


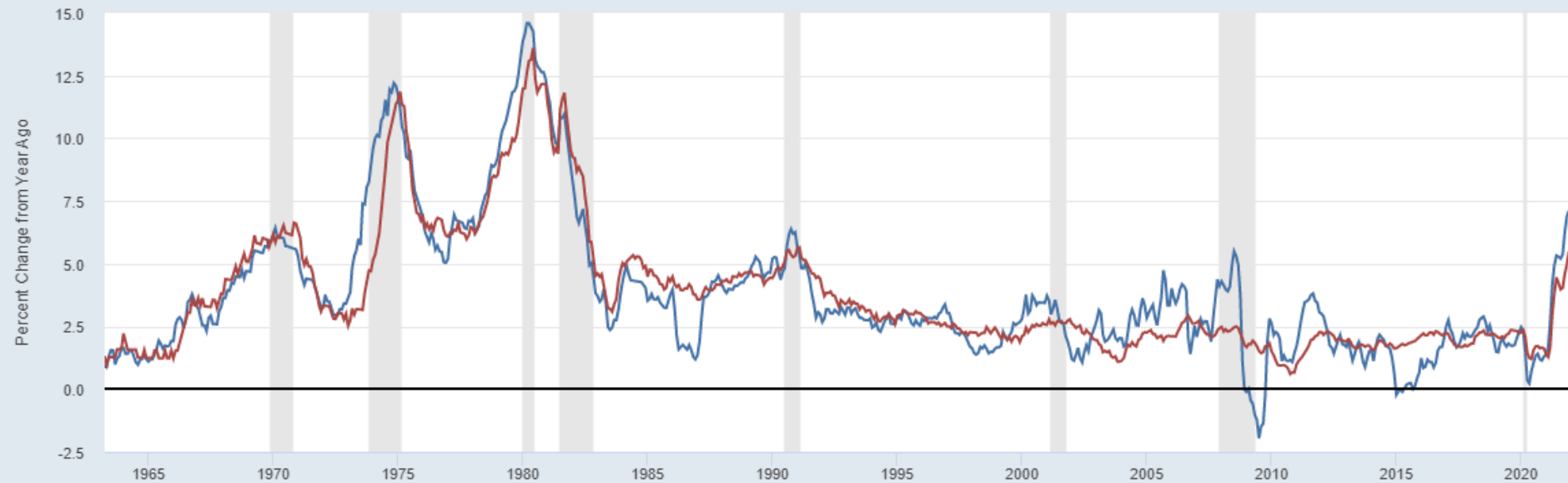
2022 Dairy Market & Policy Situation

Christopher A. Wolf, E.V. Baker Professor

Dyson School of Applied Economics and Management

Cornell University


FRED  — Consumer Price Index for All Urban Consumers: All Items in U.S. City Average
— Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average

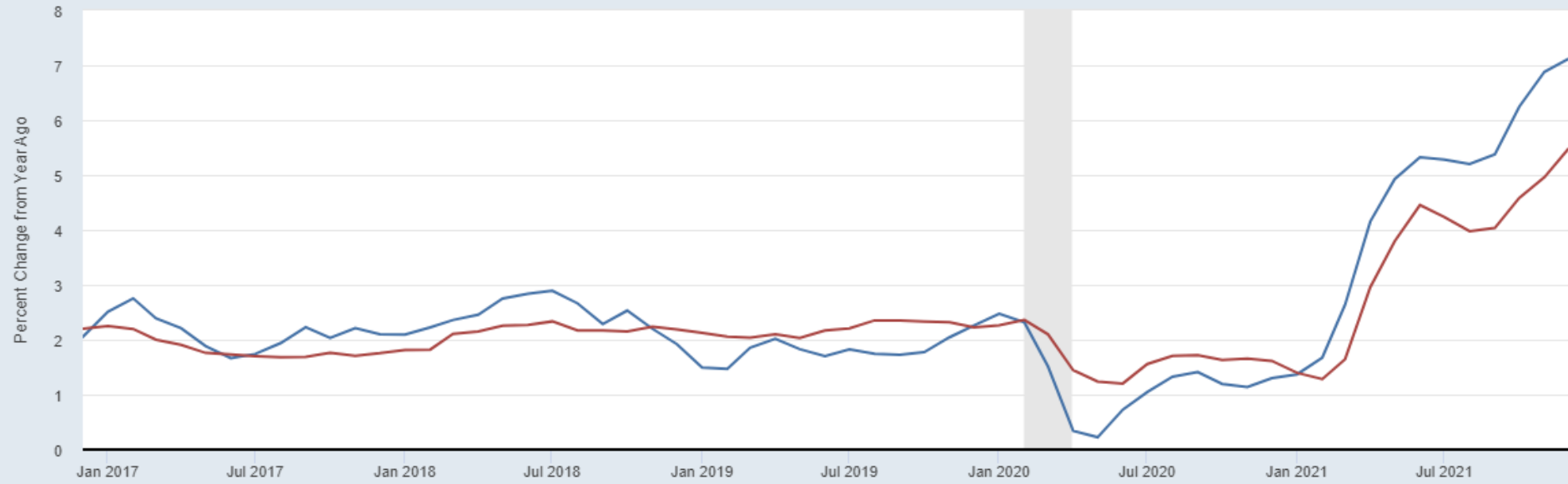


Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

FRED  — Consumer Price Index for All Urban Consumers: All Items in U.S. City Average
 — Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

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FRED — Producer Price Index by Commodity: Transportation Services: Truck Transportation of Freight



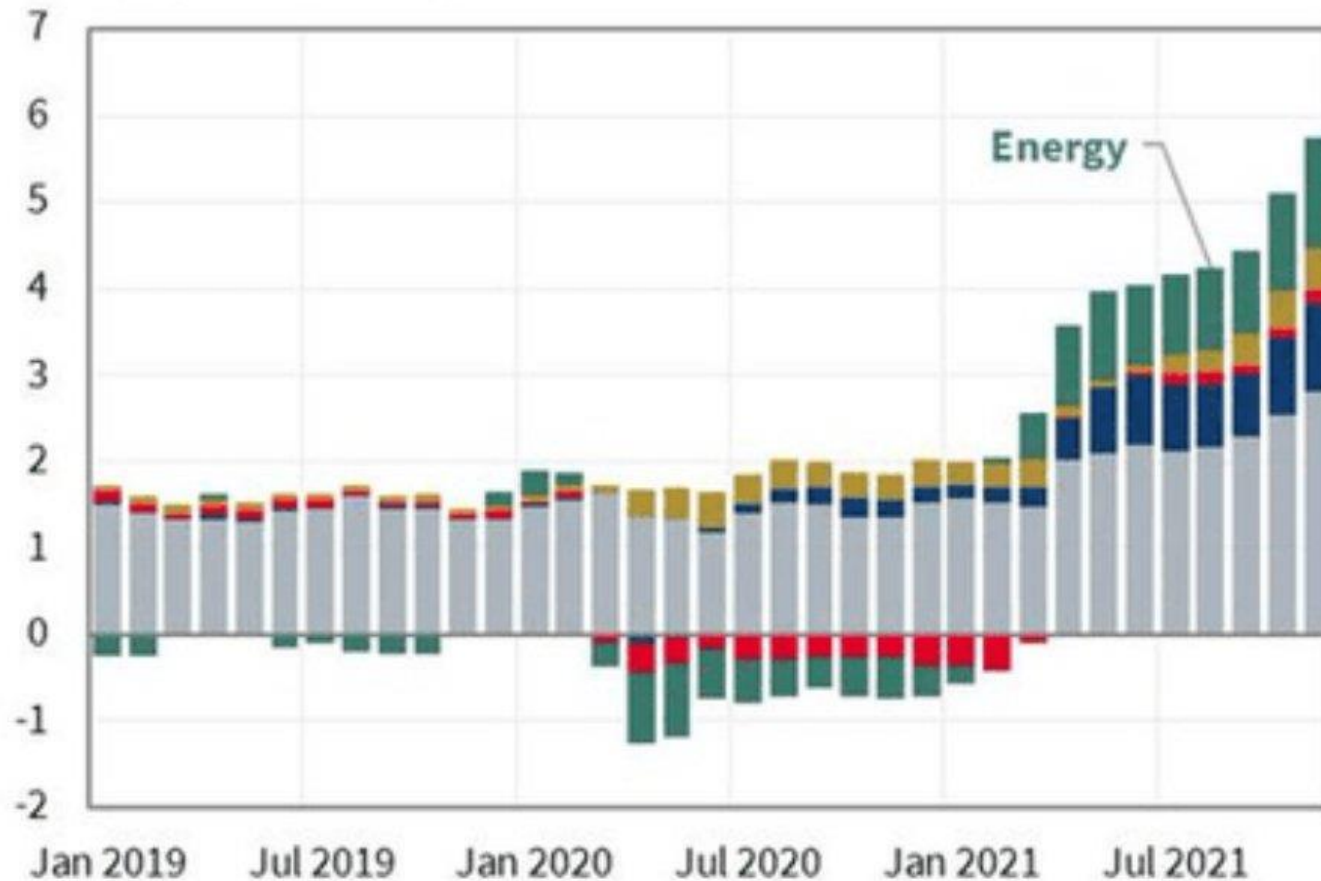
Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

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Contributions to Y-Y Headline PCE Inflation

Percentage points, year-on-year



Posted on
The Daily Shot
24 Dec 2021

Food


Pandemic-Affected Services
Airfare, hotels,
event admissions

Vehicle-Related
New & used, parts,
rentals

Other

Source: BEA, CEA analysis.

Source: Council of Economic Advisers

As [#inflation](#) reaches a 40 year high, here's a look at [#food](#) and beverage [#price](#) increases  last year (2021):

Steak 21.4 (% increase)

Beef 18.6

Bacon 18.6

Eggs 11.1

Chicken 10.4

Fish 10.2

Ham 10.1

Fruits 7.9

Coffee 6.3

Juice 5.7

Milk 4.2

Bread 3.8

Veg. 2.4

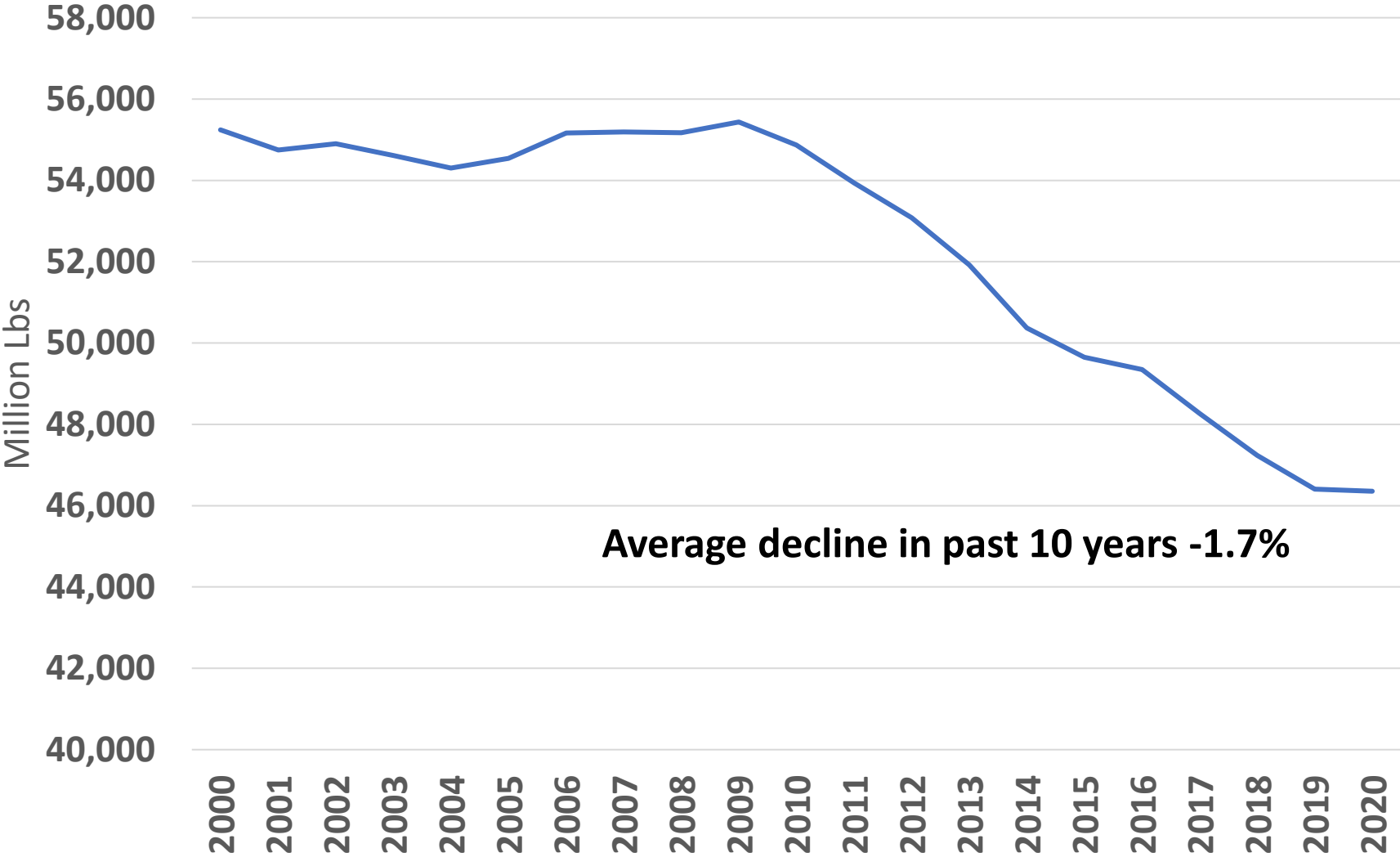
Beer 2.0

Wine -0.1

Fluid Milk Consumption (2020 YoY)

Product	% change
Whole milk	+3.28
2% milk	+3.62
1% milk	-4.26
Skim milk	-13.4
Total fluid milk	-0.11

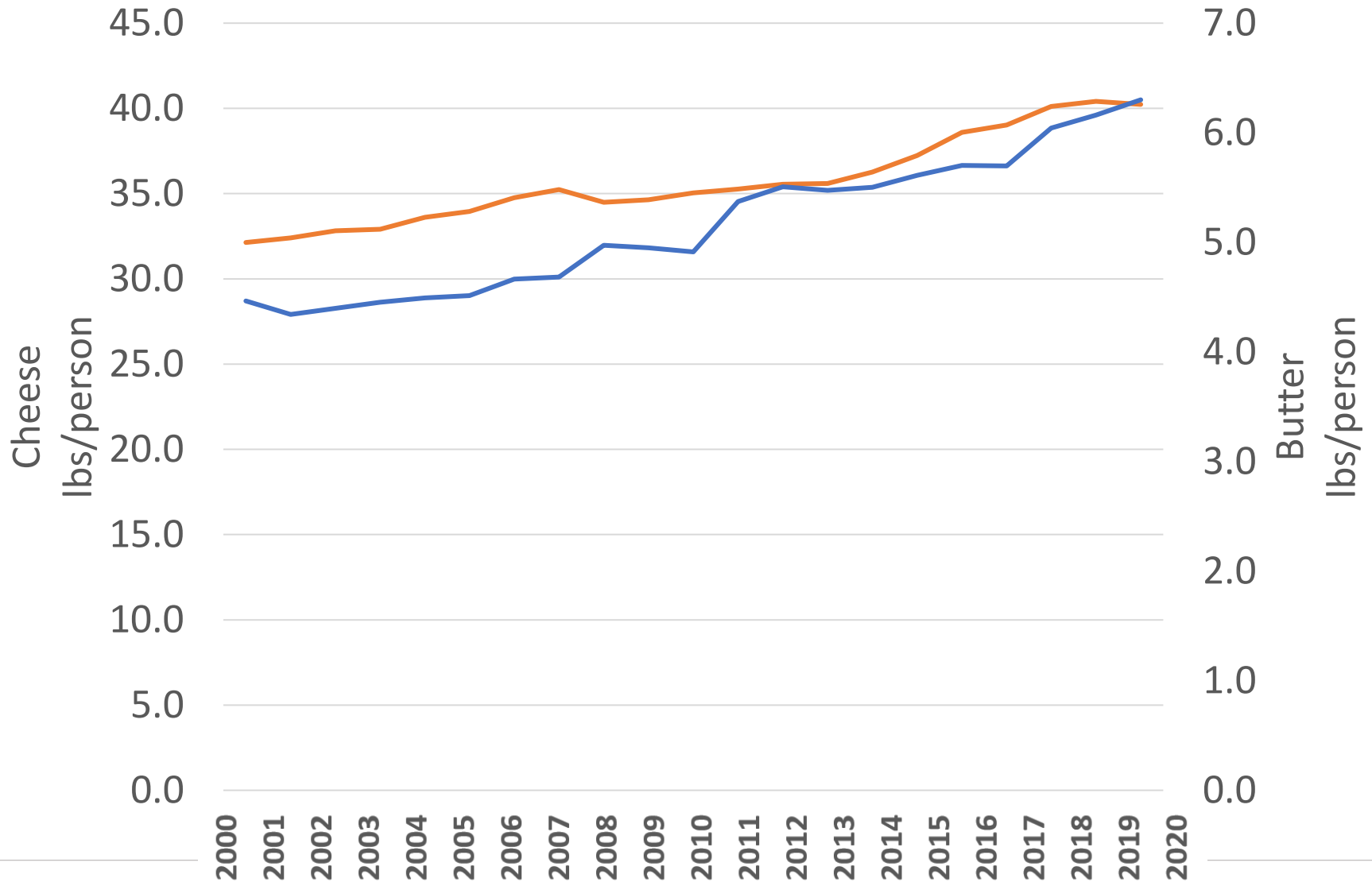
Fluid Milk Consumption



Cheese Consumption (2020 YoY)

Product	% change
Cheddar	+0.35
Mozzarella	-1.50
Swiss	-6.26
Blue	-18.57
Cream	+7.10
Hispanic	+3.80
Total natural cheese	-0.60
Total processed cheese	-3.55

