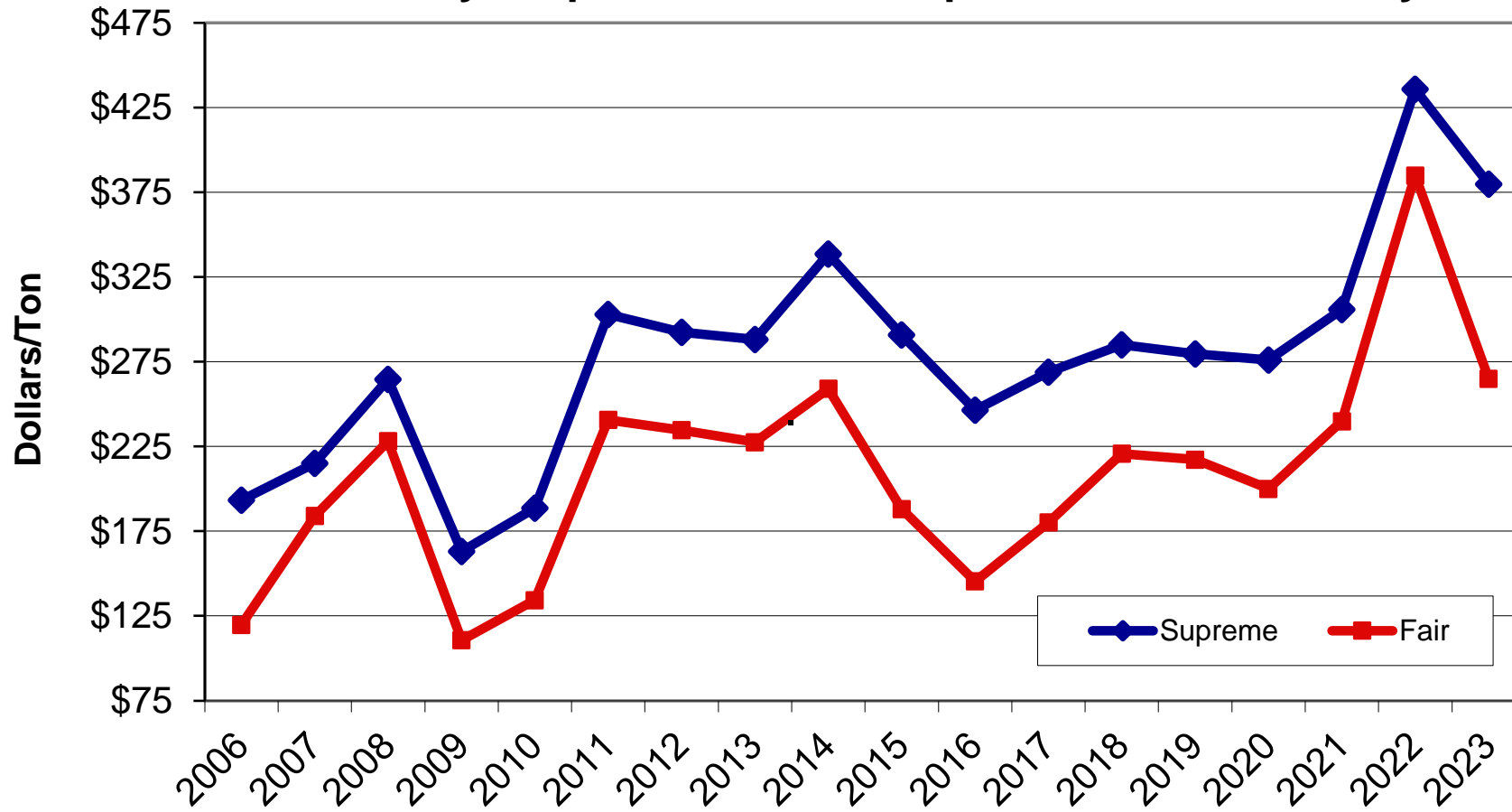




Status of Forage Markets

Josh Callen, The Hoyt Report

**Tulare-Visalia-Hanford Delivered Alfalfa Hay Prices
Market News Yearly Avg. Price, 2006-2010,
The Hoyt Report 2011-2023 Supreme and Fair Quality**



