

Oats Market Update

By Brennan Turner
SaskOats AGM
January 12, 2022



Hey I'm Brennan!

@BrennanDTurner on Twitter

- Family farms ~80,000 acres in SK/ND
- Notre Dame Hound (2005)
- Yale University (2009 Bachelors in Economics)
- Pro hockey player (2011 Calder Cup!)
- Wall Street commodity analyst/trader
- Founded Combyne Ag
 - Formerly called FarmLead
 - Now really a crop marketing hub
 - Transitioned out this past summer
- Passionate about leaning into in the challenging intersection of agriculture, technology, and sustainability



Our Vision

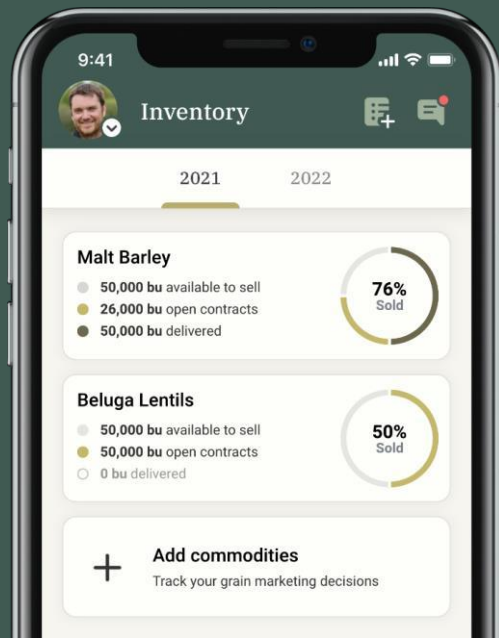
Optimize the value of every bushel



COMBYNE

A **farmer-centric** platform that
combines technology and
data to **optimize value** and
manage risk in a simple, affordable
and (semi) automated way.

Inventory Overview



See Marketed Position

Farmers get a full view of their inventory and can see what proportion of their crop is available, contracted, or delivered.

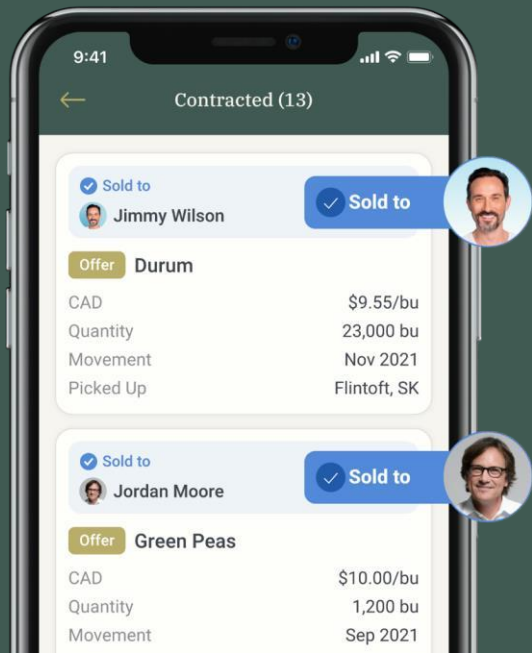
Smart Price Targets

Farmers can see their average realized price on crop volume contracted to-date, and get a recommended target price for their uncontracted volume.

Sync Inventory

Farmers can sync their inventory from their preferred tool, including their FMS or Bin Monitoring System.

Contract Management



See contracted position

Farmers get holistic view of their contracted position; upcoming contracts, open contracts, and fully closed contracts.

Digital contract capture with OCR

If the deal wasn't done on Combyne, farmers can upload a PDF, take a photo, or forward a contract via email to us. Our OCR tool converts the contract into a digital form so that all the farmer's contracts are in one place, are searchable, and are easy to keep track of.

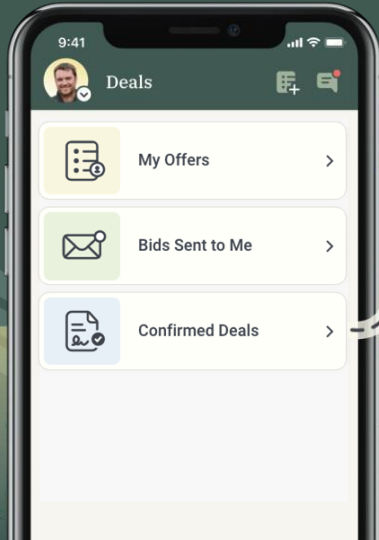
Notifications

Farmers get notified of upcoming delivery dates so they know what contracts are coming up.

Match settlements & load tickets to contracts

Through Combyne Connect integrations with buyer's back-office tools, farmers can view settlements & load tickets matched to existing contracts.

Offer Management



Manage your deals

Sold to		May 15, 2021
Jimmy Wilson		
Offer Canola		
CAD	\$16.50/bu	
Quantity	2,200 bu	
Delivered	Yorkton, SK	

View all offers

Farmers see a full picture of what offers they've created and sent to their buyers, bids sent to them from their buyers, and contracted deals.

Create an offer

Farmers can easily tell their buyers what they have to sell and the deal terms they're looking for.

Share with multiple buyers & set custom terms

Combyne also enables farmers to send offers to multiple of their buyers at once, setting custom price & freight terms per each buyer; once one buyer accepts, the grain becomes no longer available to the other buyers, eliminating the risk of a farmer ever double-booking their grain.

Negotiate deal terms & finalize

Farmers can easily negotiate and finalize deals terms with their buyers via chat in-app. Once agreed to, both farmer and buyer can review the final terms and mark the deal as contracted

Tell buyers you're SWAT CERTIFIED.

Get recognized for your environmental stewardship when marketing your crops.

SWATMAPS



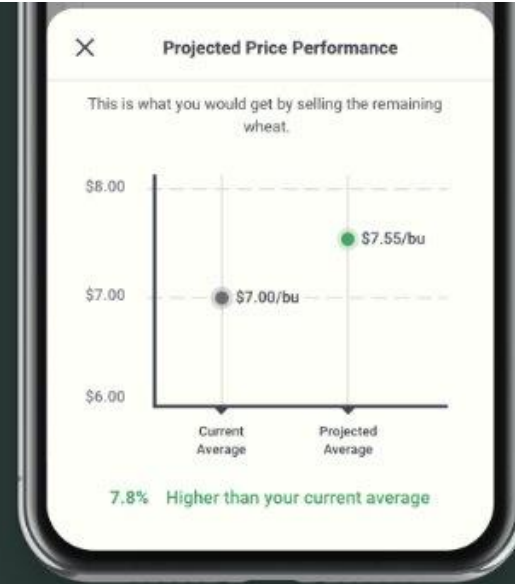
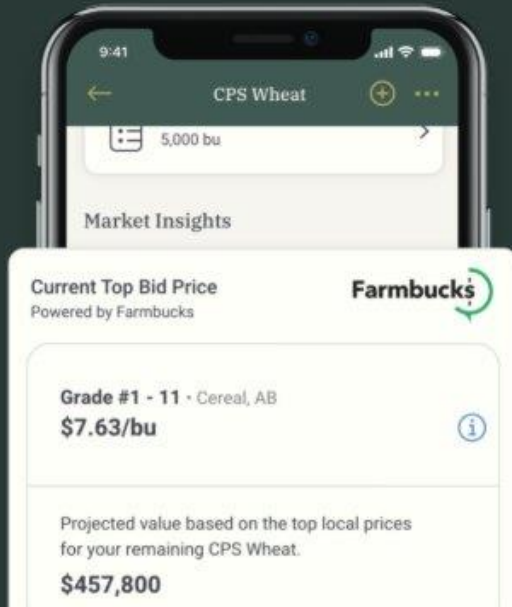
 COMBYNE

Also ingesting bids from Farmbucks

@BrennanDTurner



See the top bids for the crops
you sell,



to better understand how today's
market can impact your bottom line.