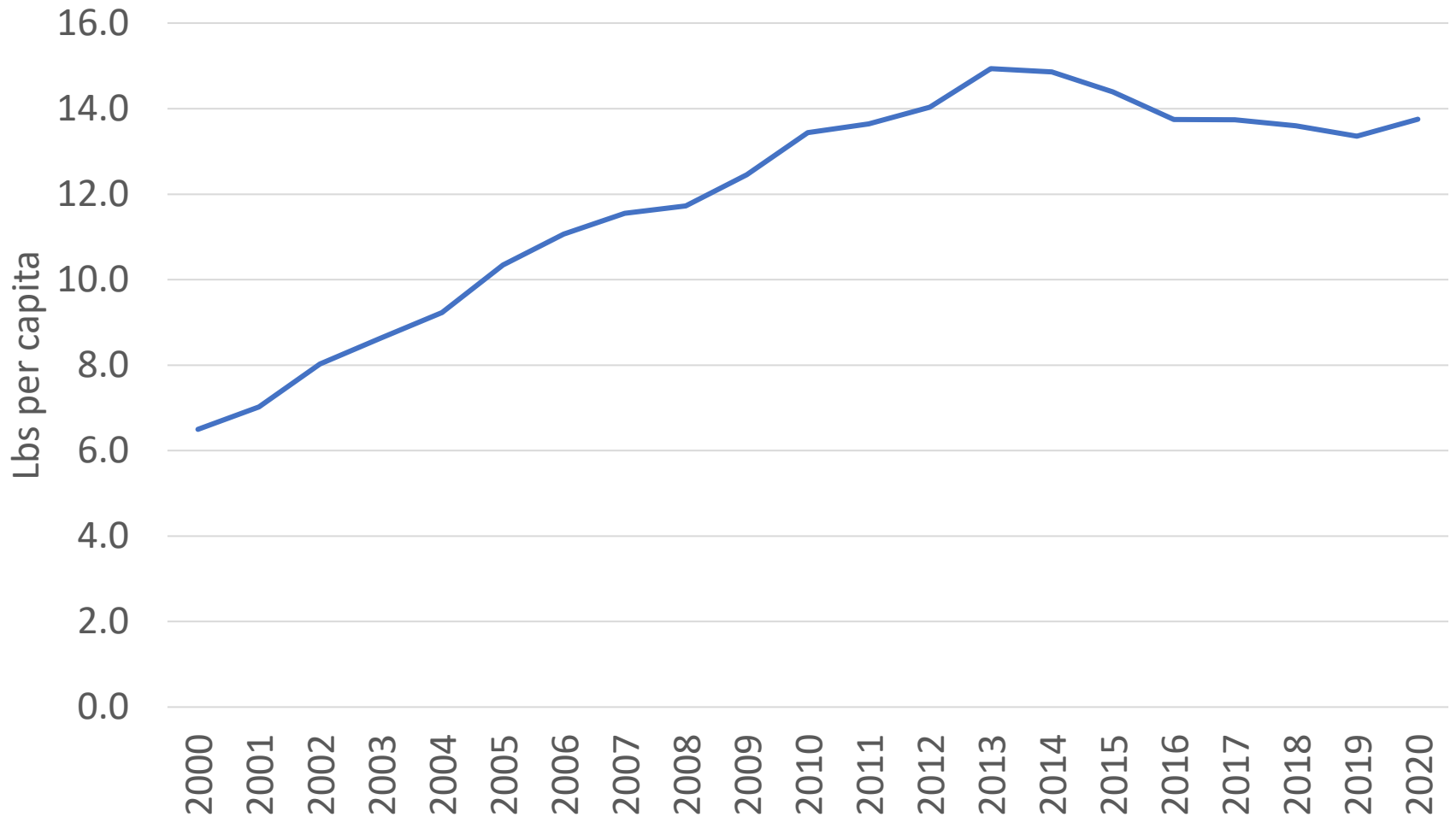
Butter and Cheese Consumption



Soft Product Consumption (2020 YoY)

Product		% change
Ice Cream	Regular	+3.94
	Low-fat	+1.85
	Nonfat	-3.09
Yogurt		+3.32

Yogurt Consumption (per capita)



Lessons from Americans eating at home

- Full fat beverage, ice cream, yogurt
- Breakfast is key:
 - More beverage milk (whole and 2%)
 - More yogurt
 - More cream cheese
- Less specialty cheeses

US Food Expenditures (2018-Oct 2021)

Million \$

100,000.00

90,000.00

80,000.00

70,000.00

60,000.00

50,000.00

40,000.00

30,000.00

20,000.00

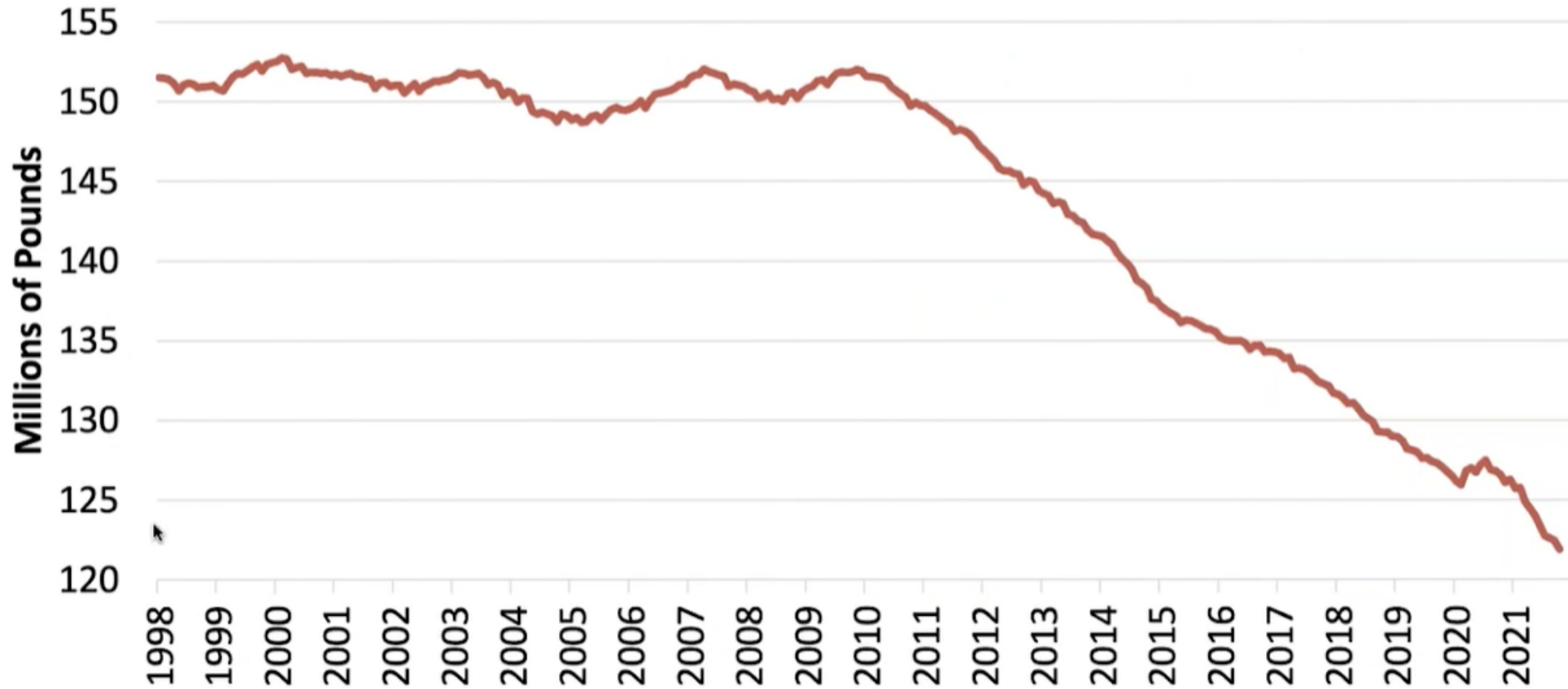
10,000.00

0.00

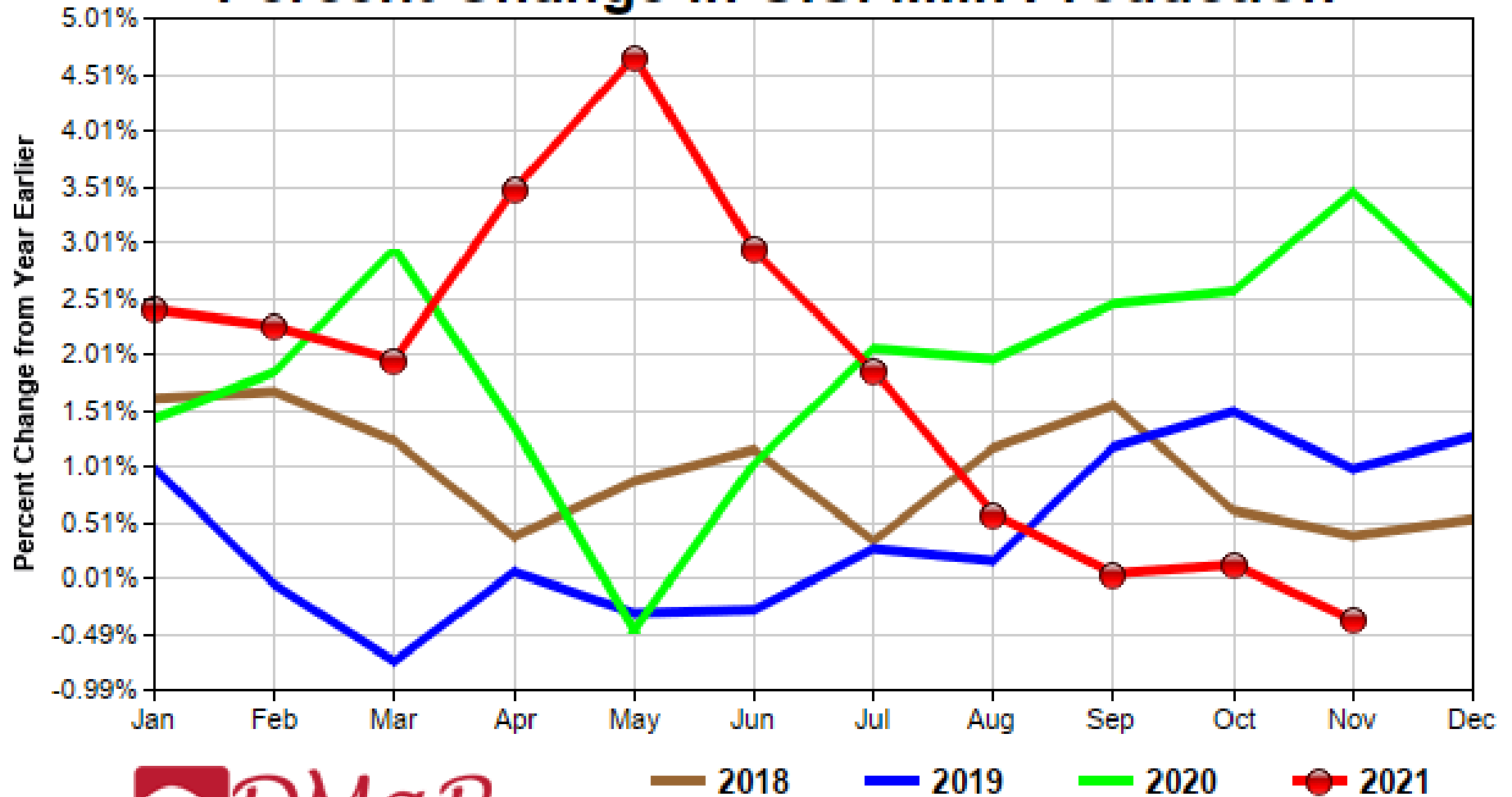
Jan-2018 Mar-2018 May-2018 Jul-2018 Sep-2018 Nov-2018 Jan-2019 Mar-2019 May-2019 Jul-2019 Sep-2019 Nov-2019 Jan-2020 Mar-2020 May-2020 Jul-2020 Sep-2020 Nov-2020 Jan-2021 Mar-2021 May-2021 Jul-2021 Sep-2021

