%
9/29/2017	\$4.4825	\$4.6650	3.33500	0.365873	0.1825	49.9%
10/2/2017	\$4.4475	\$4.6325	3.33389	0.365569	0.1850	50.6%
10/3/2017	\$4.4800	\$4.6550	3.33556	0.365858	0.1750	47.8%
10/4/2017	\$4.4200	\$4.6050	3.34250	0.365435	0.1850	50.6%
10/5/2017	\$4.4075	\$4.5950	3.34667	0.365376	0.1875	51.3%
10/6/2017	\$4.4350	\$4.6275	3.34861	0.365628	0.1925	52.6%
10/9/2017	\$4.3600	\$4.5600	3.35028	0.365018	0.2000	54.8%
10/10/2017	\$4.3525	\$4.5525	3.35639	0.365022	0.2000	54.8%
10/11/2017	\$4.3325	\$4.5225	3.35667	0.364857	0.1900	52.1%
10/12/2017	\$4.3050	\$4.4950	3.35861	0.364647	0.1900	52.1%
10/13/2017	\$4.3950	\$4.5800	3.35917	0.365409	0.1850	50.6%
10/16/2017	\$4.3650	\$4.5500	3.35333	0.365093	0.1850	50.7%
10/17/2017	\$4.3475	\$4.5375	3.35389	0.364953	0.1900	52.1%
10/18/2017	\$4.3000	\$4.4925	3.35733	0.364591	0.1925	52.8%
10/19/2017	\$4.3275	\$4.5125	3.36261	0.364879	0.1850	50.7%
10/20/2017	\$4.2600	\$4.4450	3.36250	0.364311	0.1850	50.8%
10/23/2017	\$4.3675	\$4.5500	3.36476	0.365239	0.1825	50.0%
10/24/2017	\$4.3800	\$4.5600	3.36742	0.365373	0.1800	49.3%
10/25/2017	\$4.3550	\$4.5375	3.37064	0.365198	0.1825	50.0%
10/26/2017	\$4.3175	\$4.5025	3.37446	0.364923	0.1850	50.7%
10/27/2017	\$4.2725	\$4.4525	3.37796	0.364581	0.1800	49.4%
10/30/2017	\$4.2475	\$4.4300	3.38009	0.364392	0.1825	50.1%
10/31/2017	\$4.1850	\$4.3600	3.37678	0.363830	0.1750	48.1%
11/1/2017	\$4.1800	\$4.3600	3.38122	0.363834	0.1800	49.5%
11/2/2017	\$4.2600	\$4.4450	3.38483	0.364548	0.1850	50.7%
11/3/2017	\$4.2575	\$4.4450	3.39139	0.364597	0.1875	51.4%
11/6/2017	\$4.3075	\$4.4825	3.39194	0.365027	0.1750	47.9%
11/7/2017	\$4.2725	\$4.4475	3.39703	0.364785	0.1750	48.0%
11/8/2017	\$4.2675	\$4.4375	3.40258	0.364801	0.1700	46.6%
11/9/2017	\$4.2900	\$4.4500	3.40981	0.365070	0.1600	43.8%
11/10/2017	\$4.3150	\$4.4900	3.41289	0.365317	0.1750	47.9%
11/13/2017	\$4.2425	\$4.4325	3.41289	0.364698	0.1900	52.1%
11/14/2017	\$4.2800	\$4.4525	3.41586	0.365050	0.1725	47.3%
11/15/2017	\$4.2000	\$4.3775	3.41899	0.364399	0.1775	48.7%
11/16/2017	\$4.2150	\$4.3800	3.42190	0.364558	0.1650	45.3%
11/17/2017	\$4.2725	\$4.4350	3.43567	0.365197	0.1625	44.5%
11/20/2017	\$4.2200	\$4.3850	3.44067	0.364799	0.1650	45.2%
11/21/2017	\$4.2475	\$4.4125	3.44594	0.365092	0.1650	45.2%
11/22/2017	\$4.2275	\$4.4075	3.45400	0.365004	0.1800	49.3%
11/24/2017	\$4.1475	\$4.3325	3.46206	0.364397	0.1850	50.8%

Needed to reduce VSR 31.87% Full Carry 11.63 Spread Trade

Results:

Current Maximum Premium (Storage) Charge: \$0.00365/bu/day

If the Running Average Percent of Full Carry on 11/24/2017 is 80% or greater, the Maximum Premium (Storage) Charge will increase to \$0.00465 on 12/18/2017

If the Running Average Percent of Full Carry on 11/24/2017 is greater than 50% and less than 80%, the Maximum Premium (Storage) Charge will remain at \$0.00365/bu/day on 12/18/2017

If the Running Average Percent of Full Carry on 11/24/2017 is 50% or Less, the Maximum Premium (Storage) Charge will decrease to \$0.00265 on 12/18/2017