A close-up shot of a man with dark hair and glasses, wearing a light blue button-down shirt and a dark tie. He has a questioning or uncertain expression on his face, with his eyebrows slightly furrowed and his mouth set in a neutral, questioning line. The background is an office setting, slightly out of focus, showing another person in a light blue shirt in the background.

AM I AT THE RIGHT PLACE?

The best performing commodity in 2021!

Prepared by Brennan Turner for SaskOats AGM		2021 Close	2020 Close	\$ Change YoY	% Change YoY
Grain Futures Front- Month Contracts	Futures Contract				
	Corn (USD \$/bu)	\$5.933	\$4.840	\$1.09	22.6%
	Soybeans (USD \$/bu)	\$13.393	\$13.110	\$0.28	2.2%
	Soymeal (USD \$/ton)	\$399.10	\$429.40	-\$30.30	-7.1%
	Soy Oil (USD \$/pound)	\$0.565	\$0.424	\$0.141	33.3%
	Canola (CAD/MT)	\$1,012.60	\$637.00	\$375.60	59.0%
	Oats (USD \$/bu)	\$6.830	\$3.610	\$3.22	89.2%
	SRW Wheat (USD \$/bu)	\$7.708	\$6.405	\$1.30	20.3%
	HRW Wheat (USD \$/bu)	\$8.015	\$6.035	\$1.98	32.8%
	HRS Wheat (USD \$/bu)	\$9.820	\$5.993	\$3.83	63.9%

Past year's performance

Oats

Jan 7 O:666.75 H:671.75 L:660.00 C:668.25 Vol:323.00

-2.25 (0.34%)



Oats futures over the past 6 years

Oats

Jan 7 O:689.25 H:694.25 L:660.00 C:668.25 Vol:1.48K

-2.25 (0.34%)

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

100

0

800

700

600

500

400

300

200

Oats futures over the last 25 years

Oats

Jan 7 O:689.25 H:694.25 L:660.00 C:668.25 Vol:1.68K

-2.25 (0.34%)



Did anyone grow more oats than last year?

Prepared by Brennan
Turner for SaskOats AGM

Oats Production - Top 10 Players

1,000 MT	2020/21	2021/22	# Change YoY	% Change YoY	5-Year Avg	Change from 5-Yr Avg
World	25,505	23,027	-2,478	-9.7%	23,796	-3.2%
European Union	8,422	8,150	-272	-3.2%	7,348	11%
Russia	4,127	4,100	-27	-0.7%	4,692	-13%
Canada	4,576	2,606	-1,970	-43%	3,841	-32%
Australia	1,675	1,550	-125	-7.5%	1,489	4.1%
United Kingdom	1,031	1,100	69	6.7%	930	18%
Brazil	846	927	81	9.6%	796	16%
Argentina	510	690	180	35%	592	17%
Chile	525	600	75	14%	534	12%
China	600	600	0	0%	562	6.8%
United States	954	578	-376	-39%	840	-31%
Ukraine	515	465	-50	-9.7%	471	-1.3%

Source: USDA

- Futures mostly reacting to North American harvest (duh, Brennan)
- Honorable mentions:
 - Belarus: 350K, -21%, -13%
 - Norway: 300K, nil, +8%
 - Turkey: 250K, nil, +4%, +6%
 - Kazakhstan: 200K, -17%, -32%
 - Algeria: 110K, nil, nil
 - Mexico: 90K, +43%, +10%
 - South Arica: 80K, +40%, +115%

Less production = exports musical chairs

- With less crop available from Canada, other players are having to step up
- Notable #1: Australia! Despite a smaller crop, they're exporting more!
- Notable #2: The U.K. But somewhat expected with their departure from EU

Prepared by Brennan Turner for SaskOats AGM		Oats Exports - Top 10 Players				
1,000 MT	2020/21	2021/22	# Change YoY	% Change YoY	5-Year Avg	Change from 5-Yr Avg
World	2,768	2,383	-385	-14%	2,534	-6.0%
Canada	2,023	1,300	-723	-36%	1,767	-26%
Australia	396	600	204	52%	385	56%
European Union	139	200	61	44%	171	17%
United Kingdom	43	115	72	167%	50	129%
Russia	86	100	14	16%	67	49%
United States	46	29	-17	-37%	37	-22%
Ukraine	19	15	-4	-21%	15	0.0%
Kazakhstan	6	10	4	67%	13	-23%
Brazil	1	5	4	400%	3	56%
Chile	3	5	2	67%	21	-77%
Source: USDA						



Bullish winds of domestic demand?

Prepared by Brennan
Turner for SaskOats AGM

Oats Consumption - Top 10 Markets

1,000 MT	2020/21	2021/22	# Change YoY	% Change YoY	5-Year Avg	Change from 5-Year Avg
World	24,644	23,560	-1,084	-4.4%	23,792	-1.0%
European Union	8,225	8,050	-175	-2.1%	7,265	11%
Russia	4,050	4,000	-50	-1.2%	4,630	-14%
United States	2,363	2,023	-340	-14%	2,386	-15%
Canada	2,339	1,700	-639	-27%	2,151	-21%
Australia	1,100	1,000	-100	-9.1%	1,074	-6.9%
United Kingdom	973	1,000	27	2.8%	903	11%
Brazil	845	915	70	8.3%	783	17%
China	900	900	0	0%	844	6.6%
Argentina	525	685	160	30%	592	16%
Chile	625	650	25	4.0%	552	18%

Source: USDA

- Domestic demand for oats is increasing in emerging markets:
 - Latin America
 - Mexico: 240K, +2%, +10%
 - Peru: 75K, -1%, +25%
 - Uruguay: 40K, +29%, nil
 - Other Notables
 - Turkey: 240K, nil, +1%
 - Algeria: 120K, nil, +1.5%
 - S. Africa: 95K, +38%, +41%
 - India: 50K, nil, +79%
 - Morocco: 50K, +11%, +76%

Should we pursue more feed-purposed exports?

Notable feed use vs production

- Brazil: almost all of harvest goes into feed
- Argentina: 75%
- Chile: 34%
- China: 67%
- Russia: 68%

Prepared by Brennan Turner for SaskOats AGM		Oats Feed Use - Top 10 Markets				
1,000 MT	2020/21	2021/22	# Change YoY	% Change YoY	5-Year Avg	Change from 5-Year Avg
World	16,966	15,906	-1,060	-6.2%	16,499	-3.6%
European Union	6,800	6,600	-200	-2.9%	5,980	10%
Russia	2,600	2,500	-100	-3.8%	3,100	-19%
Brazil	820	890	70	8.5%	758	17%
United States	1,225	863	-362	-30%	1,249	-31%
Australia	900	800	-100	-11%	874	-8.5%
Canada	1,170	800	-370	-32%	1,135	-30%
Argentina	400	525	125	31%	450	17%
China	550	500	-50	-9.1%	524	-4.6%
United Kingdom	408	400	-8	-2.0%	339	18%
Ukraine	325	315	-10	-3.1%	305	3.3%
Source: USDA						

Lots riding on North American Harvest 2022!

