


2023-02-07 1

Winter 2023 Agriculture: Situation and Outlook



Building on Strengths

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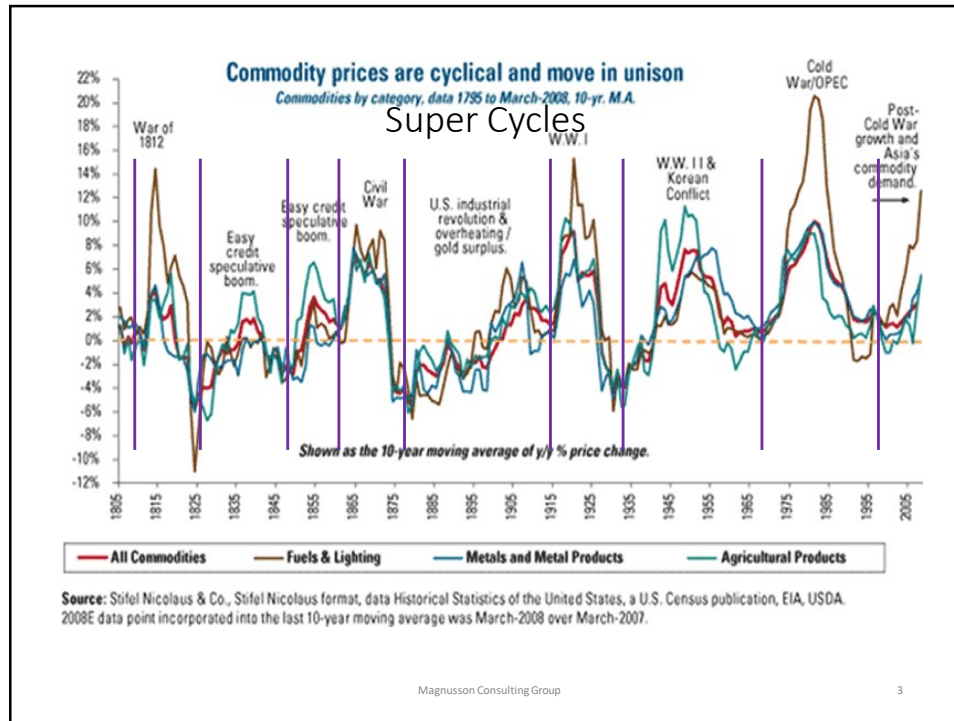
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Agenda

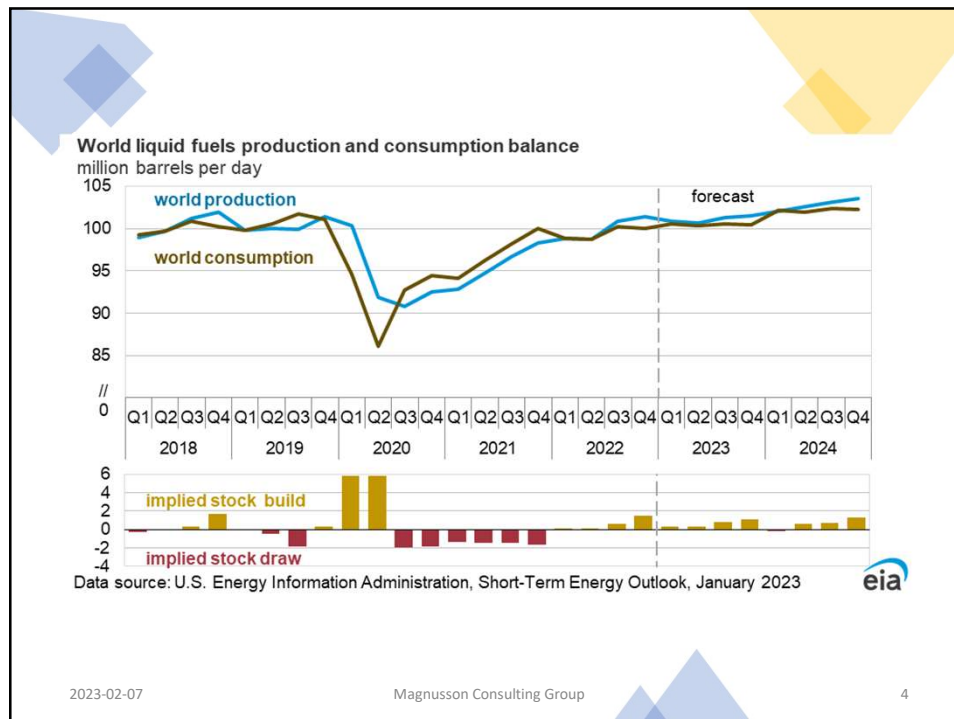
- Managing Commodity Cycles
- Impact of Global Economics on Manitoba Agriculture
 - Canadian Economy
 - Interest Rates
- Outlook for Oil & Gas
- Impact of the War in Ukraine on Supply & Demand
- Weather

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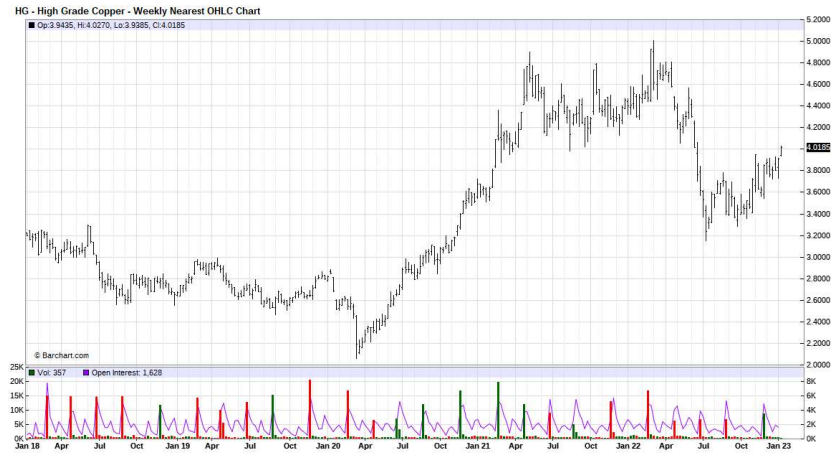


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Copper – March 2023



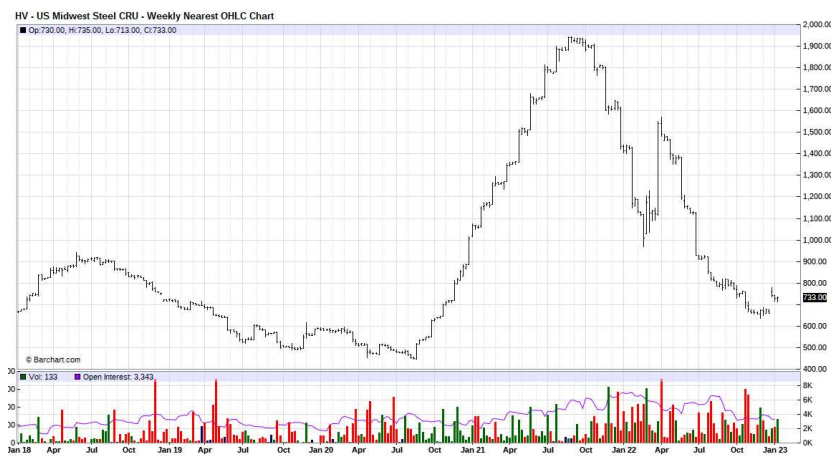
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US Mid Grade Steel – March 23, 2023



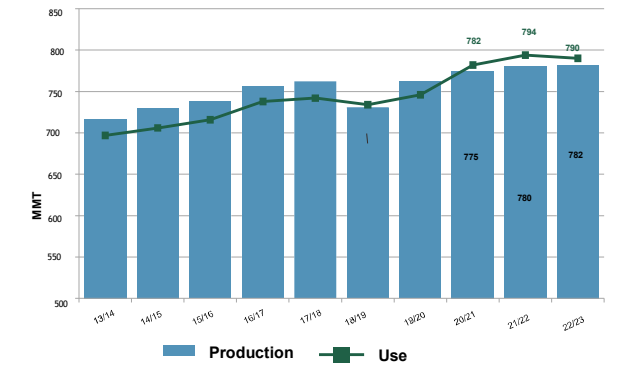
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Global Wheat Production & Use



USDA, US Wheat Associates & Magnuson Consulting Group

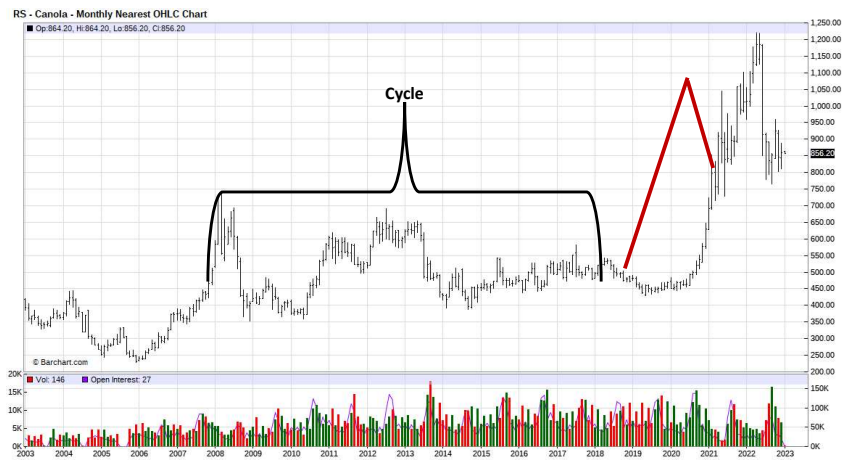
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Canola – March 2023

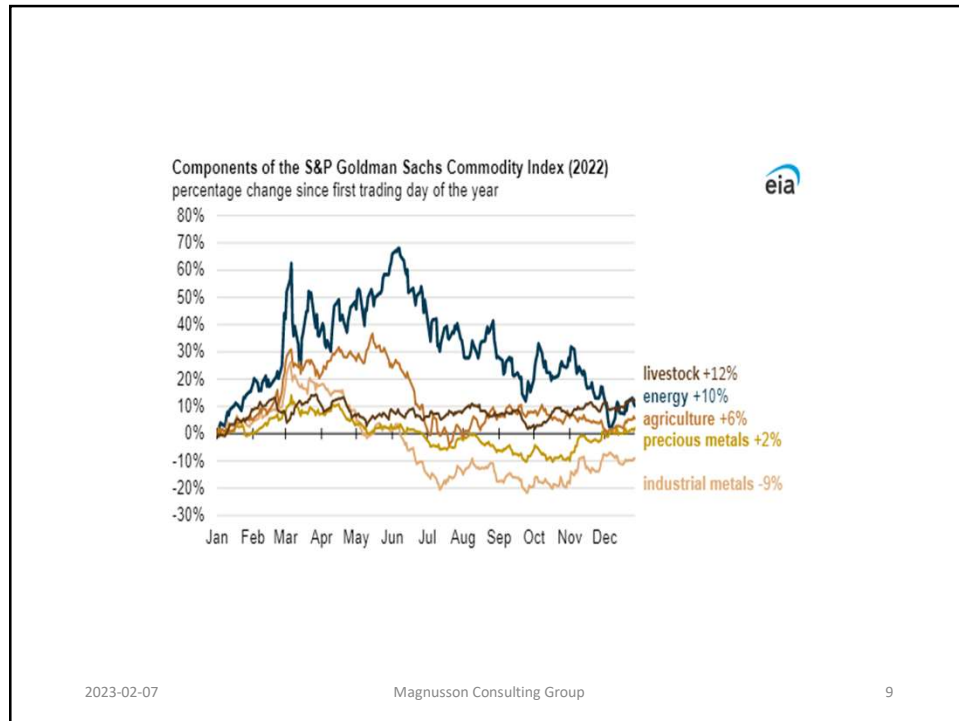


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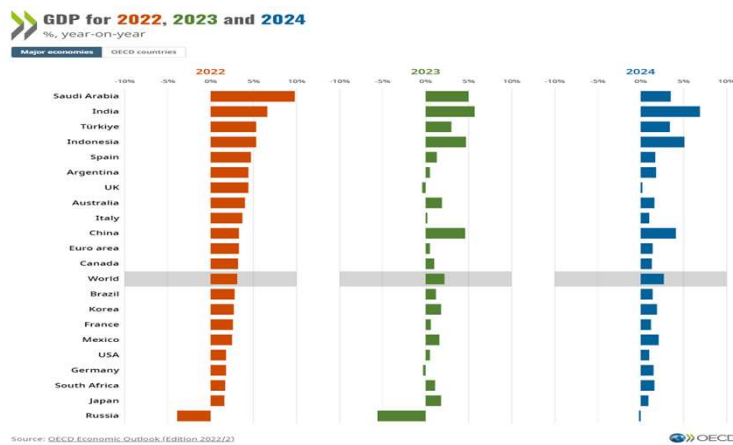
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Global Economic Outlook

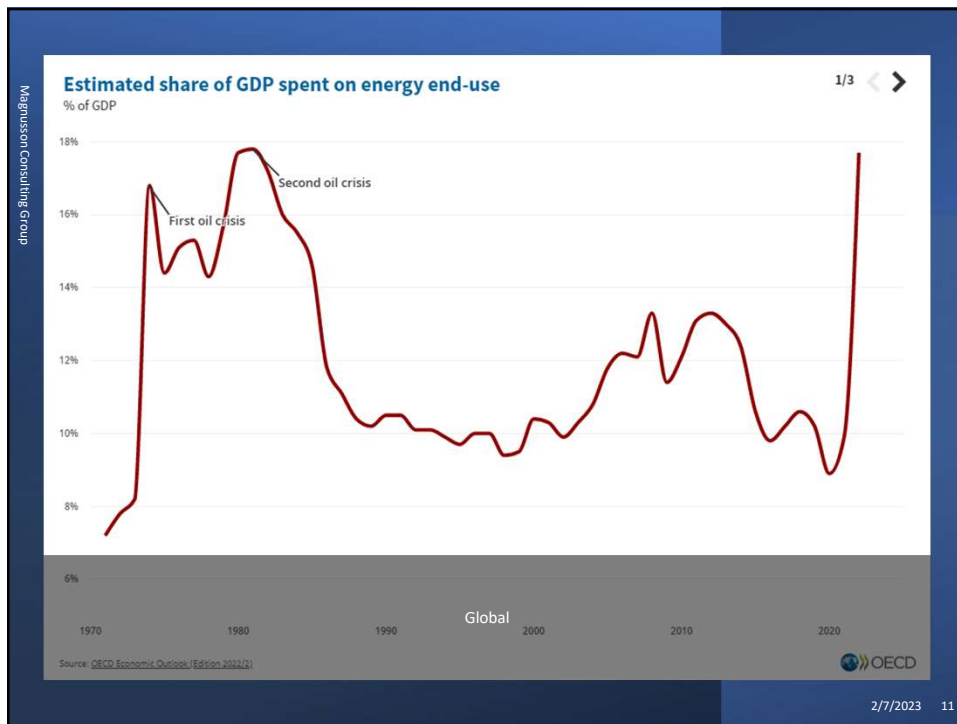


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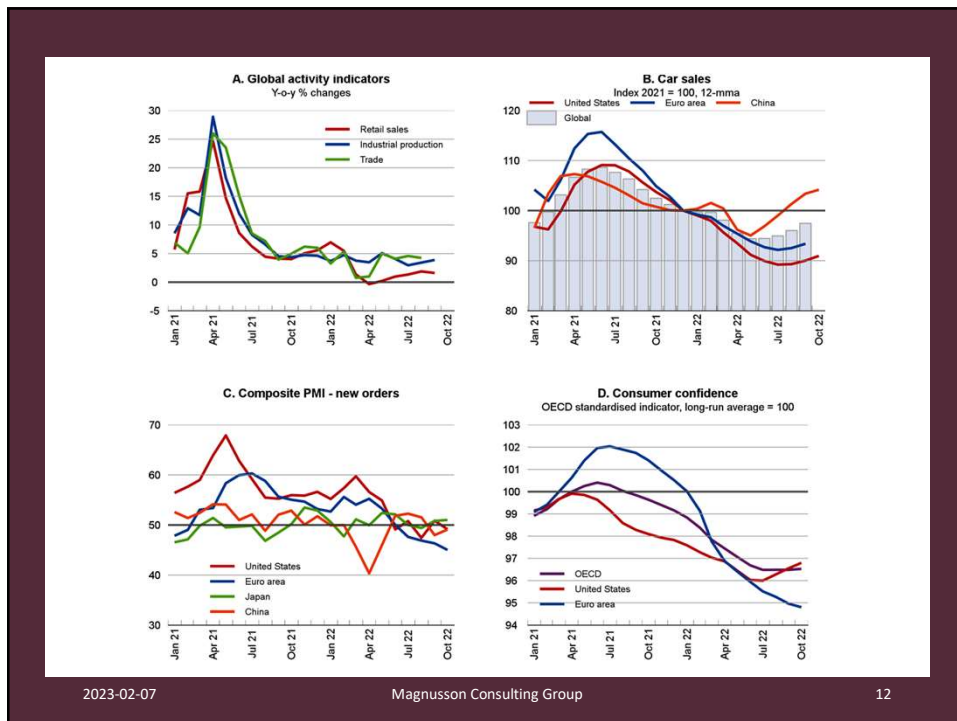
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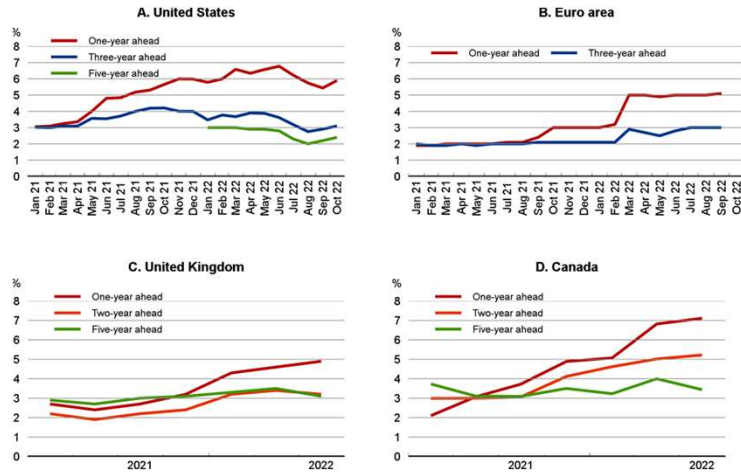


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Inflation



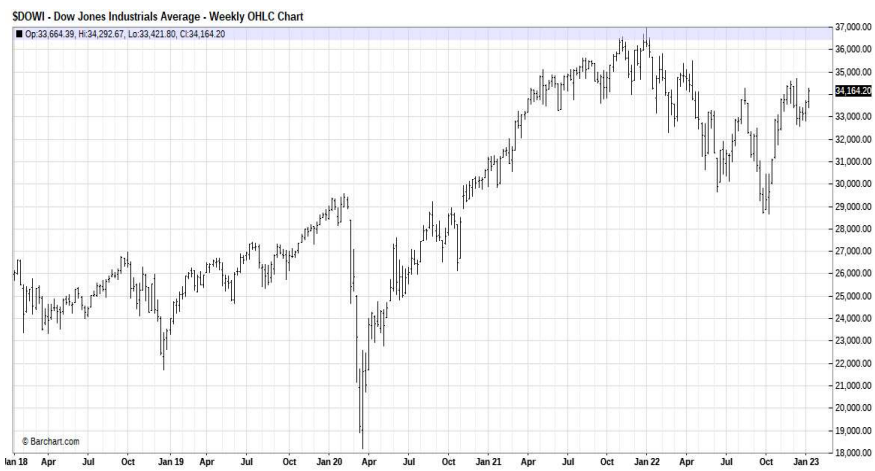
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Dow Industrials – Jan 13, 2023

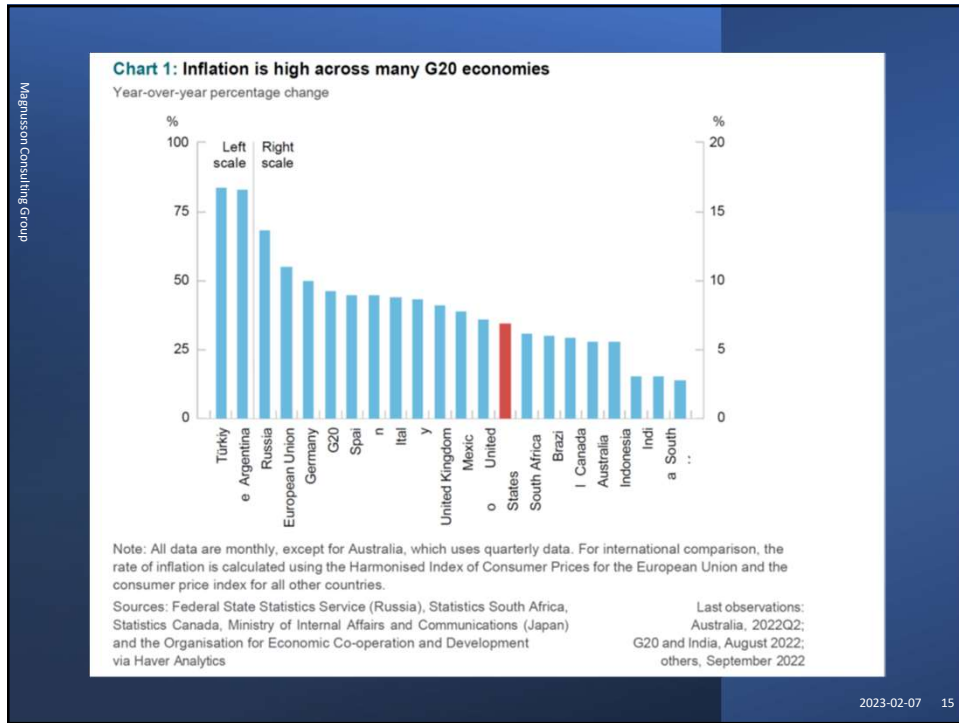


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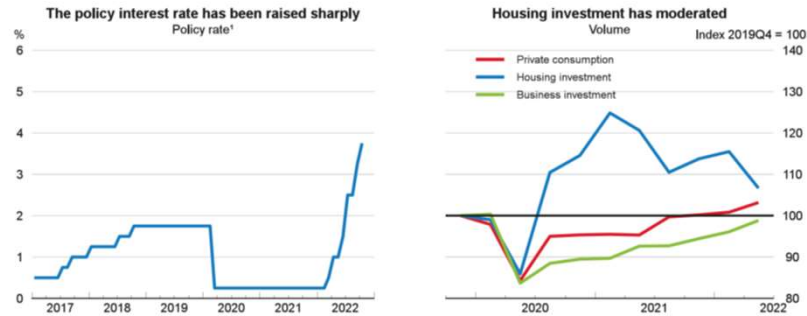
Canadian Economy

Too Little to Late?

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Canadian Economy



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Canadian Economy

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- Growth in real GDP is projected to slow from 3.2% this year to 1% in 2023 before strengthening to 1.3% in 2024.
- Higher borrowing costs will weigh on consumer spending while export growth ***moderates in the near term amid deteriorating conditions abroad. BUT...higher longer!***
- Softer aggregate demand will relieve pressure on capacity, aided by continued recovery in non-housing investment.
- Labour markets have been tight until recently, but hiring will decline with slower output growth.
- Wage growth will moderate as the unemployment rate settles slightly above pre-pandemic levels.
- Inflation will converge on target as underlying cost drivers ease and remaining supply bottlenecks clear.

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Canadian Economy

Large interest rate rises this year will help check excess demand and tame inflationary pressures.

The pace of monetary tightening should slow if labour markets show signs of deteriorating. Living-cost relief is weighing on fiscal balances in 2022.

Federal and provincial governments should scale back support as price pressures abate.

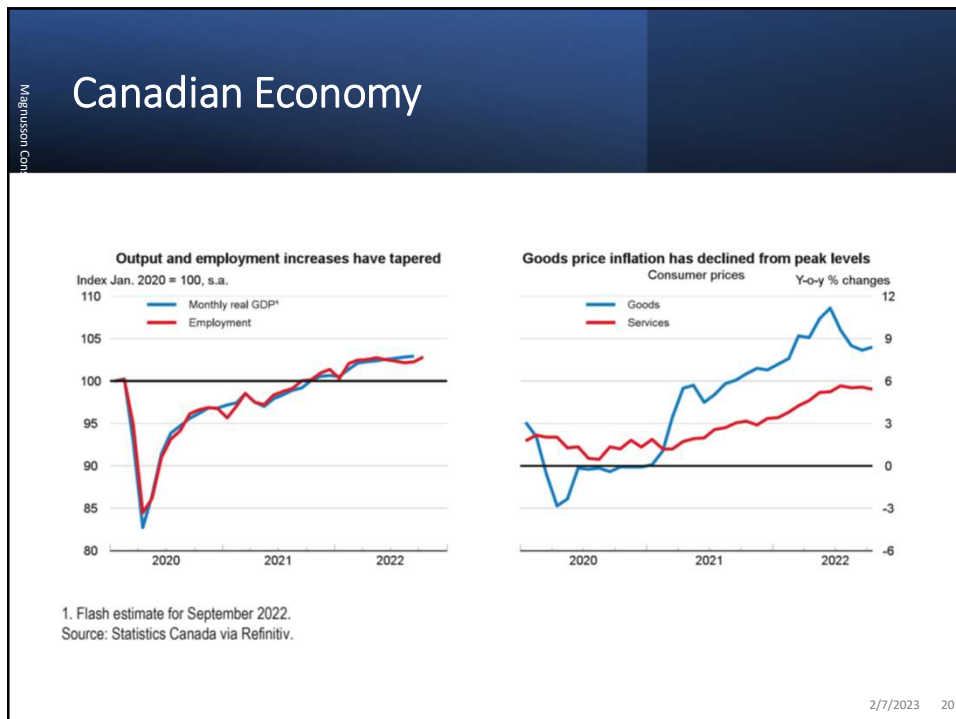
This will reduce fiscal deficits next year and help temper aggregate demand.

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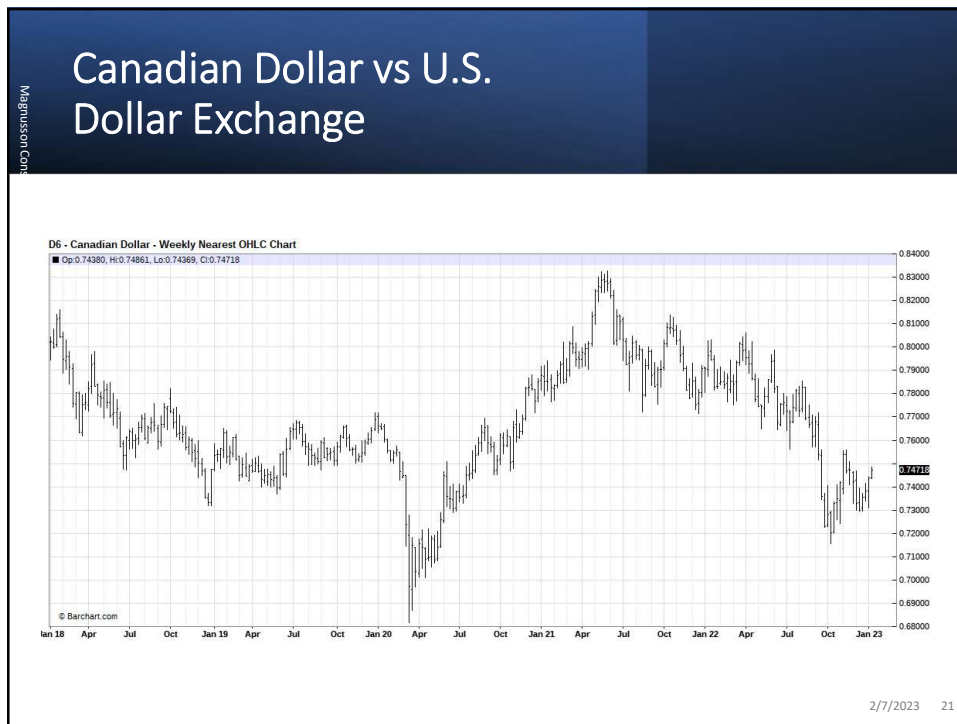
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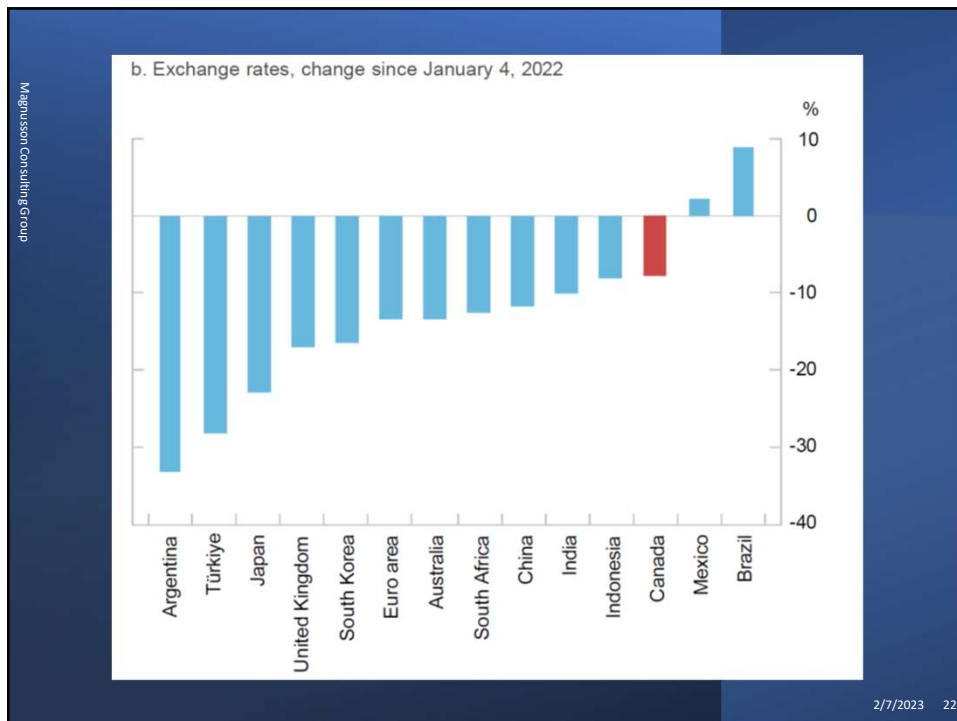
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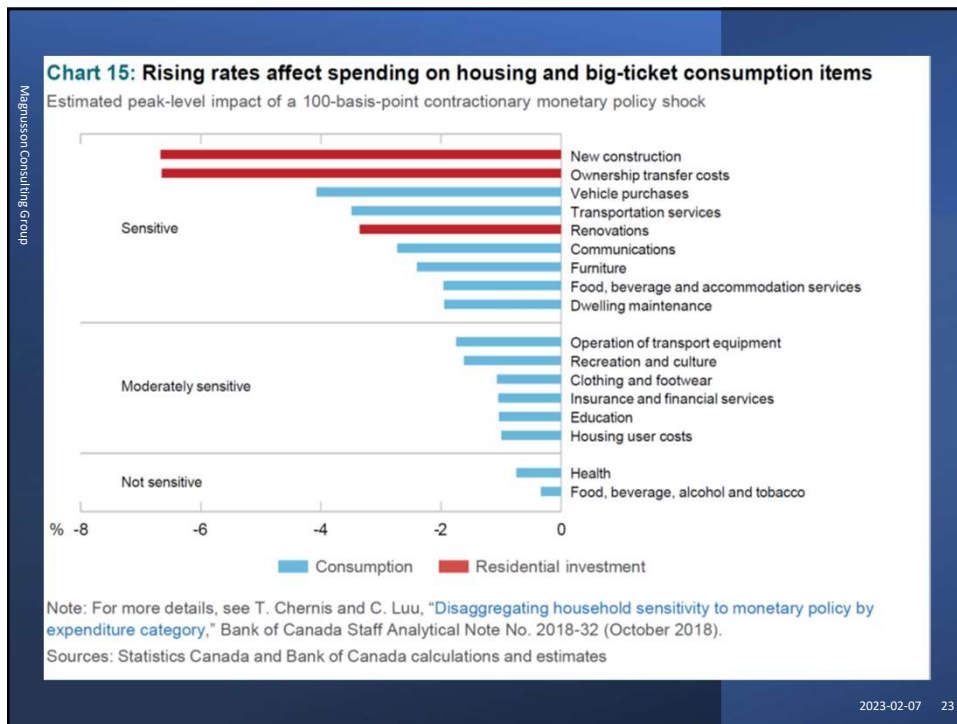
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Canadian Farm Land Values