— At Home — Away From Home

U.S. Fluid Milk Sales: Rolling Daily Average



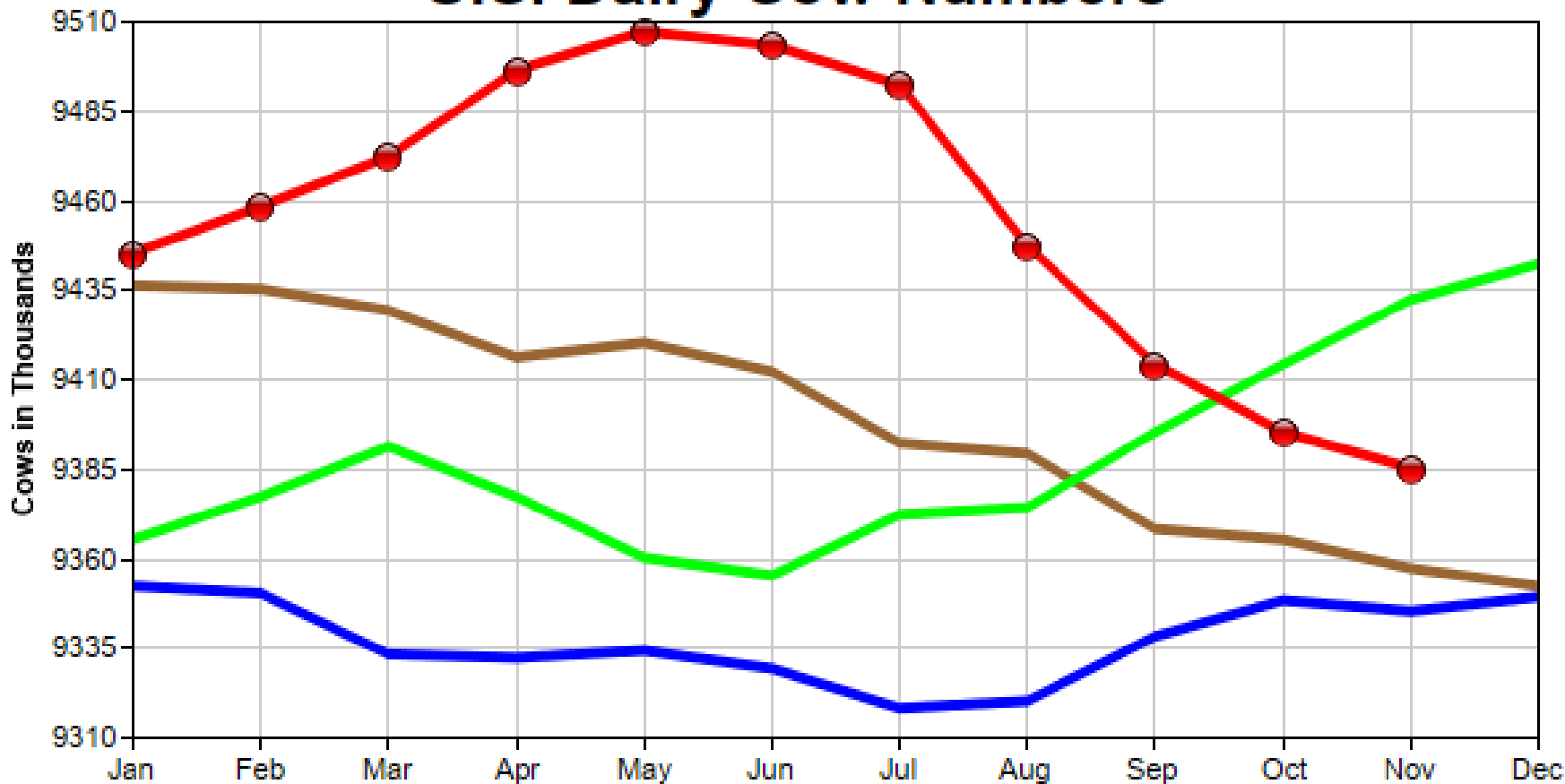
Percent Change in U.S. Milk Production



— 2018 — 2019 — 2020 ● 2021

Updated 12/20/21

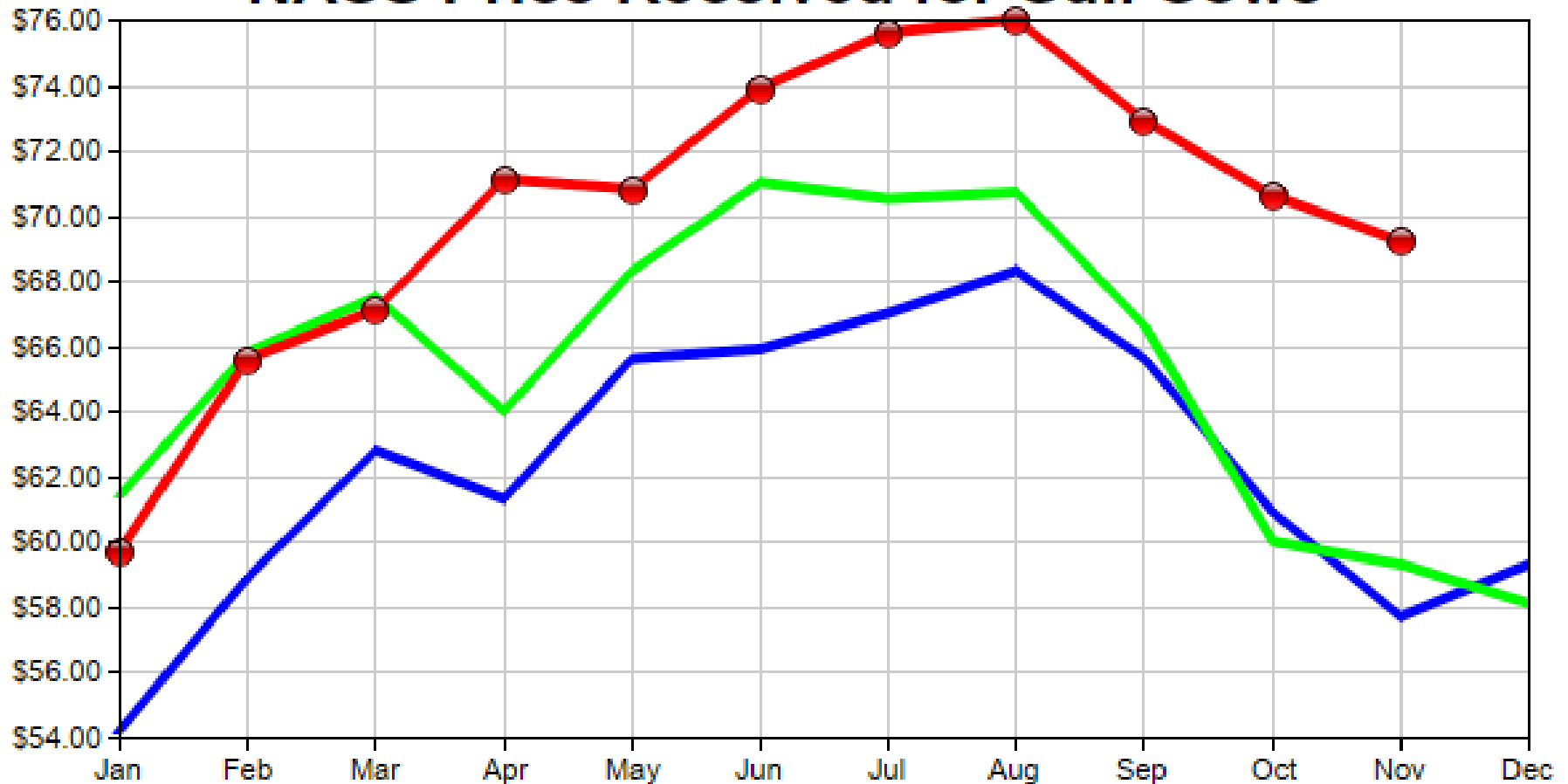
U.S. Dairy Cow Numbers



— 2018 — 2019 — 2020 ● 2021

Updated 12/20/21

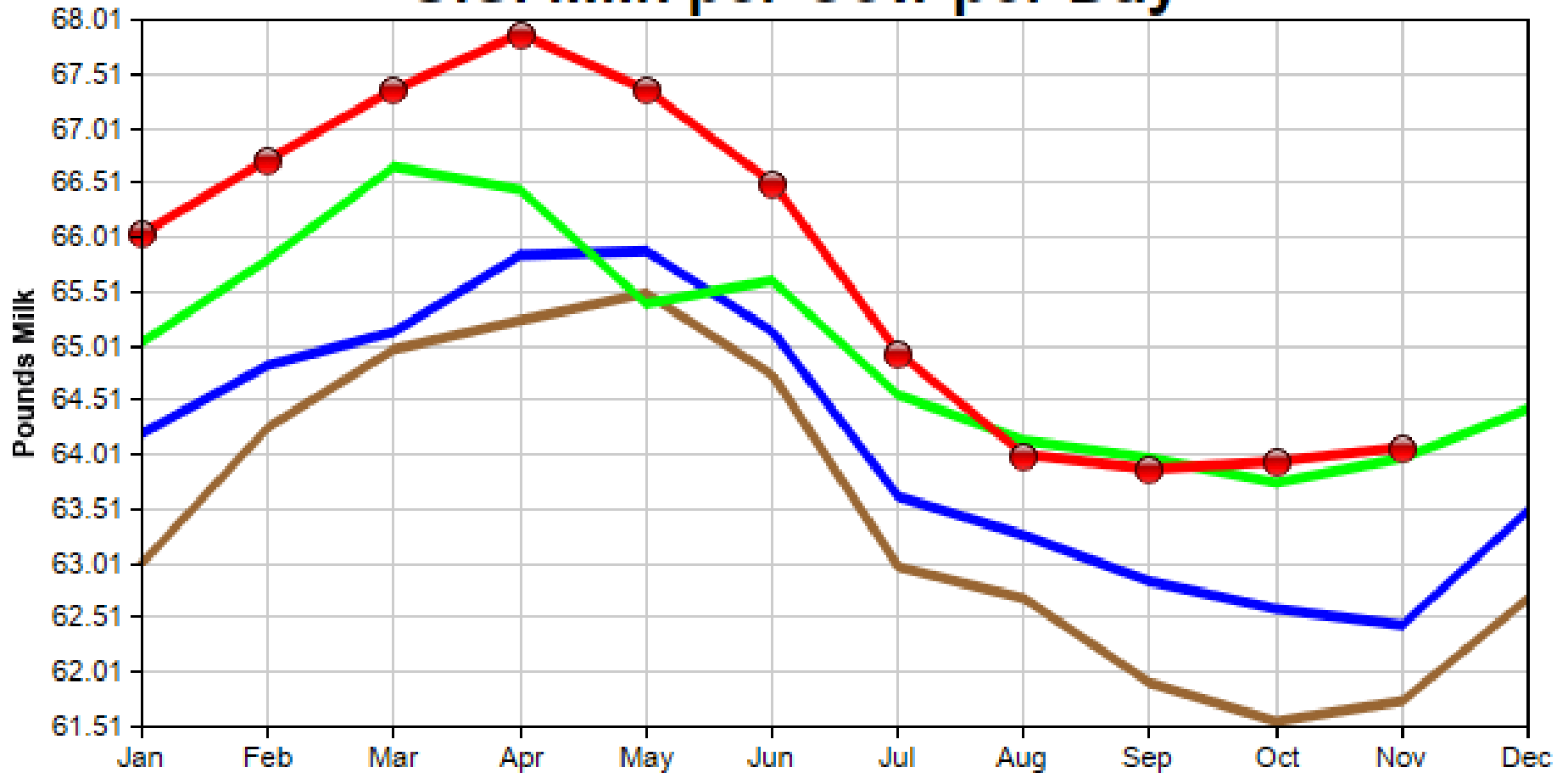
NASS Price Received for Cull Cows



— 2019 — 2020 ● 2021

Updated 12/30/21

U.S. Milk per Cow per Day



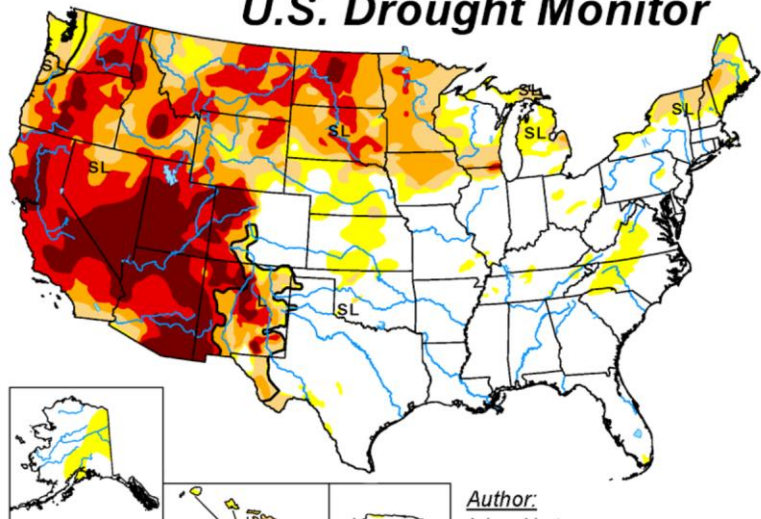
— 2018 — 2019 — 2020 ● 2021

Updated 12/20/21

Factors in Supply Response

1. Weather
2. Feed Prices
3. Coop base programs

U.S. Drought Monitor



July 13, 2021
 (Released Thursday, Jul. 15, 2021)
 Valid 8 a.m. EDT

Drought Impact Types:

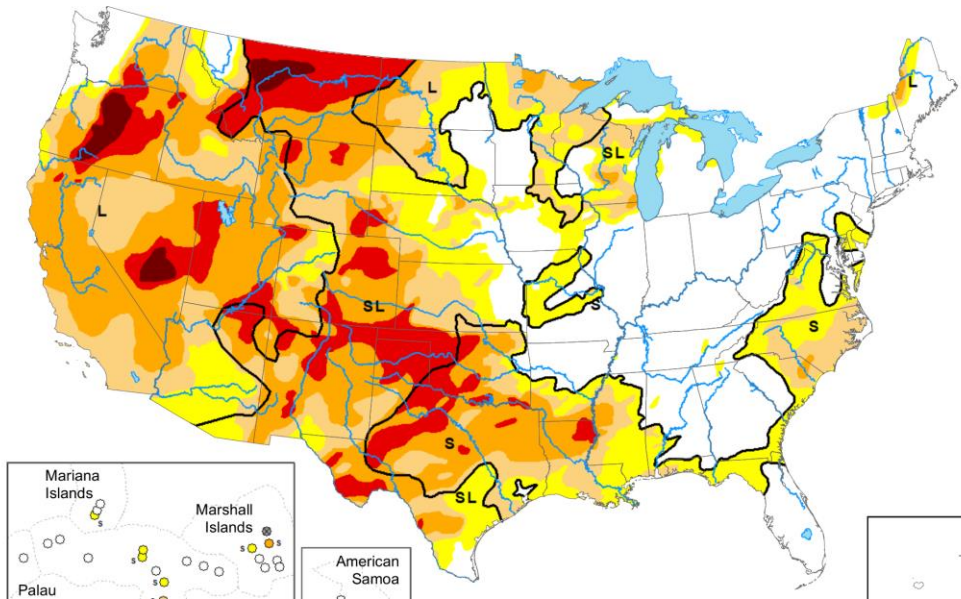
- ~ Delineates dominant impacts
- S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

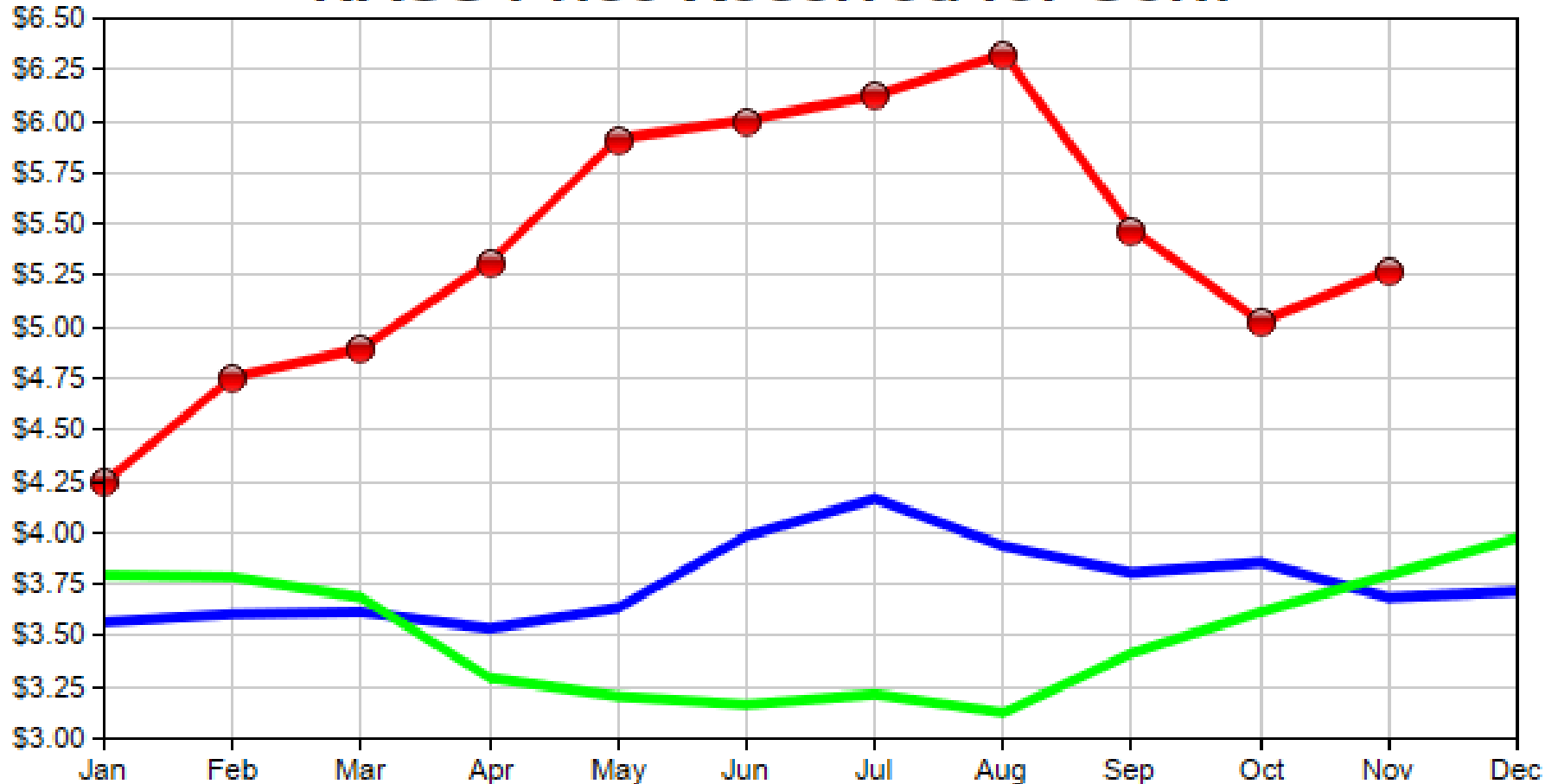
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