Notable Smallest Stocks

- USA: 2013/14 (359K MT)
- Canada: RECORD LOW
- China: 2015/16 (104K MT)

Notable Largest Stocks:

- Chile: 2nd largest ever
- Brazil: largest ever
- Mexico: 2nd largest ever

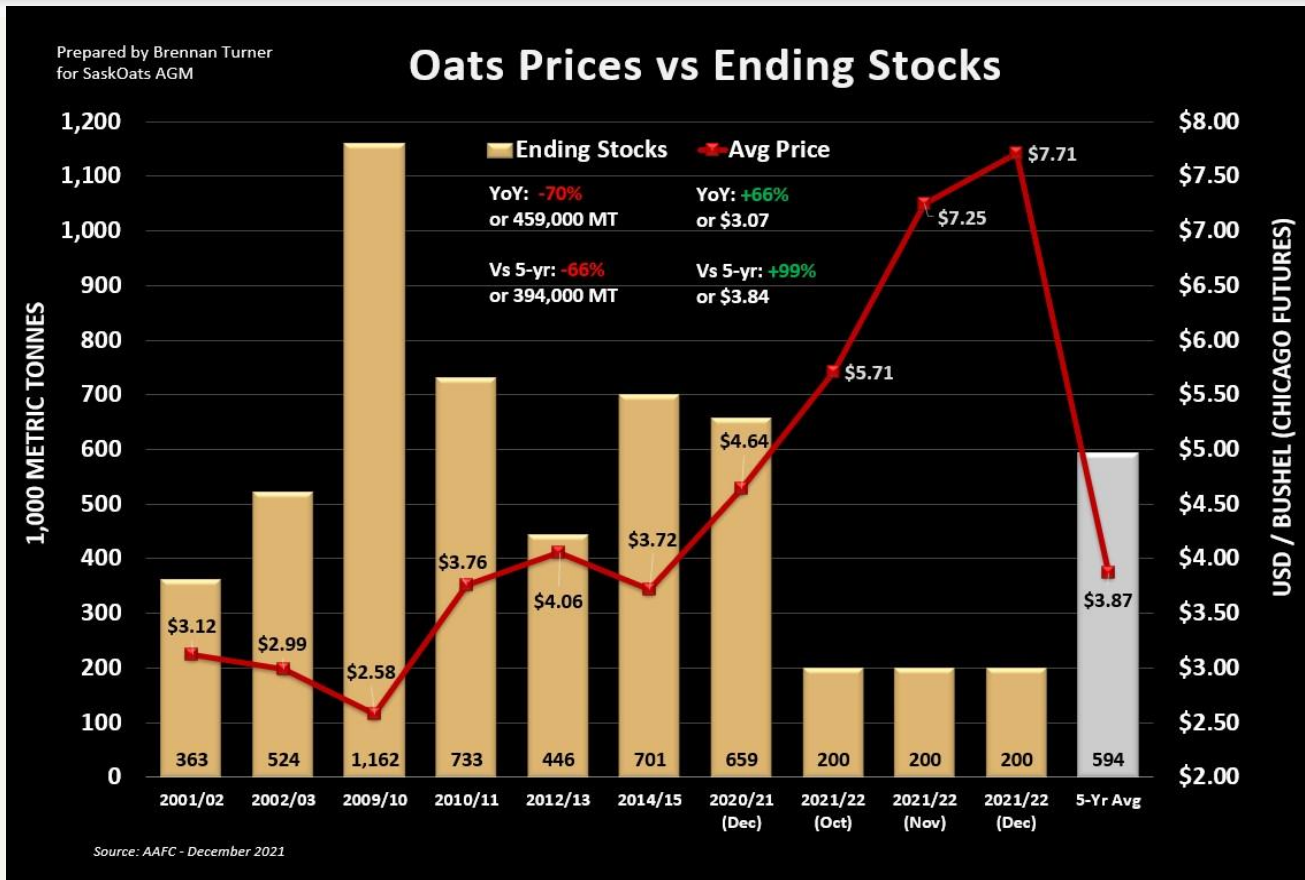
Prepared by Brennan Turner for
SaskOats AGM

Oats Carryout - Top 10 Markets

1,000 MT	2020/21	2021/22	# Change YoY	% Change YoY	5-Year Avg	Change from 5-Year Avg
World	2,862	2,218	-644	-23%	2,726	-19%
United States*^\$	552	405	-147	-27%	592	-32%
European Union*^\$	439	389	-50	-11%	436	-11%
Canada*^\$	657	273	-384	-58%	592	-54%
Australia*^\$	293	243	-50	-17%	243	0%
Russia*^\$	187	188	1	0.5%	151	24%
United Kingdom*^\$	147	152	5	3.4%	123	23%
China^	108	108	0	0.0%	153	-29%
Chile*^\$	94	89	-5	-5.3%	60	49%
Brazil*^	68	75	7	10%	53	42%
Argentina^	60	63	3	5.0%	72	-12%
<i>Source: USDA</i> \$ = Top Producer * = Top Exporter ^ = Top Consumer						

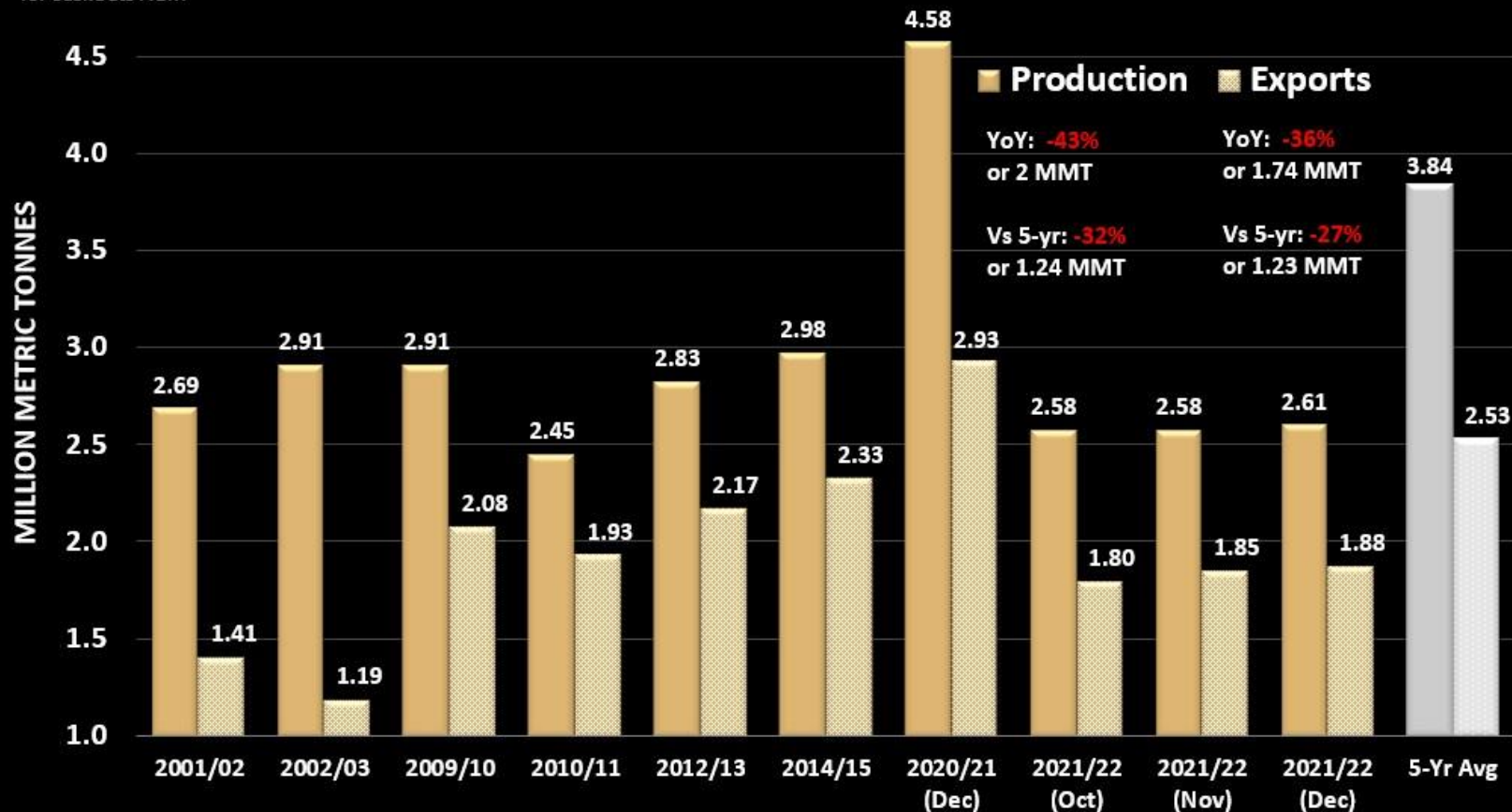
Record low Canadian oats carryout is a certainty