PROVINCES	AVERAGE % CHANGE JAN 2022 - JUNE 2022 (6 MONTHS)	AVERAGE % CHANGE JULY 2021 - JUNE 2022 (12 MONTHS)	SHARE OF ARABLE LAND IN CANADA (%)	SHARE OF ARABLE LAND IN A PROVINCE RELATIVE TO TOTAL LAND AREA (%)
B.C.	6.5	15.0	1.7	0.8
Alta.	5.9	5.8	29.6	19.9
Sask.	8.4	14.9	42.8	31.7
Man.	6.0	13.6	11.7	9.2
Ont.	15.6	27.7	8.8	4.2
Que.	10.3	13.5	4.5	1.5
N.B.	3.4	8.1	0.3	1.9
N.S.	6.0	14.0	0.2	1.8
P.E.I.	14.8	26.4	0.4	27.4
N.L.	N/A	N/A	N/A	N/A
Canada	8.1	13.1		4.9

2/7/2023

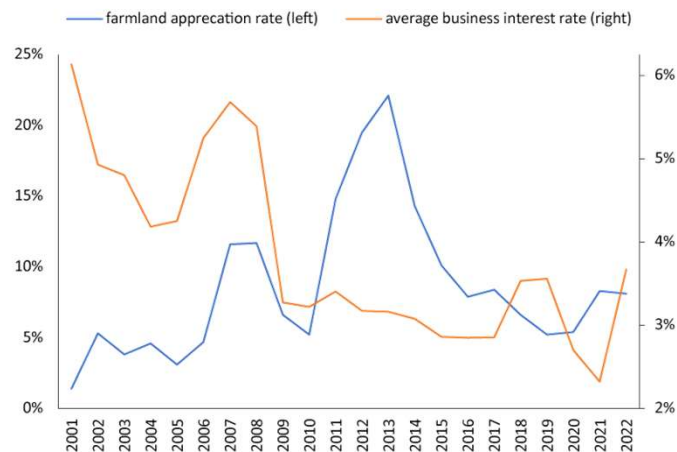
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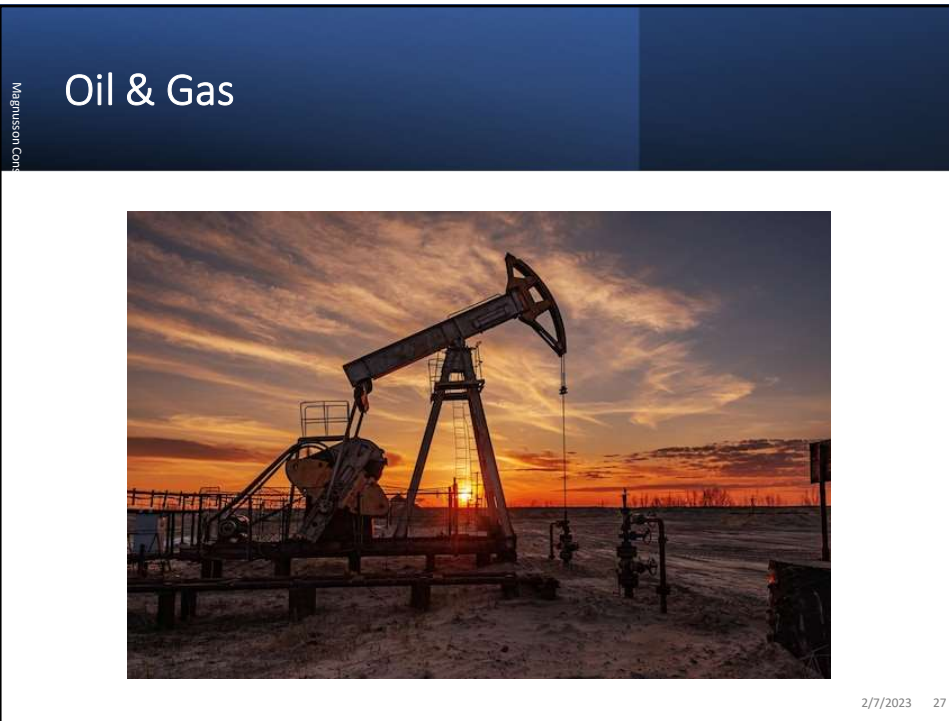
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Canadian Oil & Gas Industry

- The Canadian oil and gas industry has a growing influence on the global stage.
- With approximately 500 Canadian companies actively participating, supporting 500,000 jobs across the country in the industry, it's no wonder Canada is seen as an energy leader.
- ***Our industry contributes over \$116 billion a year to the Canadian economy, and has welcomed on average over \$41 billion a year in new investments.***
- The Canadian oil and gas industry is the leading largest recipient of private sector investment in Canada.
- The oil and gas industry contributes 6.5 percent to Canada's GDP.
- **Facts and Figures**
 - ***The oil and gas industry represents about 20% of the Toronto Stock Exchange***
 - The industry creates almost \$200 billion of revenue per year
 - 6% of those working in oil and gas identify as indigenous

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Oil Outlook

- Strong gas & oil use in key consuming countries outweighs weak European and Asian petrochemical deliveries.
- Oil demand growth has been increased to 2.3 mb/d (+140 kb/d) for 2022 as a whole and to 1.7 mb/d next year (+100 kb/d), when it will reach 101.6 mb/d.
- World oil supply fell 190 kb/d in November to 101.7 mb/d, breaking a five-month uptrend, after Saudi Arabia and other Gulf countries curbed supply in line with lower OPEC+ output targets.
- A steeper drop is expected next month as the EU ban on Russian crude imports and the G7 price cap take effect.
- Following annual gains this year of 4.7 mb/d, growth of 770 kb/d in 2023 will raise supply to 100.8 mb/d.

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Oil Outlook

- Global refinery throughputs surged 2.2 mb/d in November to the highest since January 2020, resulting in sharply lower diesel and gasoline cracks and refinery margins.
- After ten consecutive quarters of estimated stock draws, refined product balances are expected to be back in positive territory in the first half of 2023.
- Russian oil exports increased by 270 kb/d to 8.1 mb/d, the highest since April as diesel exports rose by 300 kb/d to 1.1 mb/d.
- Crude oil loadings were largely unchanged m-o-m, even as shipments to the EU fell by 430 kb/d to 1.1 mb/d.
- Loadings to India reached a new high of 1.3 mb/d. Export revenues, however, dropped \$0.7 bn to \$15.8 bn on lower prices and wider discounts for Russian-origin products.

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Oil Outlook

- Global observed inventories fell by 23.2 mb in October as product stocks fell for the first time since March and crude oil saw a smaller build.
- OECD industry stocks increased by 17.3 mb, to 2 765 mb, narrowing the deficit versus the five-year average to 150.2 mb, but OECD government stocks fell by 19.9 mb.
- Preliminary data for the US, Europe and Japan show industry stocks increased by 3.1 mb in November.

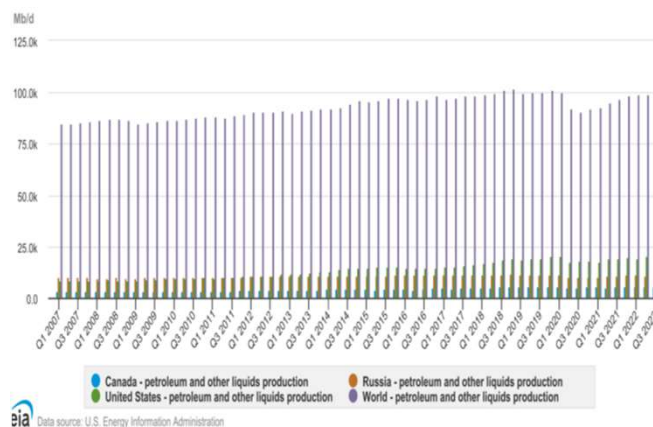
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Total Petroleum and Other Liquids Production Quarterly

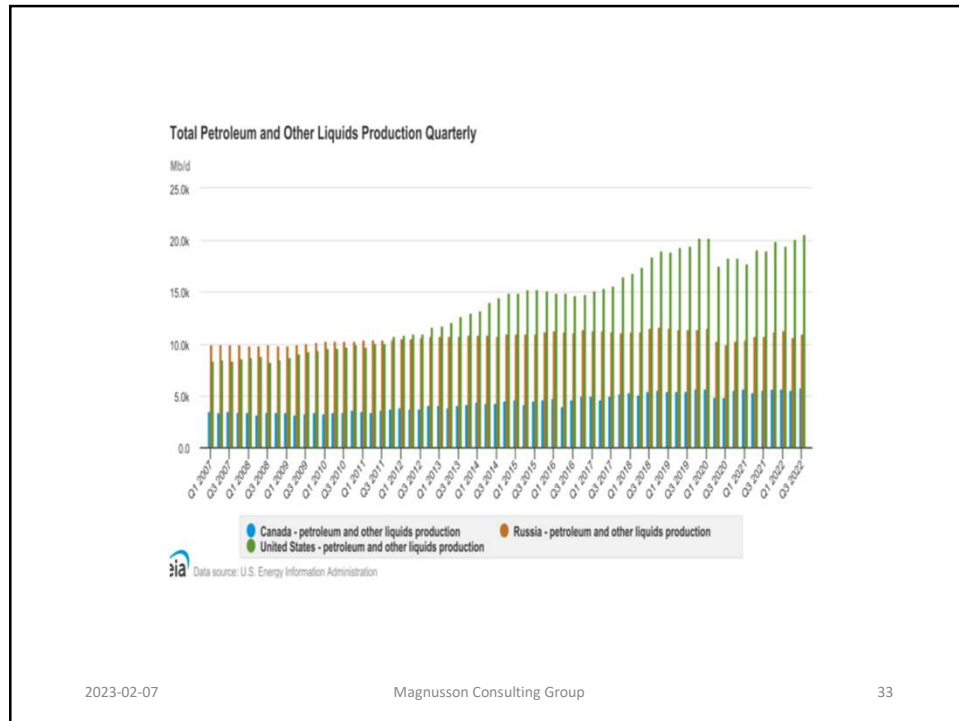


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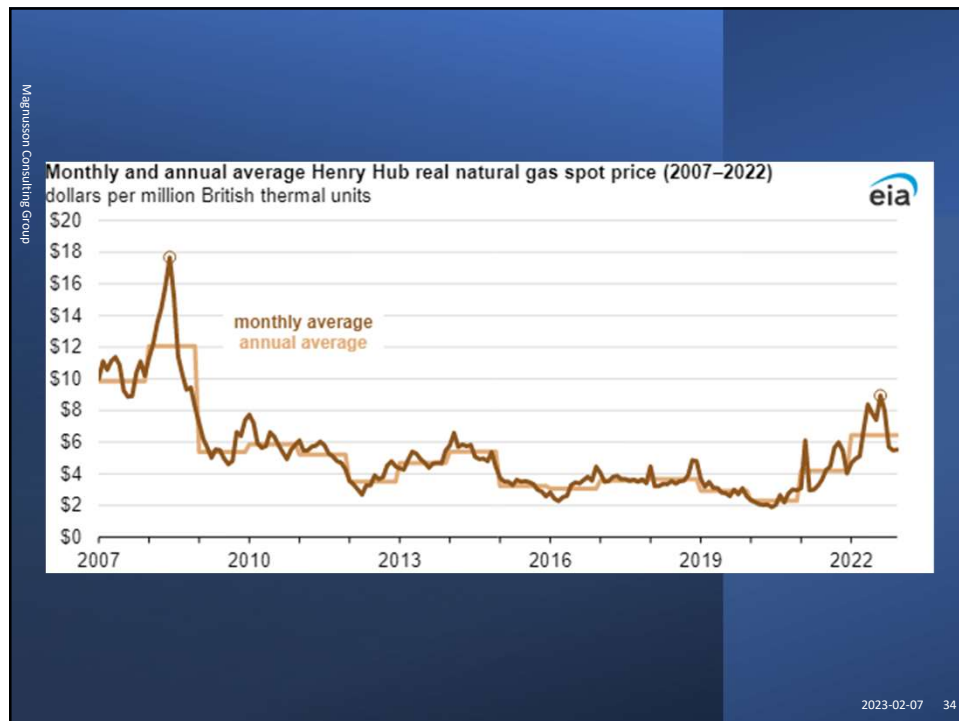
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WTI - Cash as of Jan 9, 2023



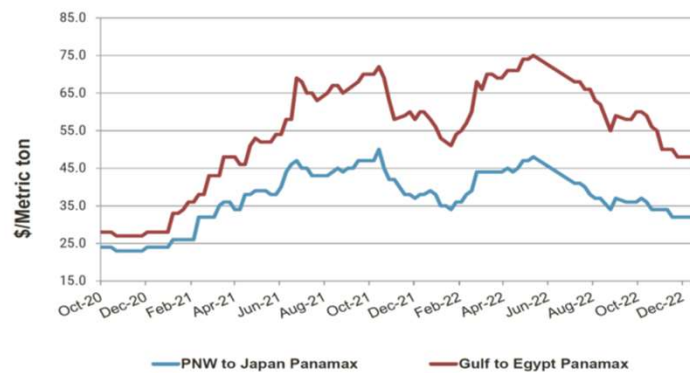
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Ocean Freight



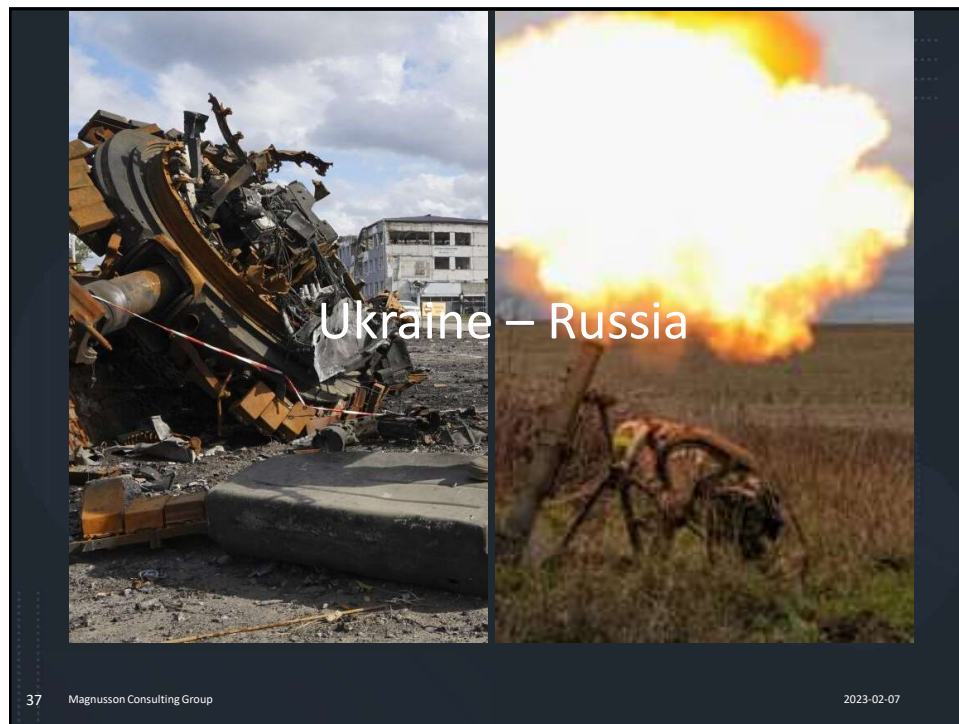
Source: U.S. Wheat Associates Price Report, January 6, 2023

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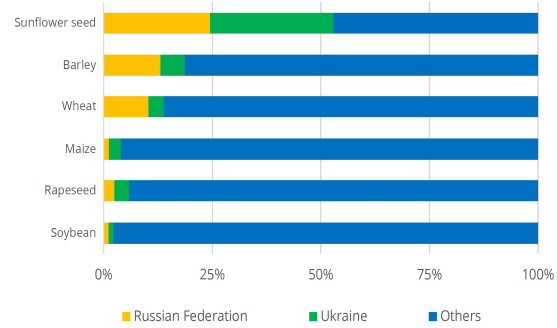
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FIGURE 1

Share in global production of selected crops (2016/17-2020/21 Avg.)



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FIGURE 4

Agricultural exports of the Russian Federation in 2021

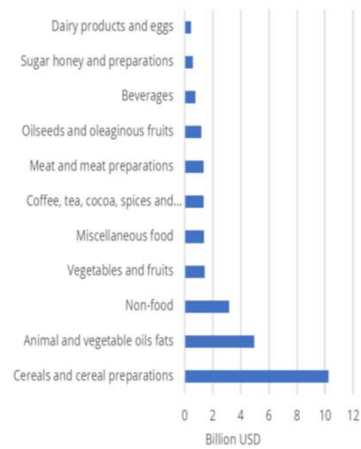


FIGURE 5

Agricultural exports of Ukraine in 2021



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Ukraine Fast Facts

- Ukraine is one of the world's top agricultural producers and exporters and plays a critical role in supplying oilseeds and grains to the global market.
- More than 55 percent of Ukraine's land area is arable land.
- Agriculture provides employment for 14 percent of Ukraine's population.
- Agricultural products are Ukraine's most important exports. In 2021 they totaled \$27.8 billion, accounting for 41 percent of the country's \$68 billion in overall exports.

Product	Production			Exports		
	Volume (1,000 MT)	Rank Among Global Producers	% of Global Production	Volume (1,000 MT)	Rank Among Global Exporters	% of Global Exports
Corn	41,900	#6	3.5%	23,000	#4	12%
Wheat	33,000	#7	4.3%	19,000	#5	9%
Sunflower	17,500	#1	30.6%	75	#9	3%
Barley	9,900	#4	6.8%	5,800	#3	17%
Sunflower Oil	5,676	#2	30.6%	4,950	#1	46%
Sunflower Meal	5,452	#2	27.5%	4,100	#1	54%
Rapeseed	3,015	#6	4.2%	2,700	#3	20%

Source: USDA WASDE and PSD Database, updated March 9, 2022.

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Ukraine Fast Facts

Product	Value	Top Markets		
TOTAL	\$27.8 billion	EU \$7.7B	China \$4.2B	India \$2.0B
Sunflower Oil	\$6.4 billion	India \$1.9B	EU \$1.9B	China \$0.9B
Corn	\$5.9 billion	China \$1.9B	EU \$1.8B	Egypt \$0.5B
Wheat	\$5.1 billion	Egypt \$0.9B	Indonesia \$0.7B	Turkey \$0.4B
Rapeseed	\$1.7 billion	EU \$1.1B	Pakistan \$0.2B	UK \$0.2B
Barley	\$1.3 billion	China \$0.7B	Turkey \$0.2B	S. Arabia \$0.1B
Sunflower Oilcake	\$1.2 billion	China \$0.6B	EU \$0.3B	Belarus \$0.1B

Source: Trade Data Monitor LLC

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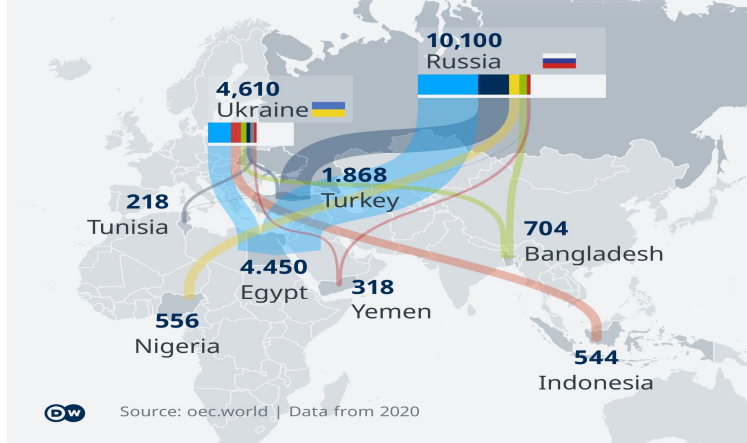
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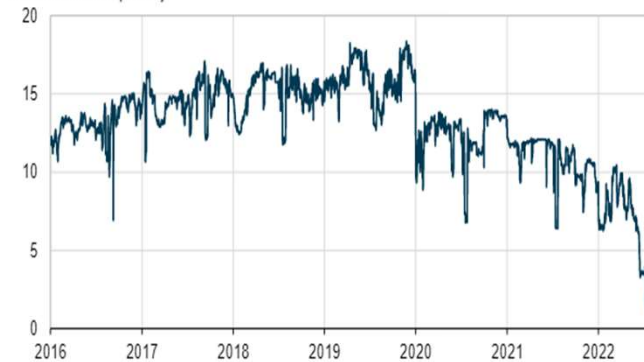
Who is buying wheat from Russia and Ukraine?

Volume of exports in million USD



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Daily natural gas pipeline exports from Russia to Europe (Jan 1, 2016–Jul 31, 2022)



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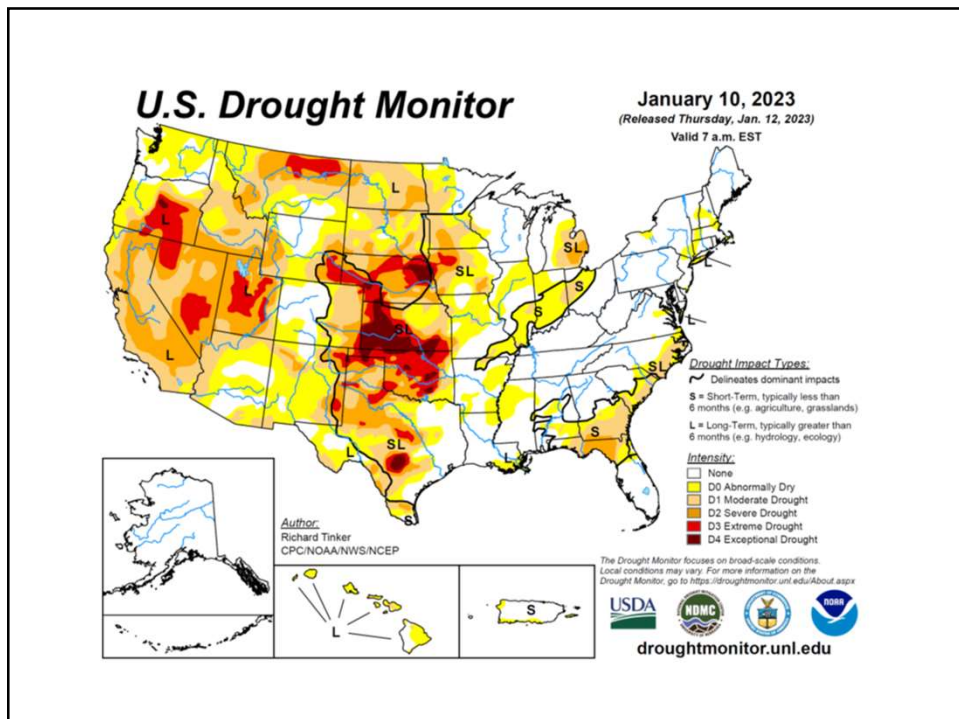
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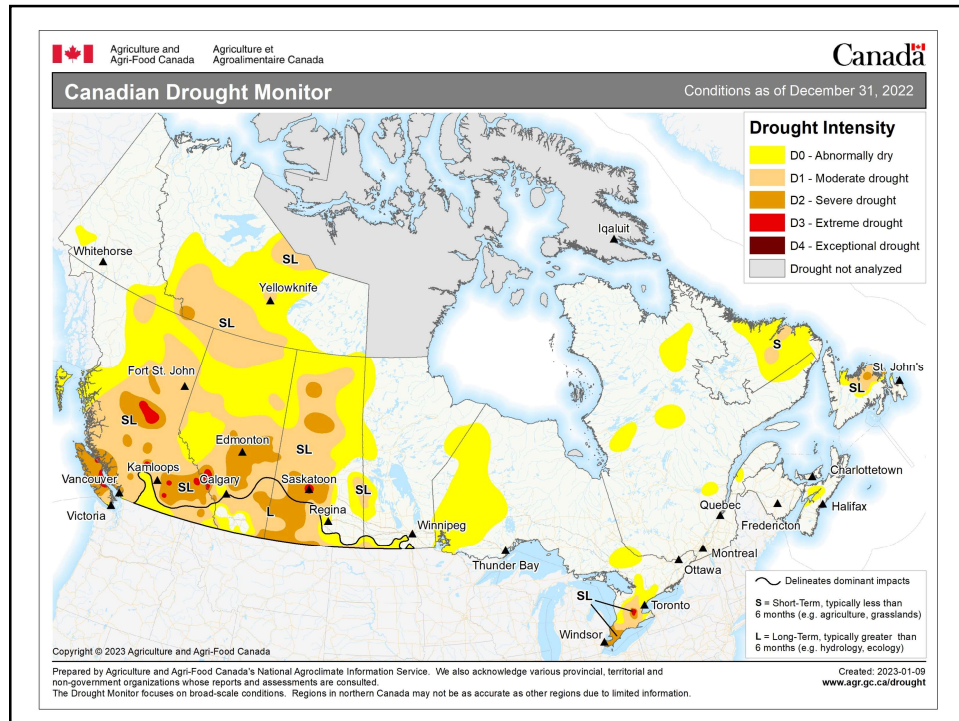
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Crop Situation & Outlook

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• Highlights of USDA's 2022/23 Wheat S&D Estimates

• World beginning stocks raised slightly from last month to 276.82 MMT

- Beginning stocks in Argentina are increased 27,000 MT to 2.35 MMT
- U.S. 2022/23 beginning stocks are increased to 19.01 MMT

• Global ending stocks raised 1.1 MMT from last month to 268.39 MMT

- The European Union's ending stocks are increased 900,000 MT to 11.31 MMT
- Ukraine's ending stocks increase 500,000 MT to 4.71 MMT
- Kazakhstan's ending stocks increased 400,000 MT to 1.91 MMT
- India's ending stocks increased 350,000 MT to 12.63 MMT
- The U.S. wheat ending stocks are decreased slightly to 15.44 MMT

• U.S. wheat domestic consumption increases 900,000 MT to 30.6 MMT

- Seed usage increased 2.2 MMT on larger than expected 2023 winter wheat planted area of 36.9 million acres
- Feed and residual use increased 800,000 MT

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Source: US Wheat Associates

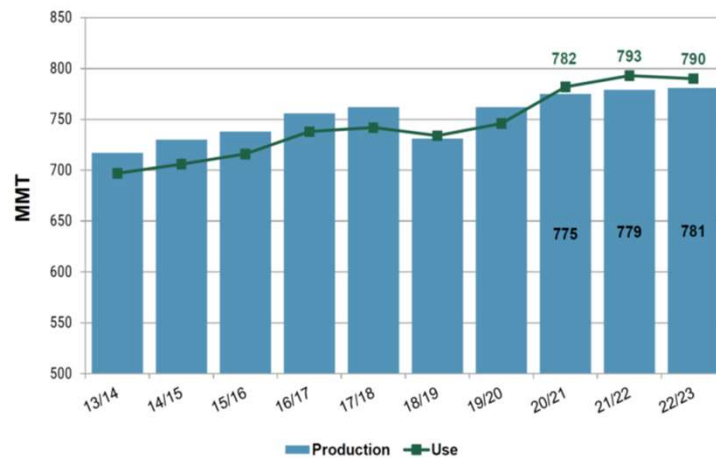
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World Production & Use



Source: US Wheat Associates

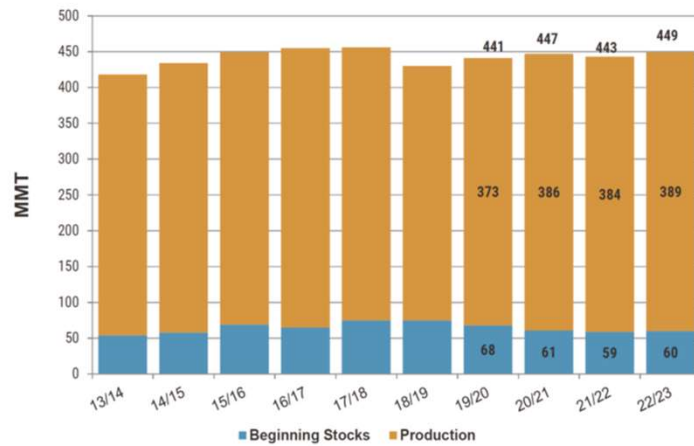
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Supplies: Exporting Nations



*Includes U.S., Canada, Australia, Argentina, EU, Russia, Ukraine and Kazakhstan

Source: US Wheat Associates
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Global Supply & Demand

		<u>20/21</u>	<u>21/22</u>	<u>22/23</u>
SUPPLY:	Beginning Stocks	298	290	277
	Production	775	779	781
	Supply Total	1073	1069	1058
	Ending Stocks	290	277	268
TRADE:	Exports/Imports	203	203	212
DEMAND:	Food & Seed	625	632	634
	Feed & Residual	158	160	155
	Use Total	783	792	790

Source: US Wheat Associates

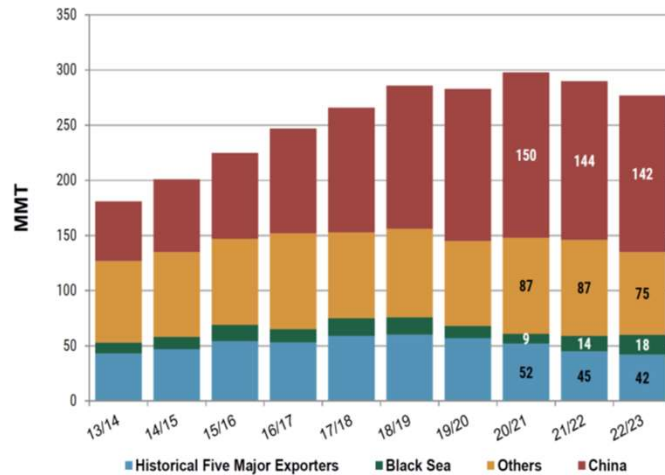
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Exporters Beginning Stock



Historical Five Major Exporters include U.S., Canada, Australia, Argentina and EU. Black Sea includes Russia, Ukraine and Kazakhstan.
Source: US Wheat Associates