January 13, 2022

Data valid: January 11, 2022



NASS Price Received for Corn



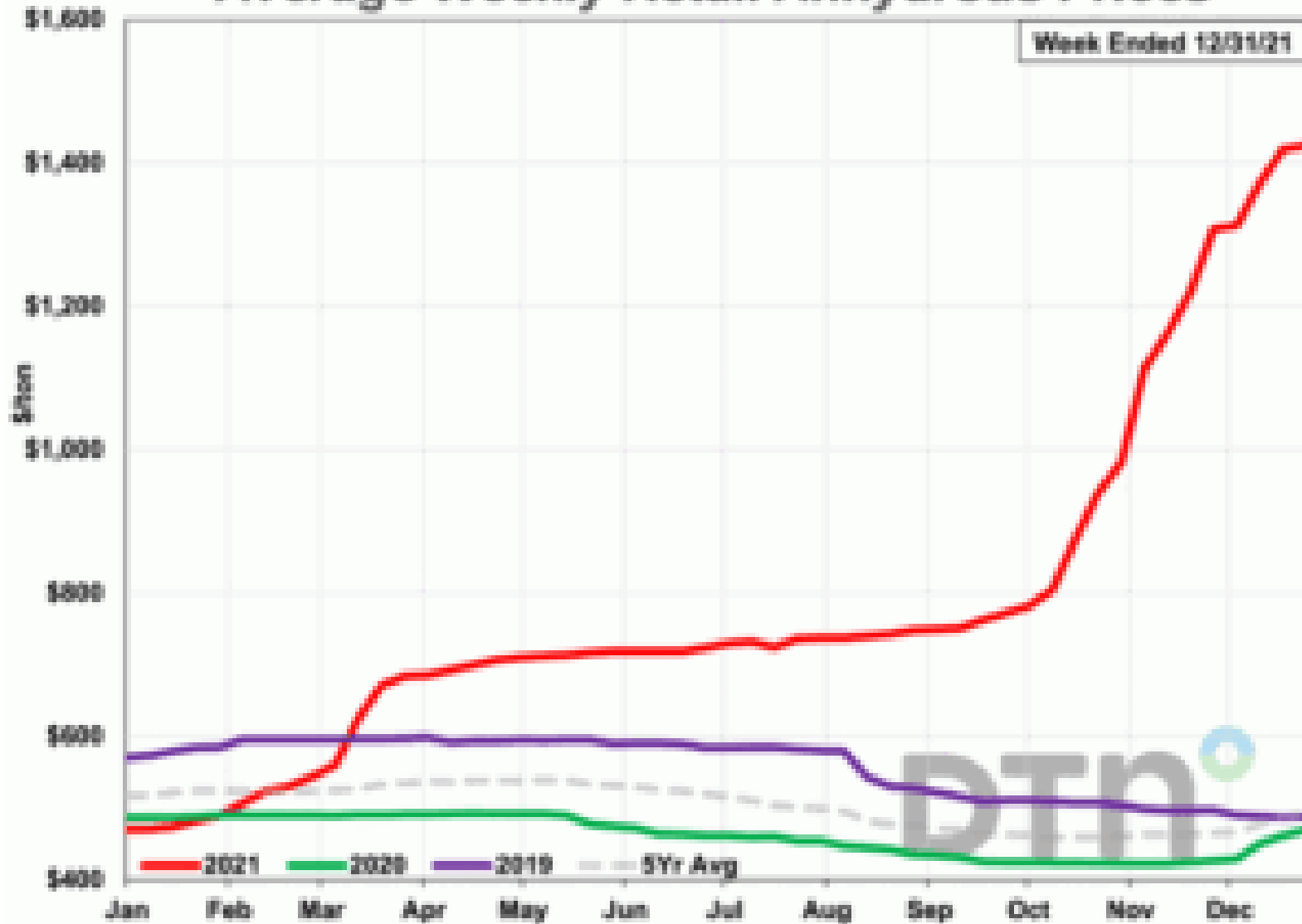
— 2019

— 2020

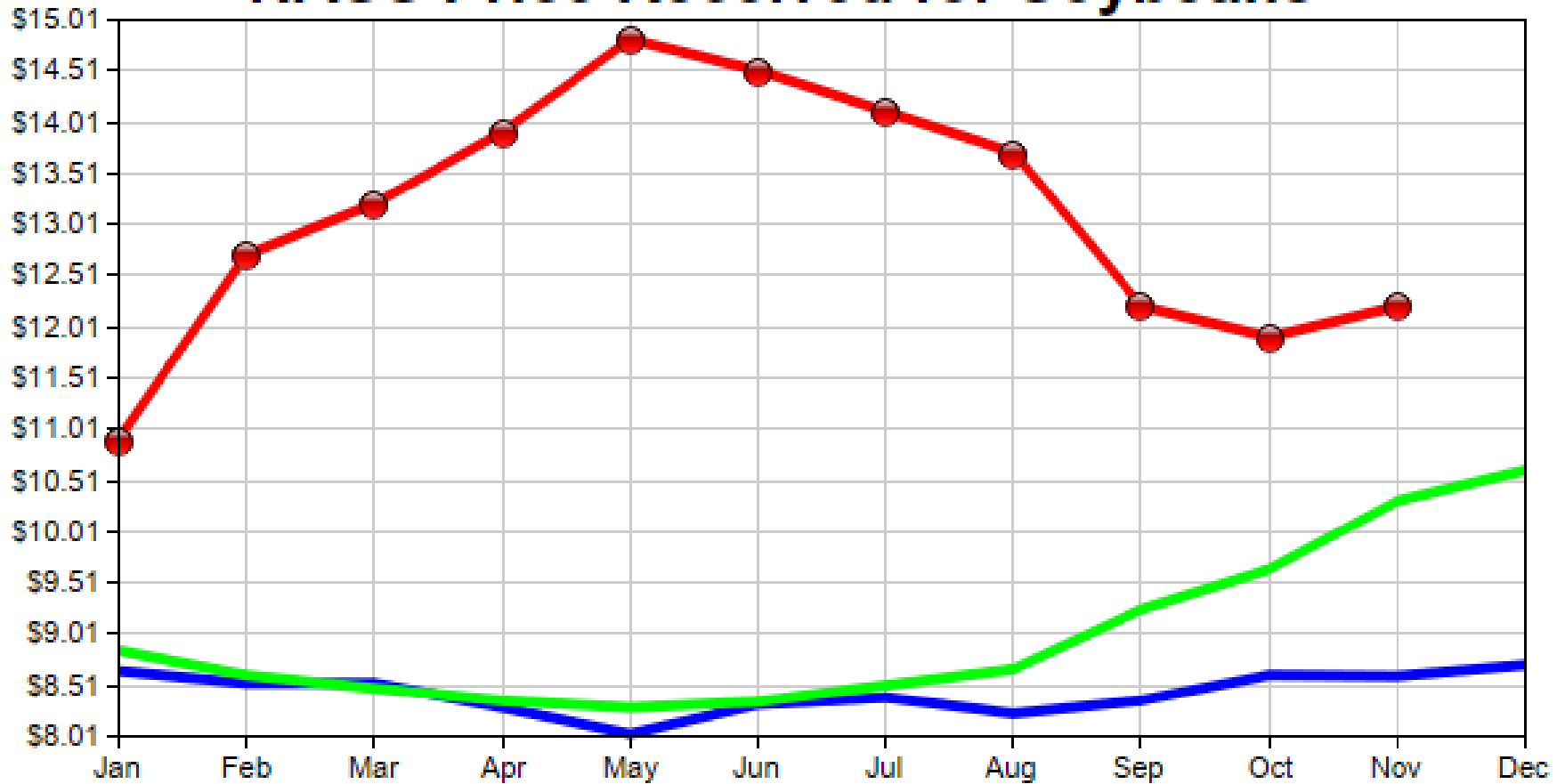
● 2021

Updated 12/30/21

Average Weekly Retail Anhydrous Prices



NASS Price Received for Soybeans



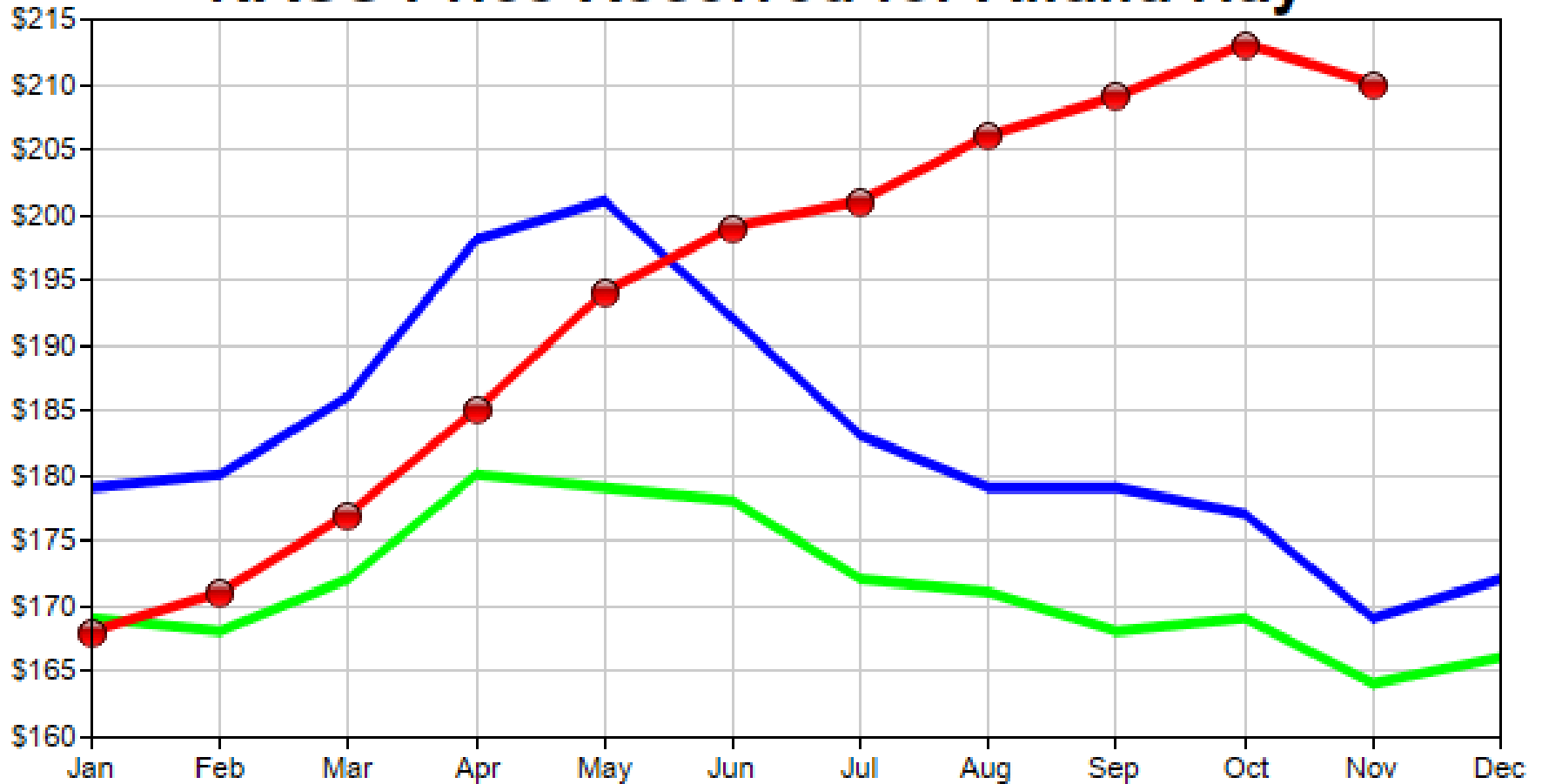
2019

2020

2021

Updated 12/30/21

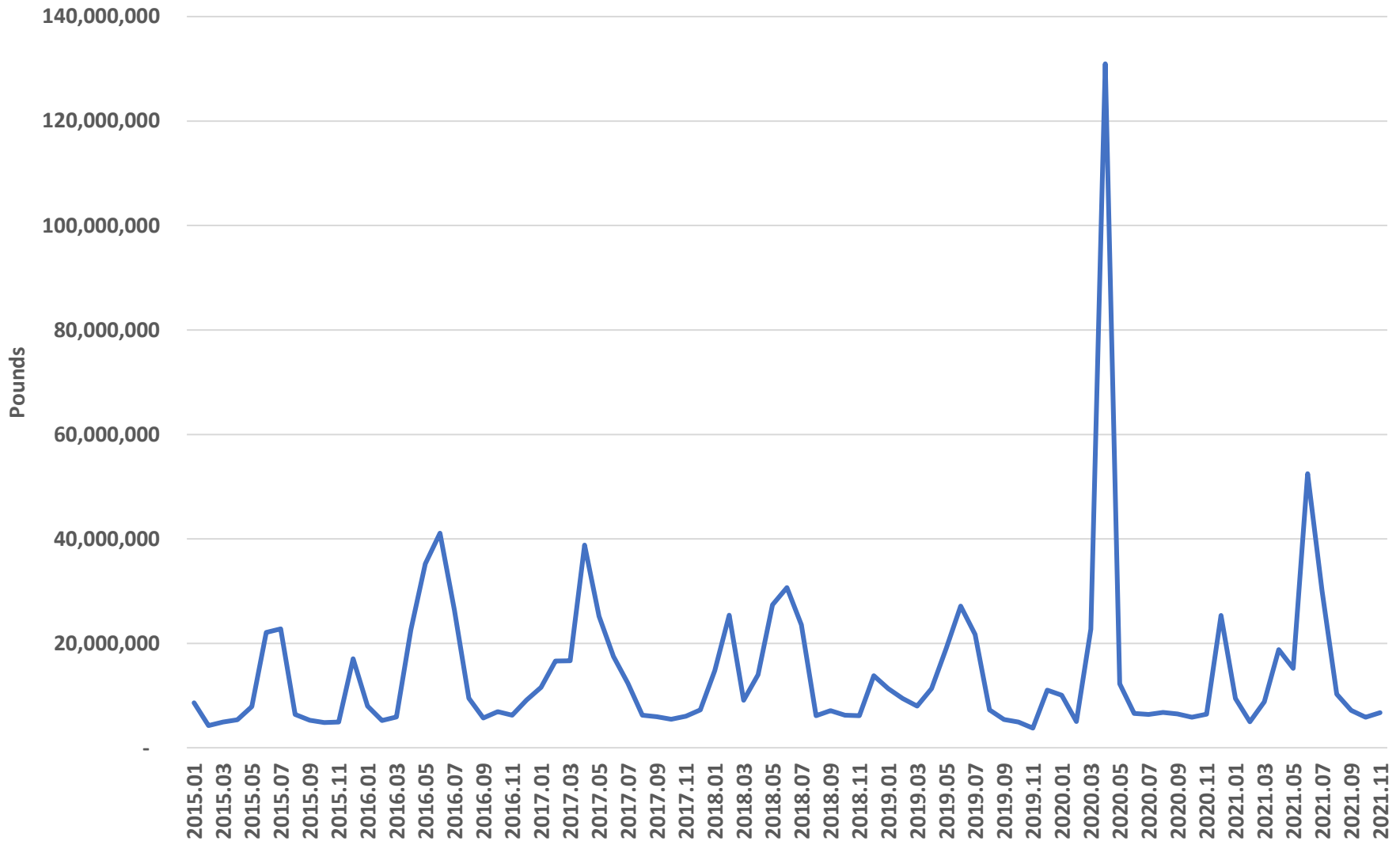
NASS Price Received for Alfalfa Hay



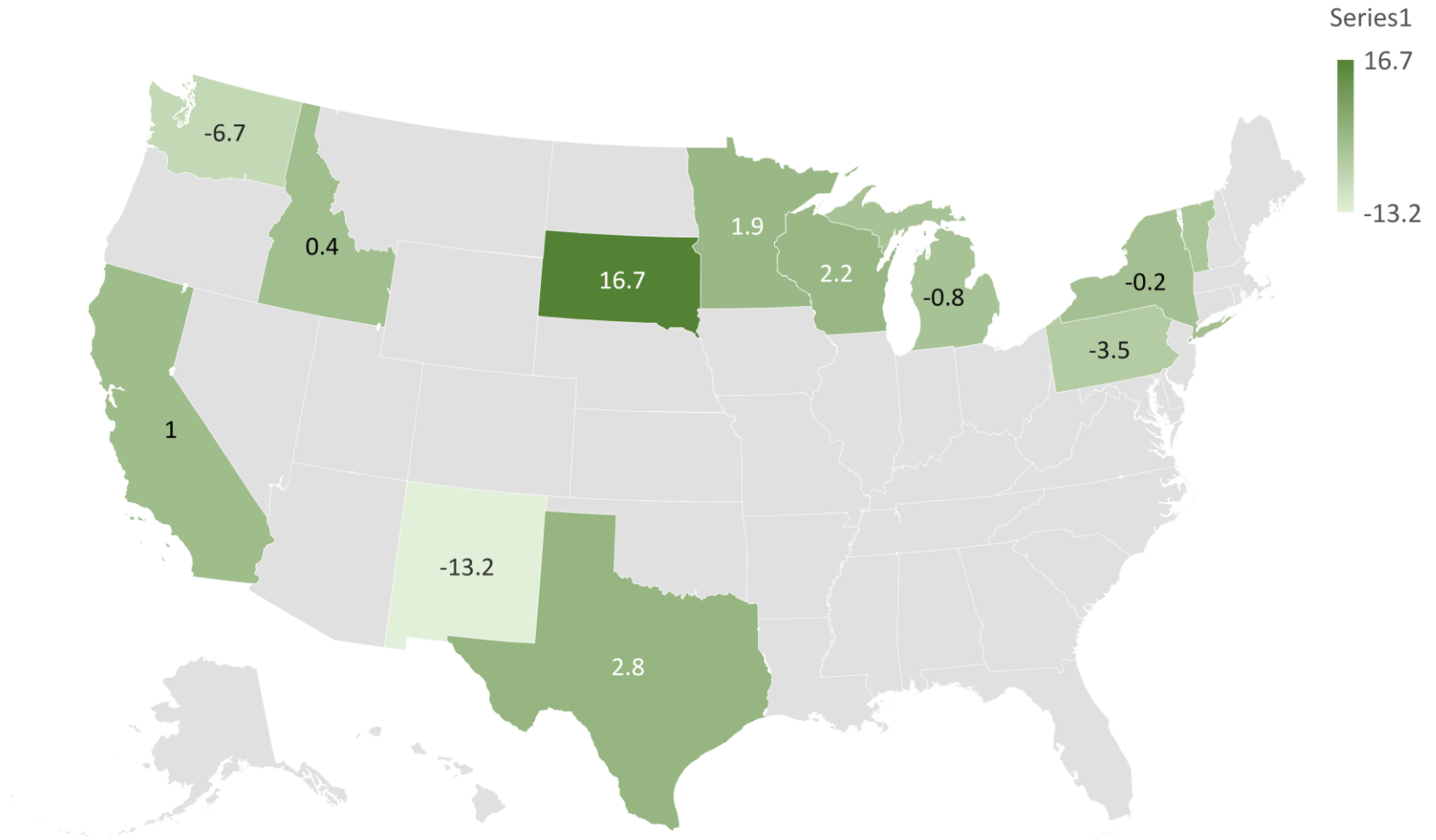
— 2019 — 2020 ● 2021

Updated 12/30/21

FMMO 1 Dumped Milk

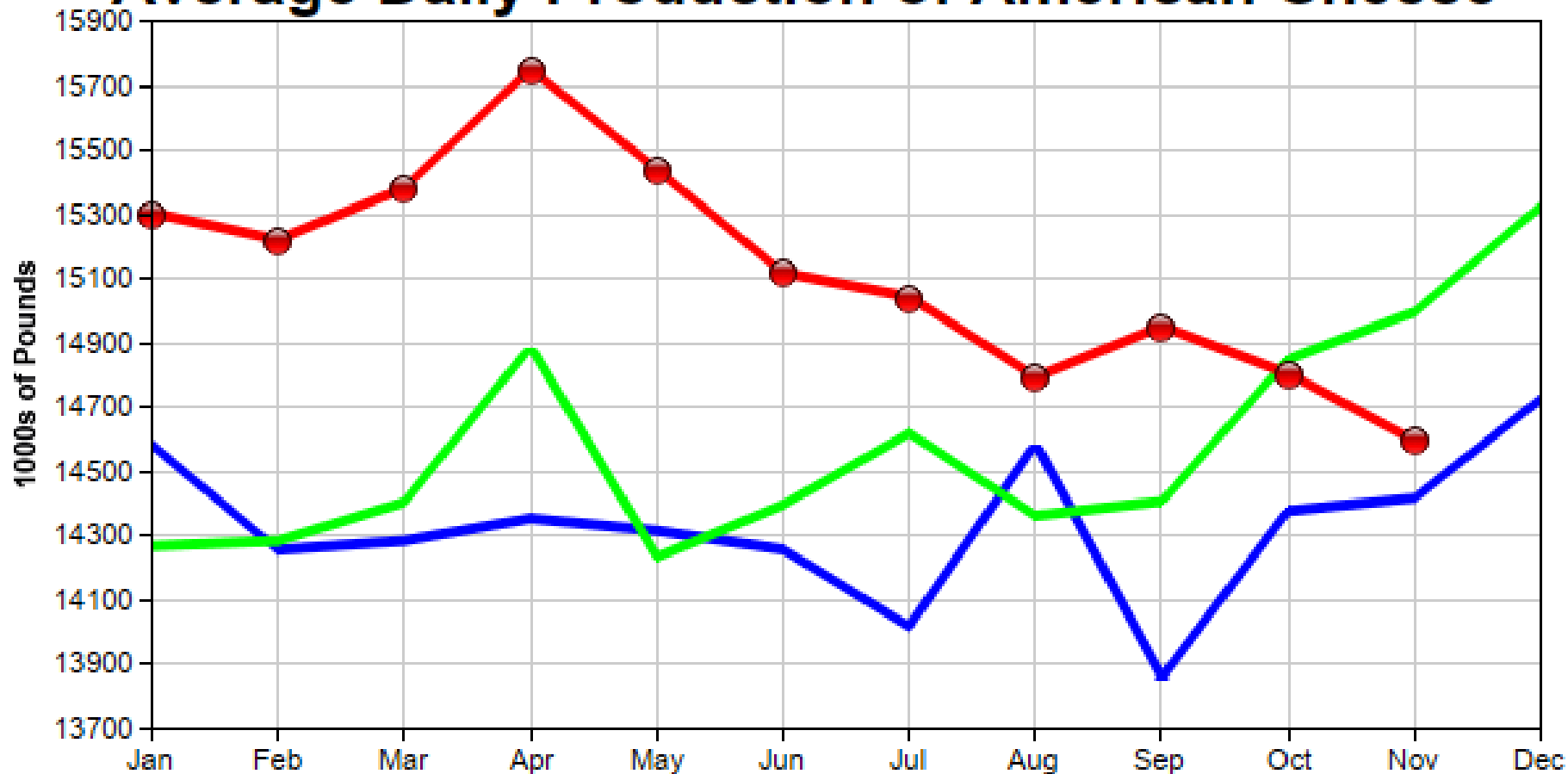


November 2021 Milk Production