The Perfect Storm



High prices killed
the export market



Milk Prices
Dropped Hard

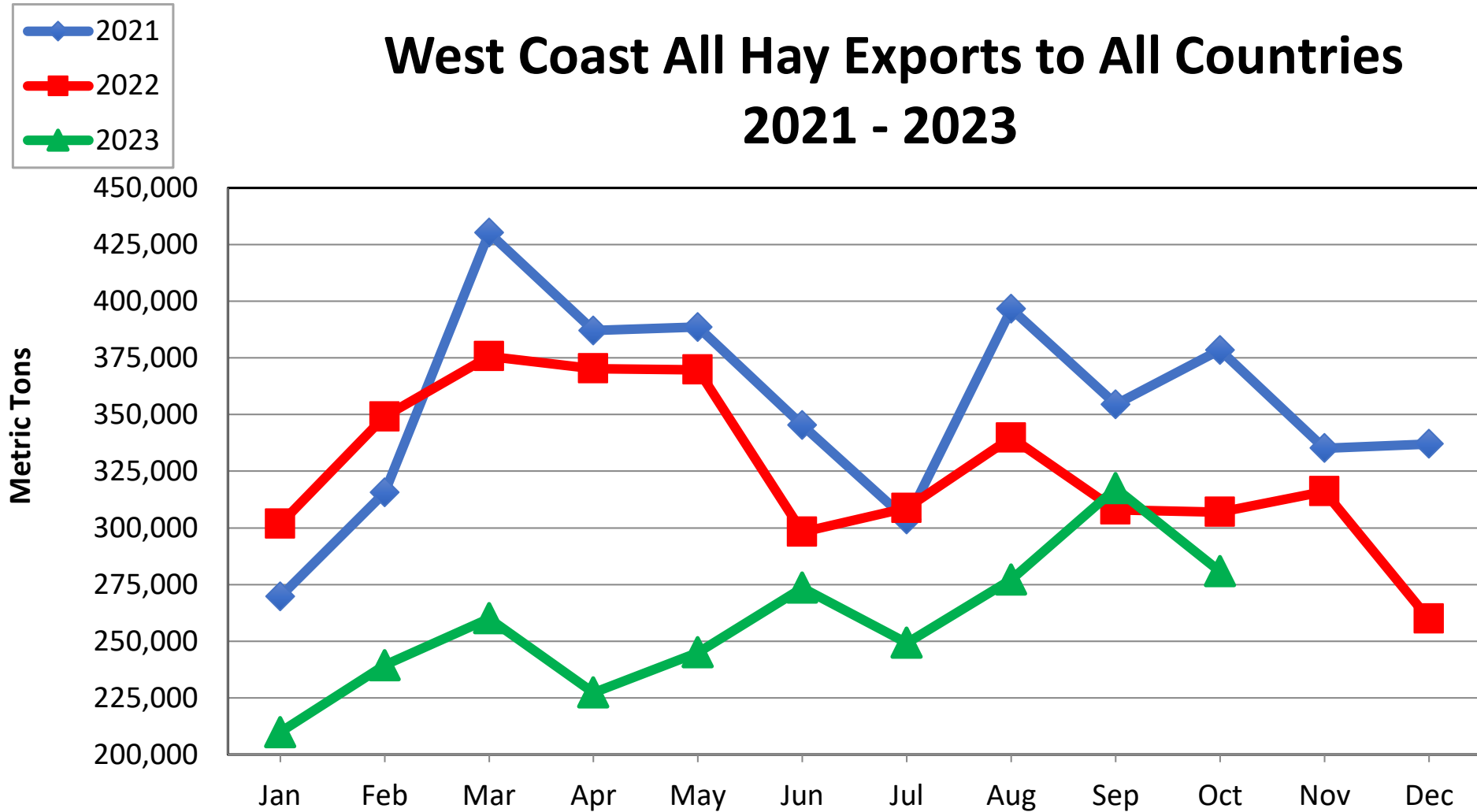


Historic Winter