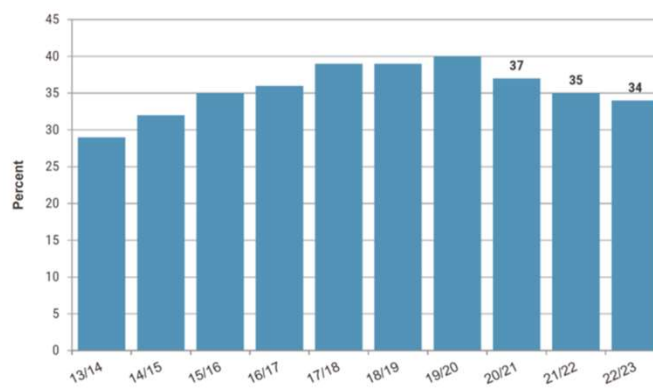
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Ending Stocks



*Ending stocks

Source: US Wheat Associates

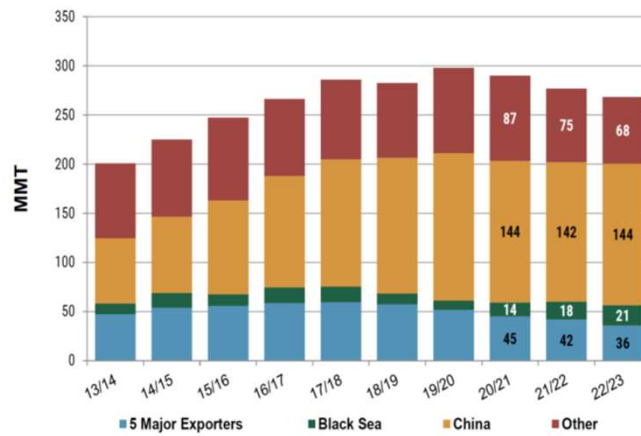
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World Ending Stocks



Historical Five Major Exporters include U.S., Canada, Australia, Argentina and EU. Black Sea includes Russia, Ukraine and Kazakhstan.
Source: US Wheat Associates

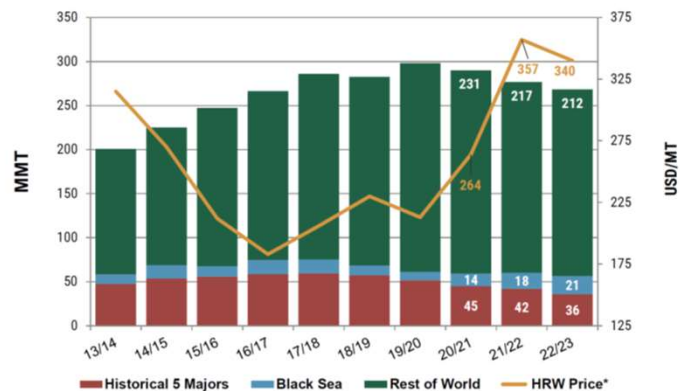
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Global Ending Stock & Price



*Source: U.S. Wheat Associates Price Report, January 6, 2023

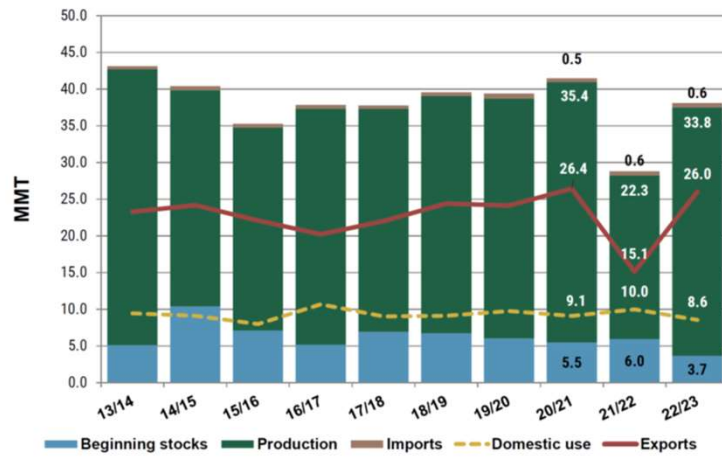
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Canada



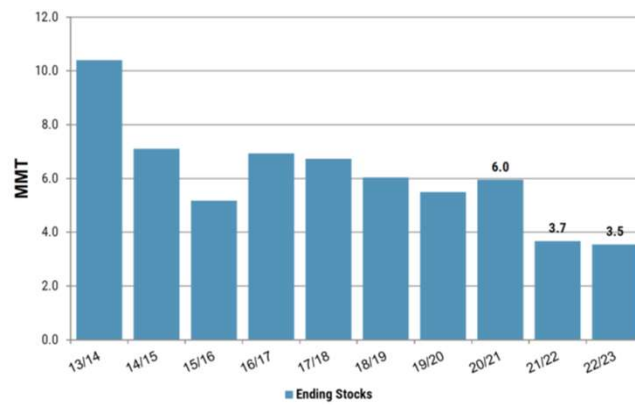
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Canada Ending Stocks



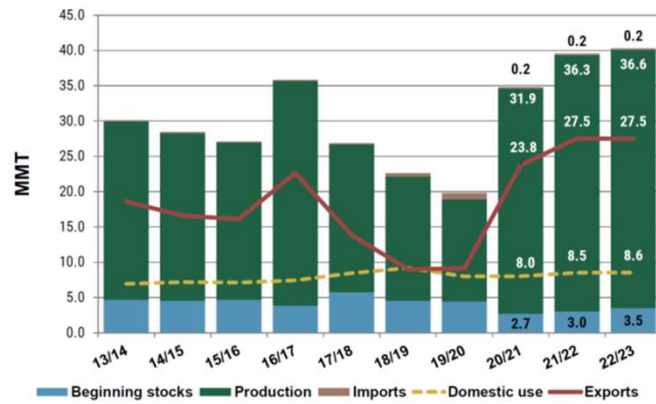
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Australian Situation



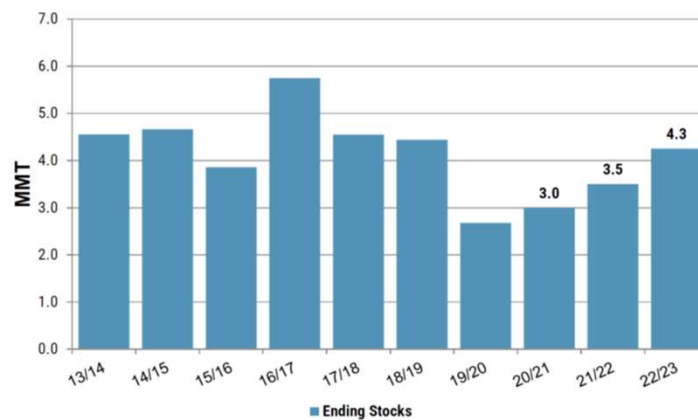
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Australia Ending Stocks



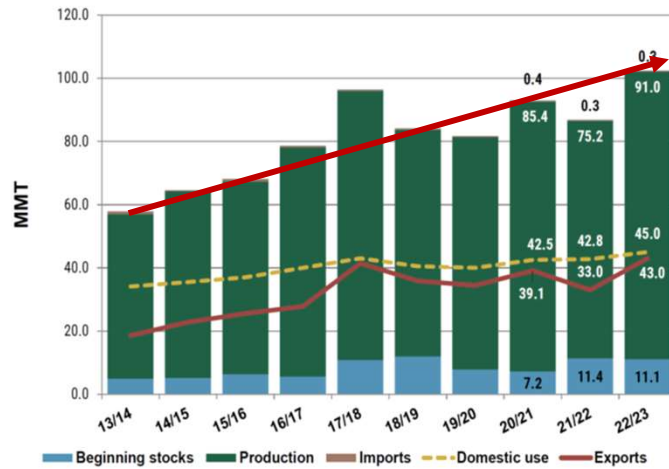
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Russia Situation



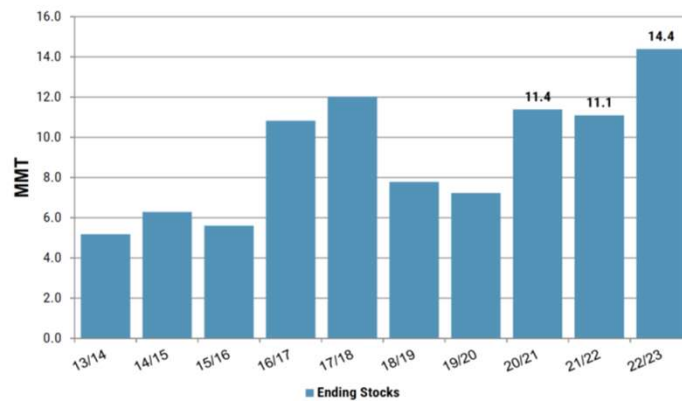
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Russia Ending Stocks



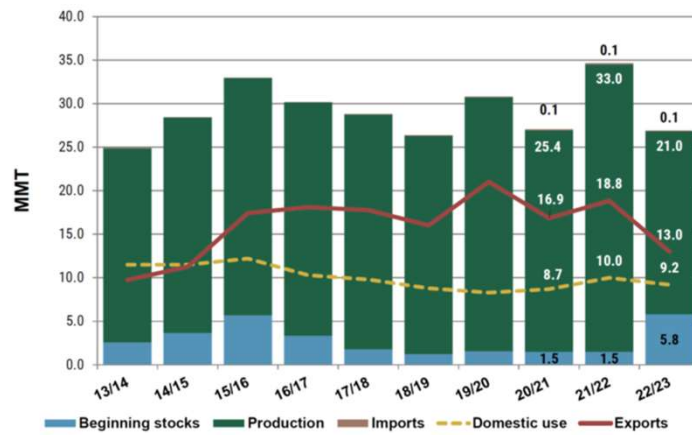
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Ukraine Situation



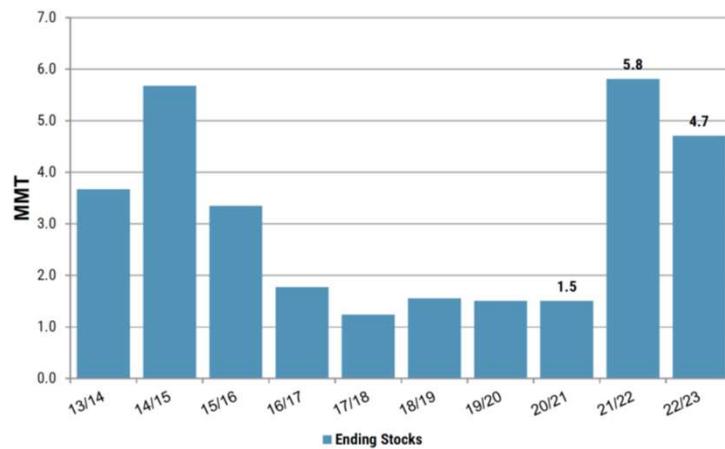
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Ukraine Ending Stocks



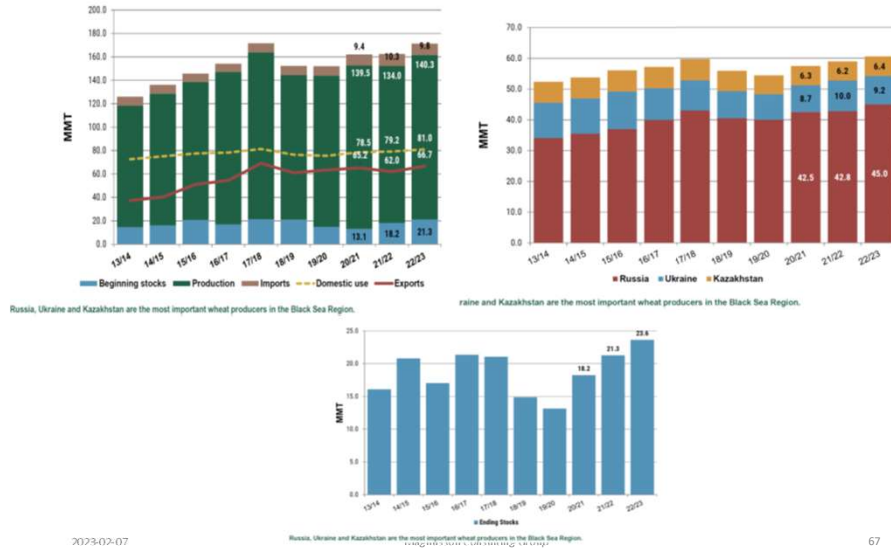
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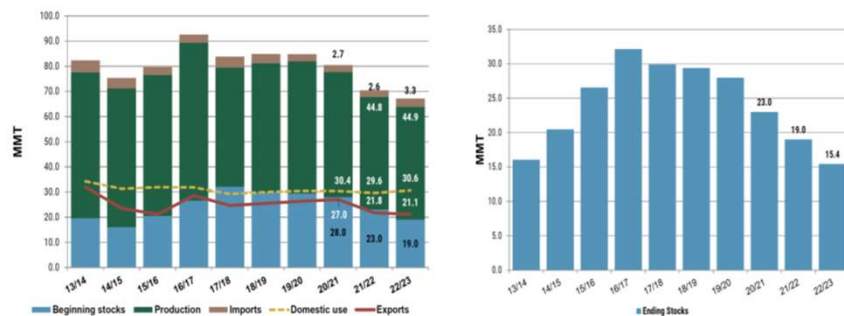
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Black Sea



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US



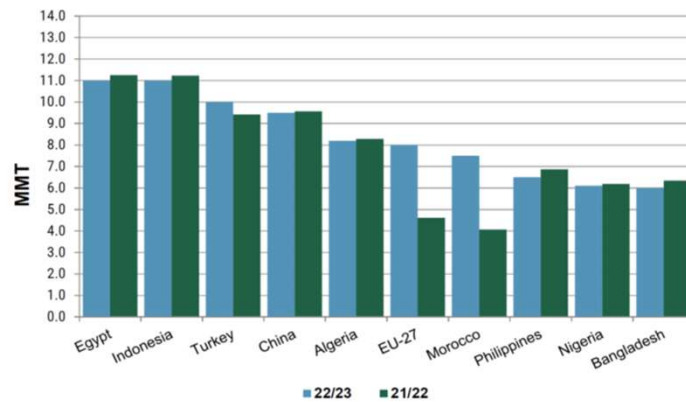
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World Importers



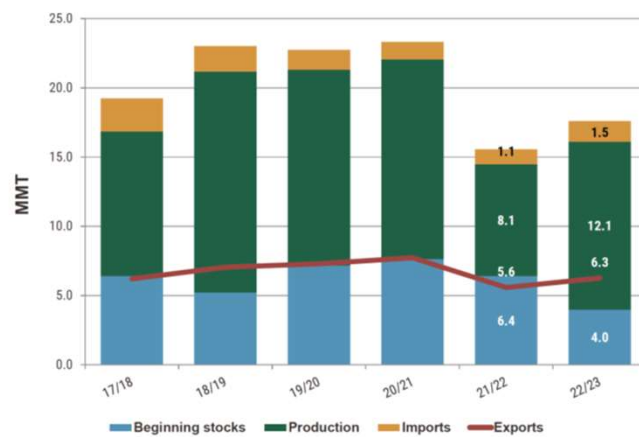
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US Hard Red Spring



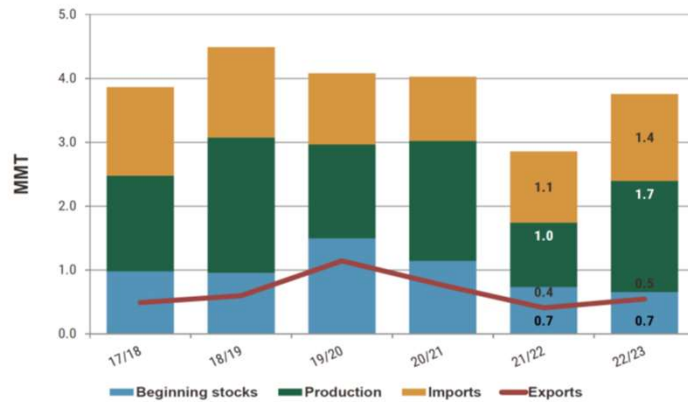
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US Durum Wheat



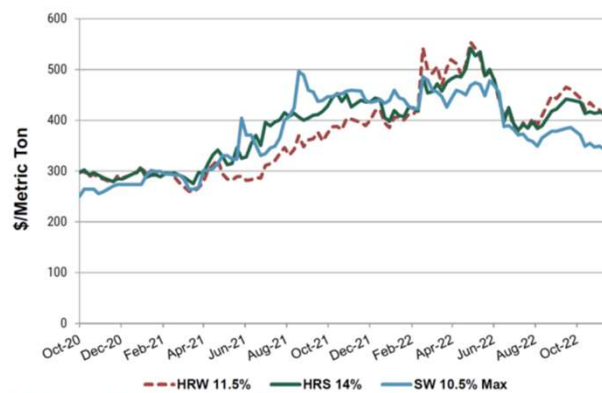
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US PNW Wheat Prices



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Durum Wheat

- **For 2022-23**, Canadian durum production increased by 79% from 2021-22 to 5.44 million tonnes (Mt), due to an increase in seeded area and a return to average yields.
- STC's final production estimate, released December 2, were down by 0.67 Mt (-10%), compared to the September estimate due to lower yields.
- Survey results show an average national yield of 2.27 t/ha versus the 2.58 t/ha reported by STC in September.
- Saskatchewan accounted for 77% of the production, Alberta for 22% and Manitoba for 1%.
- **Total supply is now forecast at 6.05 Mt, +57% compared to 2021-22, but 6% below the last five year average.**
- Compared to last month's report, exports were downgraded to 4.8 Mt due to reduced overall supplies.
- ***From August to October, STC reports durum shipments at 0.84 Mt; the Canadian Grain Commission (CGC) puts durum export shipments at 1.48 Mt, from August 1 to end of November, +38% more than from the same period in 2021.***

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Durum Wheat

- Domestic use and stocks were reduced as a result of the lower supply.
- They are now pegged at 0.75 Mt and 0.5 Mt, respectively, up compared to 2021-22, but lower than average levels.
- The average quality in terms of grades is better than in 2021-22 and also higher than the last five-year average.
- According to the CGC's sample survey analysis to November 17, 2022, 81% of the durum graded No. 1 and 2 compared to 70% last year. The protein content averaged 14.5%, lower than for 2021-22 at 15.7%.
- ***World durum production grew by 7% from 2020-21 due to a rebound in yields in North America.***
- ***This however remains 2% below the five-year average due to the smaller harvests in Europe and North Africa, mainly Morocco, according to the International Grains Council.***

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Durum Wheat

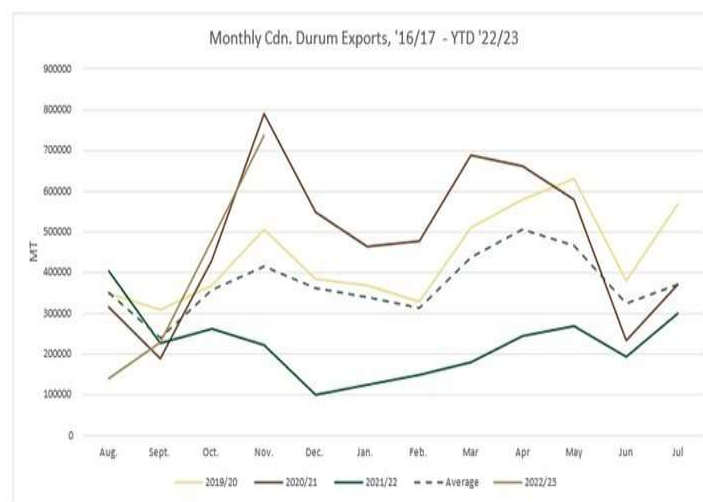
- Total supply will rebound 1% year on year, restricted by tight carry-in stocks.
- Total use is forecast at 33.6 Mt, +2% versus 2021-22 on higher feed use.
- Carry-out stocks were cut 0.2 Mt compared to the previous report, now pegged at 6.1 Mt, with stocks in major exporting nations at 2.6 Mt (+9% y/y).
- **Global durum trade is anticipated to grow close to 40% year on year to reach 8.4 Mt.**
- In the US, durum production grew by 0.71 Mt to 1.74 Mt, according to the United States Department of Agriculture (USDA). US exports of durum are forecast at 0.54 Mt.
- The average 2022-23 Saskatchewan (SK) spot price for No. 1 Canadian Western Amber Durum is forecast at \$440/t, with upward pressure due to lower domestic supplies.

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Source: CIMT

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Durum Wheat

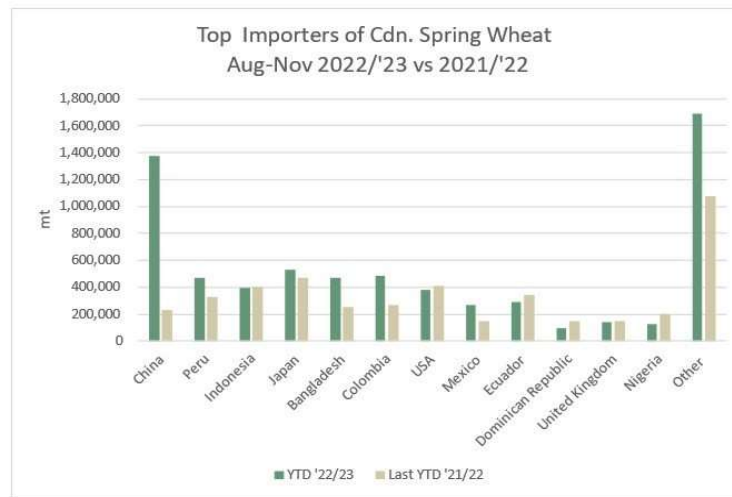
	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	2,302	2,319	2,431
Area harvested (thousand hectares)	2,295	2,233	2,399
Yield (tonnes per hectare)	2.86	1.36	2.27
Production (thousand tonnes)	6,571	3,038	5,443
Imports (thousand tonnes)	13	8	25
Total supply (thousand tonnes)	7,321	3,859	6,047
Exports (thousand tonnes)	5,766	2,716	4,800
Food and Industrial Use (thousand tonnes)	198	208	200
Feed, Waste & Dockage (thousand tonnes)	321	124	334
Total Domestic Use (thousand tonnes)	742	565	747
Carry-out Stocks (thousand tonnes)	813	579	500
Average Price (\$/tonne)	302	631	440

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Canadian Wheat

- **For 2022-23**, Canadian wheat production rose by 47% from 2021-22 to 28.38 Mt, due to an increase in seeded area accompanied by a return to average yields.
- **This is the third largest crop on record.**
- STC's final production estimate was 0.2 Mt, or 1%, lower than its September estimate due to a downward revision to seeded area.
- Saskatchewan accounts for 37% of the wheat production, Alberta 36%, Manitoba 17%, Ontario 8% and Quebec 1%; the remaining 1% is found in the Maritimes and British Columbia.
- STC estimates for winter wheat seeded this fall came in at 718,200 ha up 32% compared to the fall of 2022, with an expansion of area in Ontario (+45%), Quebec (+29%),
- Prince Edward Island (+22%) and British Columbia (+21%).
- Area seeded to winter wheat in Alberta remains relatively steady at 61,900 ha.

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Canadian Wheat

- The average quality for CWRS wheat in terms of grades is slightly better than last year and better than the past five-year average.
- According to the Canadian Grain Commission's sample survey analysis to November 17, 2022, 93% of the CWRS wheat graded No. 1 and 2, compared to 89% last year.
- **The protein content averaged 13.9%, lower than for 2021-22 at 14.7%.**
- Compared to last month's report, total supply was tightened 1% as a result of the lower production.
- **It is now pegged at 31.58 Mt.**
- The export forecast however was raised to 18.9 Mt on account of the fast export pace shown to date.
- According to STC, exports of wheat, from August to October are reported at 4.8 Mt, up 37% compared to the same period last year.
- ***The CGC reports shipments from August to November at over 6.4 Mt, outpacing last year's volumes by over 50%.***

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Canadian Wheat

- Domestic use in 2022-23 is forecast at 8.2 Mt, on par with the five year average.
- Closing stocks were reduced from 5.1 Mt to 4.5 Mt, also in line with average levels.**
- Compared to the previous report, global production was reduced 2.1 Mt to 780.59 Mt due to smaller production estimates for Canada and Argentina, offsetting the forecasted growth in the Australian harvest.
- Total supplies for 2022-23 are forecast at 1,056.86 Mt, down 1% year on year.
- Global consumption was also reduced 1.6 Mt compared to last month; it is pegged at 789.53 Mt, on reduced feed use.
- Total trade was expanded, now forecast at 210.85 Mt, up 4% year on year, while world all wheat carry out stocks were reduced 0.49 Mt compared to last month's report, at 267.33 Mt, they are 3% lower than in 2021-22.
- The US wheat supply forecast for 2022-23 remains steady at 66.38 Mt, with exports projected at 21.09 Mt, domestic use at 29.75 Mt and ending stocks at 15.54 Mt, down 15% year on year.**
- The average 2022-23 SK spot price for No. 1 Canadian Western Red Spring wheat is forecast at \$420/t.

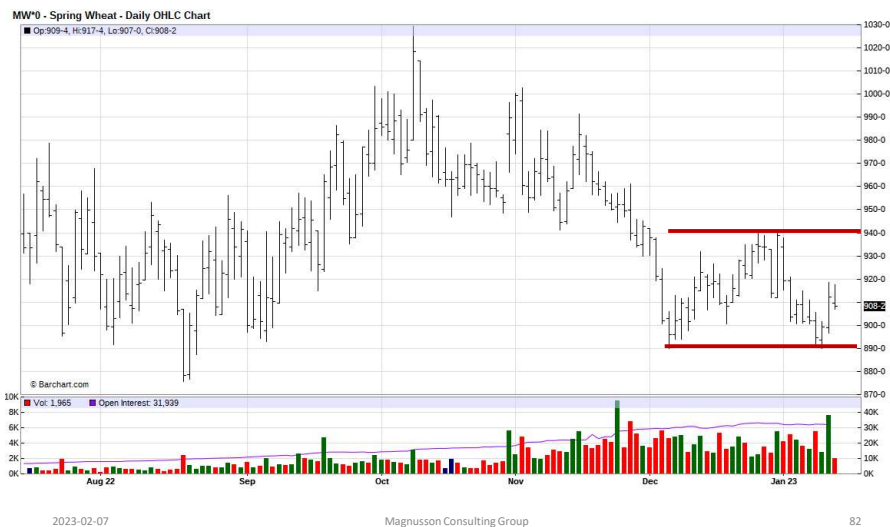
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March 2023 – Futures



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January 13, 2023

Email us with accessibility issues with this report.

Grain Report for 1/13/2023 - Preliminary

According to the Portland Merchant's Exchange, there were 18 grain vessels in Columbia River ports yesterday, with six docked.

Coarse										
US #1 Club White Wheat (Bulk)										
Export Elevators - Conventional										
Region/Location	Sale Type	Protein	Basis (\$/Bu)	Basis Change	Price(\$/Bu)	Price Change	Average	Year Ago	Freight	Delivery
Pacific Ports	Bid	10.5%			8.2000-8.7500	UNCH	8.5600	12.1350	DLVD-R/B	Current
US #1 Hard Red Winter Wheat (Bulk)										
Export Elevators - Conventional										
Region/Location	Sale Type	Protein	Basis (\$/Bu)	Basis Change	Price(\$/Bu)	Price Change	Average	Year Ago	Freight	Delivery
Pacific Ports	Bid	Ordinary	90.00H	UNCH	9.3000	UP 0.0500	9.3000	9.2071	DLVD-R/B	Current
Pacific Ports	Bid	11.0%	110.00H	UNCH	9.5000	UP 0.0500	9.5000	9.3214	DLVD-R/B	Current
Pacific Ports	Bid	11.5%	120.00H	UNCH	9.6000	UP 0.0500	9.6000	9.3786	DLVD-R/B	Current
Pacific Ports	Bid	11.5%	120.00H	UNCH	9.6000	UP 0.0500	9.6000	9.3786	DLVD-R/B	Feb
Pacific Ports	Bid	11.5%	120.00H	UNCH	9.6000	UP 0.0500	9.6000	9.3667	DLVD-R/B	Mar
Pacific Ports	Bid	11.5%	120.00K to 125.00K	UNCH	9.5650-9.6150	UP 0.0500	9.5817	9.4075	DLVD-R/B	Apr
Pacific Ports	Bid	11.5%	120.00K	UNCH	9.5650	UP 0.0500	9.5650		DLVD-R/B	May
Pacific Ports	Bid	12.0%	125.00H	UNCH	9.6500	UP 0.0500	9.6500	9.3886	DLVD-R/B	Current
Pacific Ports	Bid	12.0%	125.00H	UNCH	9.6500	UP 0.0500	9.6500	9.3886	DLVD-R/B	Feb
Pacific Ports	Bid	13.0%	135.00H	UNCH	9.7500	UP 0.0500	9.7500	9.4086	DLVD-R/B	Current
Pacific Ports	Bid	13.0%	135.00H	UNCH	9.7500	UP 0.0500	9.7500	9.4086	DLVD-R/B	Feb
US #1 Soft White Wheat (Bulk)										

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Date: January 9, 2023

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Mar '23 (bu.)	Mar '23 (mt.)
1 CWRS 13.5	\$11.53	\$423.66	1 CWRS 13.5	\$11.52	\$423.29
1 CWAD 13.0	\$13.55	\$497.88	1 CWAD 13.0	\$13.48	\$495.31
1 CPSR 11.5	\$10.87	\$399.41	1 CPSR 11.5	\$10.95	\$402.35
SW Sask			SW Sask		
1 CWRS 13.5	\$11.41	\$419.25	1 CWRS 13.5	\$11.49	\$422.19
1 CWAD 13.0	\$13.53	\$497.15	1 CWAD 13.0	\$13.47	\$494.94
1 CPSR 11.5	\$10.71	\$393.53	1 CPSR 11.5	\$10.90	\$400.51
NE Sask			NE Sask		
1 CWRS 13.5	\$11.17	\$410.43	1 CWRS 13.5	\$11.17	\$410.43
1 CWAD 13.0	\$13.39	\$492.00	1 CWAD 13.0	\$13.40	\$492.37
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a
SE Sask			SE Sask		
1 CWRS 13.5	\$11.14	\$409.33	1 CWRS 13.5	\$11.20	\$411.53
1 CWAD 13.0	\$13.39	\$492.00	1 CWAD 13.0	\$13.37	\$491.27
1 CPSR 11.5	\$10.57	\$388.38	1 CPSR 11.5	\$10.71	\$393.53

Data source: PDQ, Jan. 9/23

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Canadian Wheat

	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	7,892	7,133	7,844
Area harvested (thousand hectares)	7,723	6,960	7,683
Yield (tonnes per hectare)	3.74	2.77	3.69
Production (thousand tonnes)	28,866	19,258	28,380
Imports (thousand tonnes)	129	153	100
Total supply (thousand tonnes)	33,757	24,551	31,575
Exports (thousand tonnes)	20,566	12,412	18,900
Food and Industrial Use (thousand tonnes)	3,265	3,258	3,200
Feed, Waste & Dockage (thousand tonnes)	4,041	4,974	4,200
Total Domestic Use (thousand tonnes)	8,050	9,045	8,175
Carry-out Stocks (thousand tonnes)	5,141	3,095	4,500
Average Price (\$/tonne)	271	447	420

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CROP	HARD RED SPRING WHEAT		
	80th percentile		
Soil Zone	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	44.1	53.3	62.5
Est. On Farm Market Price \$/bu. (B)	9.50	9.50	9.50
Estimated Gross Revenue/ac (AxB)=C	418.86	506.16	593.37
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	24.96	27.52	31.04
-Seed Treatments/Inoculants	5.75	6.34	7.15
Fertilizer -Nitrogen (N)	86.40	104.16	121.91
-Phosphorous (P2O5)	26.65	32.16	37.67
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	56.10	58.60	62.76
-Insecticides	22.52	22.52	22.52
-Fungicides	18.98	18.98	18.98
Machinery Operating -Fuel	19.08	23.85	29.81
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	22.75	22.50	23.50
Crop Insurance Premium	5.05	4.60	4.78
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	9.42	10.51	11.71
Total Variable Expenses (D)	323.41	360.80	402.08
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	350.75	390.85	435.90
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	425.75	465.85	510.90
Net Income Per Acre - HRSW	-6.89	40.31	82.47

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Hard Red

RETURNS PER ACRE			
Return over Variable Expenses (C-D)	95.45	145.36	191.29
Return over Total Expenses (C-G)	68.11	115.31	157.47
Return over Total Expenses & Debt Payment	-6.89	40.31	82.47
BREAK-EVEN YIELD (bu./ac.)			
To Cover Variable Expenses	34.04	37.98	42.32
To Cover Total Expenses	36.92	41.14	45.88
To Cover Total Expenses & Debt Payment	44.82	49.04	53.78
BREAK-EVEN PRICE (\$ per bu.)			
To Cover Variable Expenses	7.34	6.77	6.44
To Cover Total Expenses	7.96	7.34	6.98
To Cover Total Expenses and Debt Payment	9.66	8.74	8.18

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Barley

- For 2022-23, the Canadian barley production estimate was finalized by Statistics Canada (STC) in its December production report at nearly 10 million tonnes (Mt).
- For now, the final production estimate is 44% and 13%, respectively, above last year's record low and the previous five-year average.**
- The recovery in 2022 production mainly benefited from near-normal yield performance on the Canadian Prairies, which rebounded from last year's near-record lows.
- Production is distributed as follows: 54% in Alberta, 36% in Saskatchewan, 7% in Manitoba, and 3% in all other provinces.
- In the largest barley-producing province of Alberta, the 2022 barley output was pegged at 5.38 Mt, up from 4.83 Mt in September and the highest since 2013 due to improved yield and a larger harvested area.
- The provincial yield level was pegged at 4.08 t/ha, up 60% and 14%, respectively, from last year's near-record low and the previous five-year average, and close to the record high achieved in 2016.
- Barley output in Saskatchewan and Manitoba was lowered by 1% in each province from September, largely reflecting deteriorated yield, despite larger harvested area.