Powered by Bing
© GeoNames, Microsoft, TomTom

Average Daily Production of American Cheese



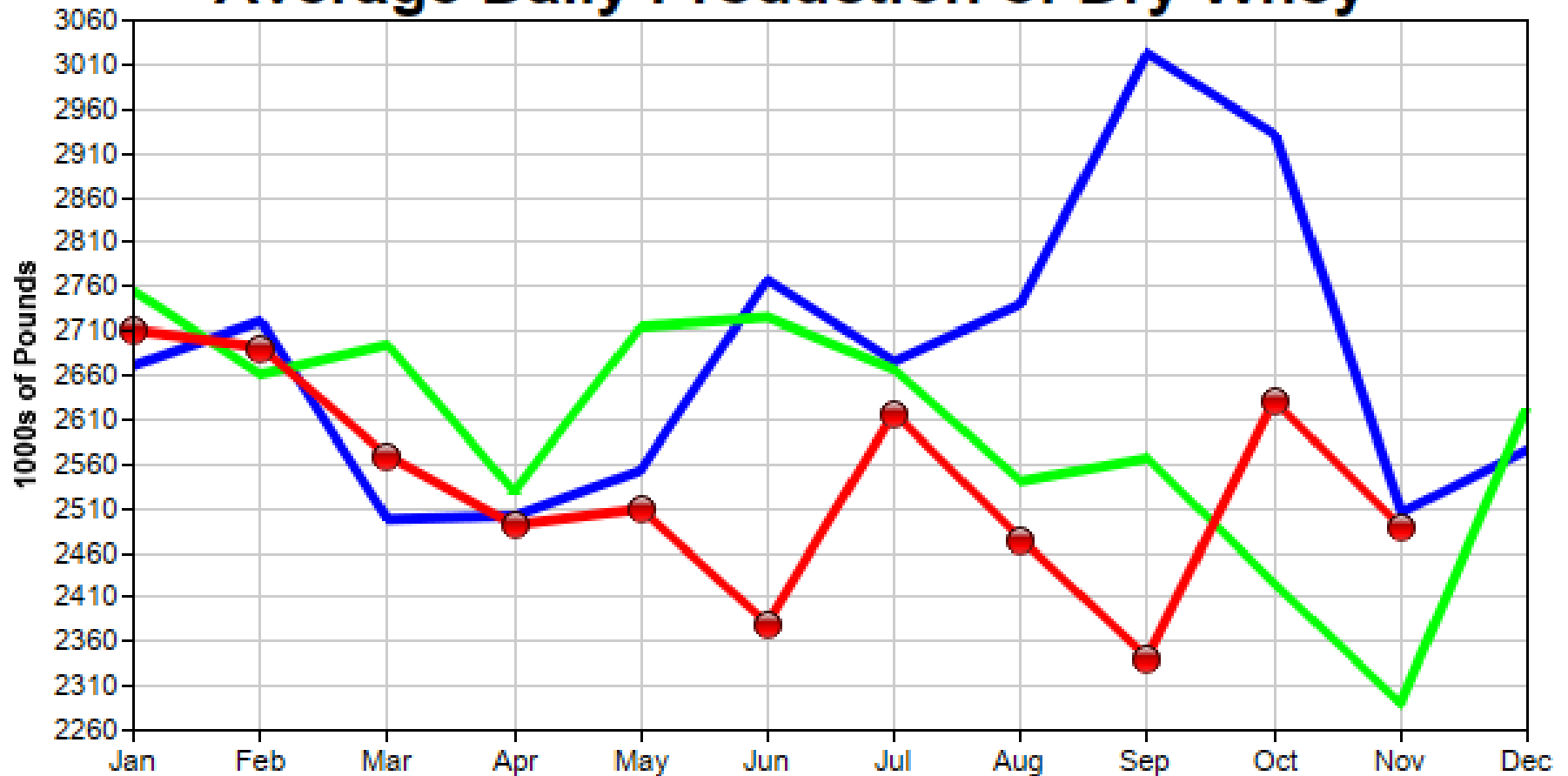
— 2019

— 2020

—● 2021

Updated 1/6/22

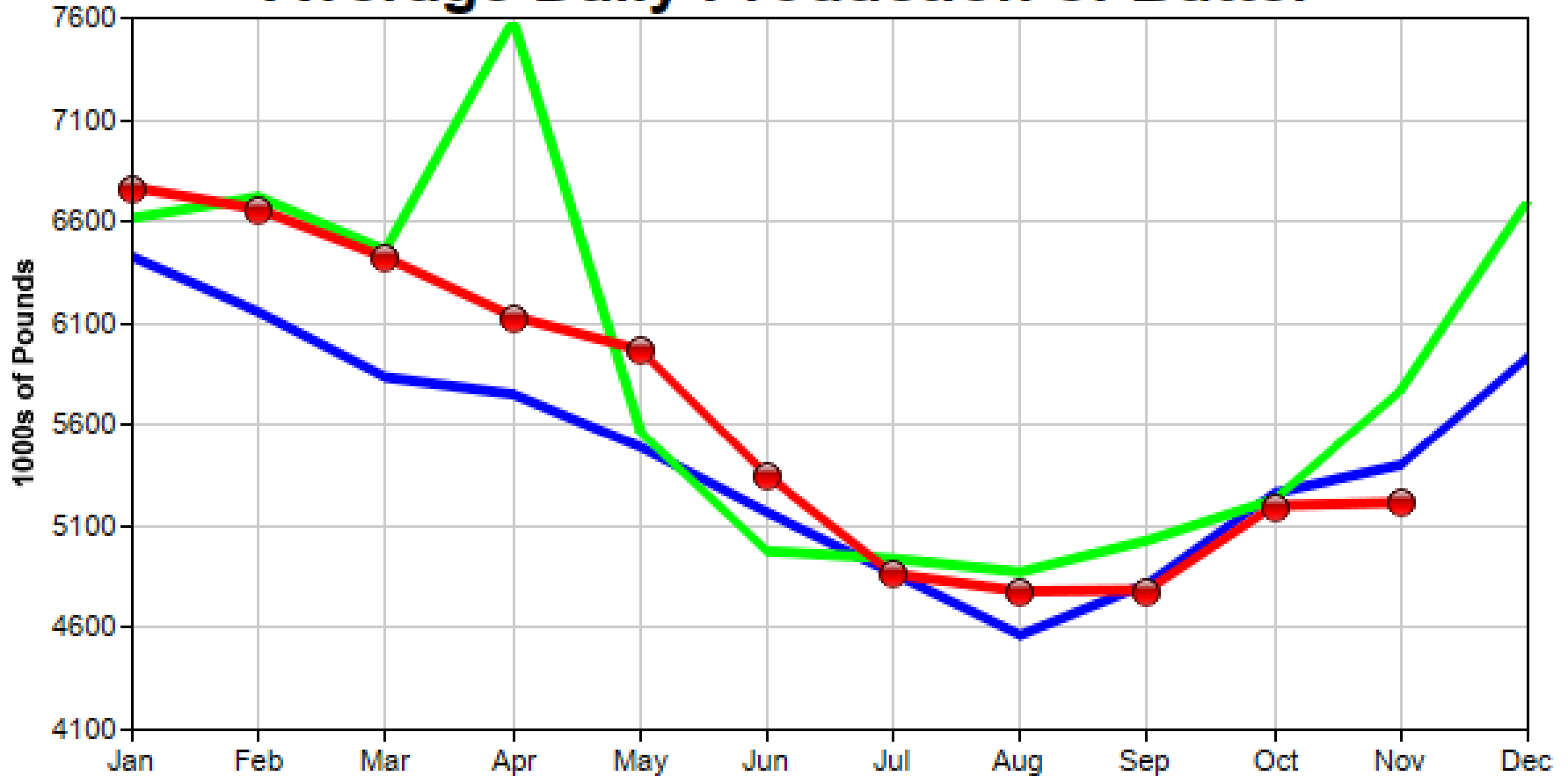
Average Daily Production of Dry Whey



— 2019 — 2020 ● 2021

Updated 1/6/22

Average Daily Production of Butter



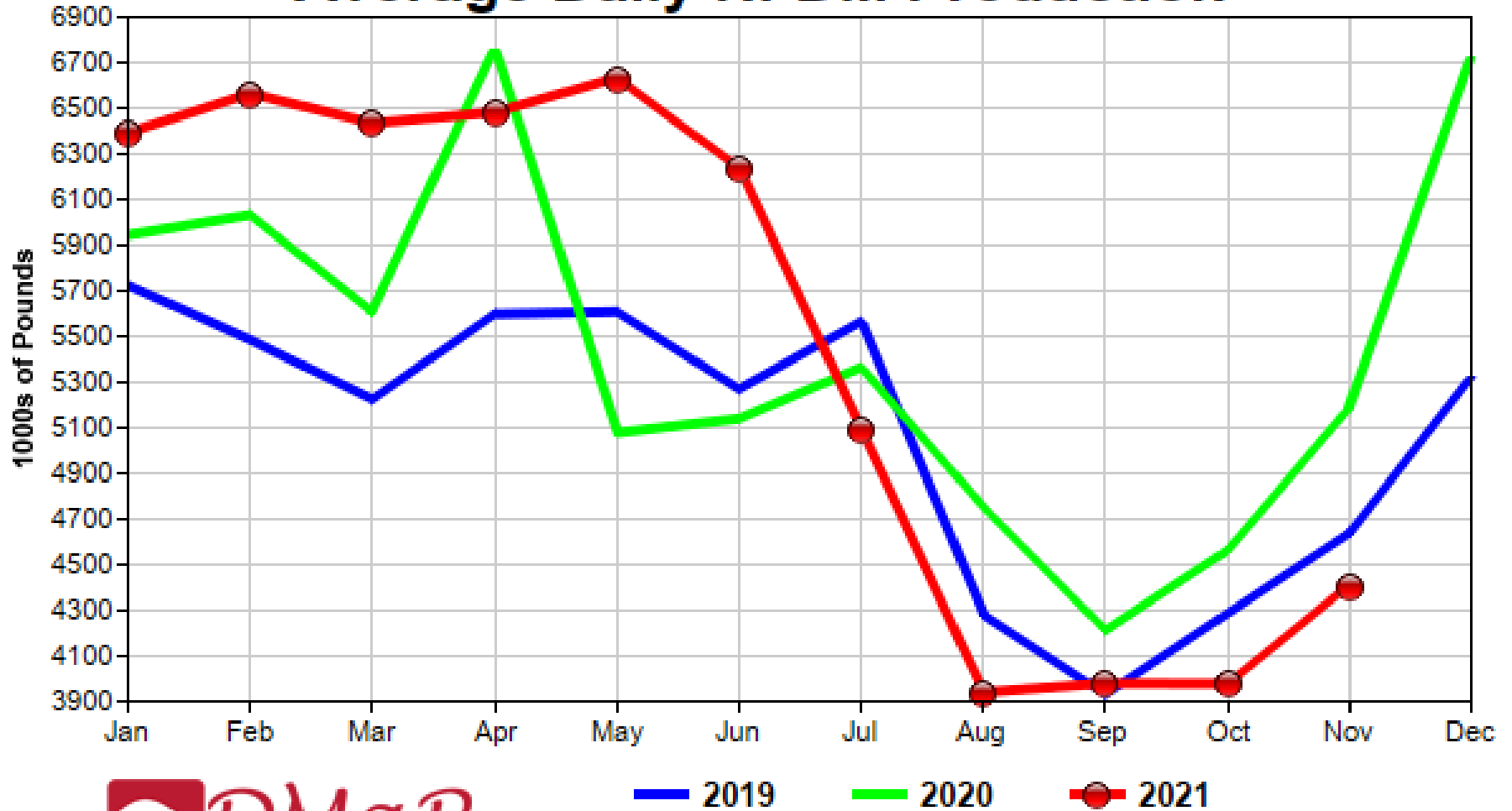
2019

2020

2021

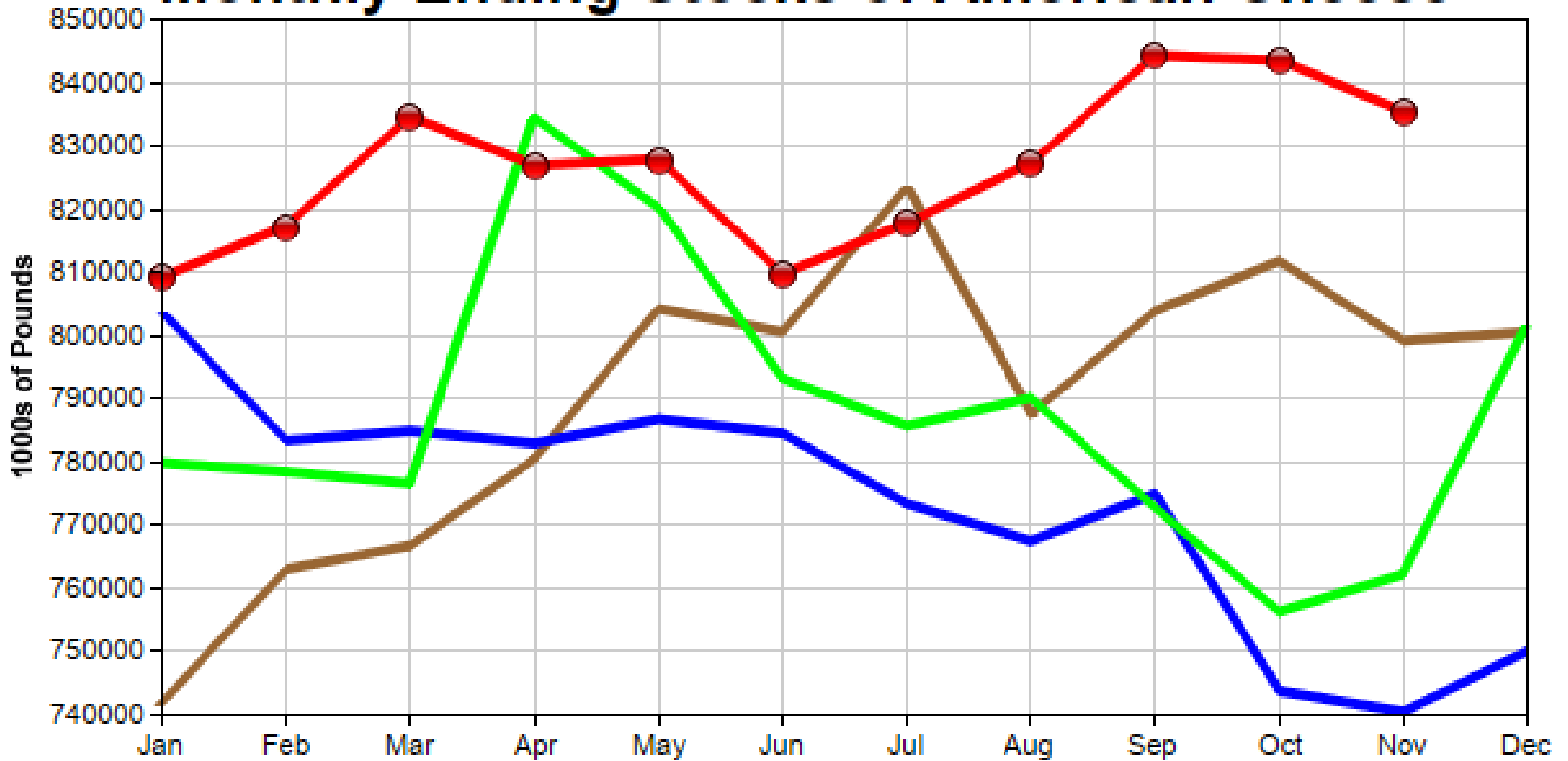
Updated 1/6/22

Average Daily NFDM Production



— 2019 — 2020 ●— 2021
Updated 1/6/22

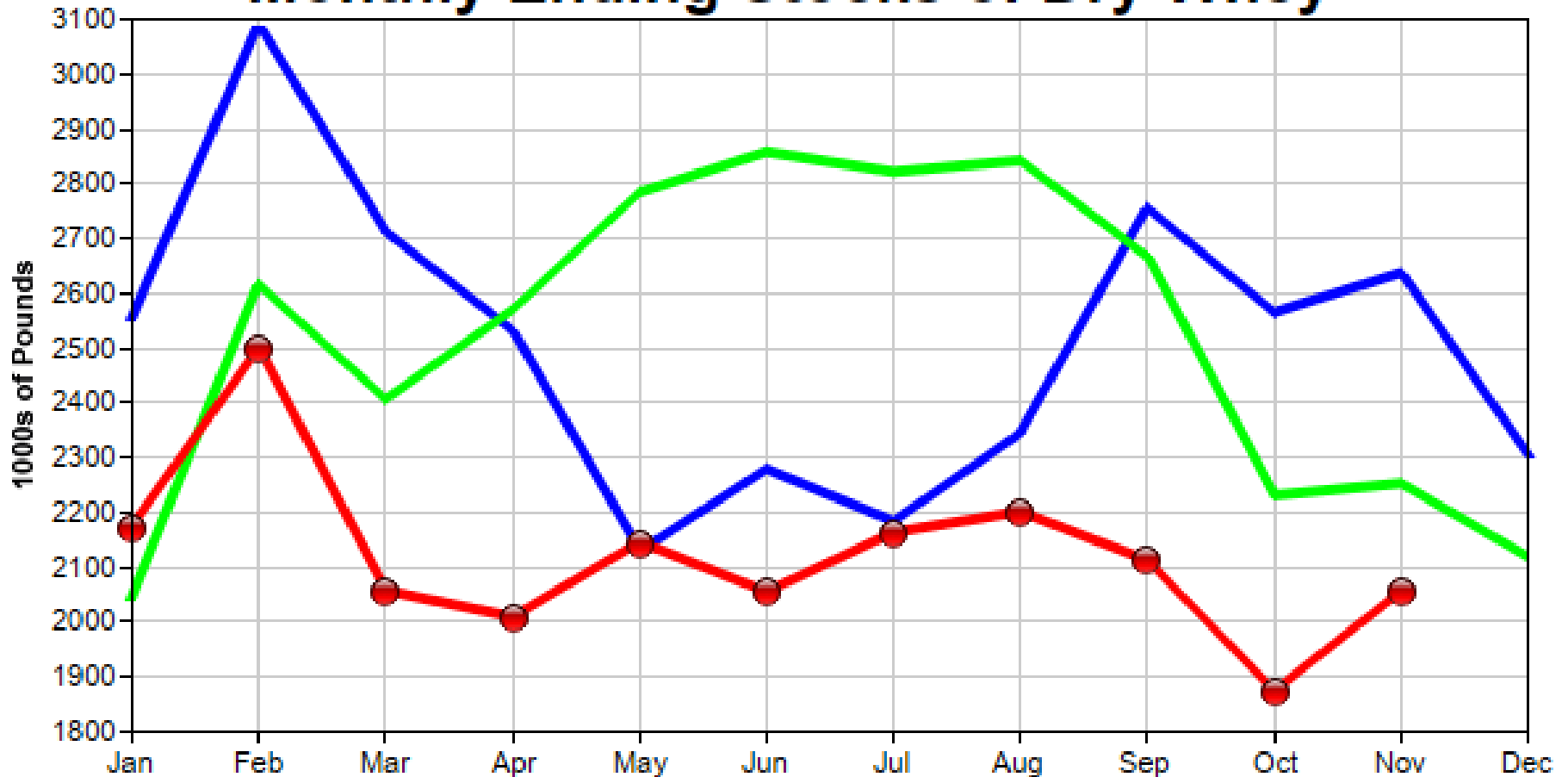
Monthly Ending Stocks of American Cheese