- Based on current demand levels, should end 2021/22 with 200K – 250K MT in remaining stocks
- Stocks-to-use ratio of 6.5% is also a record datapoint



Prepared by Brennan Turner
for SaskOats AGM

Canadian Oats Production Vs Exports



Source: AAFC - Dec 2021

Significant YoY decline in acres didn't help

*Brennan Turner for
SaskOats AGM*

StatsCan Plant 2021 Oats Acres

<i>Total Acres</i>	2020	2021	5-Year Avg	% Change YoY	# Change YoY	# Change from 5-Yr Avg
Saskatchewan	1,855,700	1,648,900	1,619,320	-11%	-206,800	2%
Alberta	881,200	769,000	817,520	-13%	-112,200	-6%
Manitoba	695,100	643,700	533,857	-7%	-51,400	21%
Quebec	204,200	165,600	185,140	-19%	-38,600	-11%
British Columbia	71,900	84,300	70,520	17%	12,400	20%
Ontario	104,500	71,700	84,760	-31%	-32,800	-15%
Maritimes	26,600	39,800	35,475	50%	13,200	12%
Total Canada	3,839,100	3,422,900	3,346,572	-11%	-416,200	2%

Actually harvested more acres than usual! (~83%)

Brennan Turner for SaskOats AGM		StatsCan Harvest 2021 Oats Acres				
Total Acres	2020	2021	5-Year Average	# Change YoY	% Change YoY	Change from 5-Yr Avg
Saskatchewan	1,630,000	1,337,000	1,377,760	-293,000	-18%	-3%
Alberta	605,500	525,700	510,160	-79,800	-13%	3%
Manitoba	649,900	555,000	488,100	-94,900	-15%	14%
Quebec	196,500	159,800	176,860	-36,700	-19%	-10%
British Columbia	49,200	73,400	43,760	24,200	49%	68%
Ontario	92,700	58,900	70,400	-33,800	-36%	-16%
Maritimes	24,300	37,100	32,800	12,800	53%	13%
Total Canada	3,248,100	2,746,800	2,699,840	-501,300	-15.4%	1.7%

Clearly,
moisture
matters!



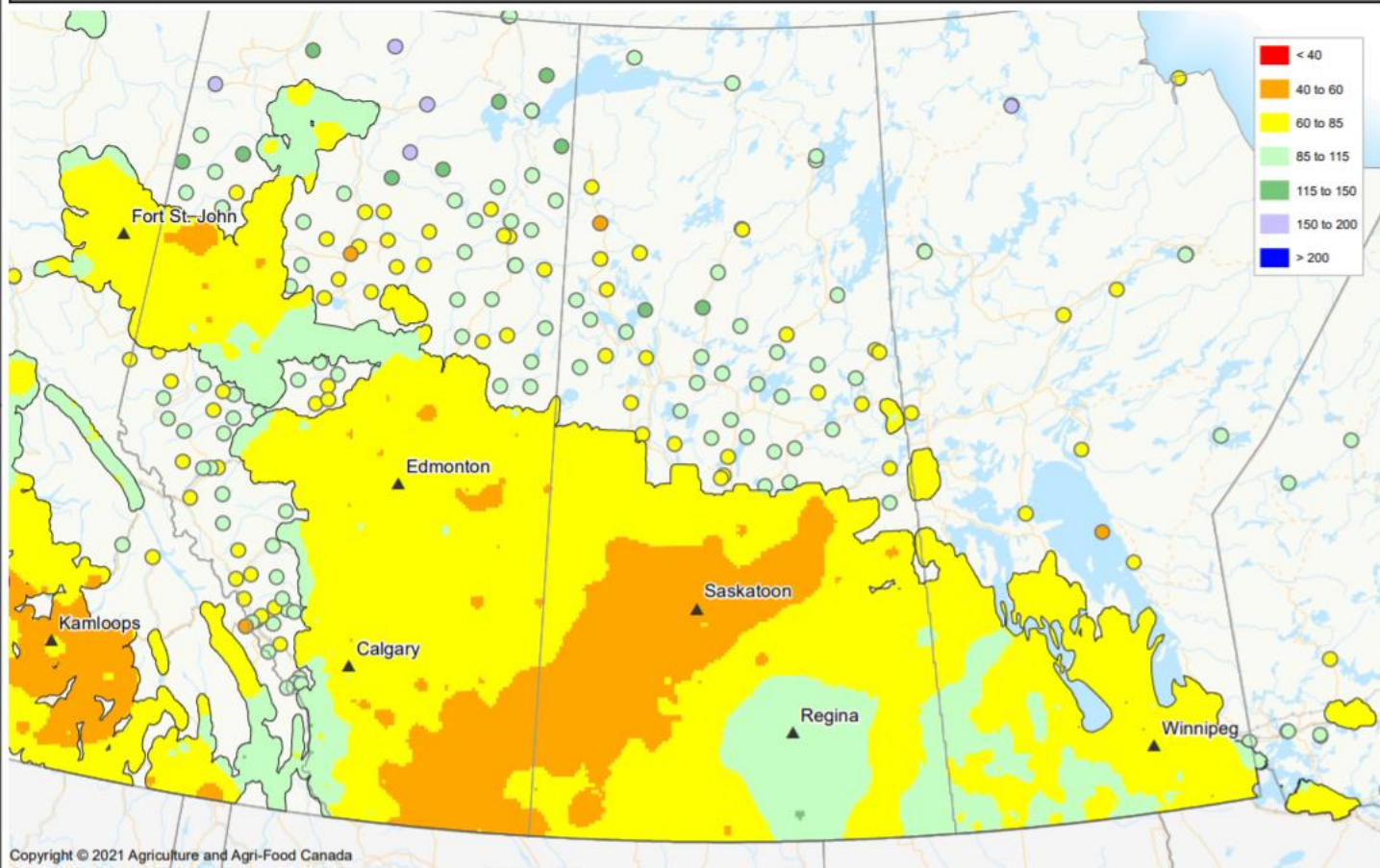
Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada

Percent of Average Precipitation

April 1, 2021 to October 25, 2021





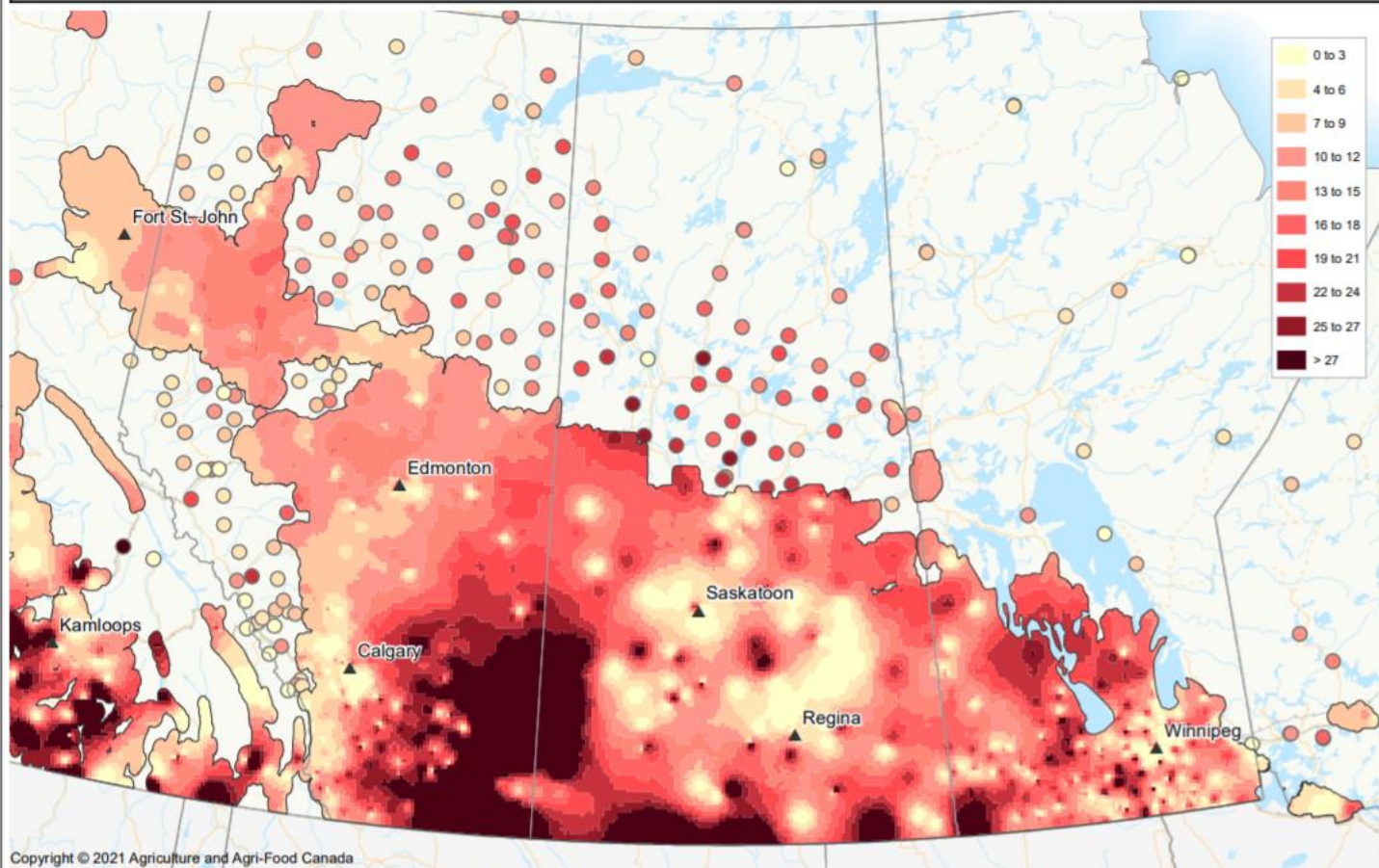
Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada

Number of Days with Temperature above 30°C

April 1, 2021 to October 25, 2021



Especially
if you
have too
much hot
weather!



Obvious difference was in yields

Brennan Turner for SaskOats AGM <i>Bushels Per Acre</i>	StatsCan Dec 2021 Canada Oats Yield Estimates								
	2020	Aug	Sept	Dec	5-Year	% of 5-Yr	% Change	# Change from	# Change from
		2021 Est	2021 Est	2021 Est	Avg	Avg	YoY	Aug Est	Sept Est
Saskatchewan	91.4	67.3	58.2	54.0	92.6	-42%	-41%	-13.3	-4.2
Manitoba	111.4	86.9	64.4	70.4	105.7	-33%	-37%	-16.5	6.0
Alberta	85.9	63.2	50.9	58.7	91.1	-36%	-32%	-4.5	7.8
Quebec	57.1	70.8	70.5	80.0	65.0	23%	40%	9.2	9.5
Ontario	72.6	77.1	78.3	89.3	78.7	13%	23%	12.2	11.0
Maritimes	67.7	-	-	78.9	68.5	15%	16%	-	-
Total Canada	91.3	71.4	60.0	61.5	92.18	-33%	-33%	-9.9	1.5

Considering Saskatchewan accounts for over half of all acres,
a ~40% reduction in average Sask oat yields isn't great for
total production!

Saskatchewan oats move national needle most

Brennan Turner for
SaskOats AGM

StatsCan December Harvest 2021 Oats Production Estimates

<i>Metric Tonnes</i>	2020	Aug 2021 Estimate	Sept 2021 Estimate	Dec 2021 Estimate	5-Year Avg	% of 5-Yr Avg	% Change YoY	# Change from Aug	# Change from Sept
Saskatchewan	2,296,400	1,471,400	1,271,500	1,114,229	1,968,640	-43%	-51%	-357,171	-157,271
Manitoba	1,117,000	773,900	573,700	602,724	801,880	-25%	-46%	-171,176	29,024
Alberta	802,000	470,900	379,200	475,538	714,140	-33%	-41%	4,638	96,338
Quebec	173,200	170,500	169,700	197,158	176,660	12%	14%	26,658	27,458
Ontario	103,700	72,000	73,200	81,053	85,060	-5%	-22%	9,053	7,853
Maritimes	25,900	-	-	48,696	35,587	37%	88%	-	-
Total Canada	4,575,800	3,070,100	2,578,700	2,605,935	3,840,660	-32%	-43%	-464,165	27,235

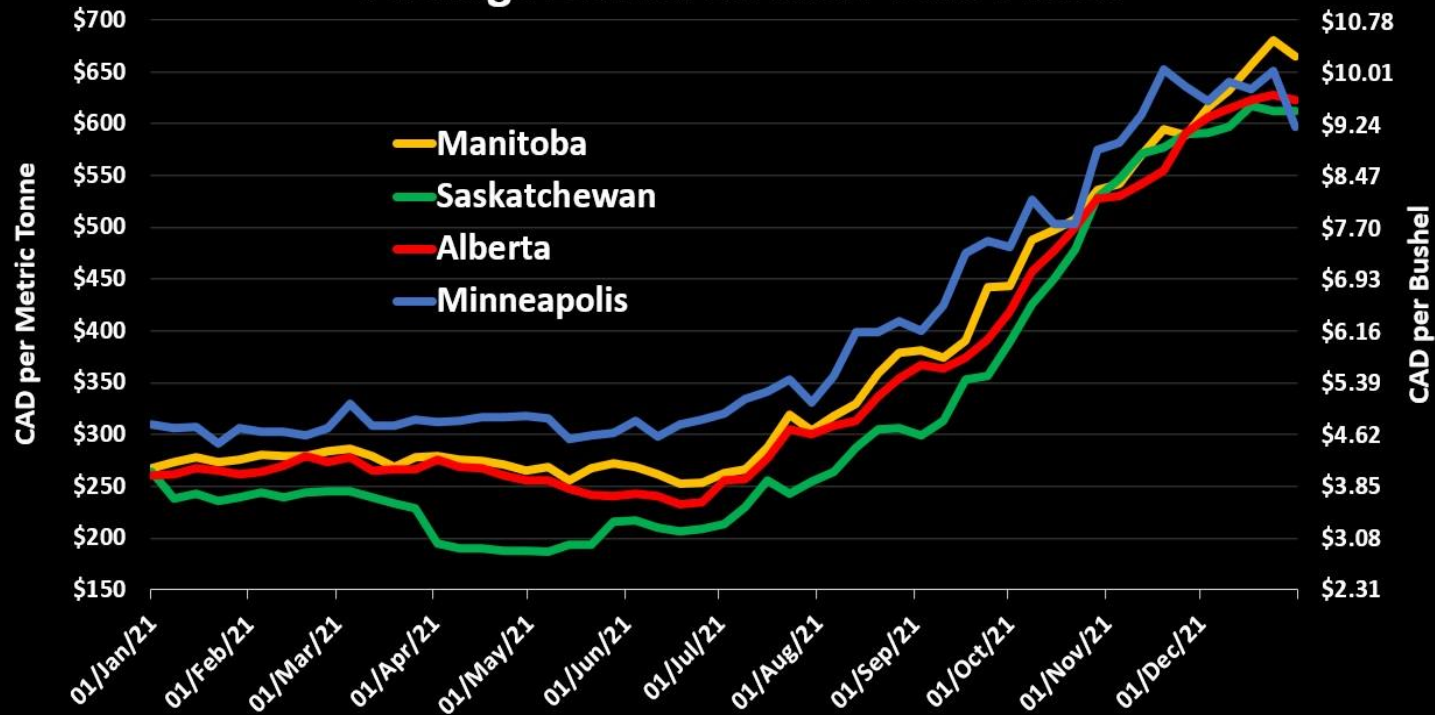
Saskatchewan went from being responsible for 51% of total Canadian oats production, to just 42%!