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Barley

- Due to the significant increase in production more than offsetting the historically low carry-in stocks and smaller imports, supply is expected to increase by 34% year on year to nearly 10.6 Mt, but still be 6% below the pre-2021 five-year average.
- Domestic use and exports are expected to expand from 2021-22, given larger supplies.
- Carry-out stocks are projected at 0.90 Mt, rising sharply from last year's record low.
- According to STC's monthly international trade data, Canadian barley exports in August-October 2022, the first three months of the 2022-23 crop year, were pegged at 816 thousand tonnes (Kt), down from 989 Kt in August-October 2021 but up from 592 Kt for the previous five-year average in the same period.
- The monthly export rate during August-October 2022 has increased sharply. Of the total export volume, about 88% was shipped to China and 10% to the US.
- Barley malt exports in August-October 2022 neared 122 Kt, down from about 140 Kt in August-October 2021 and the previous five-year average.
- Compared to barley grain exports, exporting pace of malt has been relatively stable. Of the total exports, about 52% were shipped to the US, 27% to Japan and 11% to Mexico.

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Barley

- For the crop year to-date, feed barley prices in Alberta averaged \$360/t, \$15/t under the level a year ago.
- In Saskatchewan, feed barley prices averaged nearly \$315/t, \$35/t below last year's level.
- In Manitoba, feed barley prices averaged around \$320/t, \$35/t lower than a year ago.
- Malting barley prices in the three provinces declined by about \$70/t from a year ago.
- As a result, the price premium for malting barley relative to feed barley declined from last year's high in all three provinces. For the entire crop year, the Lethbridge feed barley average price is predicted at \$400/t, down nearly \$30/t from last year's record high due to expectations for a recovery in domestic feed grain supply.
- However, it will remain historically high, largely underpinned by strong corn prices and robust demand.

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Barley

- Worldwide, feed barley prices in the US/Montana have risen in recent weeks despite declining CBOT corn futures prices, with the crop year to-date average lower than that of a year ago.
- Feed barley export quotations from the Black Sea, Europe/France, and Australia/Adelaide have fallen in recent weeks, with the crop year to-date averages higher than a year ago.
- Australia/Adelaide malt barley prices have strengthened in recent weeks.

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Barley

	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	3,060	3,357	2,851
Area harvested (thousand hectares)	2,809	3,002	2,636
Yield (tonnes per hectare)	3.82	2.32	3.79
Production (thousand tonnes)	10,741	6,959	9,987
Imports (thousand tonnes) ^B	294	228	60
Total supply (thousand tonnes)	11,991	7,897	10,551
Exports (thousand tonnes)	4,277	2,603	3,670
Food and Industrial Use (thousand tonnes)	299	284	318
Feed, Waste & Dockage (thousand tonnes)	6,416	4,262	5,383
Total Domestic Use (thousand tonnes)	7,003	4,790	5,981
Carry-out Stocks (thousand tonnes)	711	504	900
Average Price (\$/tonne)	294	432	400

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CROP	MALT BARLEY		
	80th percentile		
Soil Zone	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	49.2	57.6	69.4
Est. On Farm Market Price \$/bu. (B)	6.76	6.76	6.76
Estimated Gross Revenue/ac (AxB)=C	332.73	389.04	468.94
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	31.31	34.72	39.37
-Seed Treatments/Inoculants	7.44	8.26	9.36
Fertilizer -Nitrogen (N)	61.55	72.20	87.59
-Phosphorous (P2O5)	21.13	24.81	29.40
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	57.96	57.96	62.36
-Insecticides	22.52	22.52	22.52
-Fungicides	18.98	18.98	18.98
Machinery Operating -Fuel	19.08	23.85	29.81
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	21.25	21.50	21.50
Crop Insurance Premium	6.65	5.32	4.68
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	8.81	9.55	10.67
Total Variable Expenses (D)	302.43	327.73	366.49
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	329.78	357.78	400.31
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	404.78	432.78	475.31
Net Income Per Acre - Malt Barley	-72.05	-43.74	-6.37

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Malt Barley

RETURNS PER ACRE			
Return over Variable Expenses (C-D)	30.30	61.31	102.45
Return over Total Expenses (C-G)	2.95	31.26	68.63
Return over Total Expenses & Debt Payment	-72.05	-43.74	-6.37
BREAK-EVEN YIELD (bu./ac.)			
To Cover Variable Expenses	44.74	48.48	54.21
To Cover Total Expenses	48.78	52.93	59.22
To Cover Total Expenses & Debt Payment	59.88	64.02	70.31
BREAK-EVEN PRICE (\$ per bu.)			
To Cover Variable Expenses	6.14	5.69	5.28
To Cover Total Expenses	6.70	6.22	5.77
To Cover Total Expenses and Debt Payment	8.22	7.52	6.85

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CROP Soil Zone	FEED BARLEY		
	80th percentile		
	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	60.2	70.3	85.4
Est. On Farm Market Price \$/bu. (B)	6.16	6.16	6.16
Estimated Gross Revenue/ac (AxB)=C	370.65	432.86	526.25
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	31.31	34.72	39.37
-Seed Treatments/Inoculants	7.44	8.26	9.36
Fertilizer -Nitrogen (N)	75.75	88.77	107.71
-Phosphorous (P2O5)	25.73	29.40	36.75
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	24.27	24.27	24.27
-Insecticides	22.52	22.52	22.52
-Fungicides	18.98	18.98	18.98
Machinery Operating -Fuel	19.08	23.85	29.81
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	21.25	21.50	21.50
Crop Insurance Premium	8.11	6.49	5.76
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	8.41	9.20	10.39
Total Variable Expenses (D)	288.60	316.02	356.67
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	315.95	346.07	390.49
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	390.95	421.07	465.49
Net Income Per Acre - Feed Barley	-20.30	11.79	60.76

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Oats

- For 2022-23, the Canadian oat production estimate was finalized by STC at 5.23 Mt, 12% (572 Kt), largely reflecting a 46% (331 Kt) increase in Alberta and an 8% (189 Kt) increase in Saskatchewan.
- Oat production in most provinces were revised higher, except in Nova Scotia and British Columbia.
- National yield and harvested area were also raised from the September estimates.
- For now, the final production estimate is 86% and 39%, respectively, above last year's historical low and the previous five-year average, and also a record level.**
- The recovery in 2022 production mainly benefited from above-normal yield performance on the Canadian Prairies, which rebounded from last year's near-record lows, and the significantly expanded area on the Canadian Prairies, which reached a recent fourteen-year high.
- Production is distributed as follows: 49% in Saskatchewan, 22% in Manitoba, 20% in Alberta, and less than 9% in all other provinces.

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Oats

- **Due to the notable increase in production compensating for the historically low carry-in stocks, supply is expected to grow by 59% from 2021-22 to almost 5.56 Mt, and hit a peak not seen since the 1980s.**
- Domestic use, specifically feed use, and exports are predicted to increase.
- Carry-out stocks are projected to rise sharply from 2021-22 to 1.15 Mt, a near-record high.
- Canadian oat grain exports in August-October 2022 were pegged at 419 thousand tonnes (Kt), versus 509 Kt in August-October 2021 and 570 Kt for the previous five-year average in the same period.
- Oat product exports in August-October 2022 neared 162 Kt (with monthly export volume stabilizing at 54 Kt), on par with the level a year ago and up from 133 Kt for the previous five-year average.

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Oats

- Almost 99% of Canadian oat grain exports and about 93% of oat product exports were destined for the US.
- For the crop year to-date, oat prices in Alberta averaged just above \$265/t, nearly \$100/t under the level of a year ago.
- In Saskatchewan, oat prices averaged just under \$265/t, down \$140/t from last year's level.
- Manitoba oat prices averaged just under \$300/ton, down \$170/t from a year ago.
- For the entire crop year, the CBOT oat price is predicted at around \$365/t, down \$200/t from the record high in 2021-22, due to an expected supply recovery in North America.

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Oats

	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	1,554	1,385	1,593
Area harvested (thousand hectares)	1,314	1,176	1,402
Yield (tonnes per hectare)	3.48	2.39	3.73
Production (thousand tonnes)	4,576	2,808	5,226
Imports (thousand tonnes)	17	25	15
Total supply (thousand tonnes)	5,019	3,490	5,559
Exports (thousand tonnes)	2,972	2,302	2,850
Food and Industrial Use (thousand tonnes)	104	99	120
Feed, Waste & Dockage (thousand tonnes)	1,170	637	1,313
Total Domestic Use (thousand tonnes)	1,390	870	1,559
Carry-out Stocks (thousand tonnes)	657	318	1,150
Average Price (\$/tonne)	301	565	365

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March –Futures



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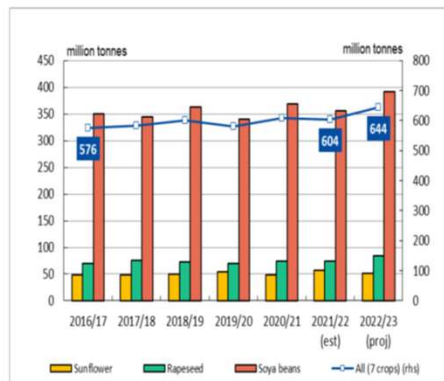
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CROP	OATS		
	80th percentile		
Soil Zone	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	53.8	79.8	123.2
Est. On Farm Market Price \$/bu. (B)	5.19	5.19	5.19
Estimated Gross Revenue/ac (AxB)=C	279.33	413.95	639.41
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	27.20	33.92	40.64
-Seed Treatments/Inoculants	6.27	7.81	9.36
Fertilizer -Nitrogen (N)	43.79	63.92	99.42
-Phosphorous (P2O5)	13.78	20.21	31.24
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	25.25	25.25	25.25
-Insecticides	22.52	22.52	22.52
-Fungicides	0.00	0.00	18.98
Machinery Operating -Fuel	19.08	23.85	29.81
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	21.25	21.50	21.50
Crop Insurance Premium	7.35	8.54	8.11
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	6.37	7.67	10.11
Total Variable Expenses (D)	218.61	263.26	347.19
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	245.96	293.31	381.01
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	320.96	368.31	456.01
Net Income Per Acre - Oats	-41.63	45.64	183.40

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2022/23 World Oilseeds (USDA)



22/23 outlook (changes y/y):

Total Oilseeds: 644 mt (+40) ↑

- Soya beans: 391 mt ↑
- Rapeseed: 84 mt ↑
- Sunflower: 51 mt ↓

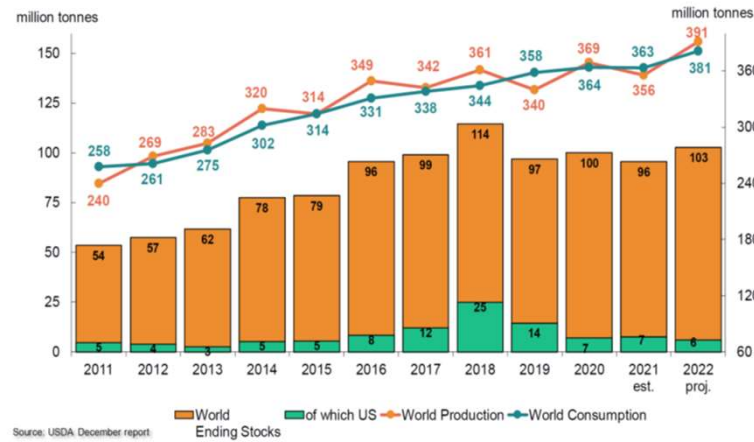
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World soya: USDA



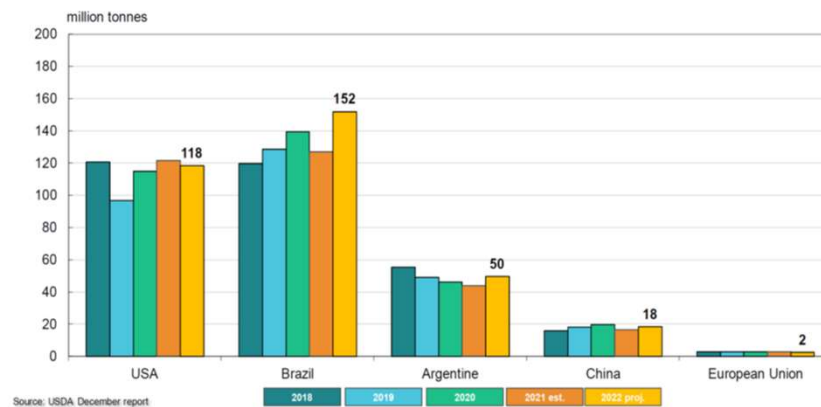
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USDA: soya beans production forecast



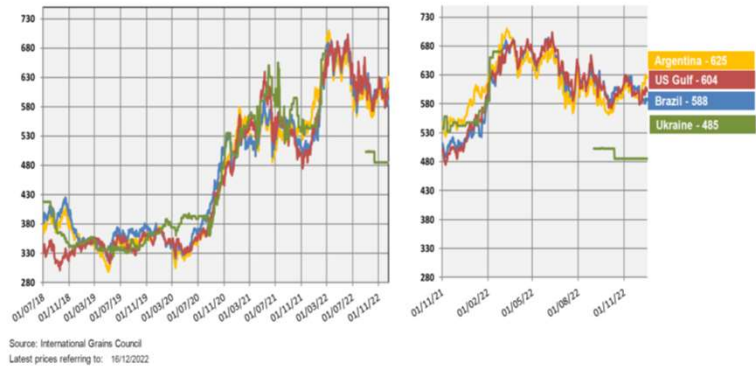
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World export prices for soya beans – (USD/tonne)



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ZS*0 - Soybean - Daily OHLC Chart

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EU oilseeds 2022/23 projections

EU OILSEEDS AREA (million hectares)				
	5-year trimmed average	2021/22	December	2022/23 vs. 2021/22 (%) vs. 5-y AVG (%)
Rapeseed	5.61	5.32	5.89	10.6 4.9
Sunflower	4.34	4.37	5.15	18.0 18.8
Soya Beans	0.95	0.94	1.10	17.4 16.6
TOTAL	10.92	10.70	12.20	14.0 11.7
EU OILSEEDS PRODUCTION (million tonnes)				
	5-year trimmed average	2021/22	December	2022/23 vs. 2021/22 (%) vs. 5-y AVG (%)
Rapeseed	17.26	17.07	19.61	14.9 13.6
Sunflower	10.19	10.36	9.24	-10.8 -9.3
Soya Beans	2.69	2.65	2.47	-6.8 -8.2
TOTAL	29.84	30.19	31.40	4.0 5.2

Sources : EC - DG AGRI.

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OILSEEDS SUPPLY & DEMAND (thousand metric tonnes)								
	2021/22 fc.				2022/23 proj.			
<i>last updated: 22/12/2022</i>	Rapeseed	Soya beans	Sunflower	TOTAL	Rapeseed	Soya beans	Sunflower	TOTAL
Beginning stocks	500	1 100	700	2 300	500	1 200	867	2 567
Usable production	17 070	2 649	10 361	30 079	19 609	2 467	9 240	31 316
Area (thousand ha)	5 325	940	4 369	10 633	5 888	1 103	5 154	12 145
Yield (tonnes/ha)	3.21	2.82	2.37	2.83	3.33	2.24	1.79	2.58
Imports (from third countries)	5 570	14 708	1 149	21 427	5 100	14 000	1 800	20 900
Total supply	23 140	18 457	12 210	53 806	25 209	17 667	11 907	54 783
Domestic use	22 210	16 987	10 940	50 137	24 194	16 226	10 735	51 156
of which crushing	(21 436)	(14 981)	(9 679)	(46 097)	(23 345)	(14 299)	(9 511)	(47 155)
Exports (to third countries)	430	270	403	1 103	514	241	305	1 060
Total use	22 640	17 257	11 343	51 239	24 709	16 467	11 040	52 216
Ending stocks	500	1 200	867	2 567	500	1 200	867	2 567
Change in stocks	-	100	167	267	-	-	-	-

Sources : EC - DG AGRI

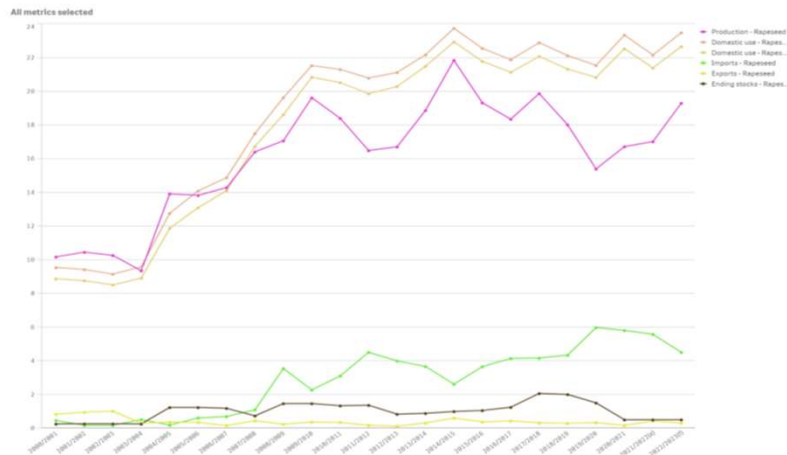
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European Rapeseed

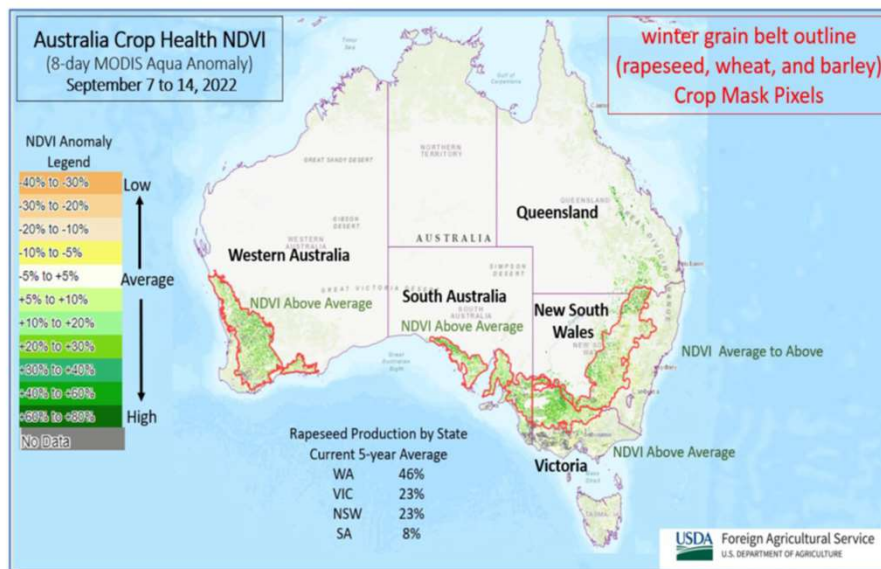


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Australian Canola

- Australia's rapeseed (canola) production is essential to world supplies, which have declined from last year.
- Australia is the largest rapeseed producer in the Southern Hemisphere and the fifth largest producer on a five-year average basis.
- Rapeseed and Canola are the same species but differ in chemical composition and fatty acid profile.
- USDA forecasts Australia marketing year (MY) 2022/23 rapeseed production at 6.7 million metric tons (mmt), down 1 percent from last year's record.
- If realized, this will be the second-highest national rapeseed harvest on record, second only to the 6.762 mmt crop produced last year (2021/22).
- The forecast production of 6.7 mmt is 67 percent above the 5-year average of 4.02 million metric tons.

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Australian Canola

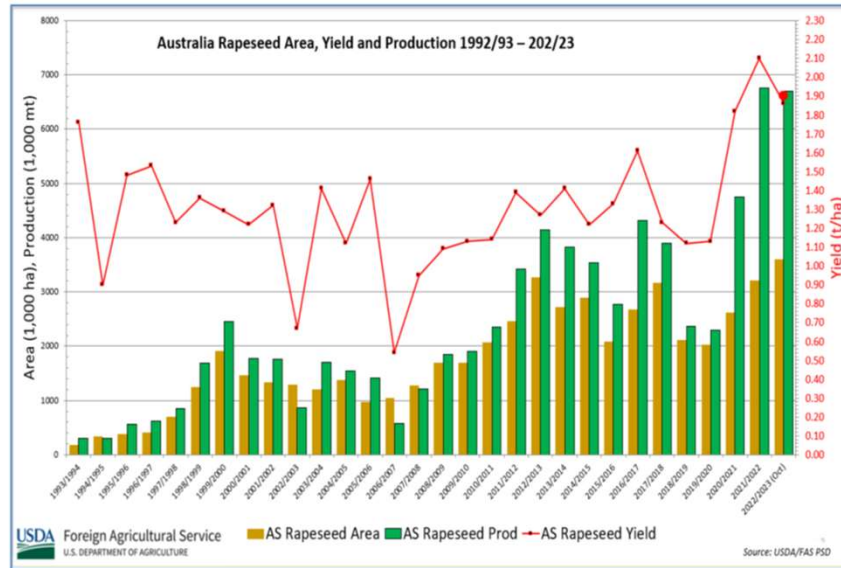
- Harvested area is estimated at a record 3.6 million hectares (mha) and is 12 percent above last year.
- Yield is forecast at 1.86 tons per hectare (t/ha) which is 11 percent below last year's record.
- Driving the large estimated production is a record area planted Commodity Intelligence Report September 30, 2022 particularly in the largest exporting state of Western Australia .
- The larger planted area is a response to favorable season conditions and strong prices at planting.

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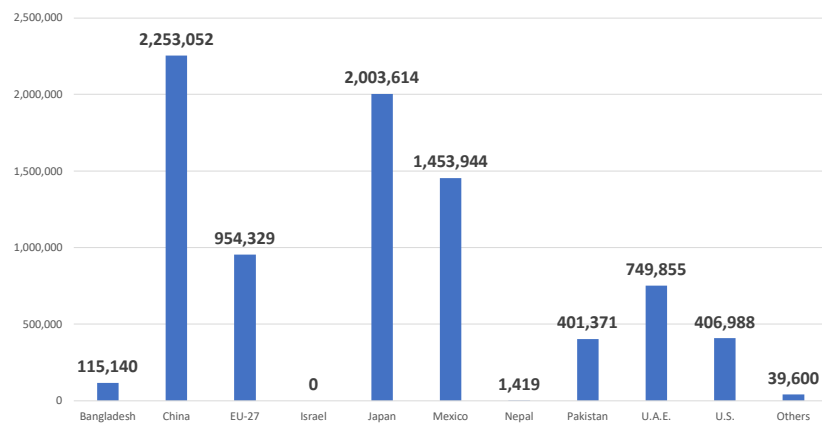
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Canola Seed Exports by Country 2021

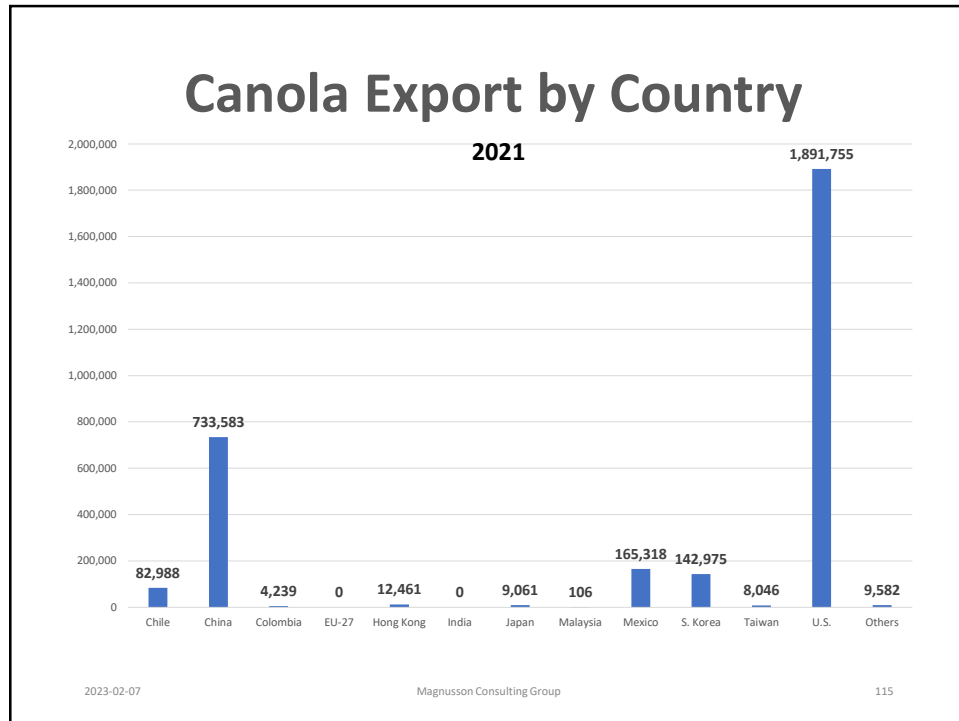


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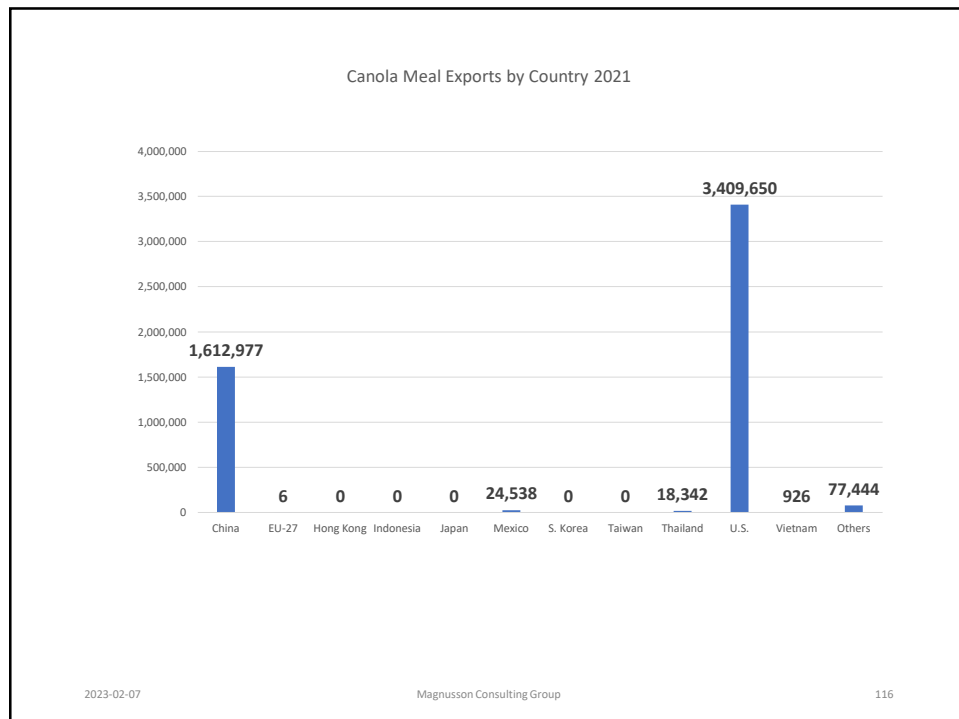
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CALENDAR YEAR	2021	2020	2019
TOTAL – ALL MARKETS	8,379,312	11,775,346	8,247,629
Bangladesh	115,140	448,998	201,989
China	2,253,052	2,576,168	1,544,608
EU-27	954,329	2,523,391	1,311,147
Israel	0	8,800	17,733
Japan	2,003,614	2,300,216	2,074,093
Mexico	1,453,944	1,272,870	1,036,166
Nepal	1,419	92,062	46,132
Pakistan	401,371	790,341	772,339
U.A.E.	749,855	1,148,213	744,598
U.S.	406,988	521,933	489,789
Others	39,600	92,354	9,035

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Canola

- For 2022-23, canola seeded area is estimated at 8.7 million hectares (Mha), down 4% from last year, with a predicted harvested area of 8.6 Mha.
- Yields are estimated at 2.11 tonnes per hectare (t/ha) compared to last year's drought-reduced of 1.54 t/ha.
- ***Production is estimated at 18.2 Mt by Statistics Canada based on a survey of 27,200 farmers.***
- The estimates, released December 2nd, show the province of Saskatchewan remaining the largest grower of canola at 9.5 Mt, followed by the provinces of Alberta and Manitoba at 5.6 Mt and 2.9 Mt, respectively.
- ***Total supply is forecast to rise sharply from last year to 19.1 Mt, as tight carry-in constrains the increase in production.***

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Canola

- Usage of Canadian canola is forecast to return to more historically normal levels: exports are up by about 63% to 8.6 million tonnes (Mt), while domestic crush rises to 9.5 Mt versus 8.6 Mt last year.
- The pace of exports to-date is 111% of last year based on the Canadian Grain Commission data, with shipments to China, Japan and Mexico accounting for 46%, 16% and 15%, respectively, of the total market share to the end of October.
- Oil content of Western Canadian canola is averaging 42.8% to-date, based on a survey of 1,755 samples. 94% of Canadian canola is grading Number 1.
- Carry-out stocks are down to 0.80 Mt for a stocks-to-use ratio of 4%. Canola prices are forecast to decline to \$895/tonne (t) track Vancouver. If realized, this would be the second highest canola price on record.