for California



Rainy Summer of
2023

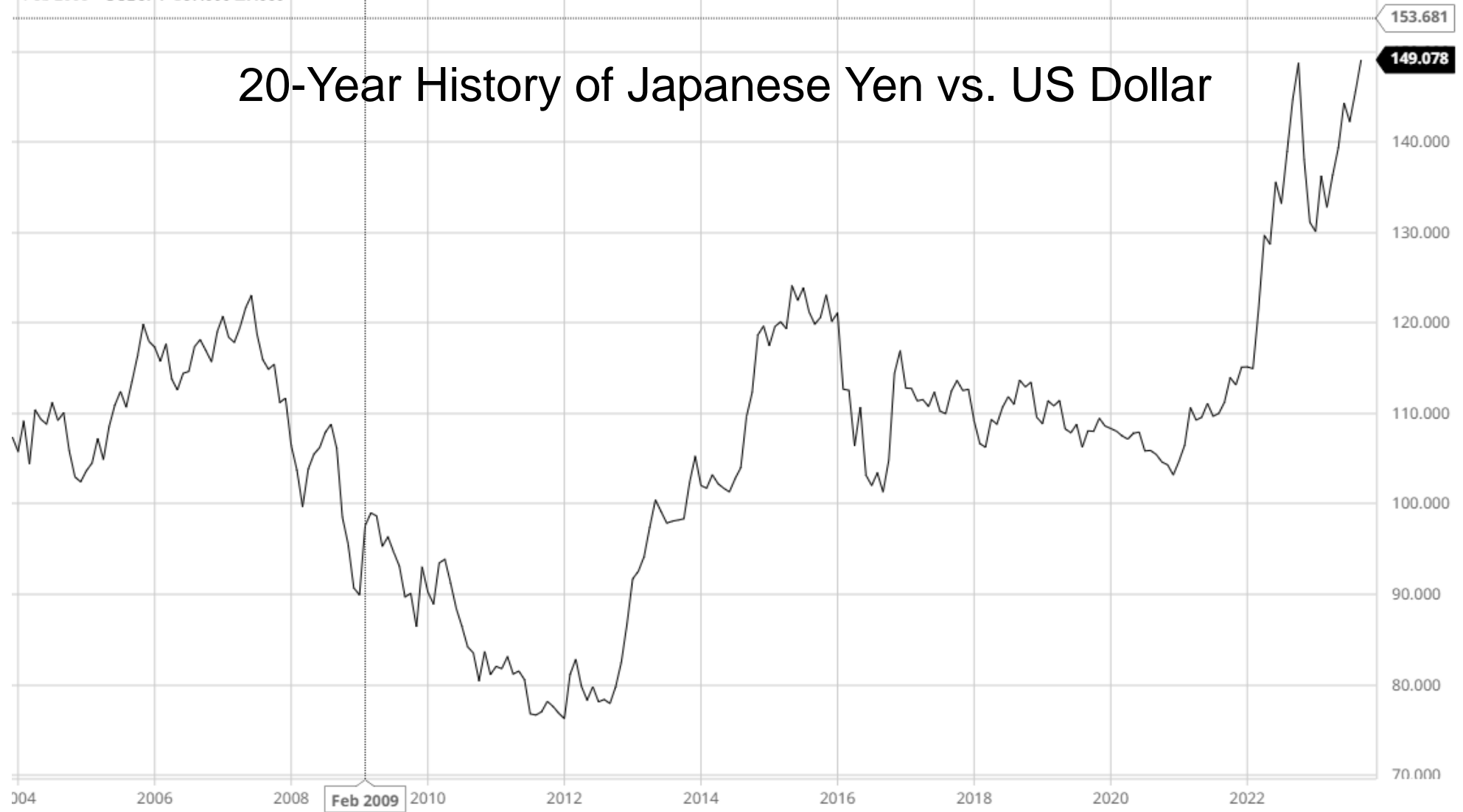
West Coast All Hay Exports to All Countries 2021 - 2023