@BrennanDTurner

Cash prices reflect short supply situation

Prepared by Brennan Turner for
SaskOats AGM

Average Delivered Cash Oats Prices



Source: USDA, Provincial Ministries of Agriculture, elevators, and brokers

- Rally started mid-July when impact became more clear!
- Weekly moves to the upside of 2% – 12% consistently happened until December!

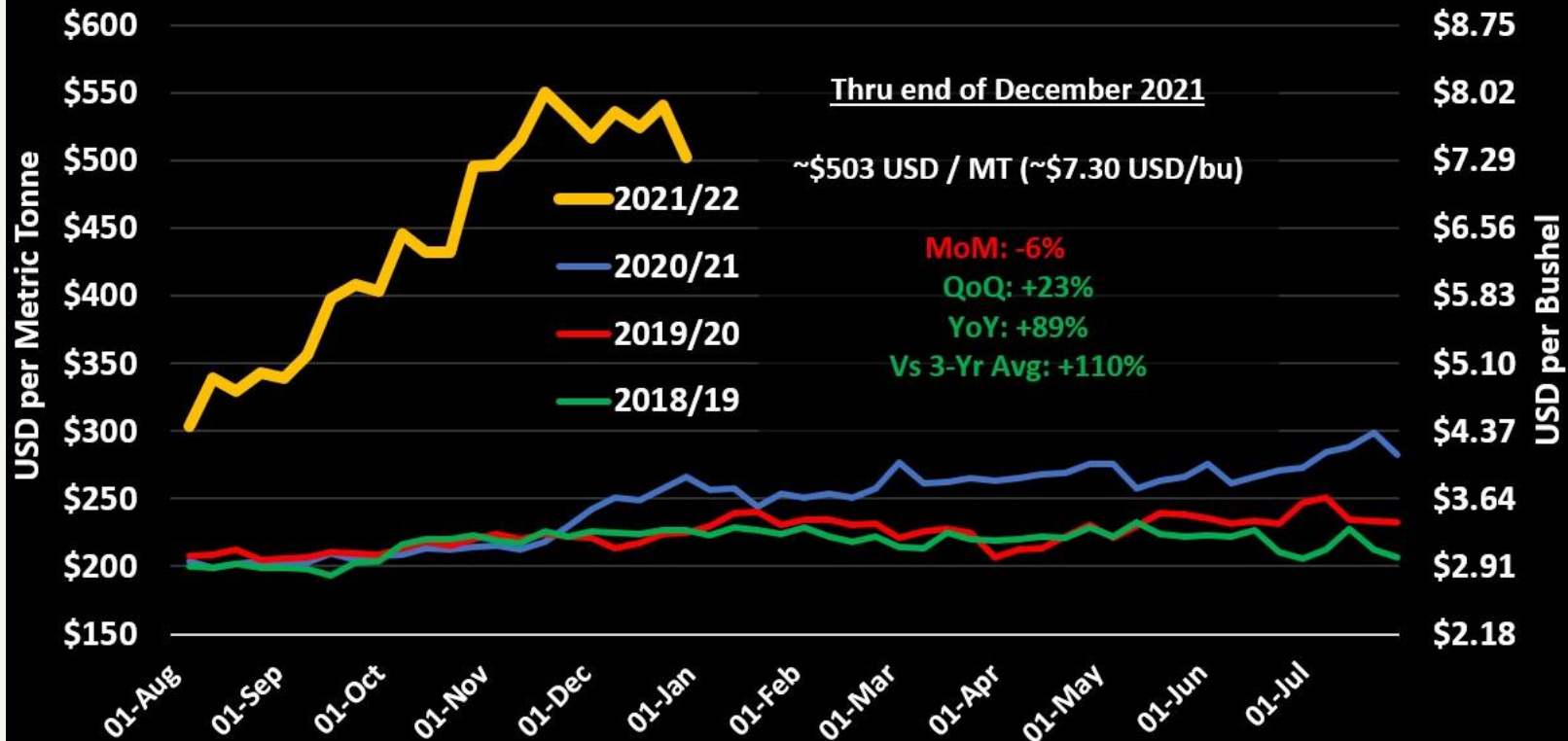
@BrennanDTurner

Is Minneapolis the benchmark?

@BrennanDTurner

Prepared by Brennan Turner for
SaskOats AGM

Average Minneapolis Delivered Oats Prices



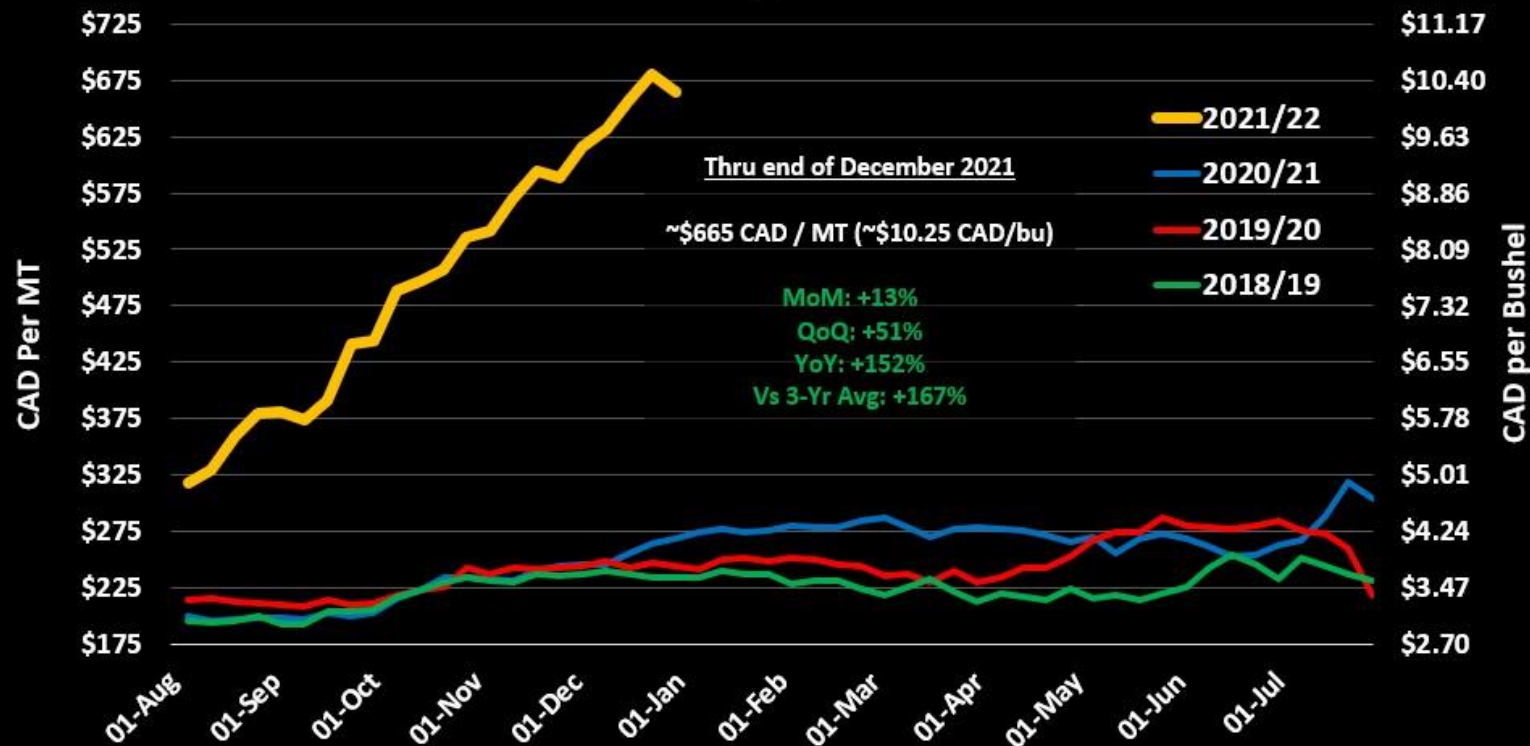
Source: USDA Market News Service

Or is it Manitoba?