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Canola

- The 2022-23 outlook remains sensitive to several factors:
 - (i) strength of world demand for canola and rapeseed,
 - (ii) the US Environmental Protection Agency's ruling on inclusion rates for canola-rapeoil in biodiesel and renewable diesel,
 - (iii) the pace of domestic crush,
 - (iv) competition from Australian and European rapeseed,
 - (v) the western United States (US) drought, (vi) supply chain disruptions resulting from the Russian invasion of Ukraine.

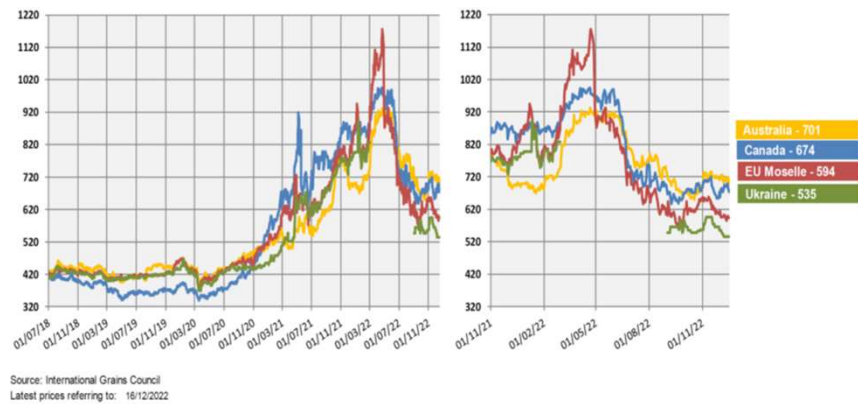
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World export prices for rapeseed – (USD/tonne)



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March Canola Futures



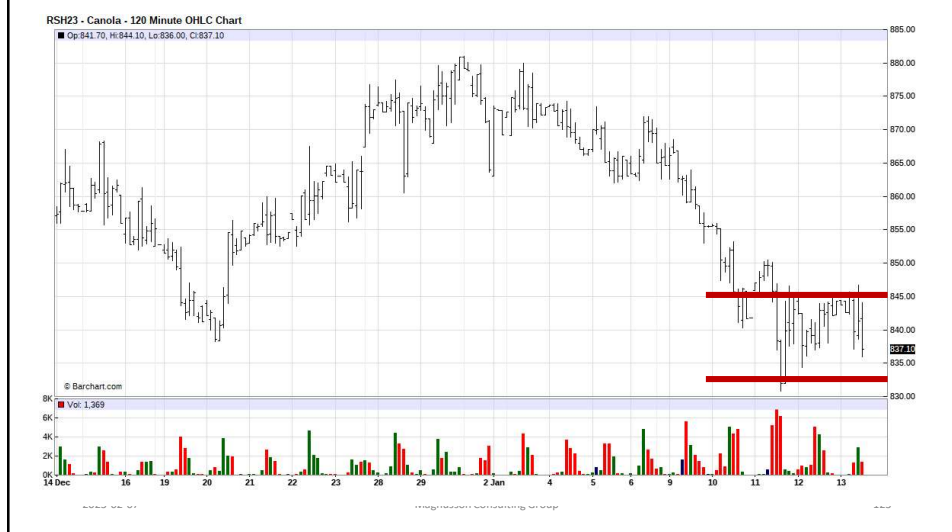
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1 Year March Canola Futures – Jan 13, 2023



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	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	8,410	9,016	8,659
Area harvested (thousand hectares)	8,325	8,949	8,596
Yield (tonnes per hectare)	2.34	1.54	2.11
Production (thousand tonnes)	19,485	13,757	18,174
Imports (thousand tonnes)	125	105	100
Total supply (thousand tonnes)	23,044	15,638	19,148
Exports (thousand tonnes)	10,589	5,268	8,600
Food and Industrial Use (thousand tonnes)	10,425	8,555	9,500
Feed, Waste & Dockage (thousand tonnes)	190	878	197
Total Domestic Use (thousand tonnes)	10,680	9,496	9,748
Carry-out Stocks (thousand tonnes)	1,776	875	800
Average Price (\$/tonne)	730	1,075	895

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CROP	Canola		
	80th percentile		
Soil Zone	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	36.16	42.77	48.06
Est. On Farm Market Price \$/bu. (B)	17.61	17.61	17.61
Estimated Gross Revenue/ac (AxB)=C	636.78	753.18	846.34
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	79.75	79.75	79.75
-Seed Treatments/Inoculants	9.00	9.00	9.00
Fertilizer -Nitrogen (N)	89.96	106.53	120.73
-Phosphorous (P2O5)	37.67	45.02	50.54
-Sulphur and Other	4.77	5.96	6.56
Plant Protection -Herbicides	66.93	66.93	76.32
-Insecticides	2.78	2.78	2.78
-Fungicides	0.00	14.63	14.63
Machinery Operating -Fuel	20.20	25.25	31.56
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	21.50	21.50	21.50
Crop Insurance Premium	13.11	10.51	10.97
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	11.14	12.48	13.64
Total Variable Expenses (D)	382.56	428.41	468.22
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	409.90	458.46	502.04
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	484.90	533.46	577.04
Net Income Per Acre - Canola	151.88	219.72	269.30

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Flax

- **For 2022-23**, flaxseed area is estimated at 0.32 Mha, versus the five-year average of 0.39 Mha, with harvested area projected at 0.31 Mha.
- Yields are projected at 1.5 t/ha based on an estimated production of 0.47 Mt – 73% of which occurs in Saskatchewan.
- Total supply is forecast to increase by 36% to 0.57 Mt, on higher output and carry-in stocks.
- Exports are forecast to increase to 0.38 Mt on stable world usage.
- To the end of November, exports through licensed terminals are running at 48% of last year's pace with most of the shipments destined for the US.
- Total domestic use is estimated at 93,700 tonnes on lower feed, waste and dockage, while carry-out stocks rise marginally to 100,000 t.
- Flaxseed prices are forecast to decline but remain historically strong at \$745/t for 2022-23.

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	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	377	416	315
Area harvested (thousand hectares)	371	404	312
Yield (tonnes per hectare)	1.56	0.86	1.52
Production (thousand tonnes)	578	346	474
Imports (thousand tonnes) Flaxseed (excluding solin) note b	26	12	10
Total supply (thousand tonnes)	667	417	569
Exports (thousand tonnes)	505	219	375
Food and Industrial Use (thousand tonnes)	N/A	N/A	N/A
Feed, Waste & Dockage (thousand tonnes)	85	99	75
Total Domestic Use (thousand tonnes)	103	113	94
Carry-out Stocks (thousand tonnes)	59	85	100
Average Price (\$/tonne)	693	1,206	745

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Competition to Canadian Peas				
(KT)	2021 Est. Production	2022 Est. Production		2023 Early Estimated Production
United States (U.S.)	390	564	U.S. Department of Agriculture (USDA) est.	600
Ukraine	583	375	Estimated	700
Russia	2,159	2,702	Estimated	2,600
Australia	261	235	Australian Bureau of Agricultural and Resource Economics (ABARES)	235
European Union (EU)	1,837	1,800	European Commission (EC), mostly used domestically	1,800
Subtotal	5,230	5,676	109%	5,935
Canada	2,257	3,423	152%	3,000
Total	7,487	9,099	122%	8,935

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World Lentil Production Estimate - Selected Major Producers - All Lentil Types			
(KT)	2020/21	2021/22	Projected 2022/23
Australia	817	925	875
Canada	2,870	1,606	2,301
United States (U.S.)	350	151	246
Turkey	445	175	340
Morocco	25	30	25
India	1,100	1,300	1,280
Bangladesh	150	150	100
Russia	85	100	80
Kazakhstan	75	50	40
Other	750	750	700
Total	6,667.0	5,237.0	5,987.0
% Canada	43%	31%	38%

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CROP Soil Zone	FLAX 80th percentile		
	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	22.4	26.4	30.7
Est. On Farm Market Price \$/bu. (B)	18.50	18.50	18.50
Estimated Gross Revenue/ac (AxB)=C	415.14	488.03	568.14
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	24.80	27.90	31.00
-Seed Treatments/Inoculants	0.00	0.00	0.00
Fertilizer -Nitrogen (N)	61.55	73.38	85.22
-Phosphorous (P2O5)	14.70	17.46	20.21
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	54.24	51.00	32.66
-Insecticides	2.78	2.78	2.78
-Fungicides	0.00	14.63	14.63
Machinery Operating -Fuel	19.08	23.85	29.81
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	21.25	21.50	21.50
Crop Insurance Premium	9.18	8.06	8.95
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	7.00	8.06	8.31
Total Variable Expenses (D)	240.33	276.69	285.32
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	267.67	306.74	319.14
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	342.67	381.74	394.14
Net Income Per Acre - Flax	72.47	106.29	174.00

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Peas

- **For 2022-23**, production increased 52% to 3.4 million tonnes (Mt) due to higher yields as harvested area was lower.
- Yields were 68% higher than the previous year due to more normal conditions.
- Yellow and green pea types are expected to account for about 2.85 Mt and 0.46 Mt, respectively, with the remainder spread across other varieties.
- Supply has increased by 35% to 3.8 Mt, due to reduced carry-in stocks.
- Exports are forecast to rise to 2.5 Mt, due to the increase in supply.
- This is expected to result in higher imports by Bangladesh. Carry-out stocks are forecast to rise sharply due to the increased supply.
- The average price is expected to fall by 22% to \$460/t from 2021-22, with lower dry pea prices for all types.

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Peas

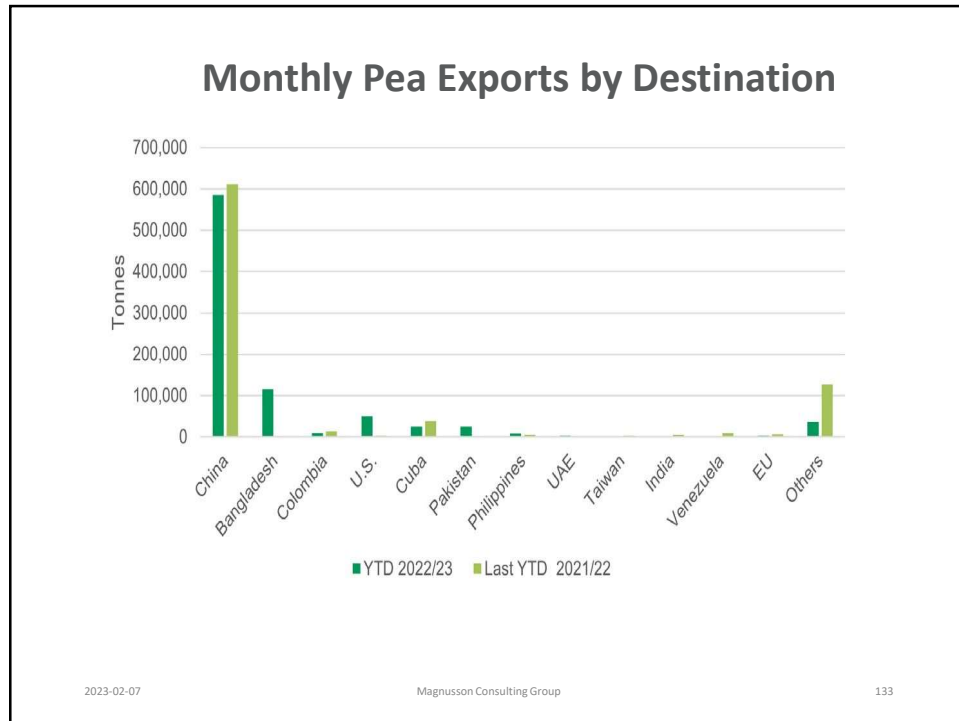
- During November, the on-farm price of yellow peas was unchanged in Saskatchewan but green types rose by \$60/t.
- Prices have been steady to strong due to solid export demand and expectations for a smaller Indian winter pulse crop.
- For the crop year to-date, green dry peas prices have been maintaining a premium of \$15/t above yellow dry peas.
- Last year, green peas were at \$60/t discount to yellow peas.
- In the US, area seeded to dry peas for 2022-23 is estimated by the USDA to have fallen by 6% to over 0.9 million acres.
- This is largely due to a decrease in area in North Dakota and Montana.
- With estimates of below-average yields but higher than last year, US dry pea production is estimated by USDA to rise by 29% to 0.5 Mt.
- US dry peas compete, on a smaller scale, in Canadian export markets such as China and the Philippines.

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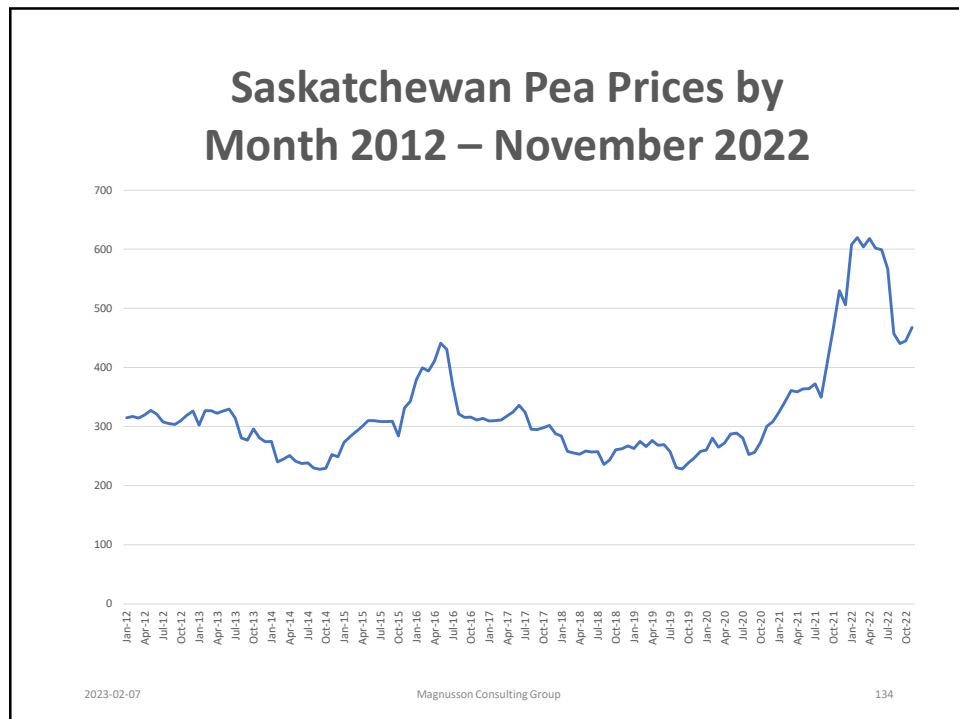
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	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	1,722	1,546	1,363
Area harvested (thousand hectares)	1,685	1,491	1,348
Yield (tonnes per hectare)	2.73	1.51	2.54
Production (thousand tonnes)	4,594	2,258	3,423
Imports (thousand tonnes)	81	29	28
Total supply (thousand tonnes)	4,909	2,845	3,836
Exports (thousand tonnes)	3,582	1,909	2,500
Total Domestic Use (thousand tonnes)	768	551	686
Carry-out Stocks (thousand tonnes)	559	385	650
Stocks-to-Use Ratio	13%	16%	20%
Average Price (\$/tonne)	340	590	460

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FIELD PEAS	SPOT MARKET	AVERAGE	A/S/O
(CDN \$ per bushel farmers dressed quality delivered plant)			
Green No 1	12.75 to 13.50	13.38	
No 2	12.75 to 13.50	13.38	
10% bleach	12.00 to 12.90	12.80	
15% bleach	11.75 to 12.40	12.22	
20% bleach	11.75 to 11.90	11.80	
No 2	12.45 to 13.00	12.71	9.54 to 11.50
Alberta No 2	12.87 to 13.12	12.97	10.00 to 10.06
Sm Yellow No 2	12.50 to 13.00	12.75	
Maple Peas	16.00 to 18.00	17.00	
Marrowfat	12.80 to 13.50	13.50	
FEED PEAS	SPOT MARKET	AVERAGE	A/S/O
(CDN \$ per bushel farmers dressed quality delivered)			
Feed Pea (SK)	12.00 to 12.62	12.62	
Feed Pea (AB)	12.10 to 12.72	12.72	
Natural Splits			

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CROP	GREEN PEAS		
	80th percentile		
Soil Zone	Brown	Dark Brown	Black
REVENUE PER ACRE			
Estimated Yield (bu./ac) (A)	34.2	43.4	51.4
Est. On Farm Market Price \$/bu. (B)	13.00	13.00	13.00
Estimated Gross Revenue/ac (AxB)=C	444.21	563.68	668.72
EXPENSES PER ACRE			
Variable Expenses/acre			
Seed	45.21	51.48	58.08
-Seed Treatments/Inoculants	8.55	9.74	10.99
Fertilizer -Nitrogen (N)	6.51	8.29	9.82
-Phosphorous (P2O5)	23.89	30.32	35.83
-Sulphur and Other	0.00	0.00	0.00
Plant Protection -Herbicides	74.69	71.45	78.95
-Insecticides	15.34	15.34	15.34
-Fungicides	14.63	14.63	14.63
Machinery Operating -Fuel	21.32	26.65	33.31
-Repair	10.27	11.59	13.11
Custom Work and Hired Labour	20.75	20.75	20.75
Crop Insurance Premium	5.71	5.13	6.02
Hail Insurance Premium	12.25	12.25	12.25
Utilities and Miscellaneous	3.23	4.23	4.89
Interest on Variable Expenses	7.87	8.46	9.42
Total Variable Expenses (D)	270.23	290.31	323.40
Other Expenses/acre			
Building Repair	0.60	0.80	1.06
Property Taxes	4.33	5.66	8.59
Business Overhead	2.22	3.39	3.98
Total Other Expenses (E)	7.15	9.85	13.62
Family Living	20.20	20.20	20.20
Total Expenses (D+E+F)=(G)	297.57	320.36	357.22
Debt Payment Per Acre Per Year	75.00	75.00	75.00
Total Expenses including Debt Payments	372.57	395.36	432.22
Net Income Per Acre - Mustard	71.64	168.32	236.50

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Lentils

- **For 2022-23**, production increased by 43% to 2.3 Mt due largely to improved yields.
- Large green lentil production is estimated to be higher than last year at 0.3 Mt and red lentil production rose to about 1.77 Mt.
- Production of the other remaining lentil types is estimated to have risen to 0.23 Mt.
- Supply, however, is expected to be 24% higher than last year due to smaller carry-in stocks.
- Exports are forecast to increase sharply to 2.3 Mt. India and Turkey are currently the top export markets. Imports are expected to be higher than the previous year with an above-average grade distribution.
- Carry-out stocks are expected to rise sharply, due to the larger exportable supply.
- The overall average price is forecast to fall by 18% with lower prices for all types, with the exception of French lentil types.

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Lentils

- During the month of November, the on-farm price in Saskatchewan for No. 1 grade large green lentils fell by about \$20/t when compared to last month, and the price of No. 1 red lentils decreased by over \$10/t. The quality of the Canadian lentil crop is considered to be above average. There is a larger proportion in the supply of No. 1 and No.2 grade Canadian lentils for 2022-23 when compared to last year. No. 1 large green lentil prices are forecast to maintain a premium of \$300/t over No. 1 red lentil prices, versus \$325/t in 2021-22.
- In the US, the area seeded to lentils for 2022-23 was forecast by the USDA at 0.7 million acres, down 5% from 2021-22 due to lower area seeded in Montana. With estimates of higher yields, 2022-23 US lentil production is estimated by the USDA at 0.22 Mt, up 47% from the 2021-22 level.
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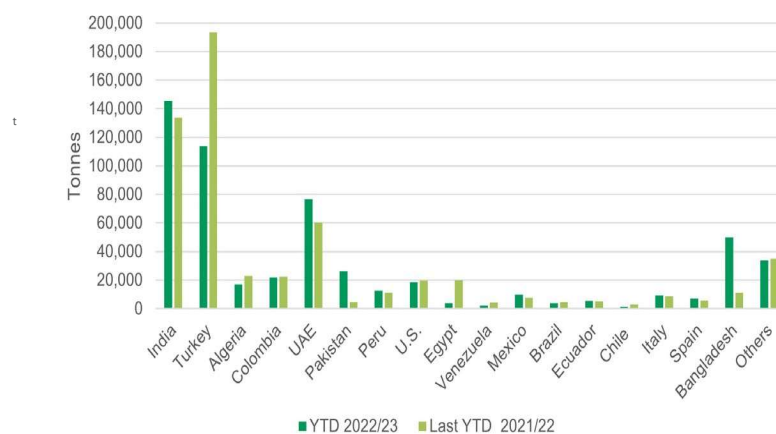
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Monthly Lentil Exports by Destination



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LENTILS		SPOT MARKET		AVERAGE	A/S/O
(CDN cents per pound farmers dressed quality delivered plant)					
Large Green 15/64		48.00	to 50.00	49.00	
(Laird) No 1		48.00	to 50.00	49.00	38.00 to
40.00					
	No 2	48.00	to 50.00	49.00	38.00 to
40.00					
	Xtra 3	43.00	to 45.00	44.00	
	No 3	38.00	to 40.00	39.00	
Medium Green No 1		40.00	to 51.00	46.67	38.00 to
40.00					
(Richlea) No 2		37.00	to 39.00	38.00	
	Xtra 3	32.30	to 34.00	34.00	
	No 3	32.30	to 34.00	34.00	
Small Green No 1		45.00	to 47.00	46.33	
(Eston) No 2		43.70	to 46.00	46.00	
	Xtra 3	32.30	to 34.00	34.00	
	No 3	32.30	to 34.00	34.00	
French No 1		70.00	to 100.00	88.33	
Green No 2					
	Xtra 3				
	No 3				
Small Red No 1		33.00	to 34.00	33.50	
30.00		33.00	to 34.00	33.50	28.00 to
	Xtra 3	31.00	to 32.00	31.50	
	No 3	28.00	to 29.00	28.50	
Xtra Small Red No 1		33.00	to 34.00	33.50	
	No 2	33.00	to 34.00	33.50	
	Xtra 3	31.00	to 32.00	31.50	
	No 3	28.00	to 29.00	28.50	
Redberry No 1		33.00	to 34.00	33.50	
	No 2	33.00	to 34.00	33.50	
Feed Div'd Plant (MT)					

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	2020-2021	2021-2022	<u>2022-2023</u>
Area seeded (thousand hectares)	1,713	1,742	1,749
Area harvested (thousand hectares)	1,705	1,716	1,715
Yield (tonnes per hectare)	1.68	0.94	1.34
Production (thousand tonnes)	2,868	1,606	2,301
Imports (thousand tonnes)	110	51	75
Total supply (thousand tonnes)	3,187	2,096	2,600
Exports (thousand tonnes)	2,326	1,600	2,300
Total Domestic Use (thousand tonnes)	422	271	200
Carry-out Stocks (thousand tonnes)	438	224	100
Stocks-to-Use Ratio	16%	12%	4%
Average Price (\$/tonne)	645	970	800

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CROP Soil Zone	RED LENTILS			
	80th percentile			
	Brown	Dark Brown	**Black	
REVENUE PER ACRE				
Estimated Yield (lb./ac) (A)	1,565.30	1,851.90	2,138.50	
Est. On Farm Market Price \$/lb. (B)	0.33	0.33	0.33	
Estimated Gross Revenue/ac (AxB)=C	516.55	611.13	705.71	
EXPENSES PER ACRE				
Variable Expenses/acre				
Seed	28.20	28.20	28.20	
-Seed Treatments/Inoculants	3.75	3.75	3.75	
Fertilizer -Nitrogen (N)	4.26	5.21	6.04	
-Phosphorous (P2O5)	15.62	19.30	22.05	
-Sulphur and Other	0.00	0.00	0.00	
Plant Protection -Herbicides	56.16	56.16	74.00	
-Insecticides	15.34	15.34	15.34	
-Fungicides	19.70	19.70	19.70	
Machinery Operating -Fuel	21.32	26.65	33.31	
-Repair	10.27	11.59	13.11	
Custom Work and Hired Labour	22.25	21.50	23.25	
Crop Insurance Premium	11.15	11.36	11.21	
Hail Insurance Premium	12.25	12.25	12.25	
Utilities and Miscellaneous	3.23	4.23	4.89	
Interest on Variable Expenses	6.70	7.06	8.01	
Total Variable Expenses (D)	230.20	242.29	275.11	
Other Expenses/acre				
Building Repair	0.60	0.80	1.06	
Property Taxes	4.33	5.66	8.59	
Business Overhead	2.22	3.39	3.98	
Total Other Expenses (E)	7.15	9.85	13.62	
Family Living	20.20	20.20	20.20	
Total Expenses (D+E+F)=(G)	257.55	272.34	308.93	
Debt Payment Per Acre Per Year	75.00	75.00	75.00	
Total Expenses including Debt Payments	332.55	347.34	383.93	
Net Income Per Acre - Mustard	184.00	263.79	321.78	

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CROP Soil Zone	LARGE GREEN LENTILS			
	80th percentile			
	Brown	Dark Brown	**Black	
REVENUE PER ACRE				
Estimated Yield (lb./ac) (A)	1,344.80	1,631.40	1,565.30	
Est. On Farm Market Price \$/lb. (B)	0.49	0.49	0.49	
Estimated Gross Revenue/ac (AxB)=C	658.95	799.39	767.00	
EXPENSES PER ACRE				
Variable Expenses/acre				
Seed	60.06	60.06	60.06	
-Seed Treatments/Inoculants	5.68	5.68	5.68	
Fertilizer -Nitrogen (N)	3.79	4.50	4.26	
-Phosphorous (P2O5)	13.78	16.54	15.62	
-Sulphur and Other	0.00	0.00	0.00	
Plant Protection -Herbicides	56.16	56.16	74.00	
-Insecticides	15.34	15.34	15.34	
-Fungicides	19.70	19.70	19.70	
Machinery Operating -Fuel	21.32	26.65	33.31	
-Repair	10.27	11.59	13.11	
Custom Work and Hired Labour	22.25	21.50	23.25	
Crop Insurance Premium	12.13	14.37	12.44	
Hail Insurance Premium	12.25	12.25	12.25	
Utilities and Miscellaneous	3.23	4.23	4.89	
Interest on Variable Expenses	7.68	8.06	8.82	
Total Variable Expenses (D)	263.64	276.63	302.74	
Other Expenses/acre				
Building Repair	0.60	0.80	1.06	
Property Taxes	4.33	5.66	8.59	
Business Overhead	2.22	3.39	3.98	
Total Other Expenses (E)	7.15	9.85	13.62	
Family Living	20.20	20.20	20.20	
Total Expenses (D+E+F)=(G)	290.99	306.68	336.56	
Debt Payment Per Acre Per Year	75.00	75.00	75.00	
Total Expenses including Debt Payments	365.99	381.68	411.56	
Net Income Per Acre - Mustard	292.96	417.71	355.44	

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ChickPeas

- For 2022-23, production rose by 68% to 128 Kt due to higher harvested area and yields.
- Crop quality is average when compared to the previous year. Supply is forecast to fall by 16% as lower carry-in stocks more than offset the higher production.
- Exports are forecast to be higher at 195 Kt, with the US, Pakistan and the EU as the main importers.
- Carry-out stocks are expected to fall sharply to 65 Kt.
- The average price for all grades of chickpeas is forecast to rise by 5%, to a record \$1,025/t, due to lower world supply.
- US chickpea area seeded is estimated by the USDA at 0.36 million acres, down marginally from 2021-22.
- With average yields, 2022-23 US chickpea production is forecast by USDA at 0.18 Mt, up 37% from the previous year.