— 2018 — 2019 — 2020 ● 2021

Updated 12/22/21

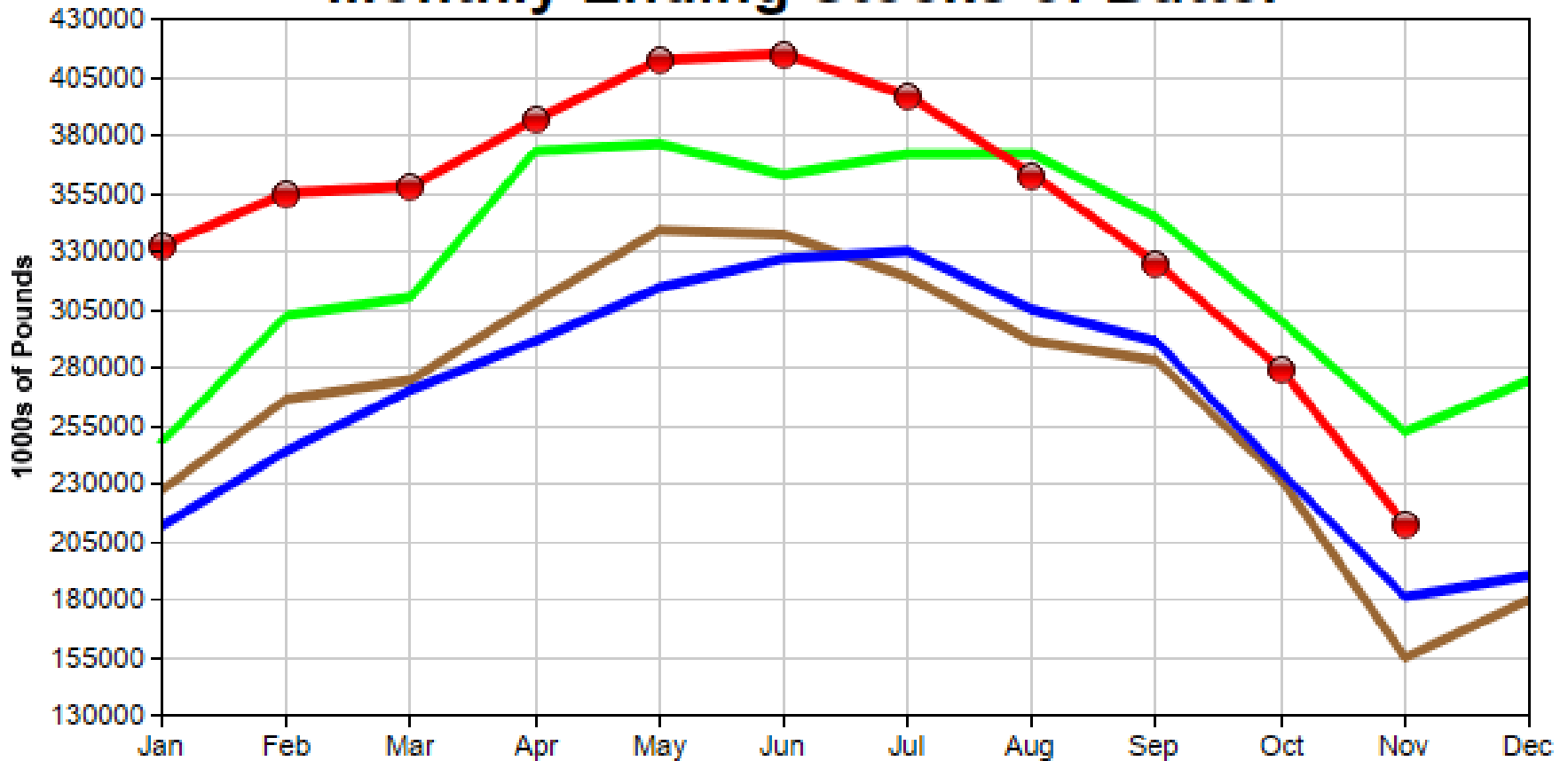
Monthly Ending Stocks of Dry Whey



— 2019 — 2020 ● 2021

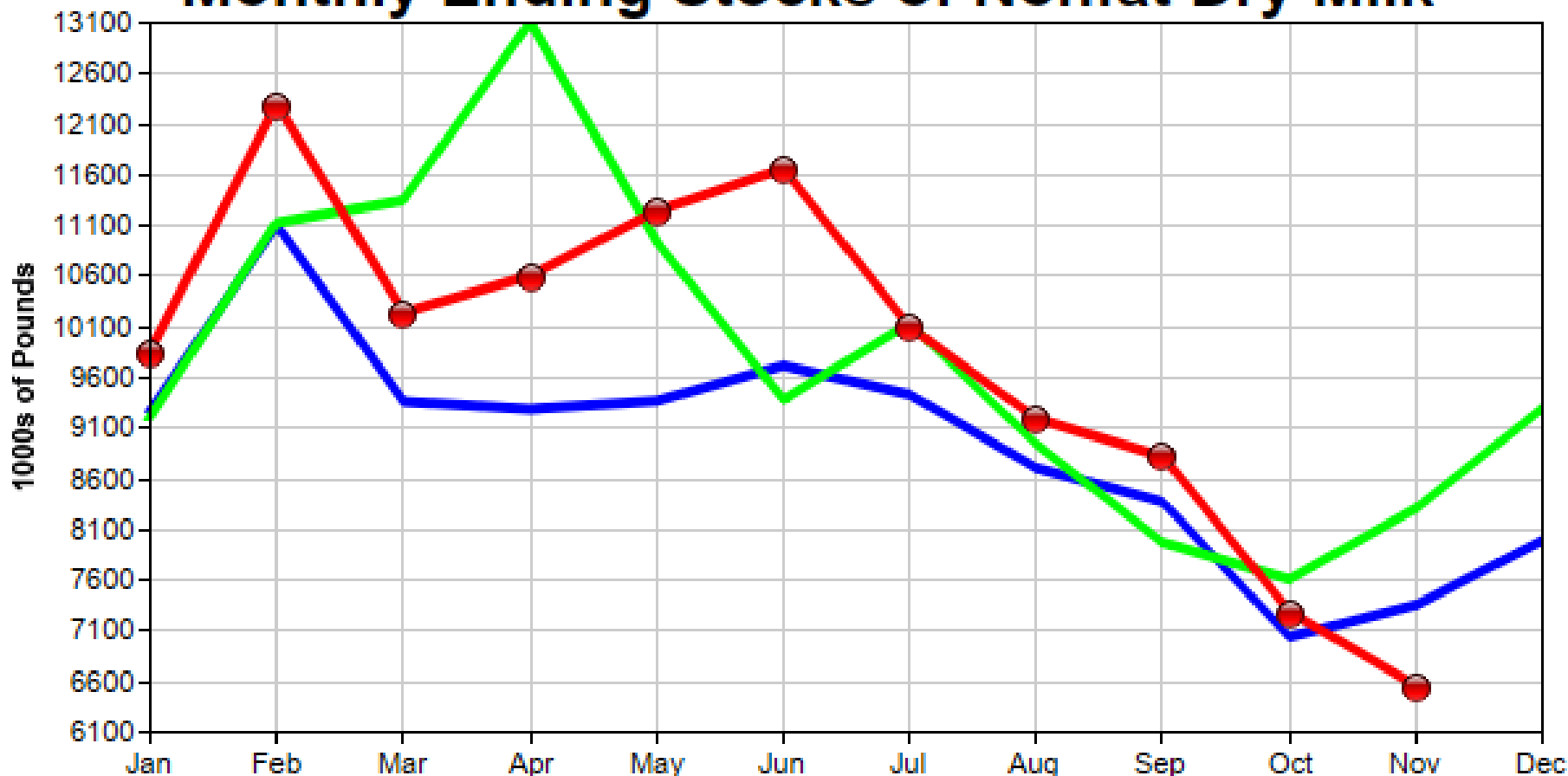
Updated 1/6/22

Monthly Ending Stocks of Butter



— 2018 — 2019 — 2020 ● 2021
Updated 12/22/21

Monthly Ending Stocks of Nonfat Dry Milk

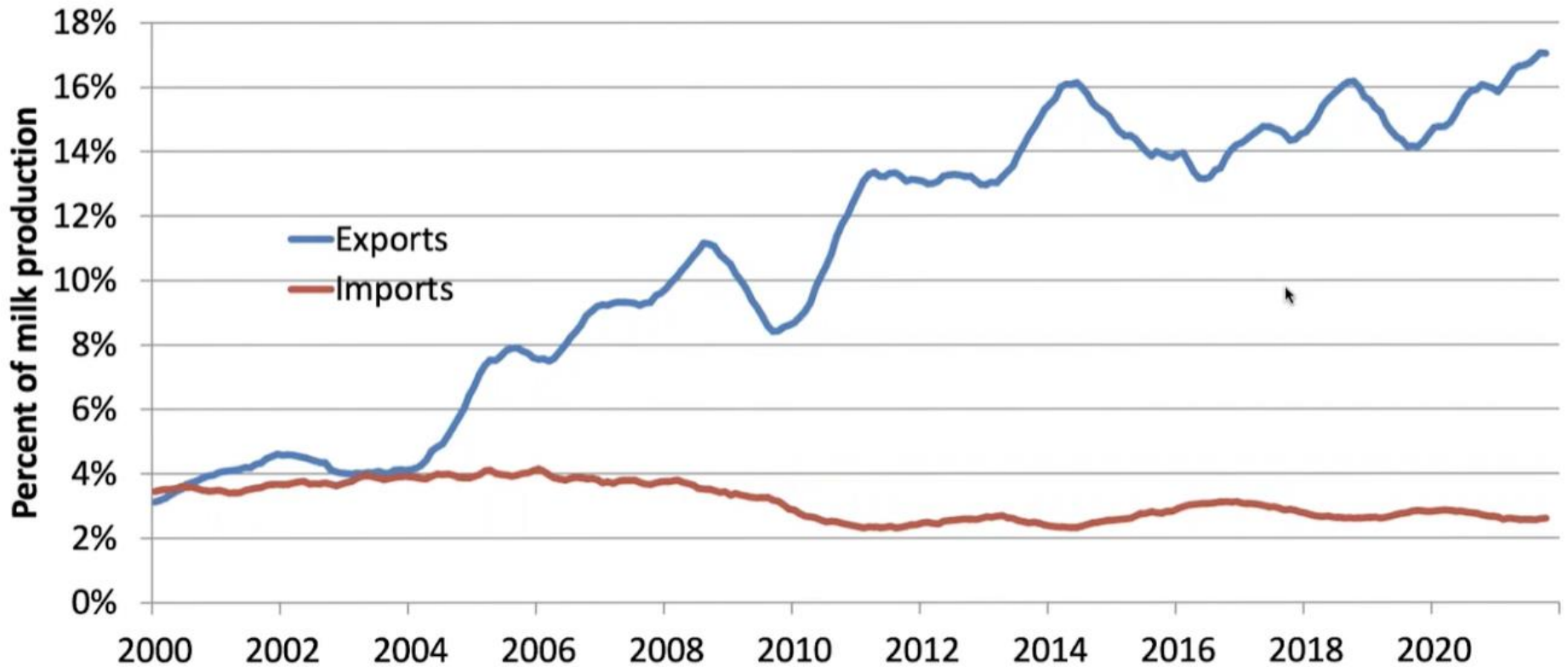


2019 2020 2021

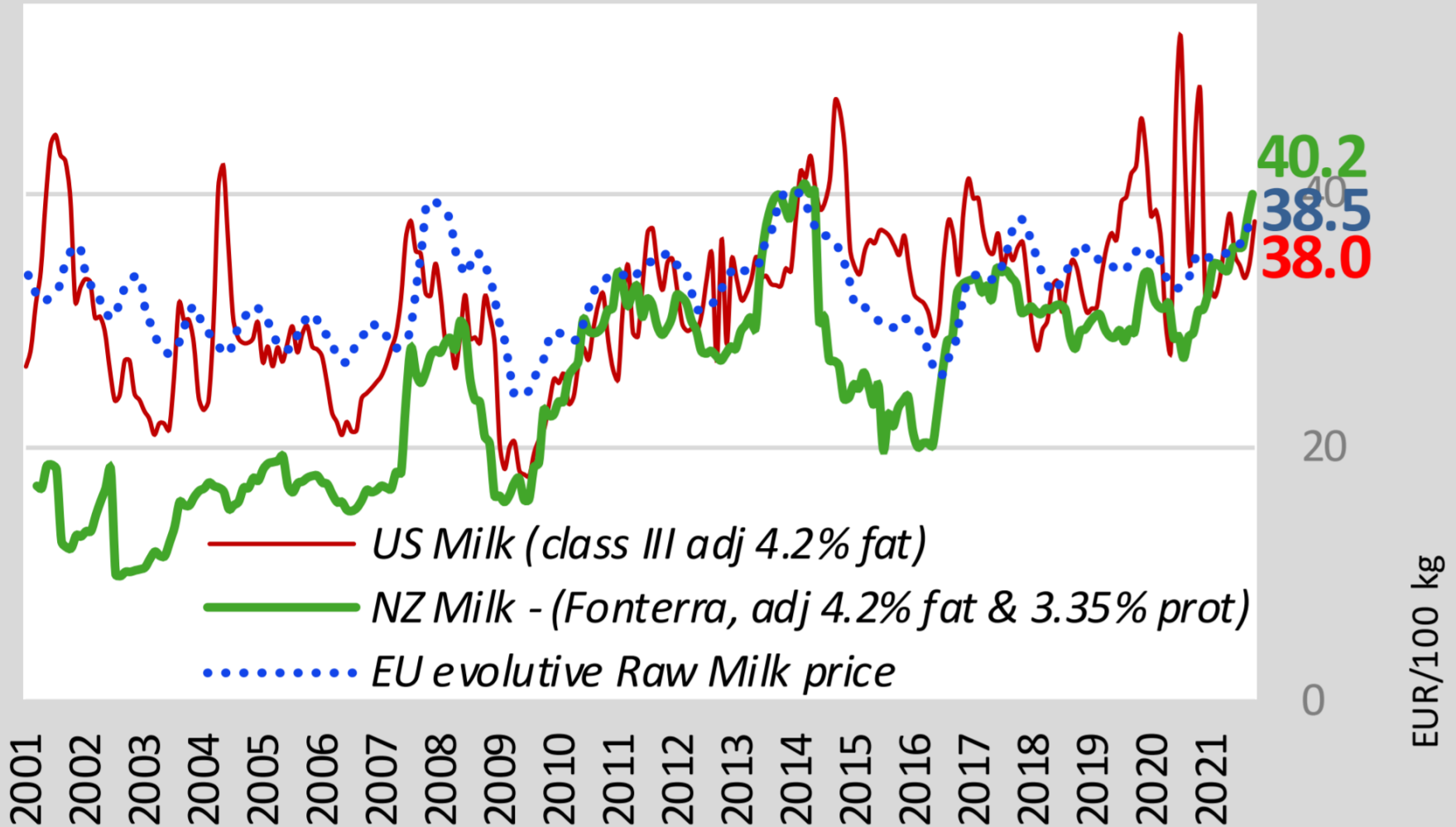
Updated 1/6/22

US Dairy Trade

12-Month Rolling Average Trade as a Percent of Solids Produced

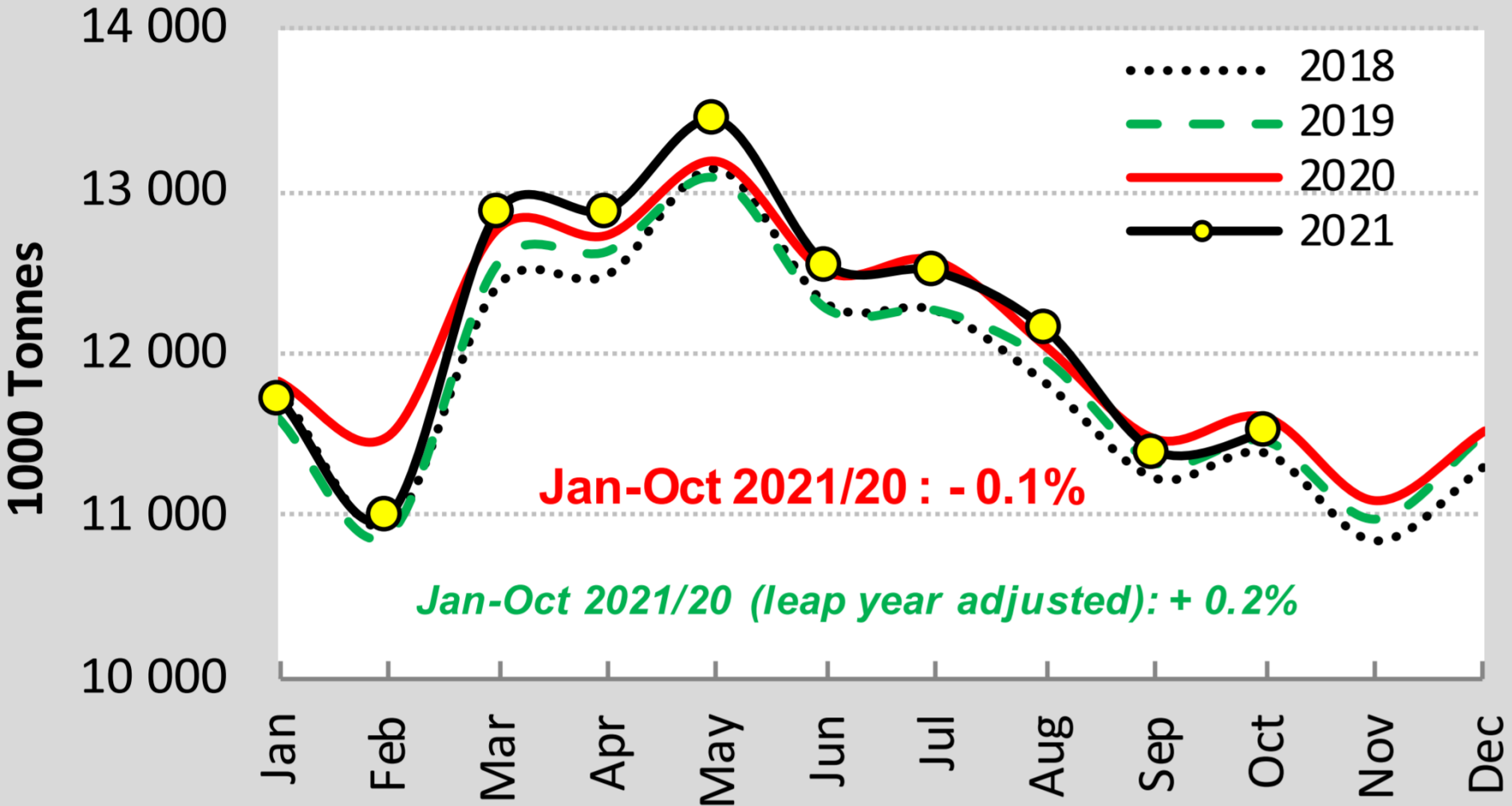


US, NZ and EU milk prices up to October 2021



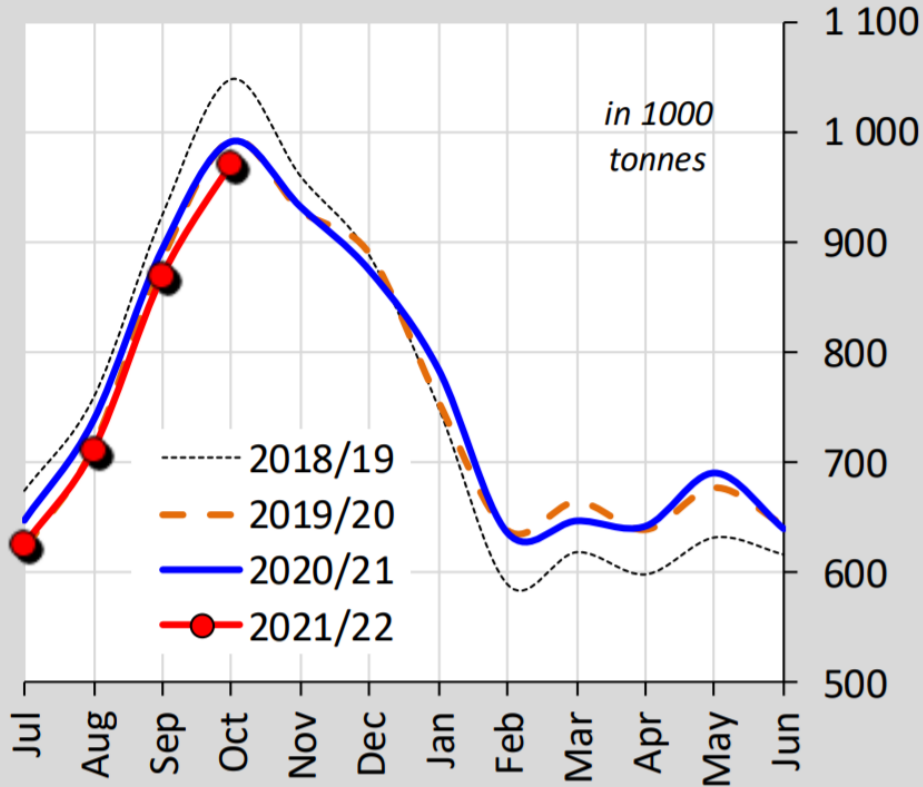
Source : DG AGRI, LTO Nederland

EU - Cows' milk collected



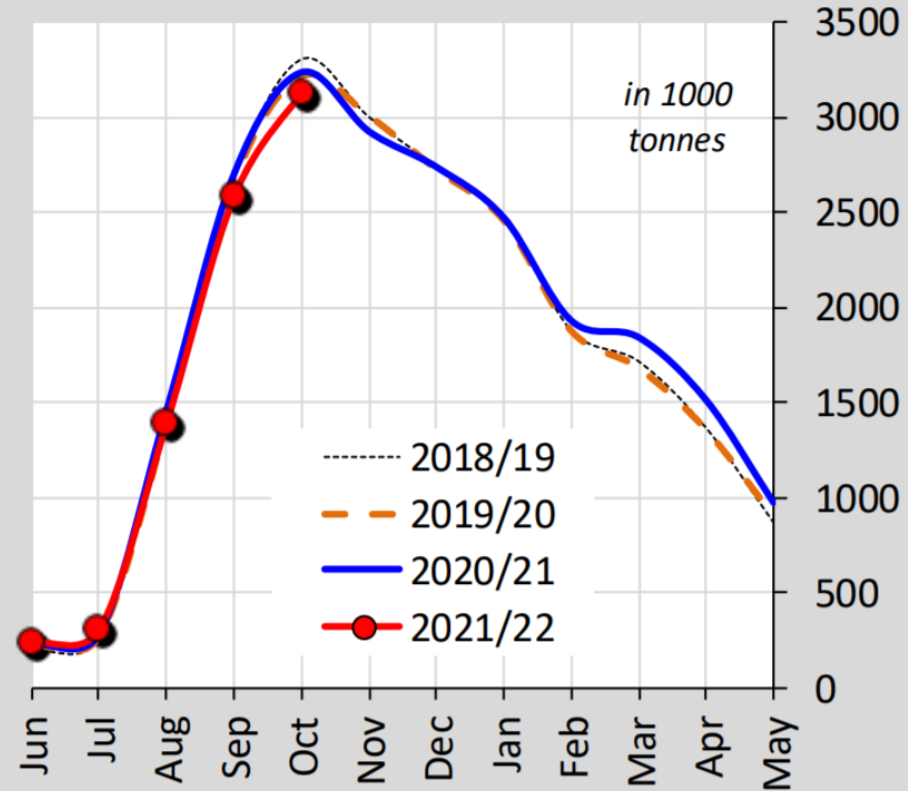
Australian milk production

Jul-Oct 2021/22 compared to 2020/21 : - 2.9%

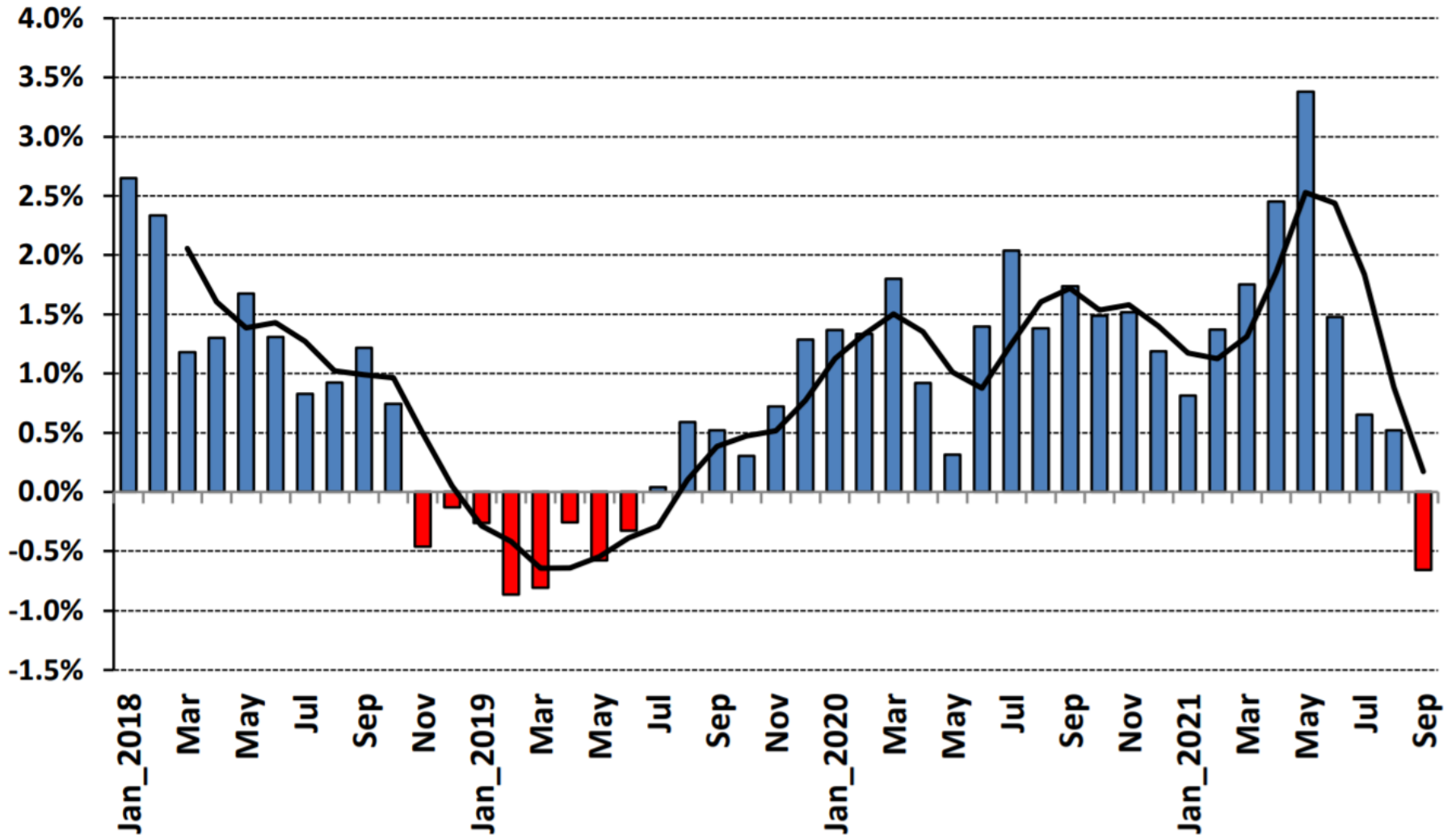


NZ milk production

Jun-Oct 2021/22 compared to 2020/21 : - 3.4%