@BrennanDTurner

Prepared by Brennan Turner for
SaskOats AGM

Manitoba Average #2CW Oats Prices



Source: Manitoba Ministry of Agriculture

Alberta feed markets very competitive

@BrennanDTurner

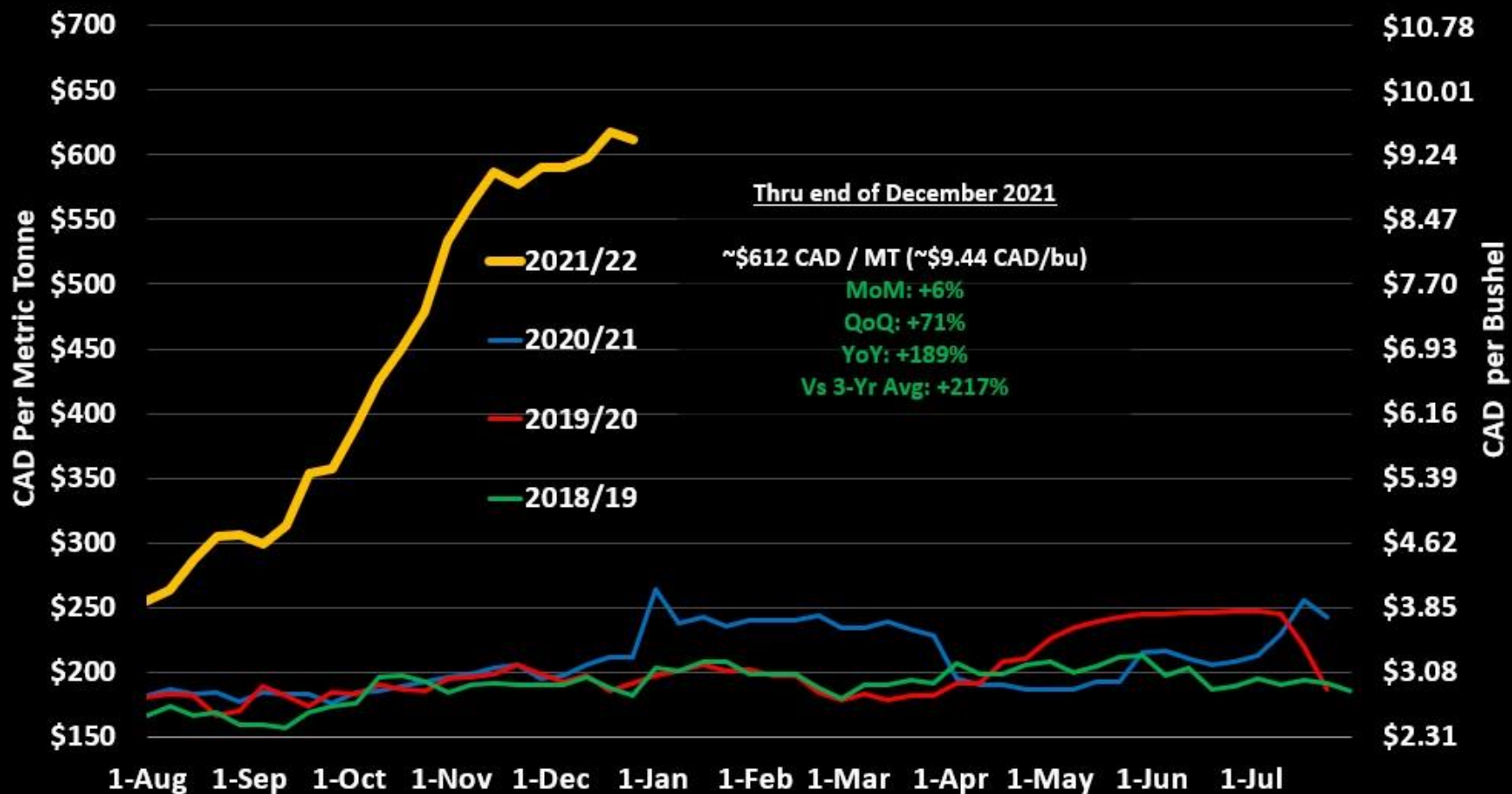
Prepared by Brennan Turner for SaskOats AGM

Alberta Feed Oats Prices



Source: PDQInfo thru end of December 2021

Saskatchewan Cash Oats Prices



Where are oats prices going in 2022?



Supply Factors



Carry Over
Inventory



Production Volume
(Acres X Yield)



Import
Volumes

Demand Factors



Livestock



Substitution
(e.g. Corn vs Wheat)



Processing
(e.g. Ethanol, Milling)



Export

Currency

£

¥

\$

€

@BrennanDTurner

Has COVID helped the oats market?



1. Demand relatively stable

- Commercial down but retail up

2. Healthy eating is becoming a larger factor than anything

- Goes in stride with the ESG push.
- Helps control blood sugar, cholesterol, etc.

3. Oat milk part of health / sustainability push from consumers

- Longer shelf life a very valid factor (no refrigeration needed until carton's open)
- In 1st year of COVID, it was #1 in increase in sales from pre-pandemic
- The go-to for vegans + lactose-intolerant

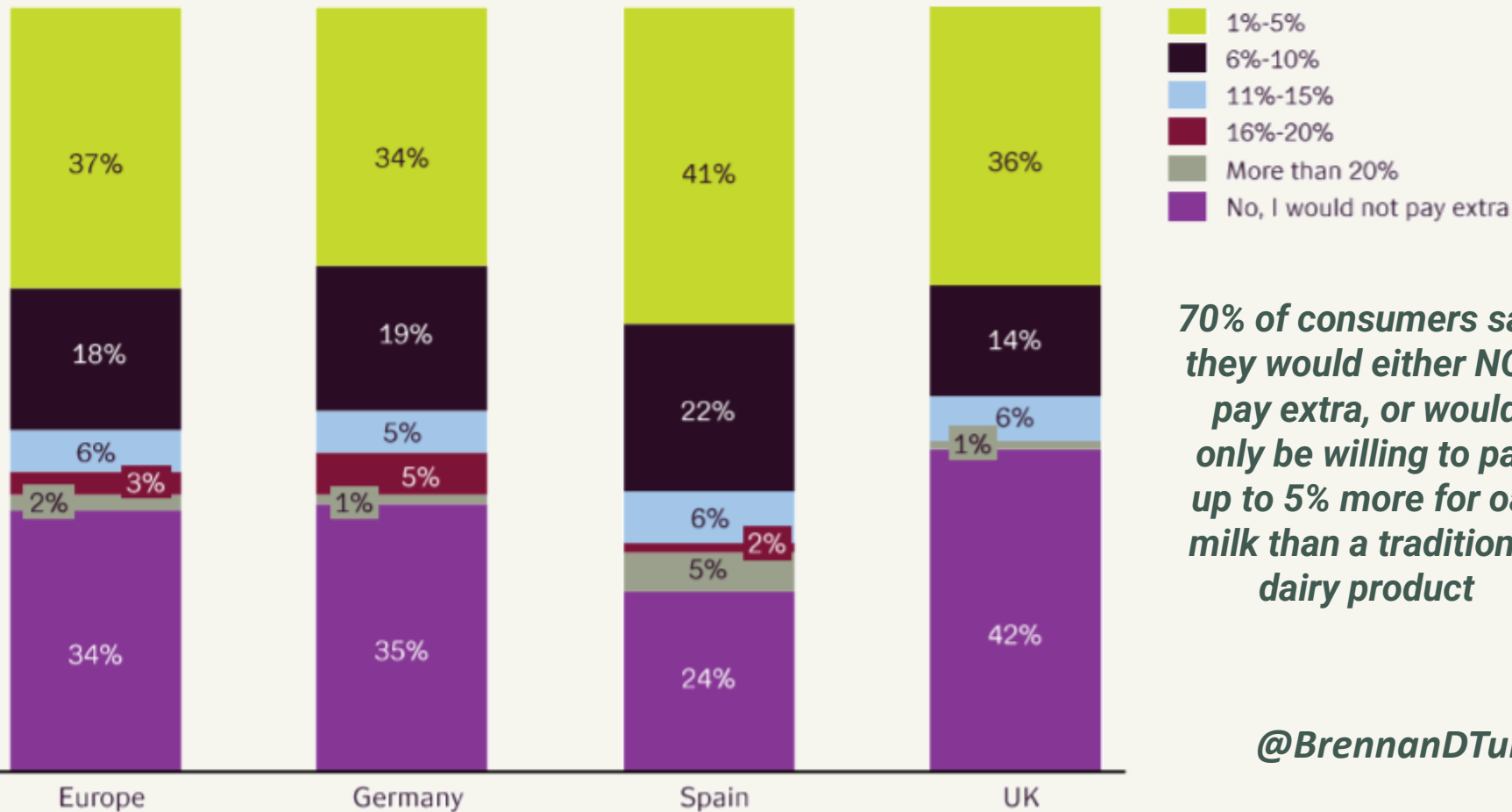
1. Now the fastest-growing plant-based milk in America