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CHICKPEAS	SPOT MARKET		AVERAGE	A/S/O
(CDN cents per pound farmers dressed quality delivered plant)				
Desi Chickpeas	30.00	to 35.00	33.00	
No 1 Grade Kabuli Chickpeas				
10mm	56.00	to 56.50	56.25	
9mm	55.00	to 56.00	55.50	
8mm	53.00	to 54.00	53.50	
7mm	39.00	to 41.00	41.00	
No 2 Grade Kabuli Chickpeas				
9mm	52.50	to 56.00	54.50	47.00 to
47.50				
8mm	48.00	to 50.50	50.50	
7mm	37.10	to 39.00	39.00	
Kabuli Frontier 8mm+	23.80	to 25.00	25.00	
Kabuli Frontier 7mm	17.10	to 18.00	18.00	
No 1 B-90 Chickpea	39.00	to 41.00	41.00	
No 2 B-90 Chickpea	38.50	to 40.50	40.50	
Feed	30.00	to 35.00	32.50	

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CROP	#1 Desi	CROP	#1-9mm Kabuli Chickpea	CROP	#1-7mm Kabuli Chickpea
Soil Zone	Brown	Soil Zone	Brown	Soil Zone	Brown
REVENUE PER ACRE		REVENUE PER ACRE		REVENUE PER ACRE	
Target Yield (lb./ac.) (A)	1,631.40	Target Yield (lb./ac.) (A)	1,896.00	Target Yield (lb./ac.) (A)	1,697.60
Est. Farm Gate Price \$/lb. (B)	0.30	Est. Farm Gate Price \$/lb. (B)	0.54	Est. Farm Gate Price \$/lb. (B)	0.40
Estimated Gross Revenue/ac (AxB)=C	489.42	Estimated Gross Revenue/ac (AxB)=C	1023.84	Estimated Gross Revenue/ac (AxB)=C	679.04
EXPENSES PER ACRE		EXPENSES PER ACRE		EXPENSES PER ACRE	
Variable Expenses/acre		Variable Expenses/acre		Variable Expenses/acre	
Seed	46.50	Seed	98.60	Seed	74.12
-Seed		-Seed		-Seed	
Treatments/Inoculants	5.81	Treatments/Inoculants	13.81	Treatments/Inoculants	13.81
Fertilizer -Nitrogen (N)	5.92	Fertilizer -Nitrogen (N)	7.10	Fertilizer -Nitrogen (N)	7.10
-Phosphorous (P2O5)	24.81	-Phosphorous (P2O5)	27.56	-Phosphorous (P2O5)	22.97
-Sulphur and Other	0.00	-Sulphur and Other	0.00	-Sulphur and Other	0.00
Plant Protection -Herbicides	82.63	Plant Protection -Herbicides	82.63	Plant Protection -Herbicides	82.63
-Insecticides	15.34	-Insecticides	15.34	-Insecticides	15.34
-Fungicides	31.32	-Fungicides	31.32	-Fungicides	31.32
Machinery Operating -Fuel	30.86	Machinery Operating -Fuel	30.86	Machinery Operating -Fuel	30.86
-Repair	10.27	-Repair	10.27	-Repair	10.27
Custom Work and Hired Labour	20.25	Custom Work and Hired Labour	20.25	Custom Work and Hired Labour	20.25
Crop Insurance Premium	11.40	Crop Insurance Premium	17.90	Crop Insurance Premium	14.67
Hail Insurance Premium	12.25	Hail Insurance Premium	12.25	Hail Insurance Premium	12.25
Utilities and Miscellaneous	3.23	Utilities and Miscellaneous	3.23	Utilities and Miscellaneous	3.23
Interest on Variable Expenses	9.02	Interest on Variable Expenses	11.13	Interest on Variable Expenses	10.16
Total Variable Expenses (D)	309.60	Total Variable Expenses (D)	382.26	Total Variable Expenses (D)	348.98
Other Expenses/acre		Other Expenses/acre		Other Expenses/acre	
Building Repair	0.60	Building Repair	0.60	Building Repair	0.60
Property Taxes	4.33	Property Taxes	4.33	Property Taxes	4.33
Business Overhead	2.22	Business Overhead	2.22	Business Overhead	2.22
Total Other Expenses (E)	7.15	Total Other Expenses (E)	7.15	Total Other Expenses (E)	7.15
Family Living	20.20	Family Living	20.20	Family Living	20.20
Total Expenses (D+E+F)=(G)	336.95	Total Expenses (D+E+F)=(G)	409.60	Total Expenses (D+E+F)=(G)	376.33
Debt Payment Per Acre Per Year	75.00	Debt Payment Per Acre Per Year	75.00	Debt Payment Per Acre Per Year	75.00
Total Expenses including Debt Payments	411.95	Total Expenses including Debt Payments	484.60	Total Expenses including Debt Payments	451.33

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CROP	#1 Desi	CROP	#1-9mm Kabuli Chickpea	CROP	#1-7mm Kabuli Chickpea
Soil Zone	Brown	Soil Zone	Brown	Soil Zone	Brown
REVENUE PER ACRE		REVENUE PER ACRE		REVENUE PER ACRE	
Target Yield (lb./ac.) (A)	1,631.40	Target Yield (lb./ac.) (A)	1,896.00	Target Yield (lb./ac.) (A)	1,697.60
Est. Farm Gate Price \$/lb. (B)	0.30	Est. Farm Gate Price \$/lb. (B)	0.54	Est. Farm Gate Price \$/lb. (B)	0.40
Estimated Gross Revenue/ac (AxB)=C	489.42	Estimated Gross Revenue/ac (AxB)=C	1023.84	Estimated Gross Revenue/ac (AxB)=C	679.04
Total Other Expenses (E)	7.15	Total Other Expenses (E)	7.15	Total Other Expenses (E)	7.15
Family Living	20.20	Family Living	20.20	Family Living	20.20
Total Expenses (D+E+F)=(G)	336.95	Total Expenses (D+E+F)=(G)	409.60	Total Expenses (D+E+F)=(G)	376.33
Debt Payment Per Acre Per Year	75.00	Debt Payment Per Acre Per Year	75.00	Debt Payment Per Acre Per Year	75.00
Total Expenses including Debt Payments	411.95	Total Expenses including Debt Payments	484.60	Total Expenses including Debt Payments	451.33
Net Income Per Acre # 1 Desi	77.47	Net Income Per Acre # 1 Desi	539.24	Net Income Per Acre # 1 Desi	227.71

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Mustard

- **For 2022-23**, production nearly tripled to 162 Kt, due to higher yields and area.
- Production of all types of mustard seed rose. Supply increased by 36% to 177 Kt. Exports are expected to be higher at 110 Kt.
- Due to increased supply, carry-out stocks are forecast to rise sharply to 50 Kt.
- The US and the EU are expected to remain the main export markets for Canadian mustard seed.
- The average price is forecast to fall to \$2,420/t, but remain historically high.

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	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	104	117	225
Area harvested (thousand hectares)	101	110	219
Yield (tonnes per hectare)	0.99	0.55	0.74
Production (thousand tonnes)	100	61	162
<u>Imports (thousand tonnes)</u>	6	9	9
Total supply (thousand tonnes)	191	130	177
<u>Exports (thousand tonnes)</u>	111	106	110
<u>Total Domestic Use (thousand tonnes)</u>	20	18	17
Carry-out Stocks (thousand tonnes)	61	6	50
Stocks-to-Use Ratio	46%	5%	39%
<u>Average Price (\$/tonne)</u>	885	2,885	2,420

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Canary

- **For 2022-23**, production rose by 24% to 159 Kt with higher yields but lower area.
- Exports are expected to be lower than last year at 170 kt, due to the lower supply.
- The EU and Mexico are forecast to remain the main export markets.
- The average price is forecast to fall from the record 2021-22 level, to \$900/t despite tighter supply and smaller carry-out stocks.

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	2020-2021	2021-2022	2022-2023
Area seeded (thousand hectares)	135	124	118
Area harvested (thousand hectares)	135	123	117
Yield (tonnes per hectare)	1.67	1.05	1.36
Production (thousand tonnes)	225	129	159
<u>Imports (thousand tonnes)</u>	0	0	0
Total supply (thousand tonnes)	241	202	180
<u>Exports (thousand tonnes)</u>	160	173	170
<u>Total Domestic Use (thousand tonnes)</u>	8	8	5
Carry-out Stocks (thousand tonnes)	73	21	5
Stocks-to-Use Ratio	44%	12%	3%
<u>Average Price (\$/tonne)</u>	690	1,125	900

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BIRDSEED		SPOT MARKET		AVERAGE	A/S/O
(CDN cents per pound farmers dressed quality delivered plant)					
Canaryseed		37.00	to 39.00	46.67	35.00 to
					36.00
MUSTARDSEED		SPOT MARKET		AVERAGE	A/S/O
(CDN cents per pound farmers dressed quality delivered plant)					
Yellow	No 1	118.00	to 125.00	121.50	84.00 to
					85.00
	No 2	114.00	to 121.00	117.50	
	No 3	110.00	to 117.00	113.50	
	No 4	106.00	to 113.00	109.50	
Brown	No 1	118.00	to 125.00	121.50	78.00 to
					80.00
	No 2	108.30	to 114.00	114.00	
	No 3	104.50	to 110.00	110.00	
	No 4	100.70	to 106.00	106.00	
Oriental	No 1	118.00	to 125.00	121.50	84.00 to
					85.00
	No 2	108.30	to 114.00	114.00	
	No 3	104.50	to 110.00	110.00	

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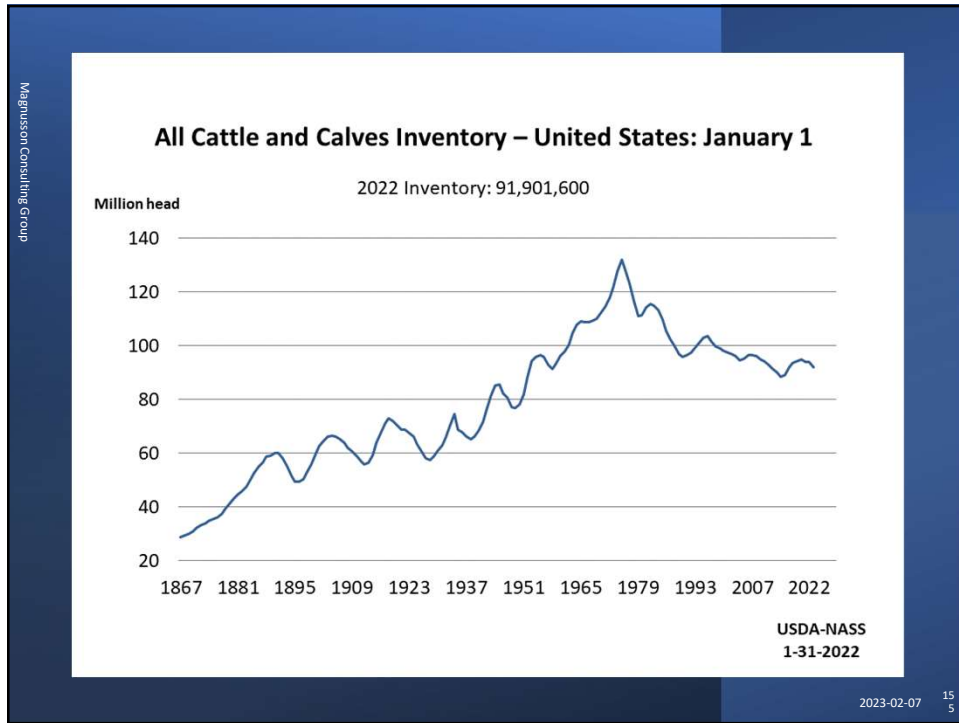
Cattle & Calves

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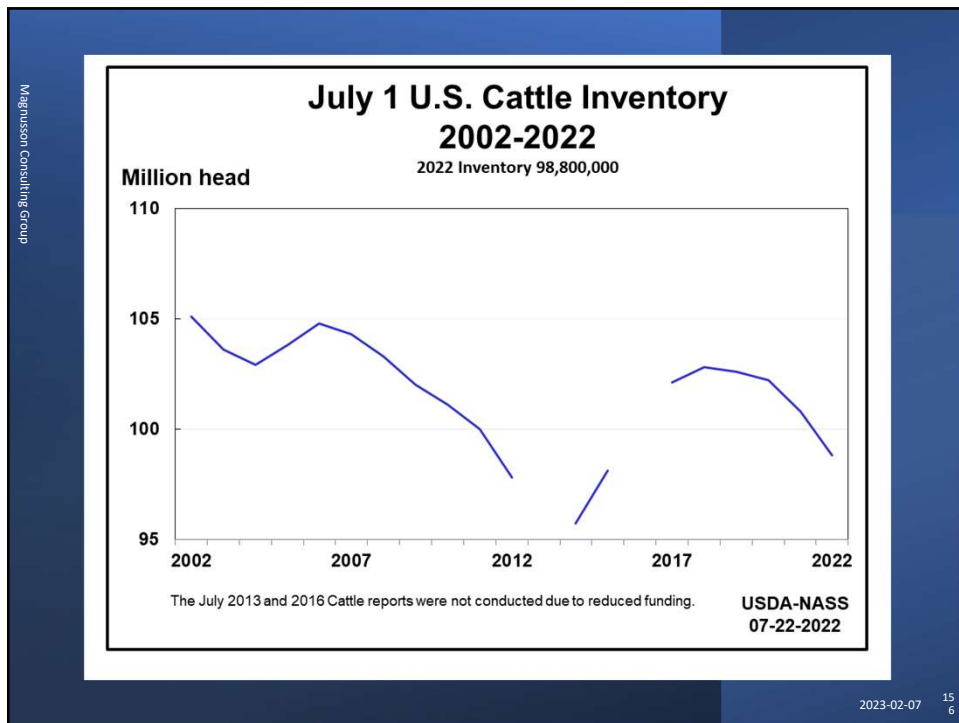
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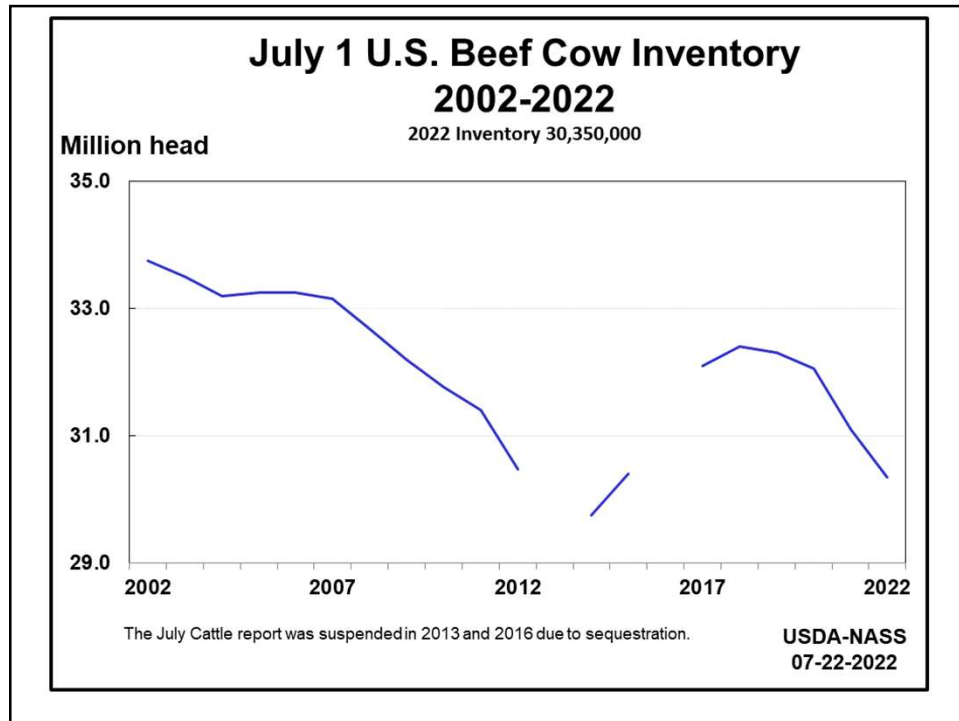
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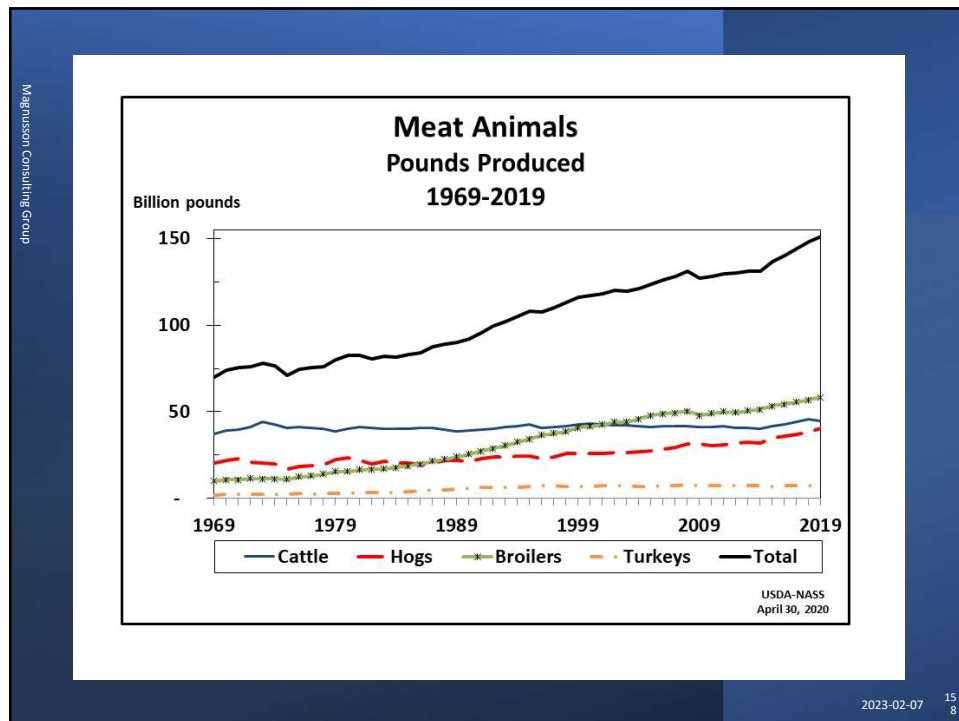
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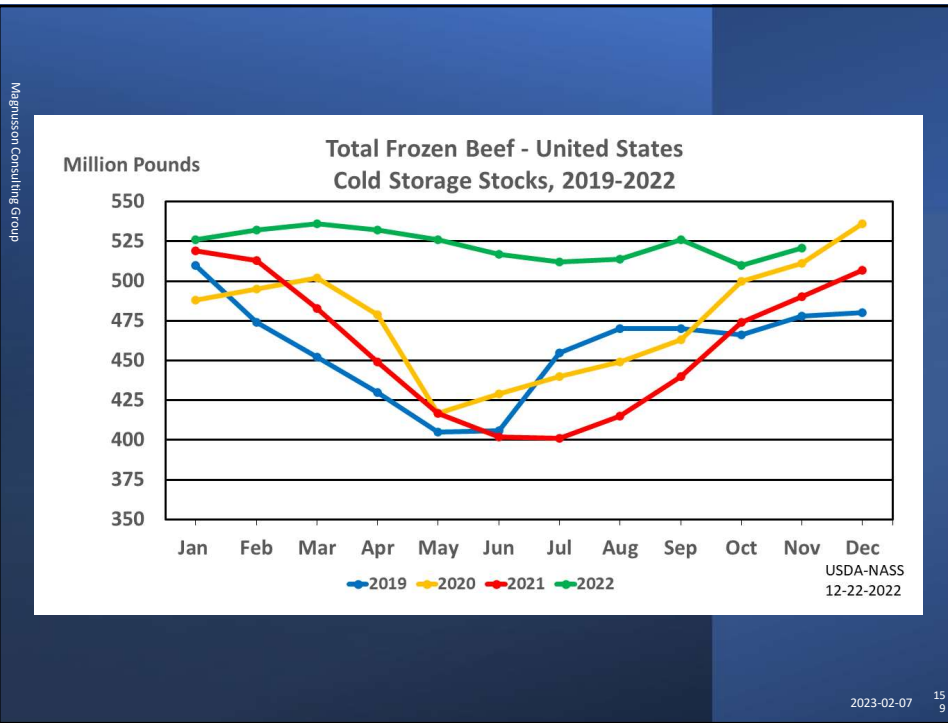


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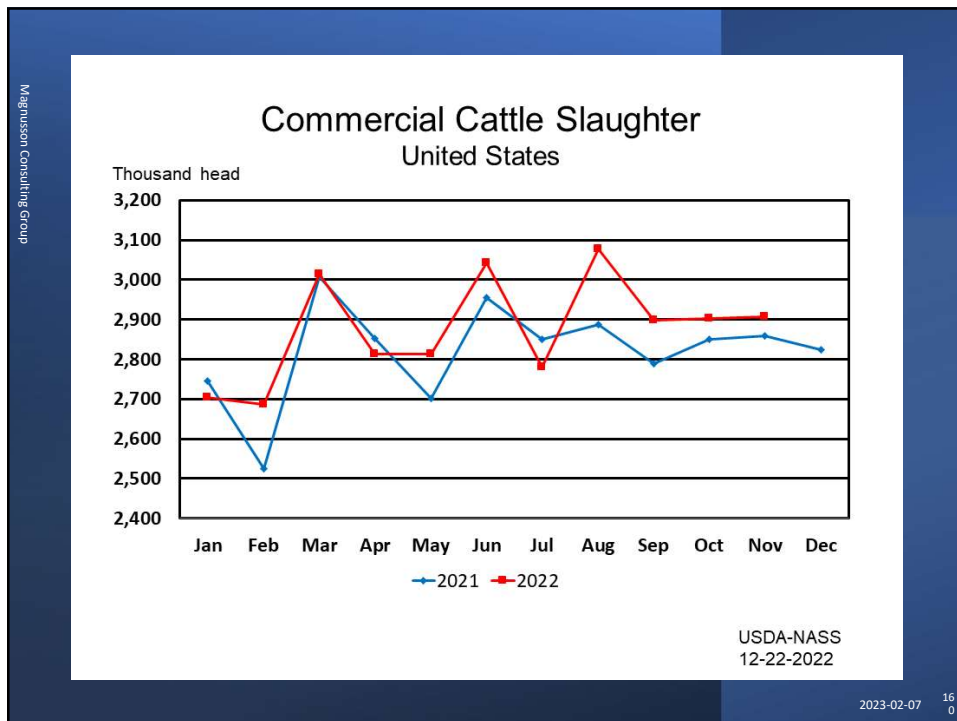


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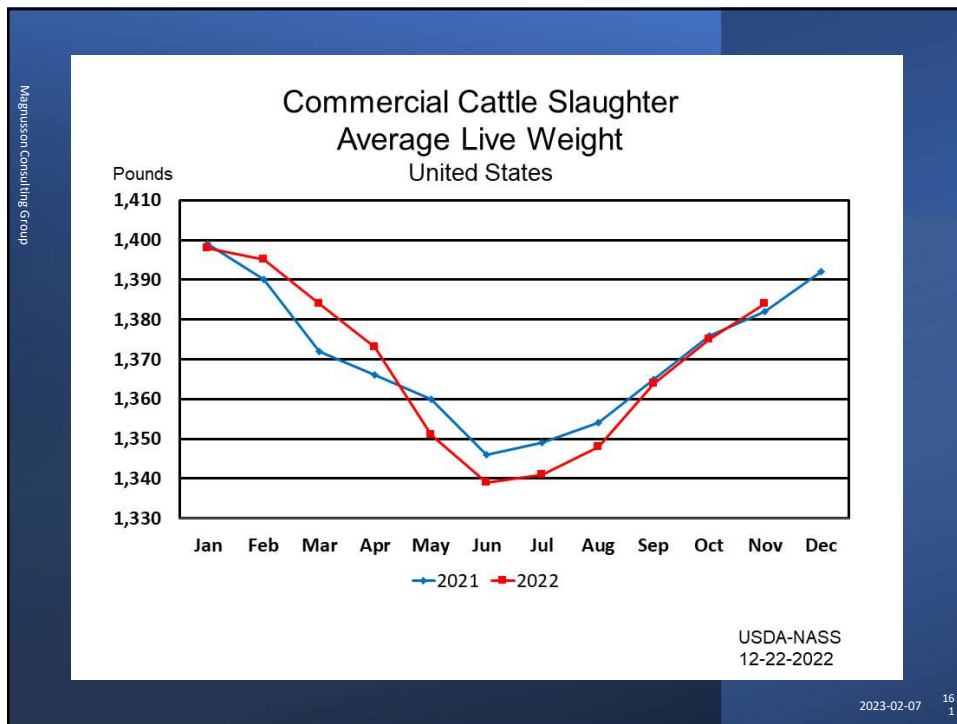
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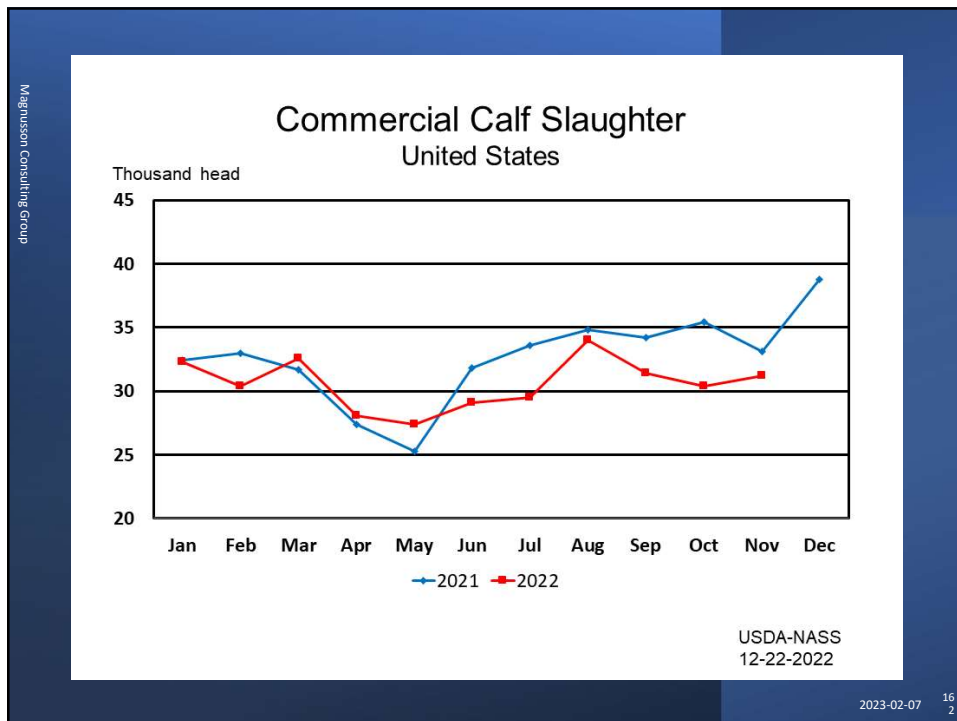
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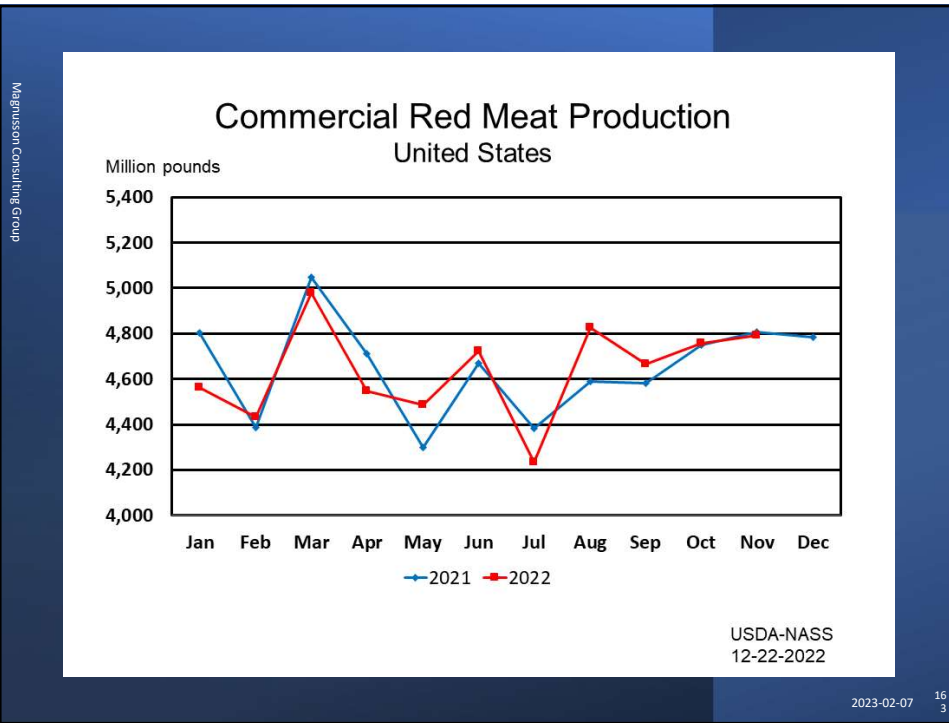
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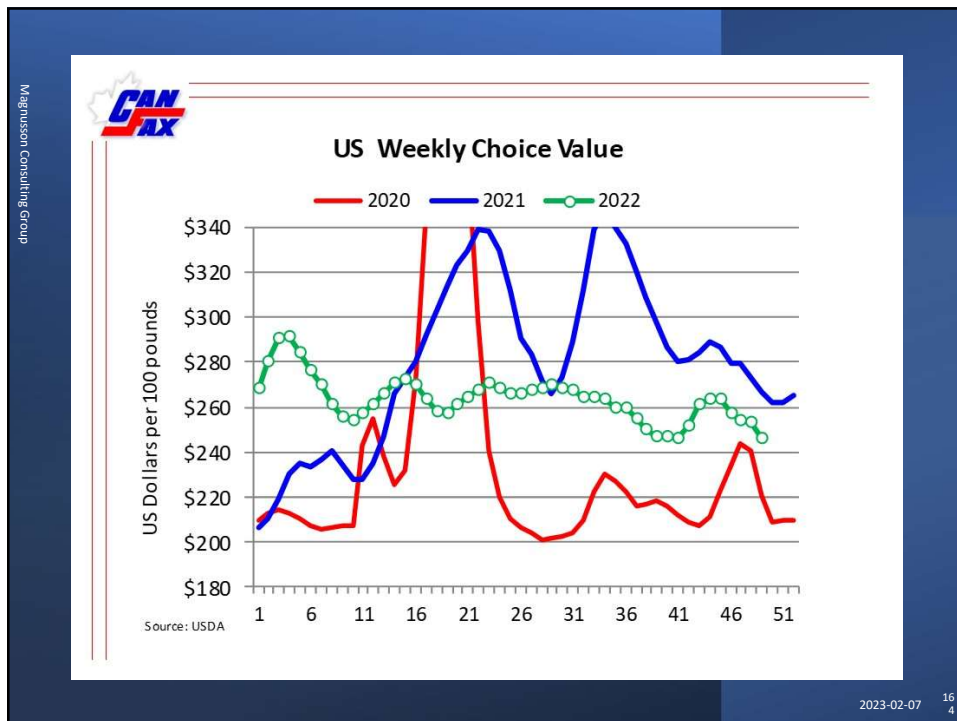
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U.S. beef exports by volume, January–October 2021 and 2022

Country	October 2022 exports	Year-to-date exports				Share of YTD exports, percent	
		2021	2022	Year-over-year volume change	Year-over-year percent change	2021	2022
Japan	61.2	689.2	683.4	-5.8	-1	24	23
South Korea	66.2	657.3	674.4	17.1	3	23	23
China	61.6	441.3	555.7	114.4	26	15	19
Canada	23.7	225.6	228.0	2.3	1	8	8
Mexico	26.6	259.4	227.5	-32.0	-12	9	8
Taiwan	13.5	158.7	173.3	14.6	9	6	6
ROW	48.2	417.5	450.8	33.3	8	15	15
Total	301.1	2849.1	2993.1	144.0	5		

Notes: Top six countries based on 2022 year-to-date exports; YTD = year-to-date; ROW = rest of world.
Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

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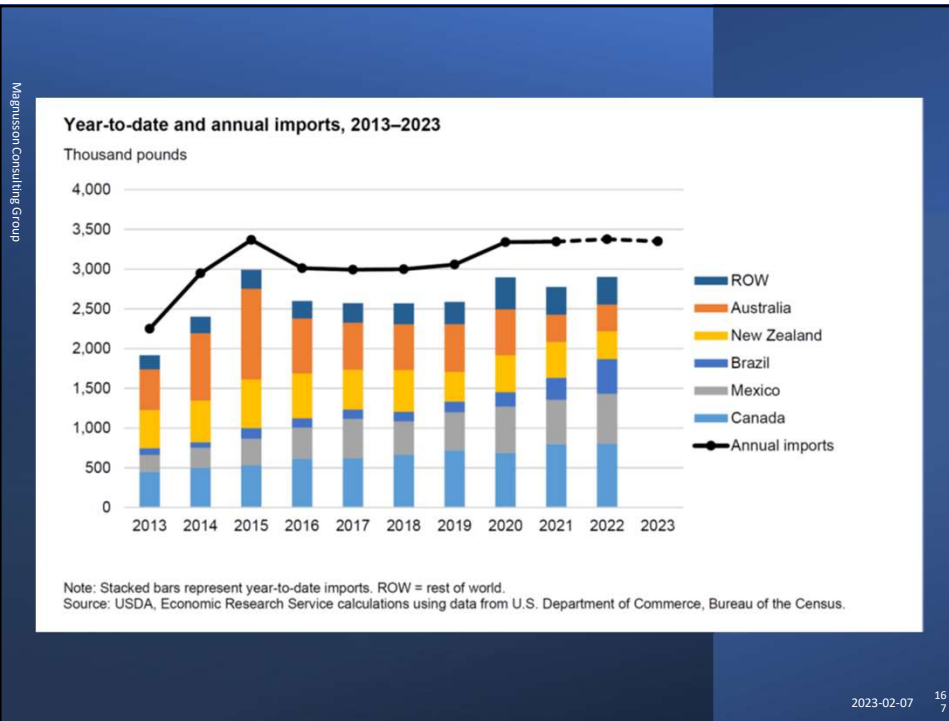
U.S. beef imports by volume, January–October 2021 and 2022