Percent Change in Monthly Milk Production for Major Producers and 3-month Moving Average



Note: --Includes, Argentina, Australia, EU, New Zealand, and the United States.
 --Adjusted for Leap Year 2020

International Production Issues

- Weather issues in southern hemisphere
- Increased environmental/climate related regulations

New Zealand farmers have avoided regulation for decades. Now their bill has come due

Baz Macdonald

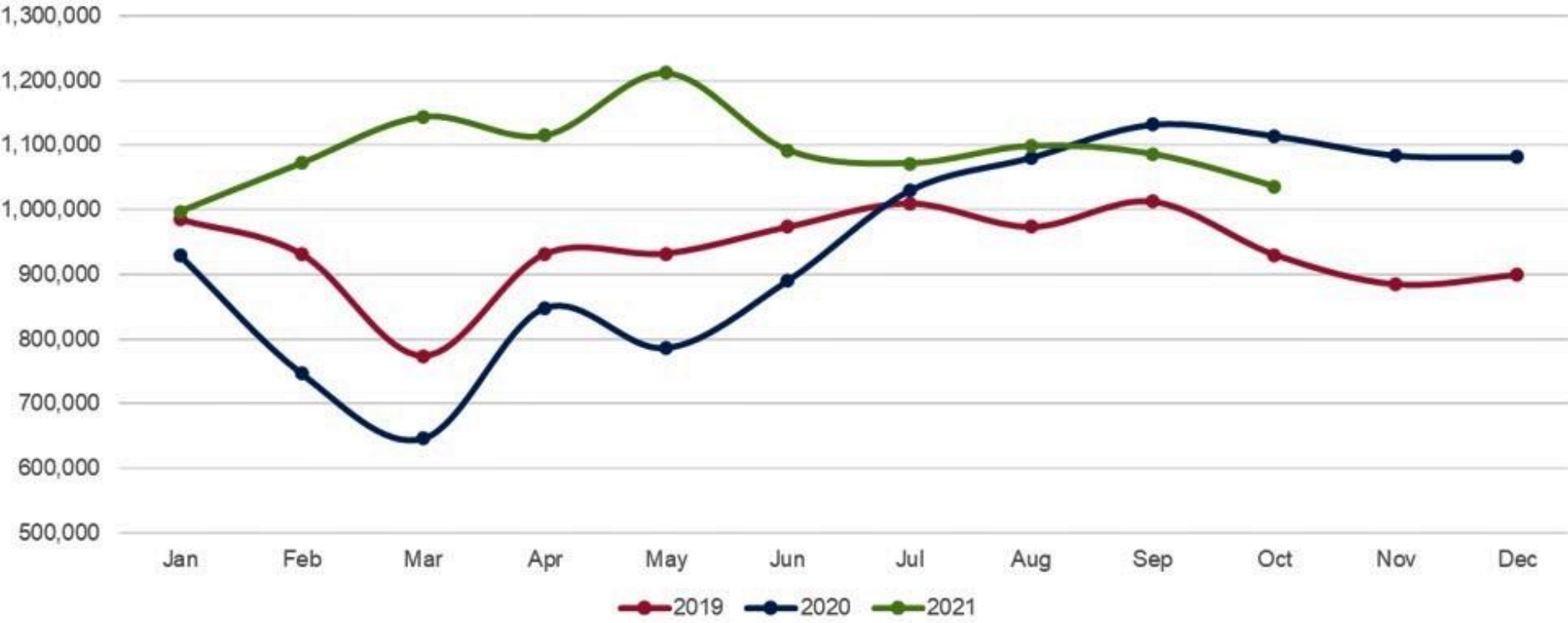
Exports on a Milk Equivalent Basis Through October 2021

Top Dest. -M.E. Milkfat Basis (Mill. lbs)	2021
MEXICO	1,940 20%
CANADA	1,091 11%
SOUTH KOREA	1,086 11%
CHINA (MAINLAND)	691 7%
JAPAN	625 6%
AUSTRALIA	438 4%
Other	3,982 40%
TOTAL	9,853

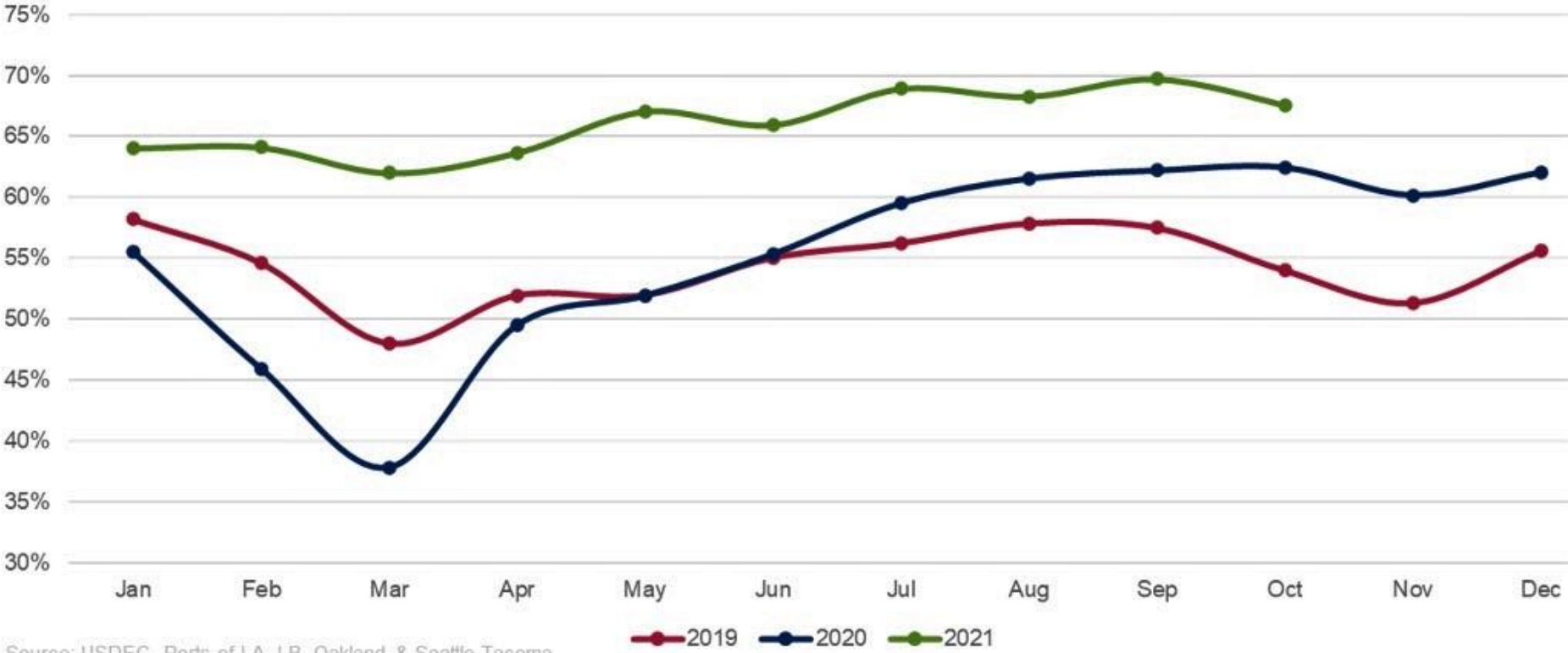
Top Dest.-M.E. Skim Basis (Mill. lbs)	2021
MEXICO	9,508 22%
CHINA (MAINLAND)	8,658 20%
PHILIPPINES	3,402 8%
INDONESIA	2,663 6%
VIETNAM	2,635 6%
JAPAN	1,736 4%
Other	14,851 34%
TOTAL	43,453

Total Inbound Containers Processed at Major West Coast Ports

(30-Day Months)