- But almond milk still dominates from a market share standpoint
- Remember! 500 MT of oats = 500 litres of oat milk
- Unknown if new consumers are repeat or just replacing one another
- Emits one-third less than CO₂ in production than dairy milk
 - *“Replacing a litre of dairy milk w/ a litre of oat milk is equivalent to not driving 5km on fossil fuels”*
 - **Oatly puts their carbon footprint on every carton now!**

2. Most established, consistent market is in Europe

- 30% of EU milk drinkers consume oat milk 2-3x / week (Source: Novozymes)

Novozymes' 2021 Consumer Insights Survey



70% of consumers said they would either NOT pay extra, or would only be willing to pay up to 5% more for oat milk than a traditional dairy product

@BrennanDTurner

Oats are Great!

“Oats are one of the most underrated crops going from all sorts of angles: growing, bedding, feeding, eating.”

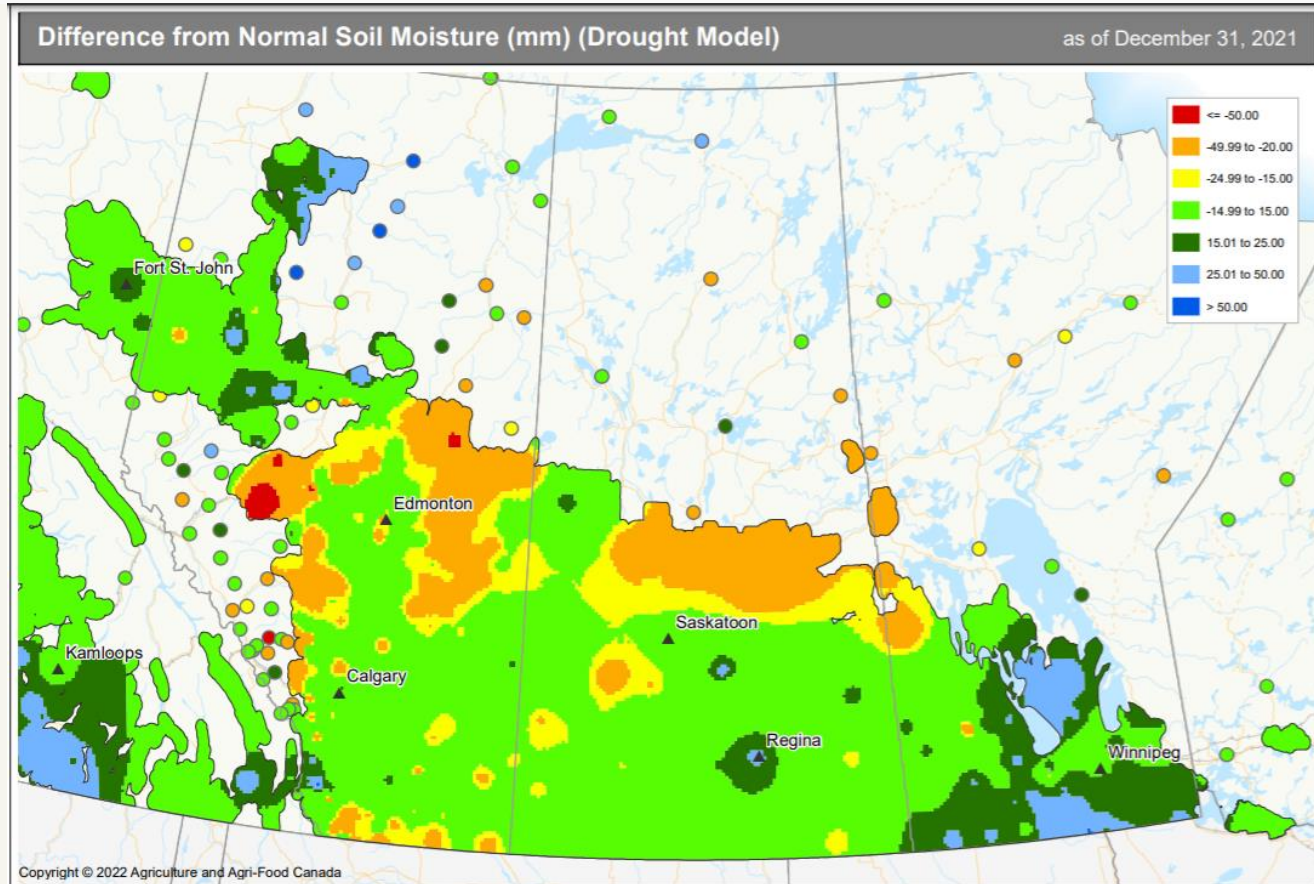
– @RoryDeverell
EU futures & options broker

“Low input requirement, grows on marginal land, stands up to difficult weather, slow release energy, drives milk from cows.”

– @Friesian_man aka Bruce Thompson
UK farmer & Nuffeld Scholar



Decent snowfall so far but...



@BrennanDTurner

How do past years compare?

With demand relatively constant, all about production! What does history tell us?

Crop Year	Planted Area (1,000 ac)	Harvest Area (1,000 ac)	Harvest %	Avg Yields (bu/ac)	Harvest Total (1,000 MT)	Stocks to Use %	Carryout (1,000 MT)	Avg Futures Price (USD/bu)
2000/01	4,511	3,225	72%	68.4	3,403	23%	854	\$1.77
2001/02	4,713	3,060	65%	57.0	2,691	11%	363	\$3.12
2002/03	5,797	3,407	59%	55.4	2,911	19%	524	\$2.99
2008/09	4,300	2,428	83%	77.4	4,273	41%	1,527	\$2.95
2009/10	3,697	2,203	66%	77.8	2,912	35%	1,162	\$2.58
2010/11	2,989	2,678	74%	72.1	2,451	25%	733	\$3.76

Source: AAFC

Oats futures in 2000 - 2003



Concluding Thoughts



1. Lots riding on Harvest 2022!

- Likely will see higher acres (at the expense of malt barley and HRS wheat)

2. Prices will correct a bit to the downside over winter/spring

- Given record low carryout, volatility in the market likely to continue because of the production uncertainty

3. Bull vs Bear Harvest Scenarios

- If normal harvest, prices revert even lower
- If another below-average harvest, double digit oats prices could be the norm in 2022/23

Will Oat Milk feature
in The Dude's White
Russian in
The Big Lebowski 3?



THANK YOU !

brennan.d.turner@gmail.com

@BrennanDTurner

306-715-4540