Country	October 2022 imports	Year-to-date imports				Share of YTD imports, percent	
		2021	2022	Year-over-year volume change	Year-over-year percent change	2021	2022
Canada	92.1	797.7	804.4	6.7	1	29	28
Mexico	56.4	558.0	626.6	68.6	12	20	22
Brazil	20.3	277.7	436.4	158.7	57	10	15
New Zealand	20.4	449.5	348.8	-100.7	-22	16	12
Australia	39.5	342.3	337.3	-5.0	-1	12	12
ROW	32.2	351.7	349.1	-2.6	-1	13	12
Total	261.0	2776.8	2902.5	125.7	5		

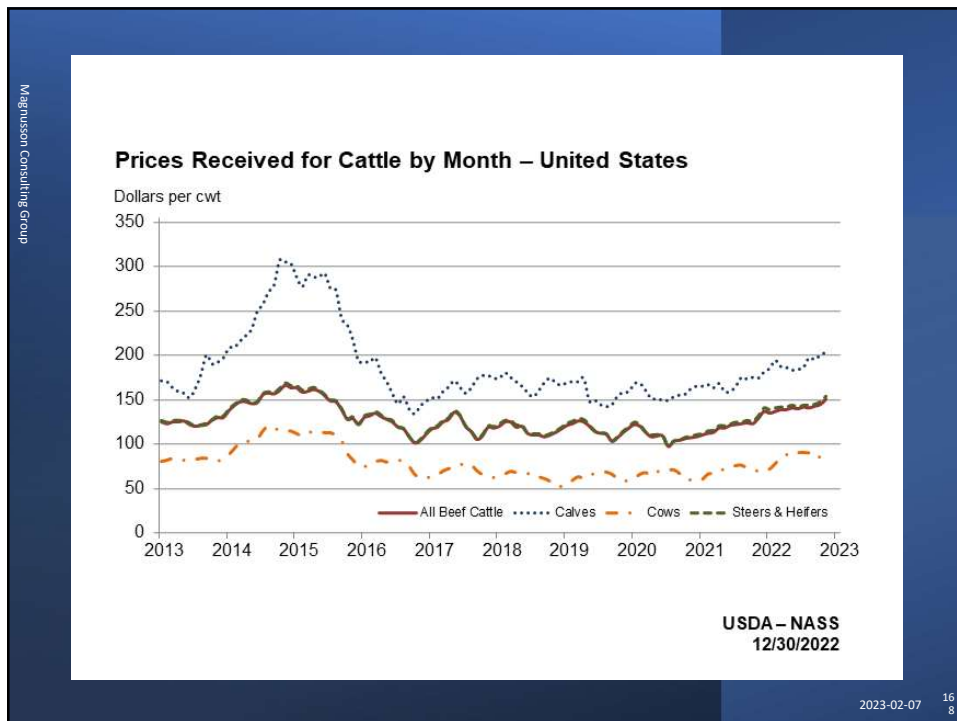
Notes: Top five countries based on 2022 year-to-date imports; YTD = year-to-date; ROW = rest of world.
Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

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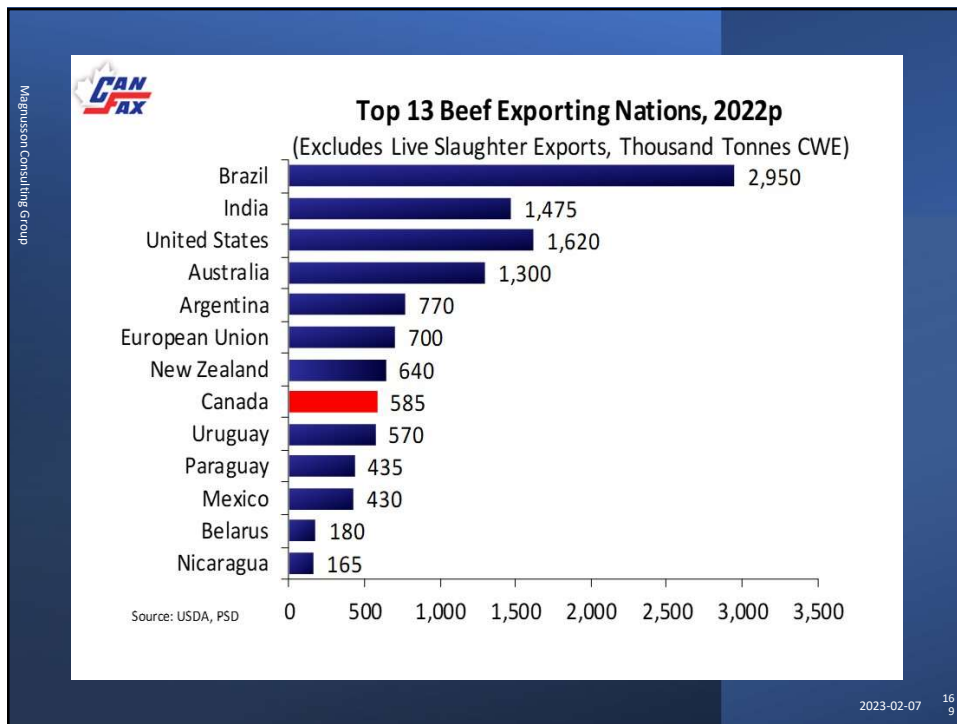
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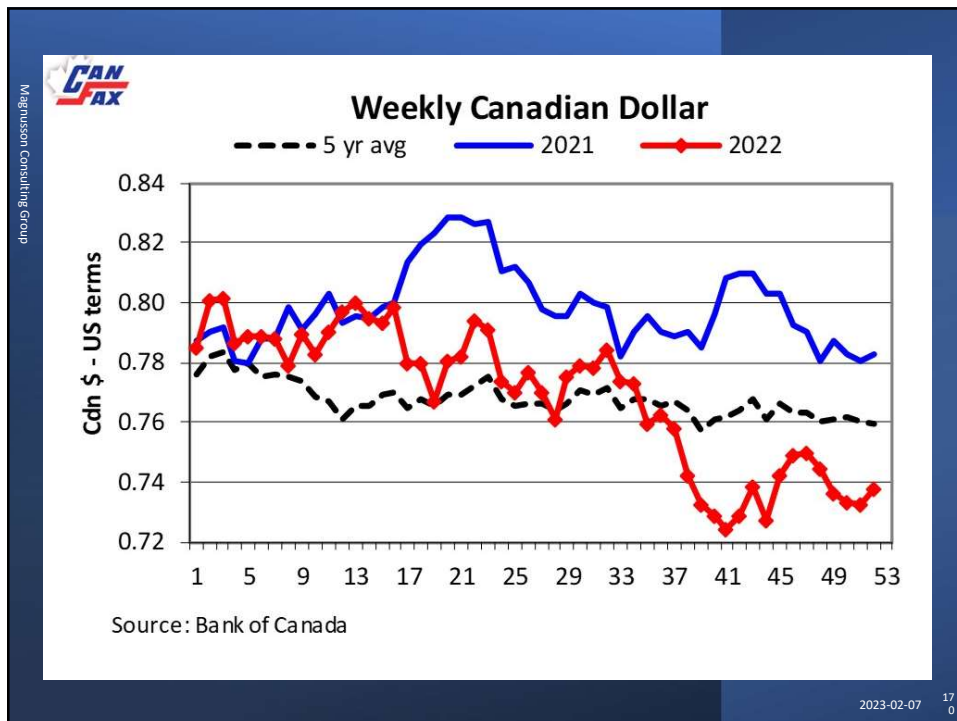
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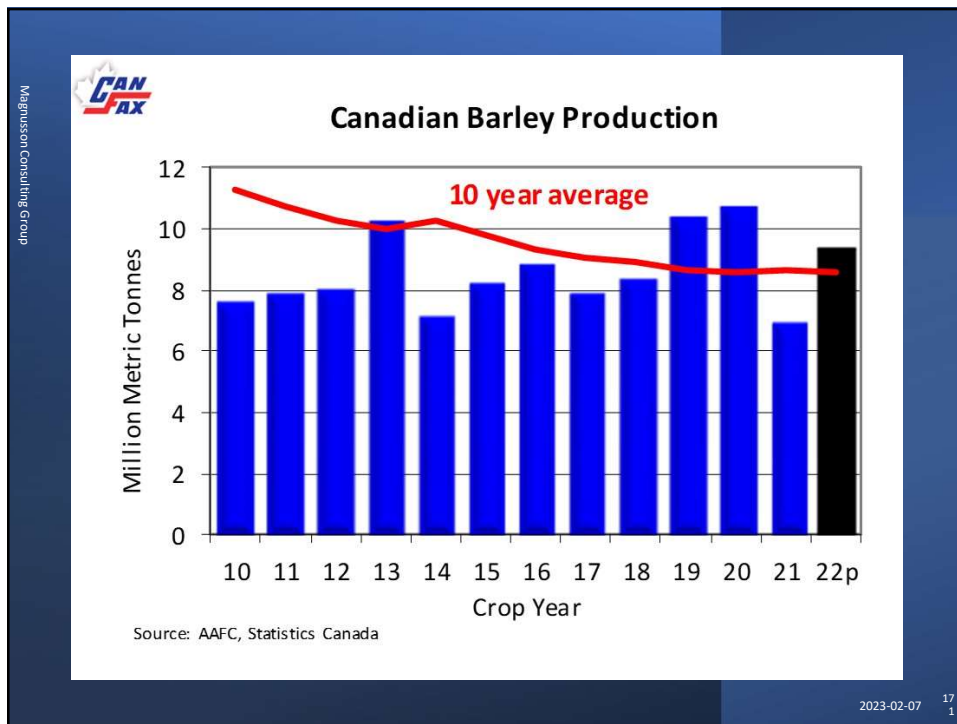
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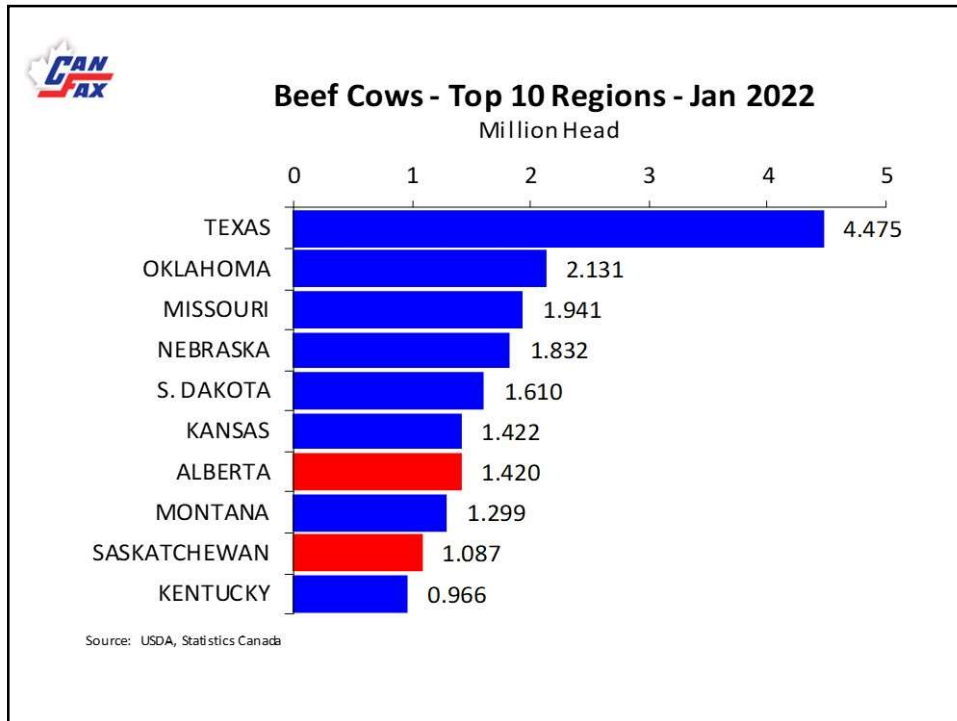
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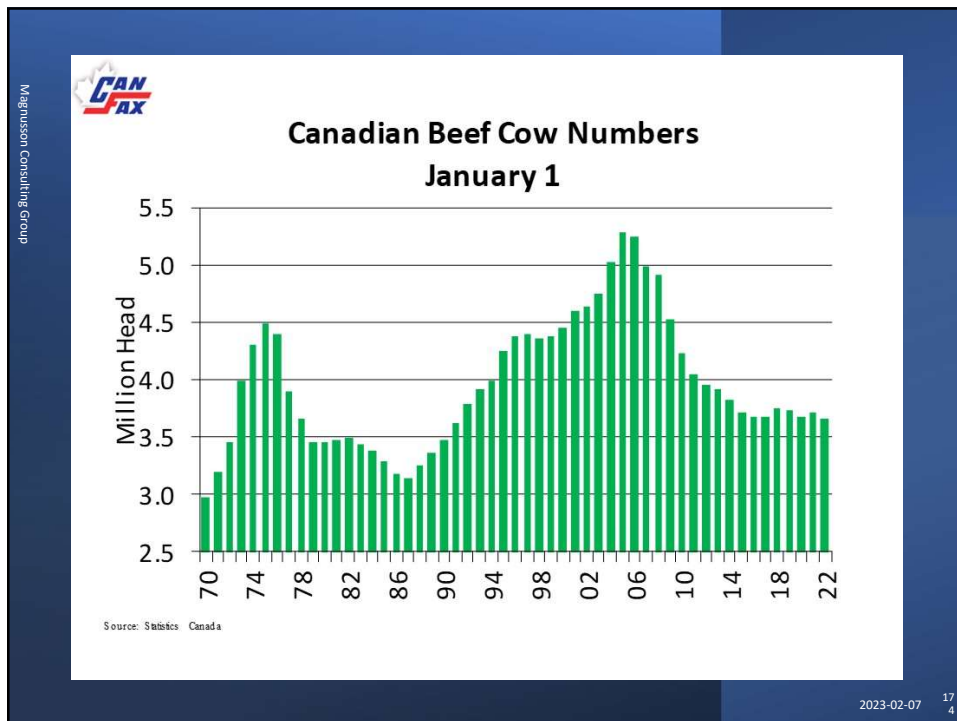
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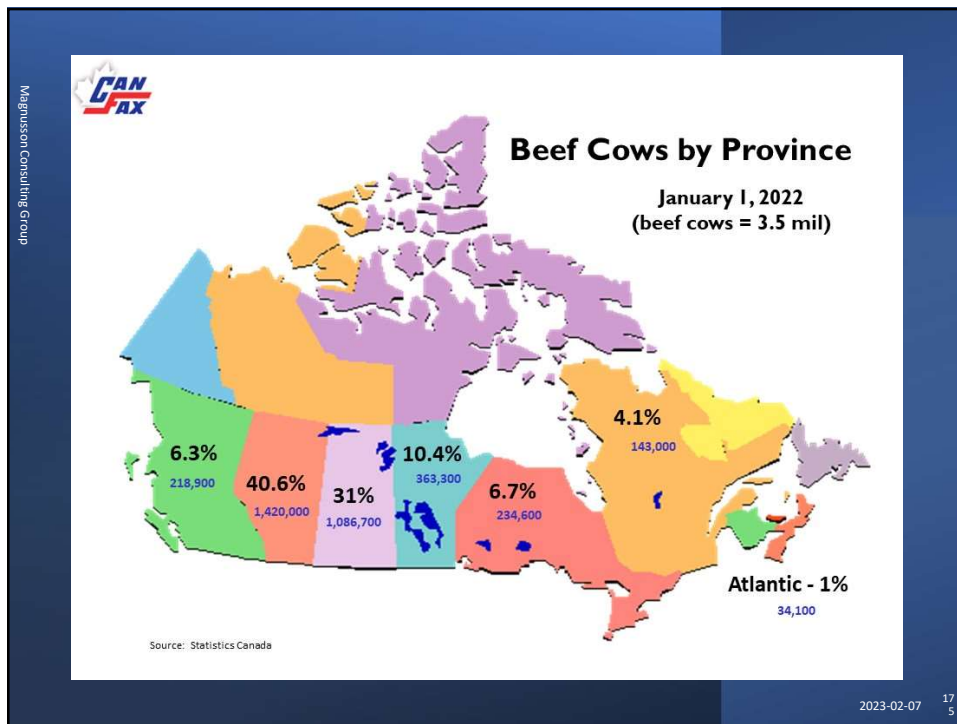
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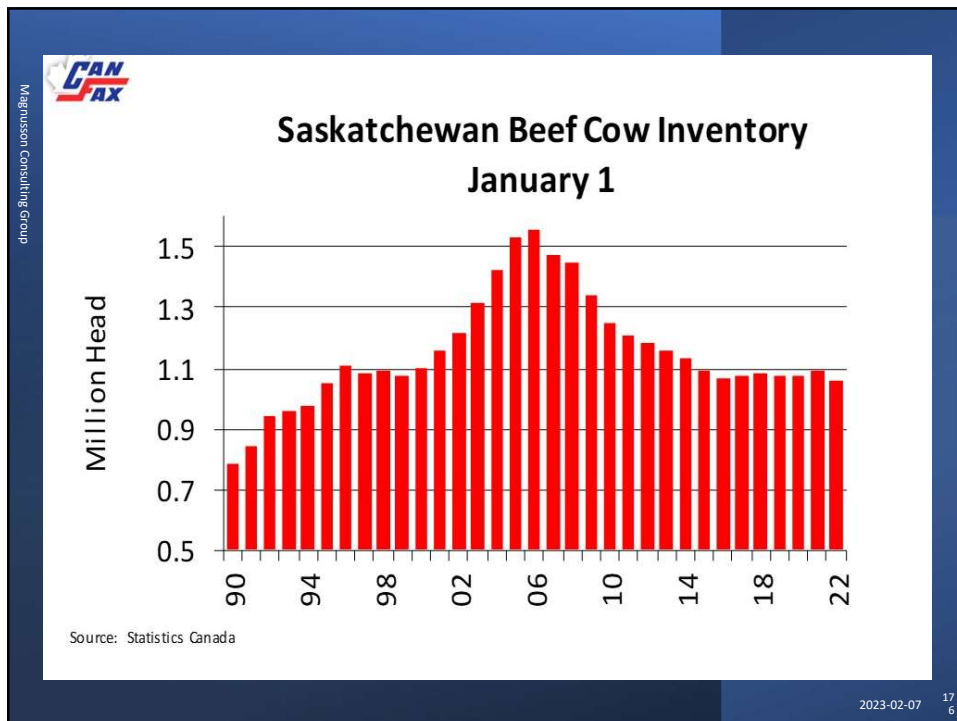
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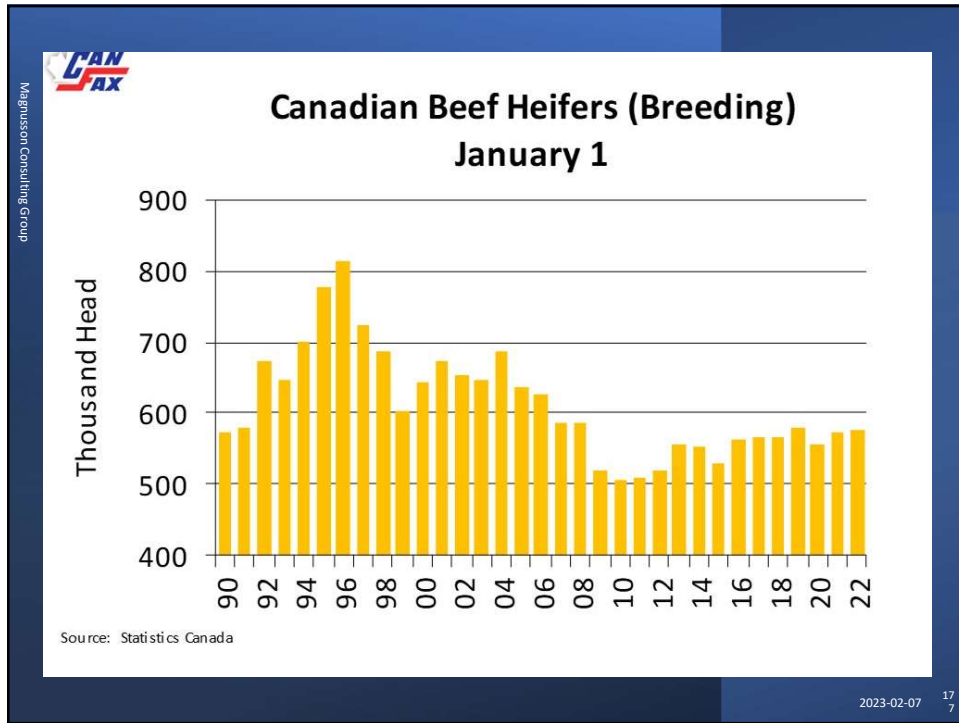
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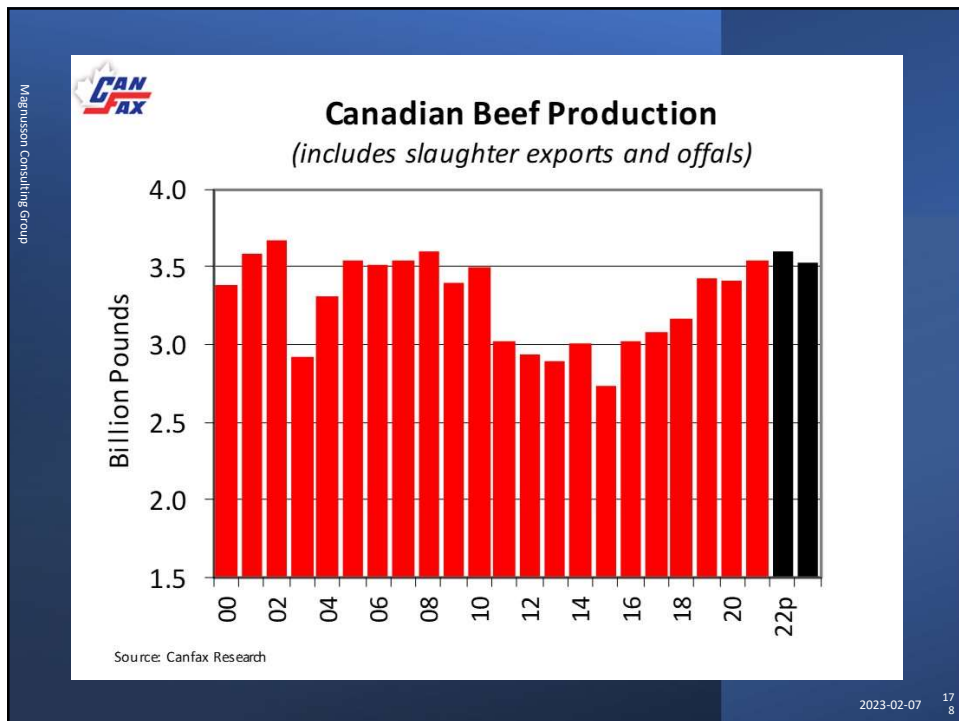
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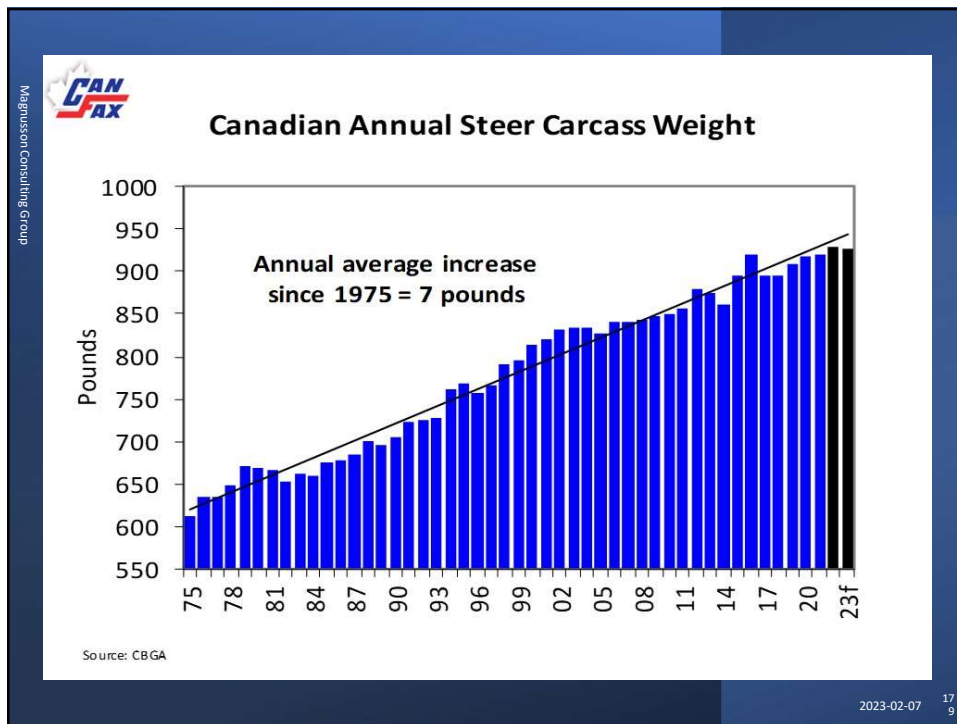
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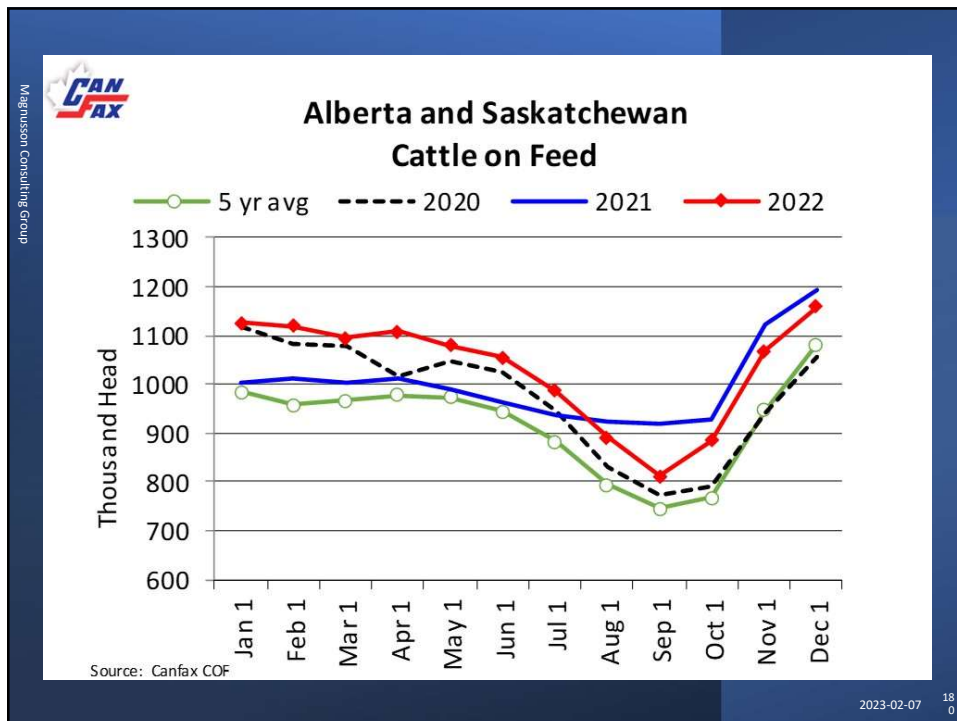
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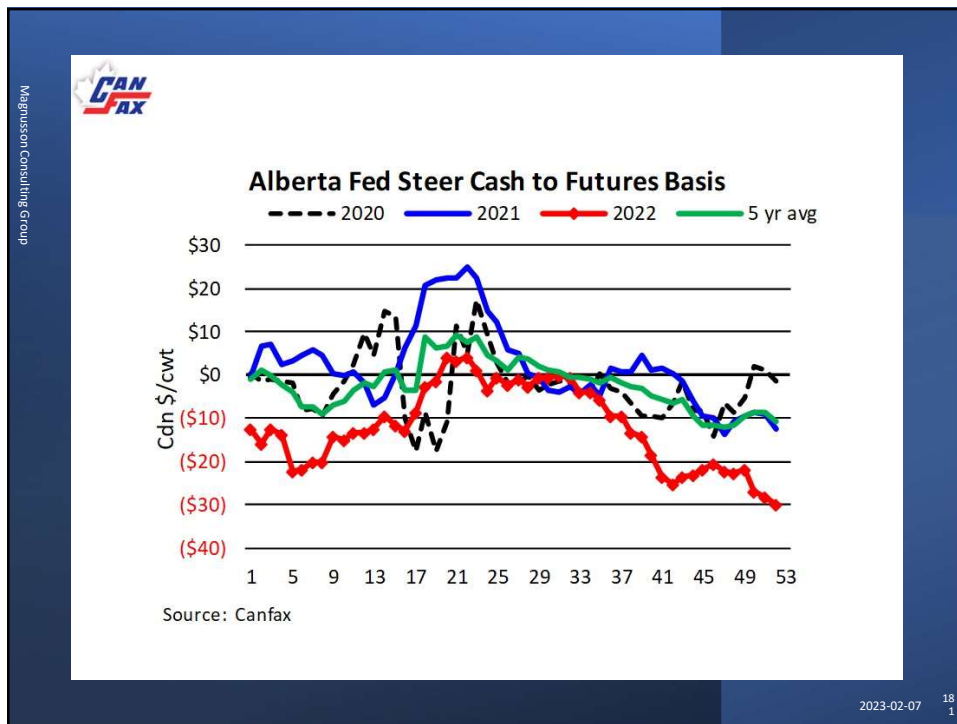
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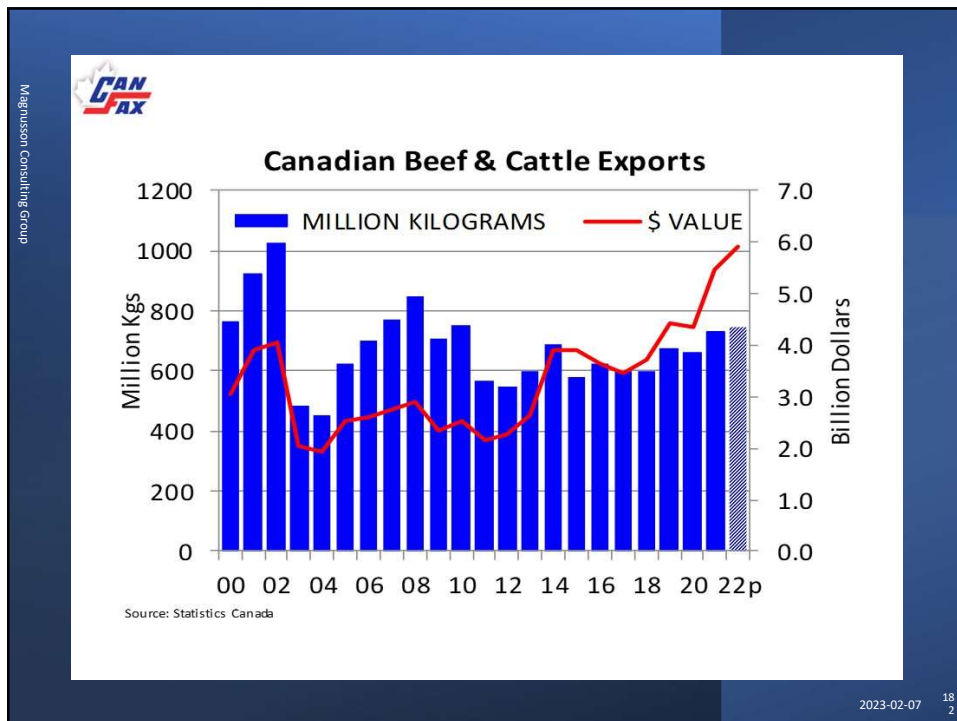
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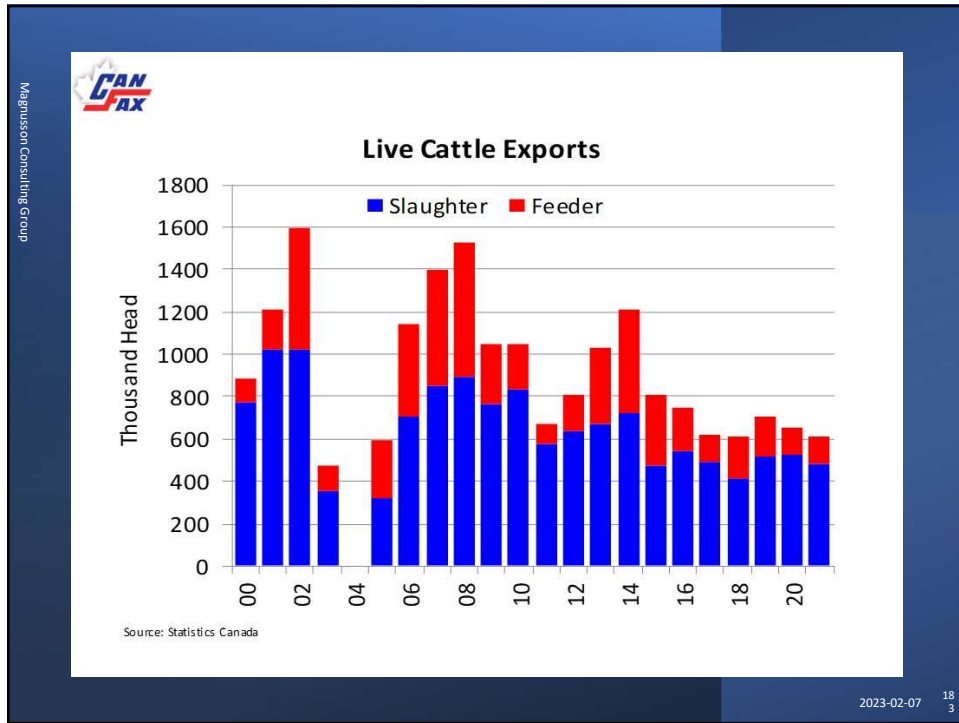
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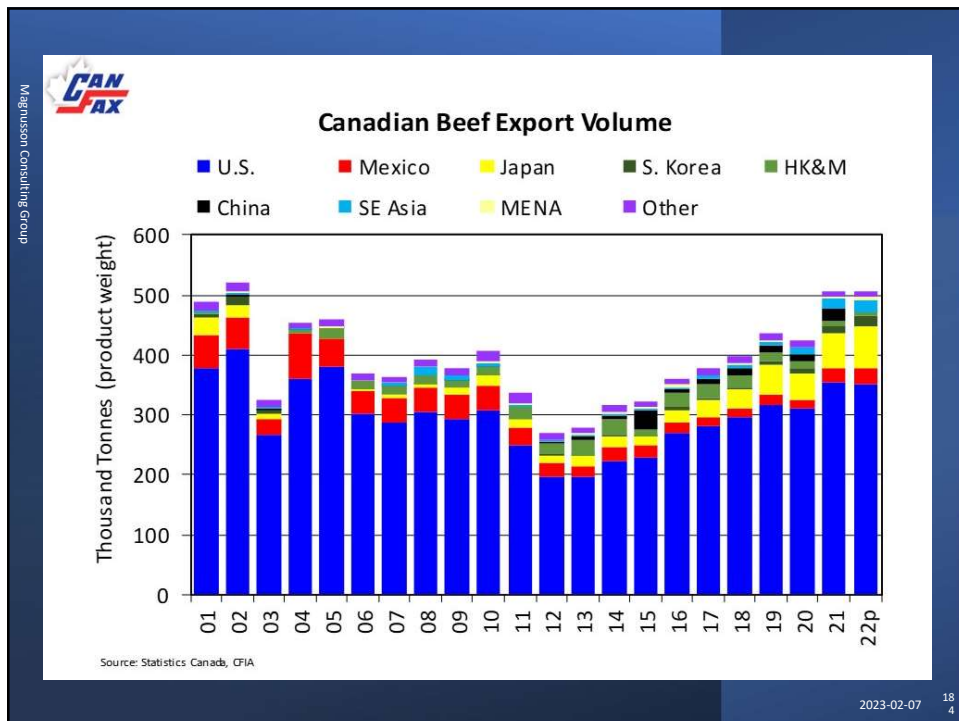
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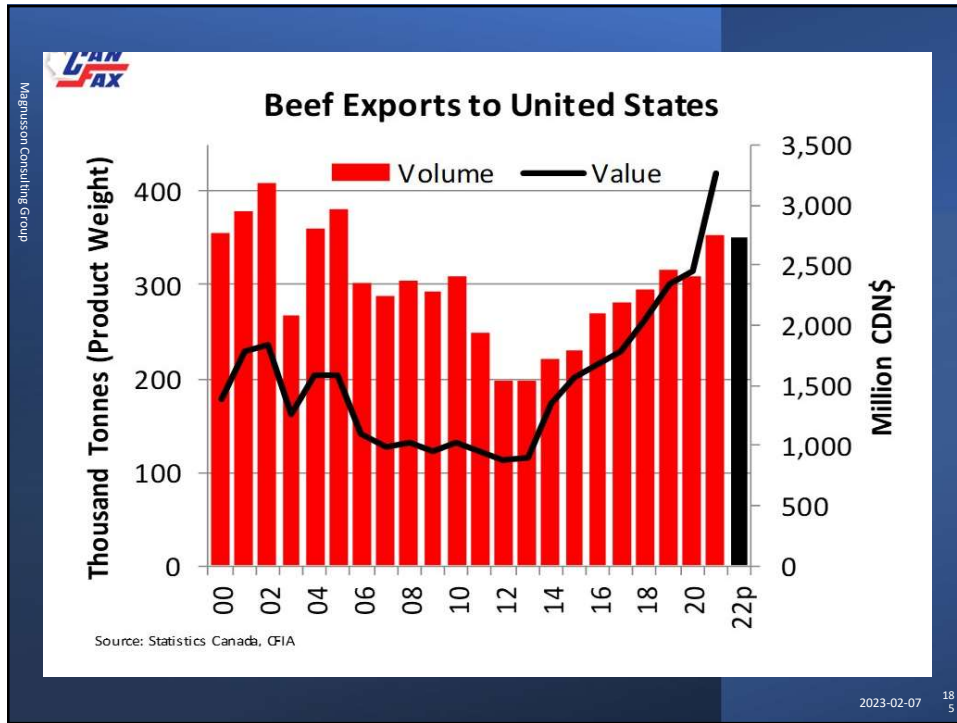
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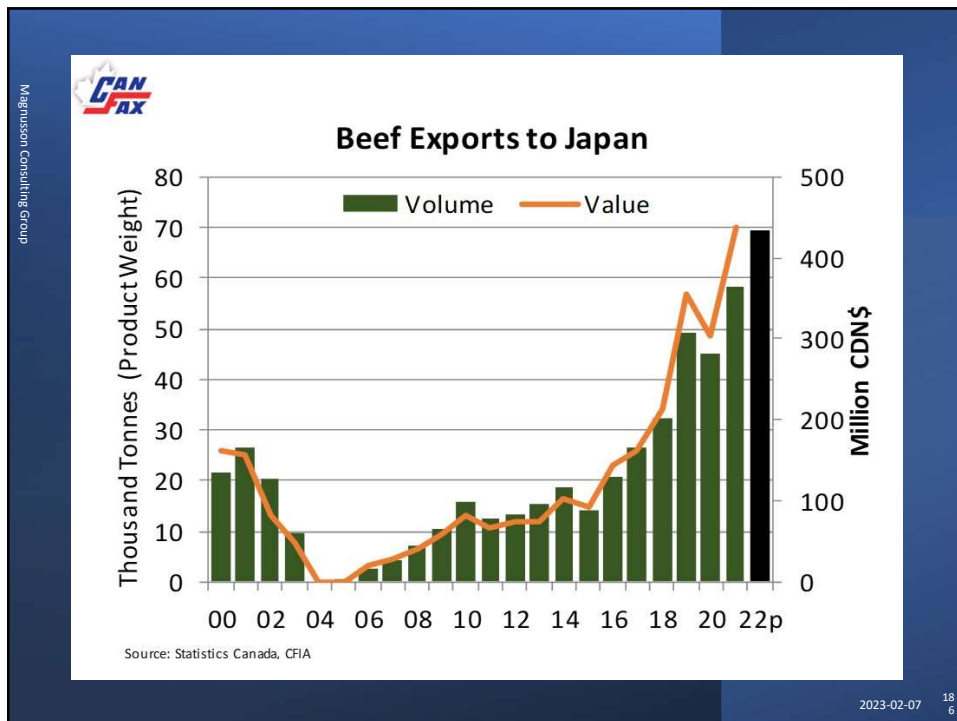
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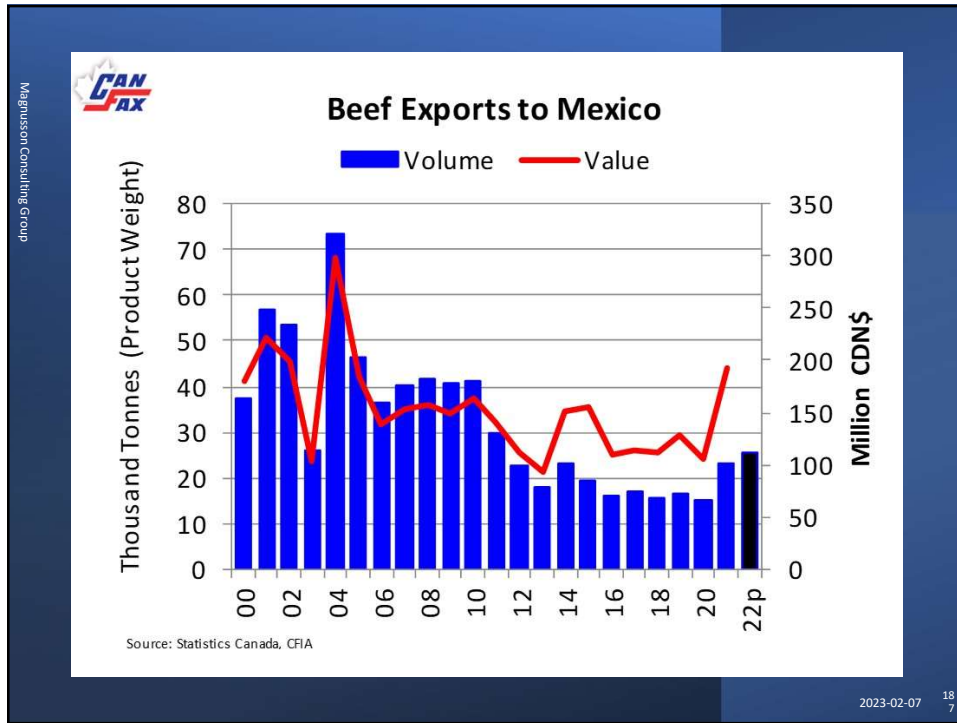
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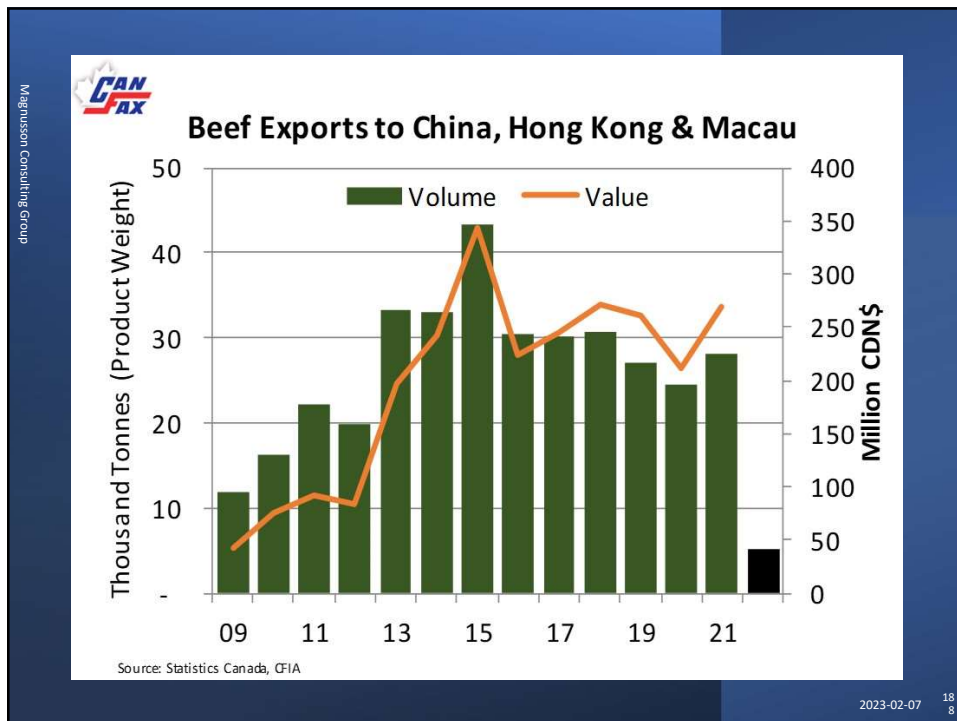
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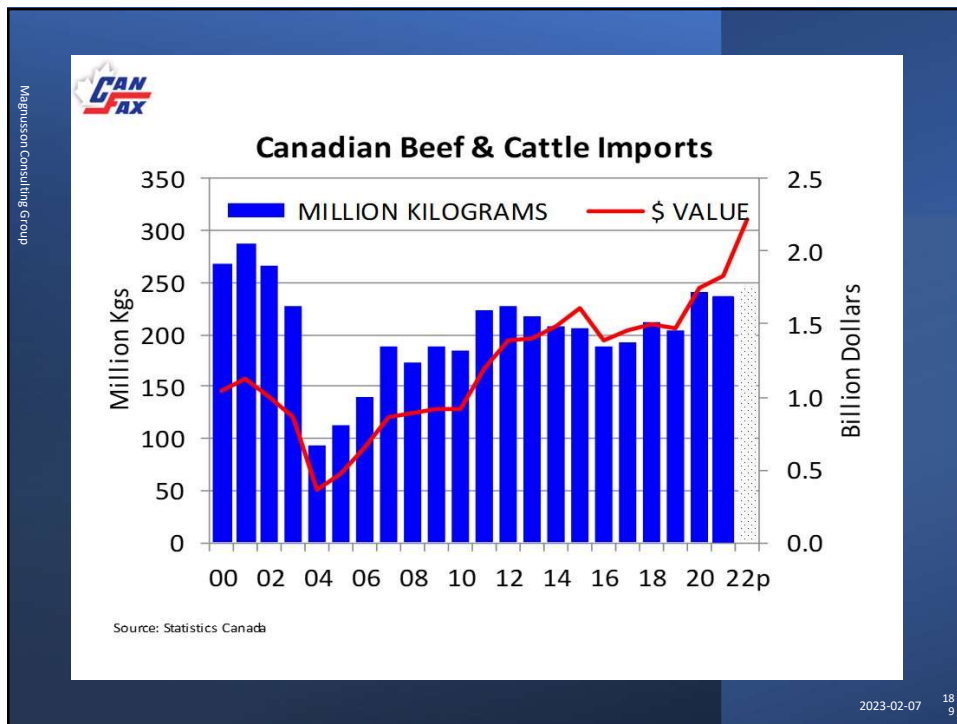
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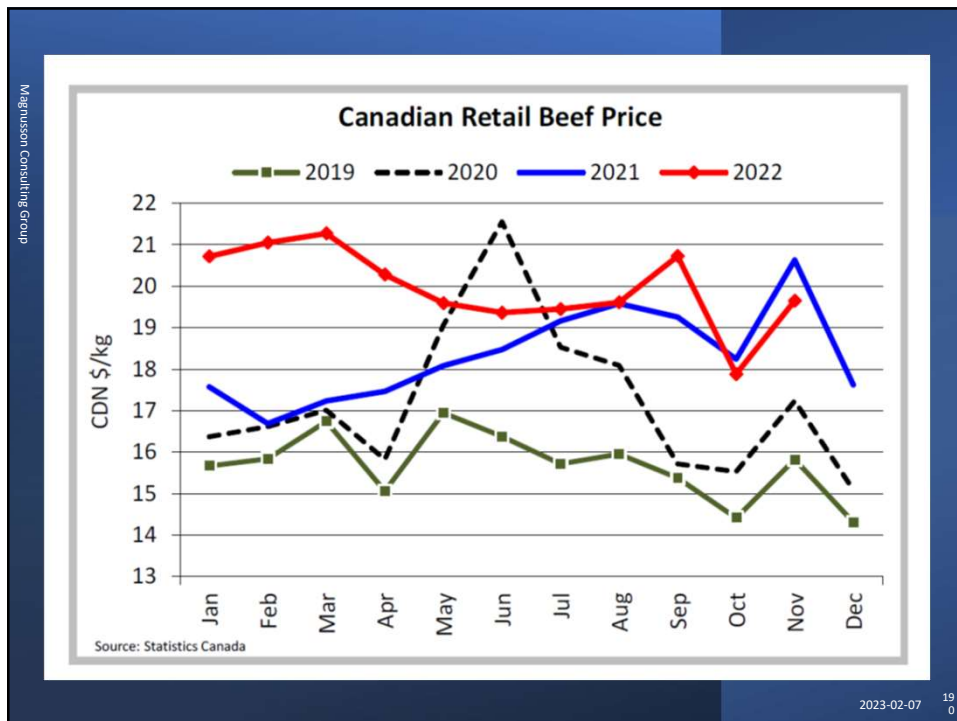
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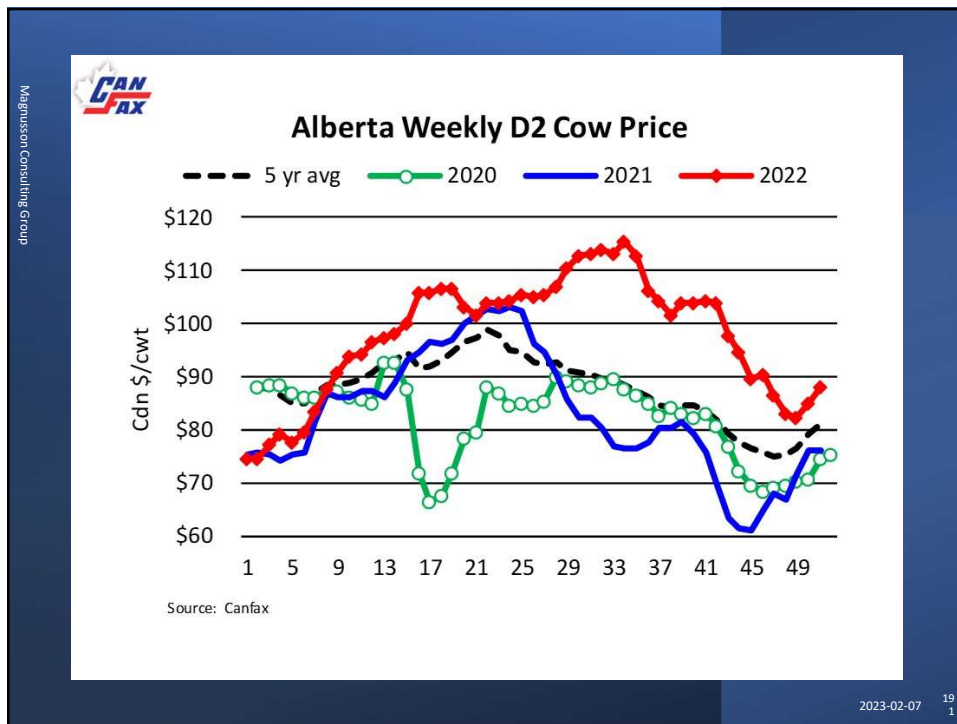
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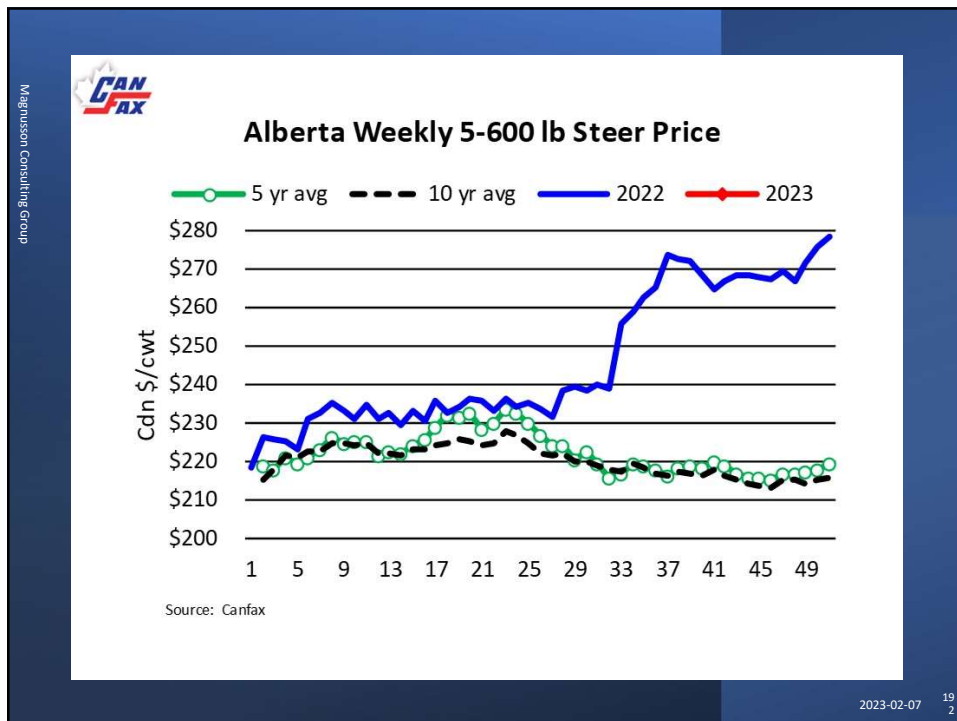
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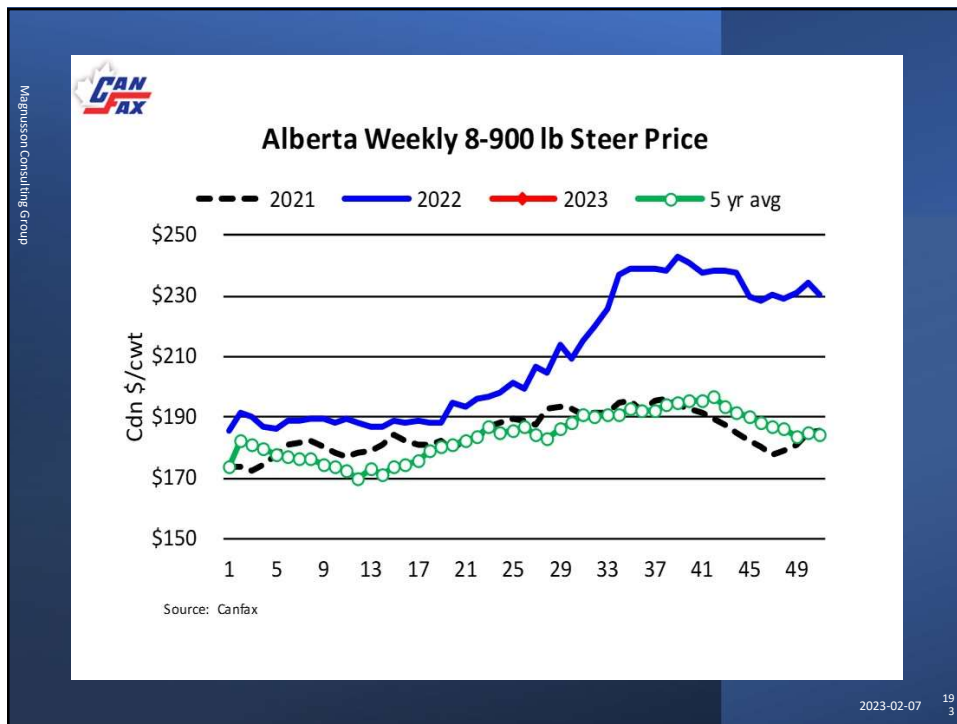
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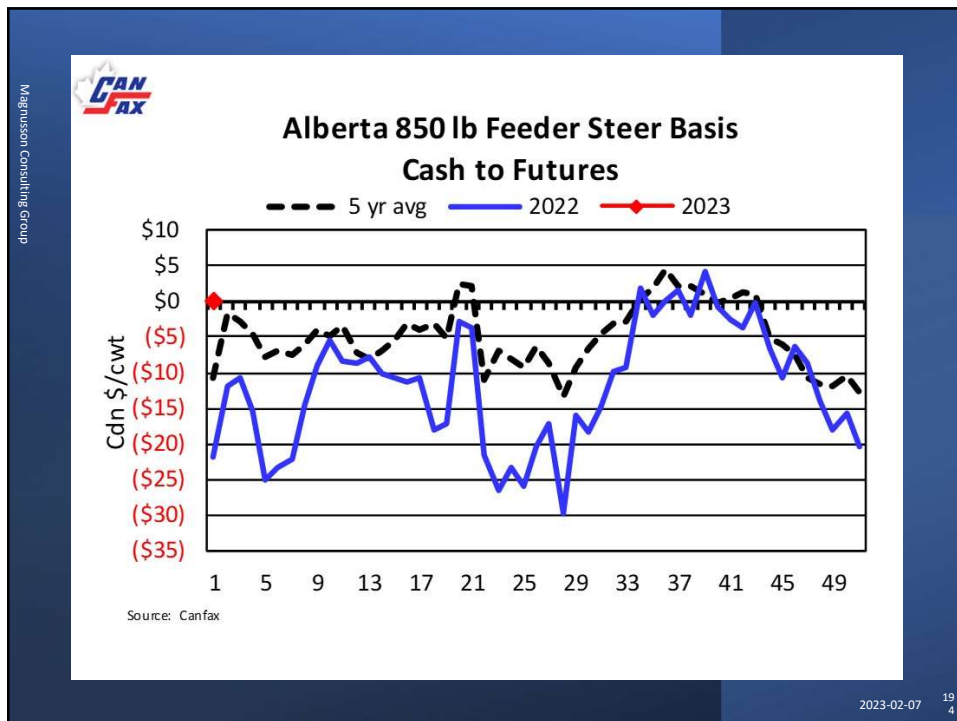
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Canadian Slaughter