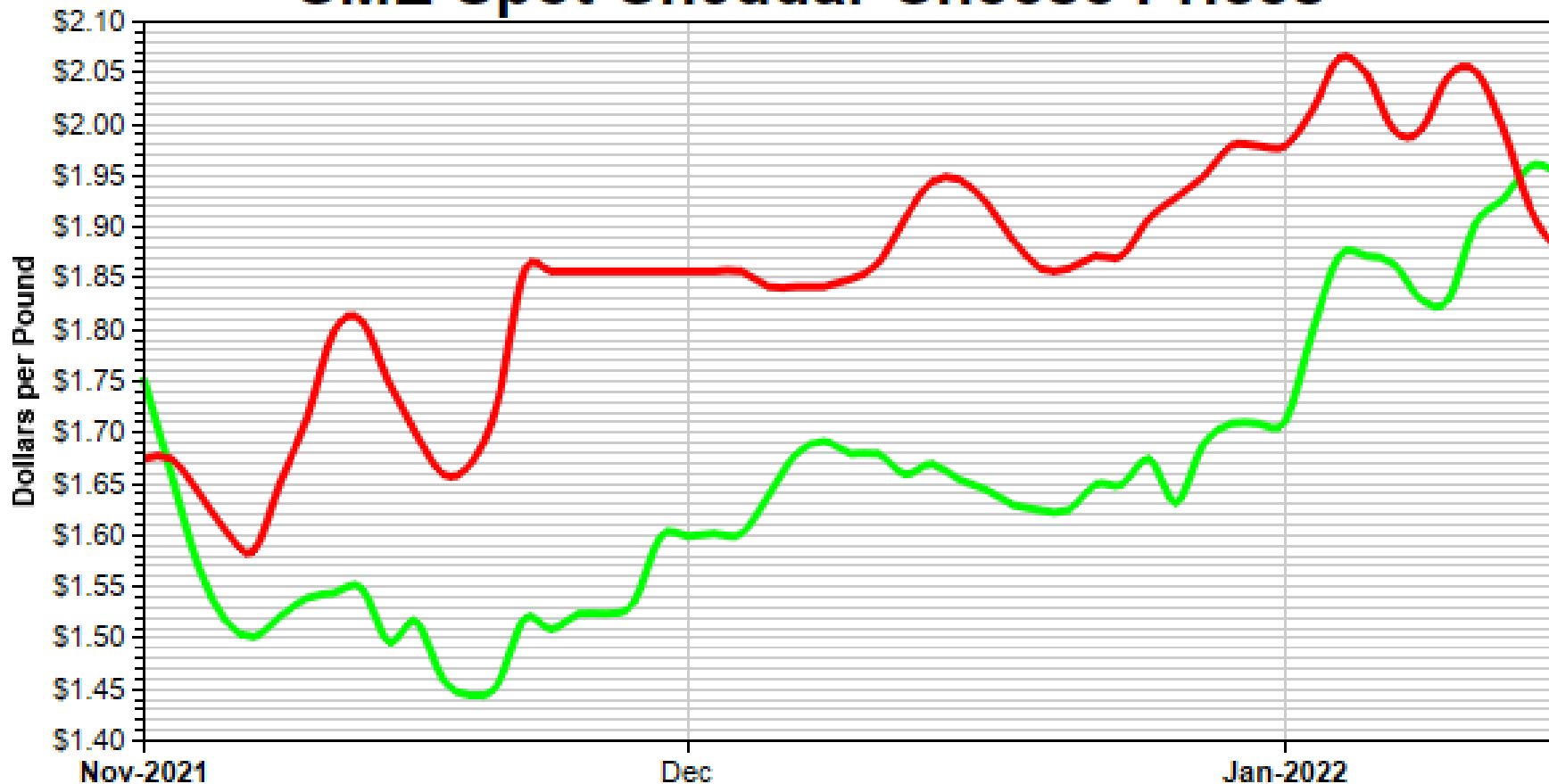


Percentage of Outbound Containers Leaving Empty from Major West Coast Ports



Source: USDEC, Ports of LA, LB, Oakland & Seattle-Tacoma

CME Spot Cheddar Cheese Prices

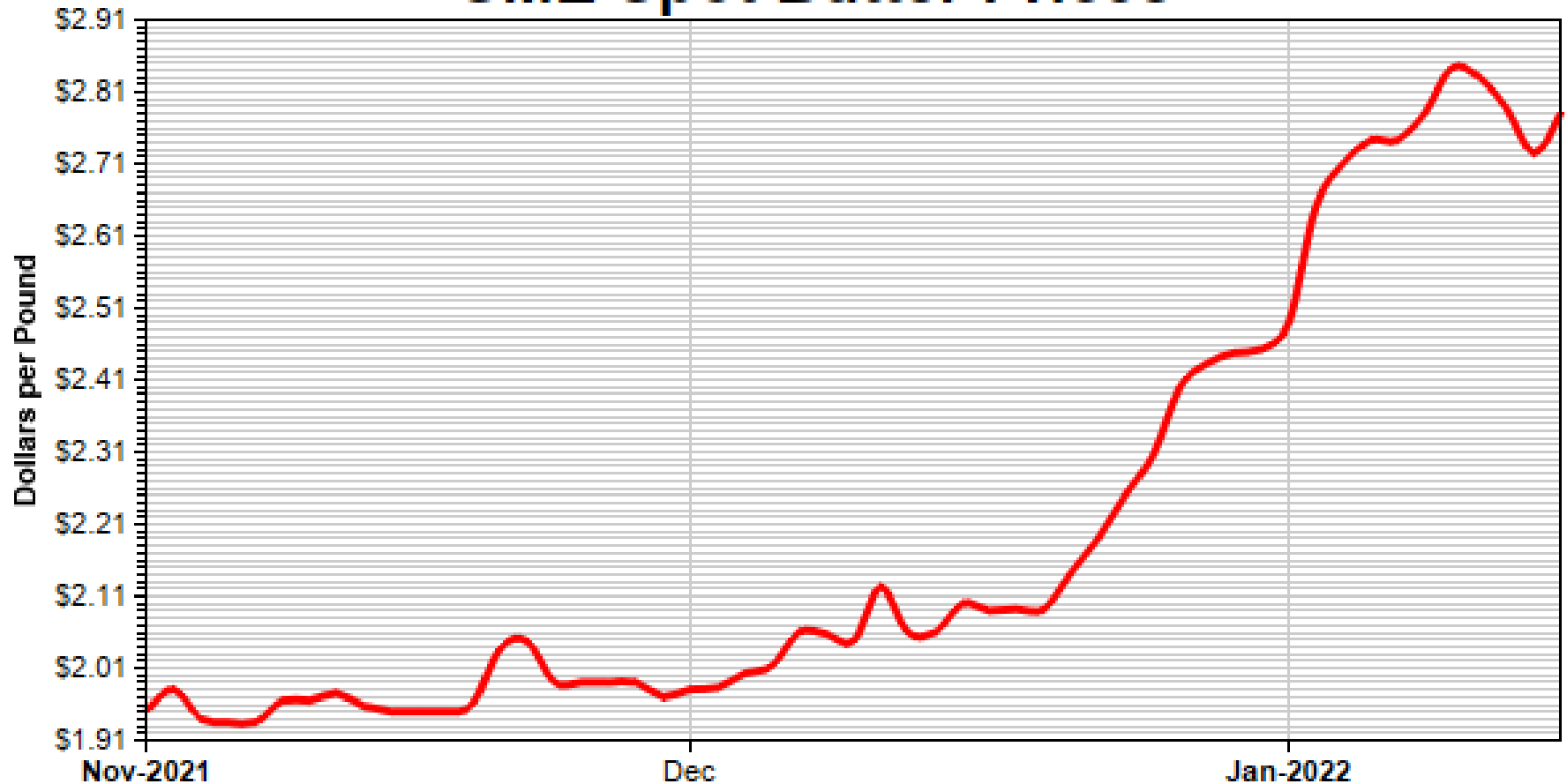


■ 40 lb Blocks

■ 500 lb Barrels

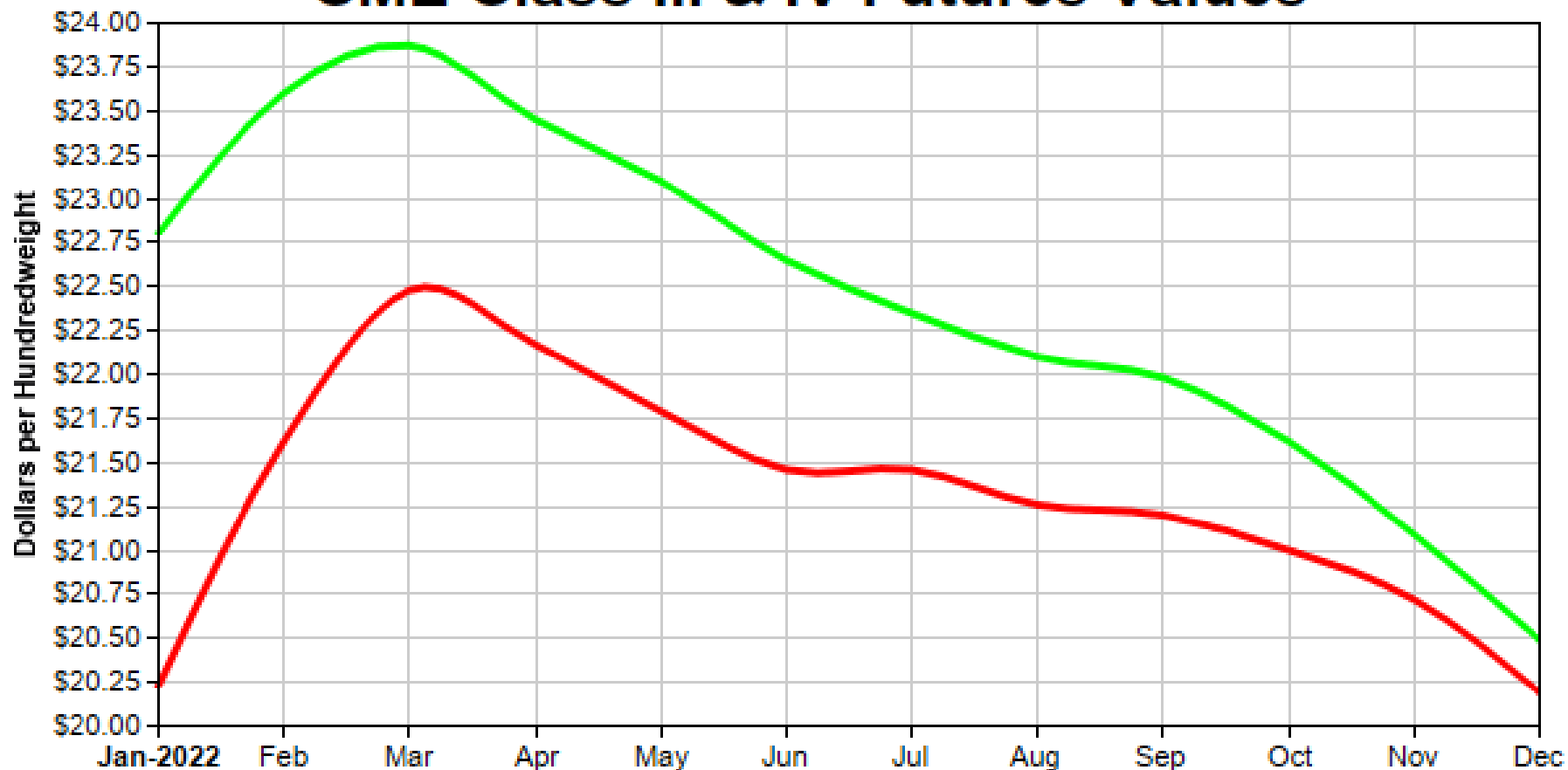
Updated 1/18/22

CME Spot Butter Prices



Updated 1/18/22

CME Class III & IV Futures Values

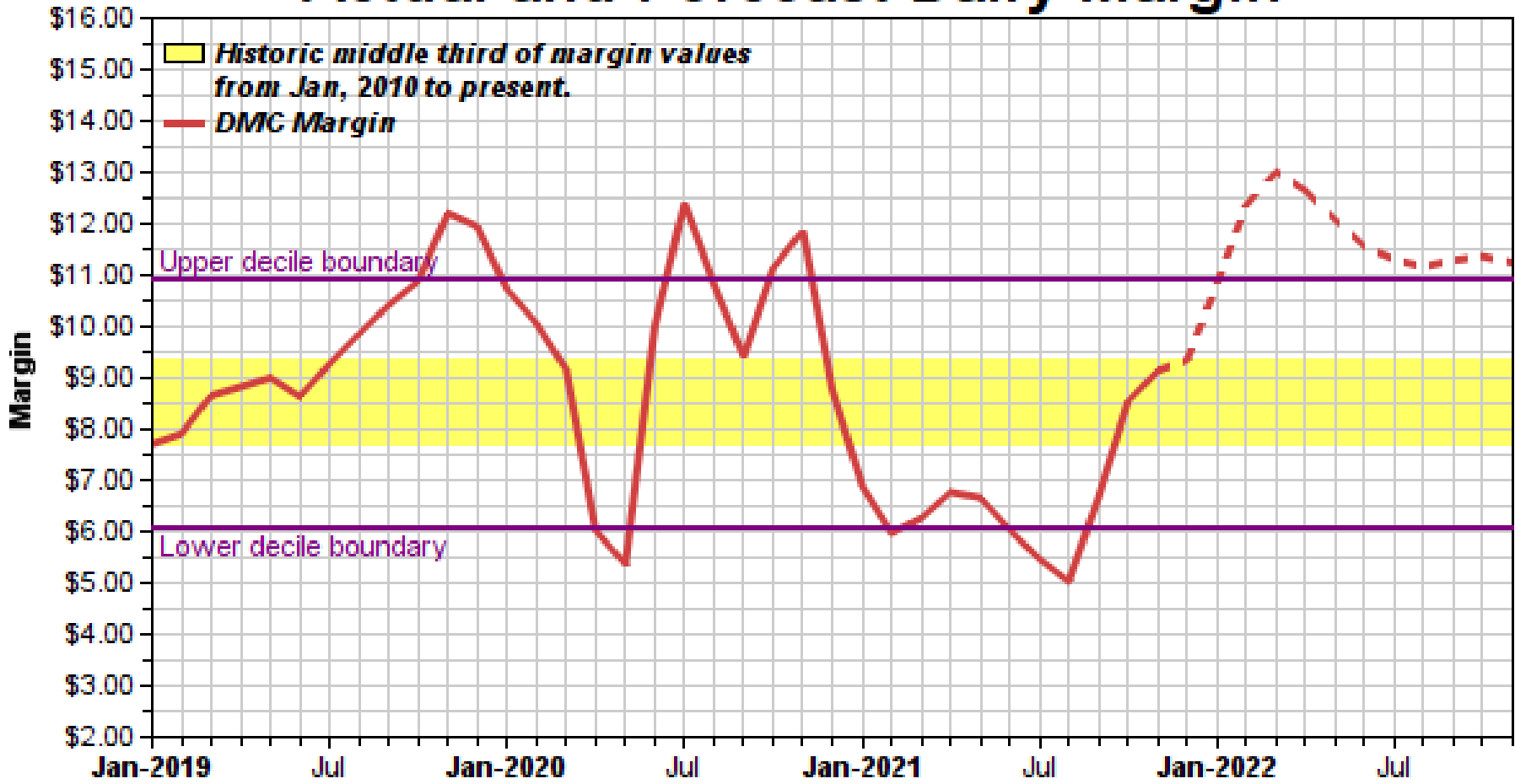


■ Class III Futures

■ Class IV Futures

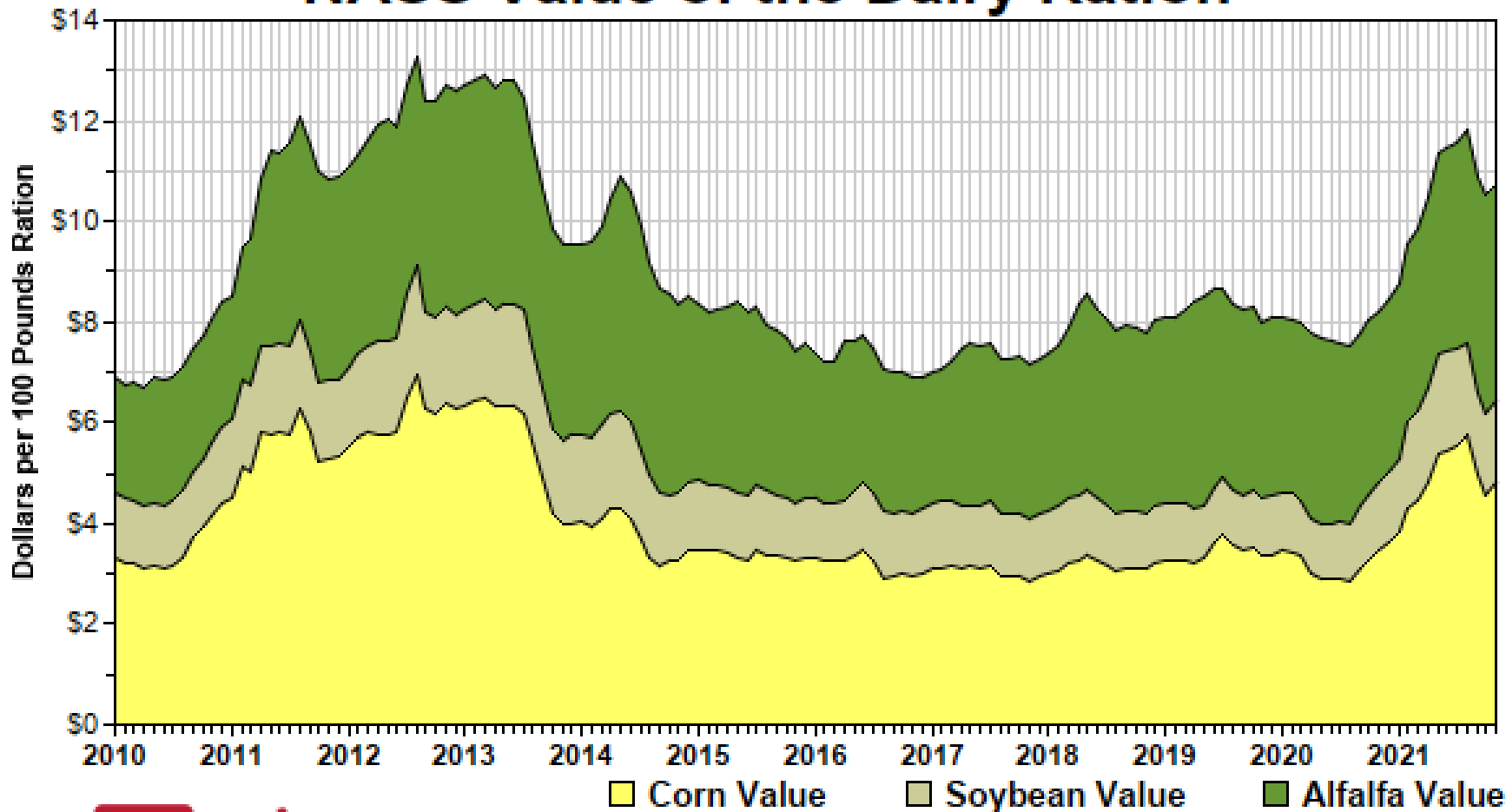
Updated 1/18/22

Actual and Forecast Dairy Margin



Updated 1/18/22

NASS Value of the Dairy Ration

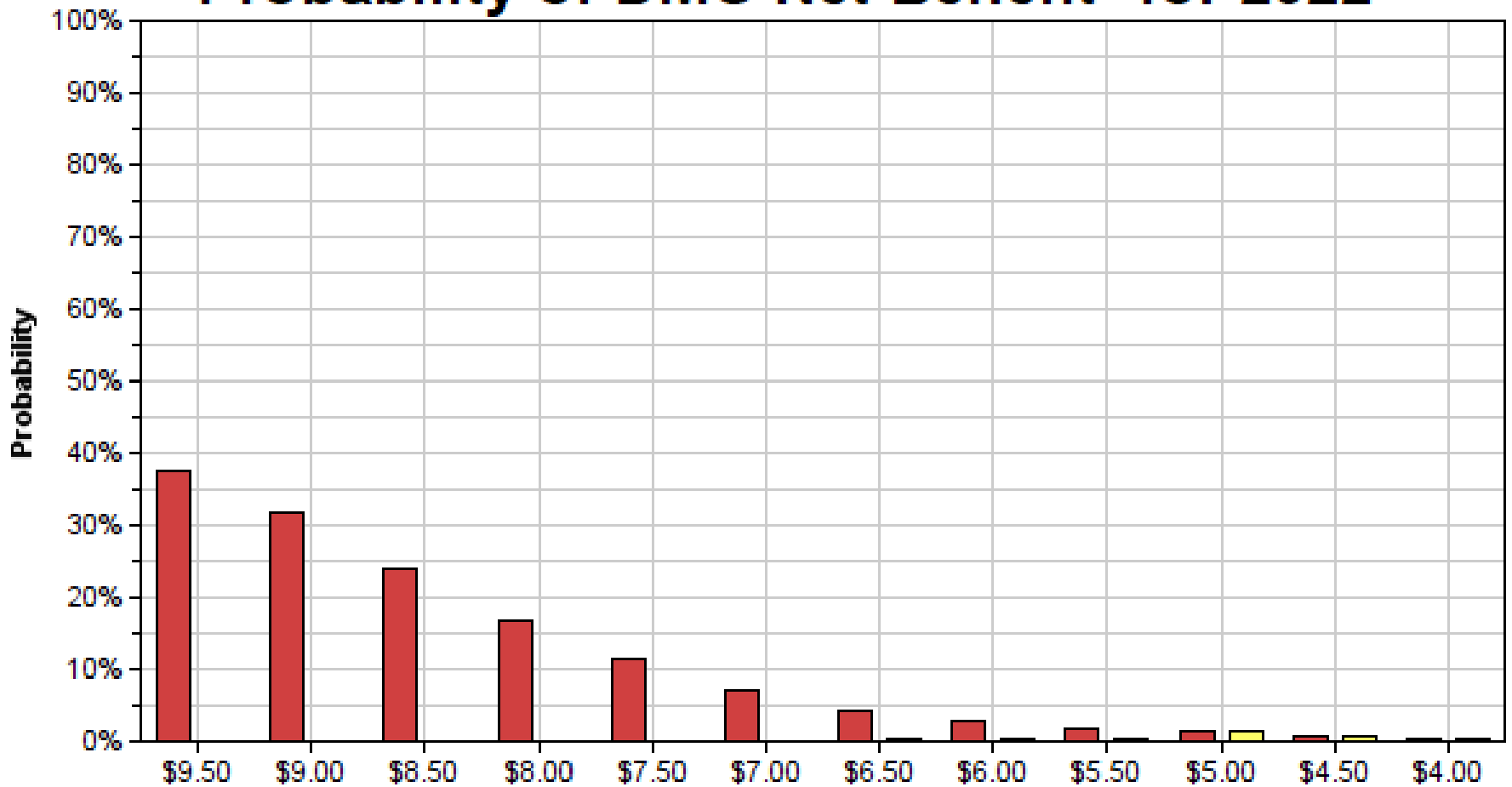


Updated 12/30/21

Dairy Margin Coverage Program

- DMC program was changed to use the Supreme Alfalfa to reflect the cost of dairy quality hay.
- Supplemental DMC Enrollment: Some producers will be allowed to increase their historic milk production (for the first time since the program came about in 2014):
 - Eligible dairy operations with <5 million pounds of established production can increase their base according to a formula which uses 2019 actual milk marketed.
 - 75% of difference between 2019 actual marketings and previous production history subtracted will be added to the old production history to create a new production history up to 5 million pounds.
 - Producers must pay additional premiums on the increased production history, but they will also receive retroactive payments on their 2021 coverage.
 - This increase in production history will be applicable through the 2023 Farm Bill. This change in supplemental DMC enrollment must be made prior to making the 2022 election coverage.
- Mark Stephenson has completely rewritten the DMC decision tool to present the decision data in more tabular form.
 - <https://DMC.DairyMarkets.org>
- At the current time, the forecast is essentially for no payments in 2022 given the current strength in the milk market (although feed is expensive). Historically, the DMC program has been a net positive in almost every year (2014 being the exception).
- Enrollment will begin at your county FSA office on Dec 13, 2021 and end on Feb 18, 2022. Encourage your producers to consider their enrollment level and make a coverage decision in the next couple of months. Please let me know if you have any questions.

Probability of DMC Net Benefit* for 2022



■ New Tier 1

■ Tier 2

* Indemnity payments minus premiums.

Updated 1/18/22

Dairy Policy Issues

- FMMO issues
 - Class I pricing formula
 - Make allowances
- A U.S.-Mexico-Canada Agreement (USMCA) Dispute Settlement Panel found Canada is improperly restricting access to U.S. dairy products in violation of its USMCA tariff-rate quotas (TRQs) commitments.
 - Canada faces possible retaliatory measures if the dispute issues are not resolved by Feb. 3.

Thank You

Christopher Wolf
cwolf@cornell.edu