	2022	2021	2022/2021	2022/5 yr
Total Slaughter	3,279,126	3,258,879	0.6%	7.4%
Steers	1,788,987	1,838,105	-2.7%	6.8%
Heifers	1,004,443	952,999	5.4%	11.7%
Bulls	15,645	17,482	-10.5%	-6.1%
Cows	470,051	450,293	4.4%	1.4%
West Cows	351,631	333,502	5.4%	-0.8%
East Cows	118,420	116,791	1.4%	9.9%
Hfs as % of Fed	36.0%	34.1%	5.3%	11.7%
Western Fed	2,231,563	2,228,138	0.2%	10.0%
Eastern Fed	561,867	562,966	-0.2%	2.9%
Fed Total	2,793,430	2,791,104	0.1%	8.2%

Source: Canfax

The West is in full liquidation mode with cows up 5.4% and heifers up 8%; while the East appears more optimistic about the future with cows up only 1.4% and heifers down 10% - potentially pointing towards more retention on the cow-calf side. Overall, given the larger female slaughter, the Canadian cow herd is expected to be stable to smaller and younger on January 1, 2023.

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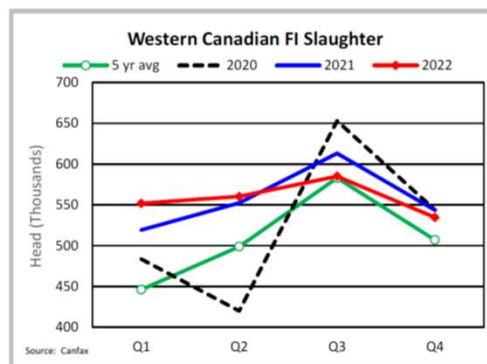
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Source: Canfax

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- Fed cattle slaughter was steady with 2021 in both the West and the East. However, there were seasonal variations. Western fed cattle supplies seasonally have their high in the third quarter. In 2022, there were 4.6% fewer fed cattle slaughtered in the third quarter compared to 2021, steady with the five-year average. By the fourth quarter, Western fed slaughter was down 1.6% from 2021, though still 5.6% above the five-year average.
- Eastern fed slaughter was 4% higher than last year and 5.9% higher than the five-year average in the fourth quarter. After being down 1.5% in the first three quarters.



Source: Canfax

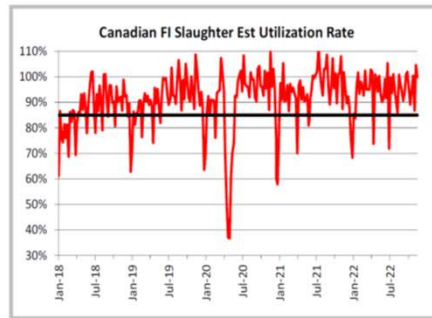
Source: Canfax

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Slaughter capacity has been pushed in the West to a much greater degree than in the East. ***In the second half of 2022, total federally inspected slaughter in the West was 95% or more of capacity on 21 of those weeks.*** Of those 21 weeks where slaughter is considered to be maximized, packing plants ran at least one Saturday shift 12 times to work through cattle.

In the East, there were only five occurrences in the second half of the year, where slaughter rates were 95% or more of capacity. Ontario slaughter plants didn't have to run any Saturday shifts to keep up with fed cattle supplies. ***For the last half of the year, average federally inspected packer utilization was 96% in Western Canada and 86% in Eastern Canada.*** These utilization levels are well above the ten-year averages which are 86% in the West and 85% in the East. Even with smaller numbers expected in 2023, packer utilization levels are expected to remain above the 10-year average.

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Source: Canfax

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Source: Canfax

Canadian Weekly Average Carcass Weights (lbs)

Source: CBGA

	Steer	Heifer	Cow	Bull	Total
31-Dec-22	949	832	716	853	872
Last wk	939	829	708	865	864
Yr ago	938	836	710	947	878
YTD 2022	930	843	728	945	874
YTD 2021	920	841	722	993	870

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Cdn\$/cwt		Range	Avg	\$ chg	\$ chg
Saskatchewan - Vol 7,533 (YTD 7,860 -16%)					
Steers	3-400	320 - 368	340.83	-	-
	4-500	300 - 327	318.17	-	+74
	5-600	288 - 315	301.17	-	+76
	6-700	262 - 290	274.00	-	+62
	7-800	247 - 272	260.83	-	+64
	8-900	235 - 255	244.83	-	+53
	900+	231 - 242	236.83	-	-
Heifers	3-400	253 - 270	262.67	-	-
	4-500	244 - 265	257.83	-	+52
	5-600	230 - 258	243.33	-	+54
	6-700	220 - 238	228.50	-	+46
	7-800	216 - 227	222.33	-	+46
	800+	208 - 221	212.50	-	+39