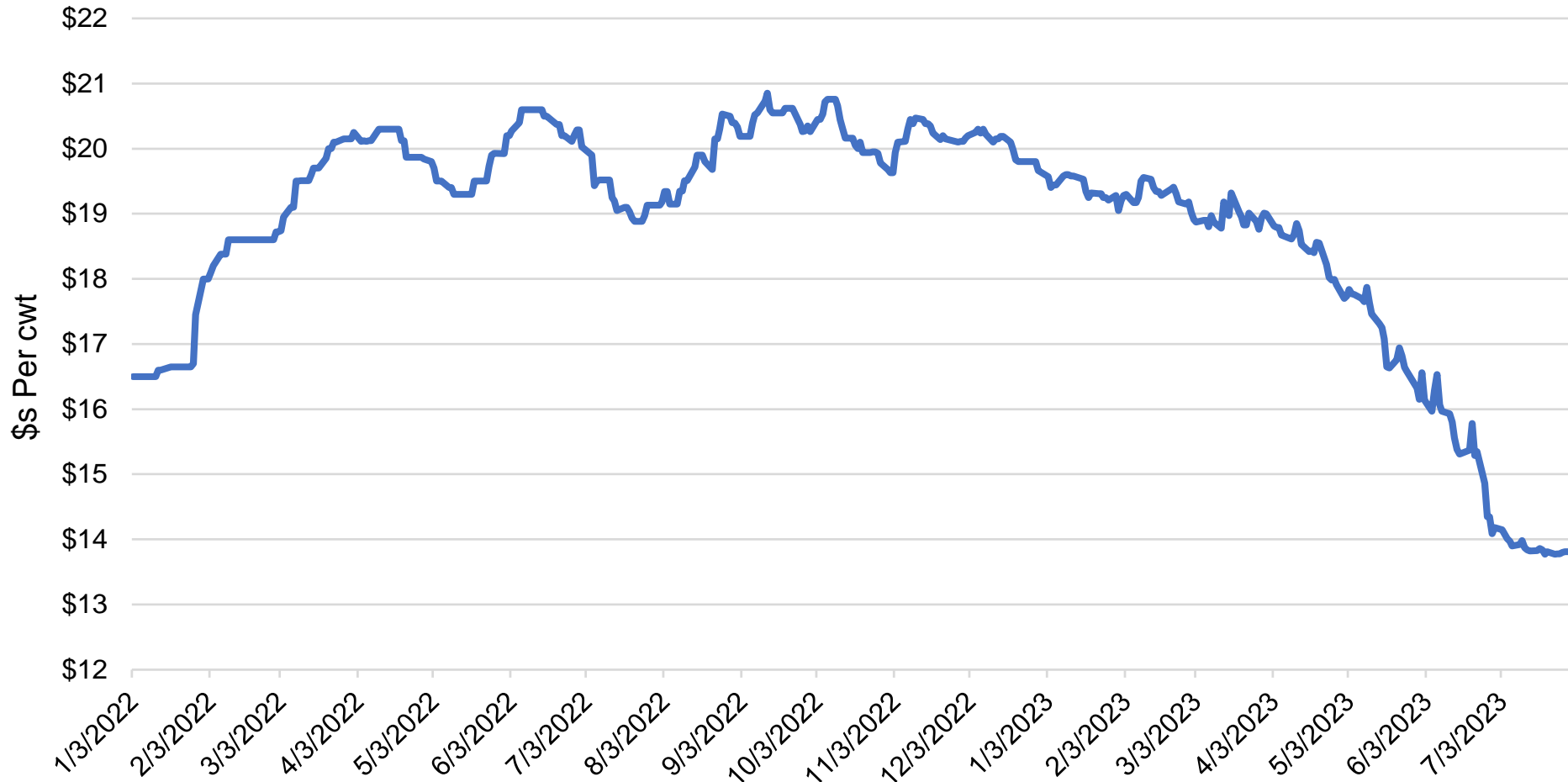
Source: U.S. Census Bureau *** July & Aug of 2022 adjusted to Datamyne totals

Feb 2009 ^USDJPY C97.600 Δ7.660

20-Year History of Japanese Yen vs. US Dollar



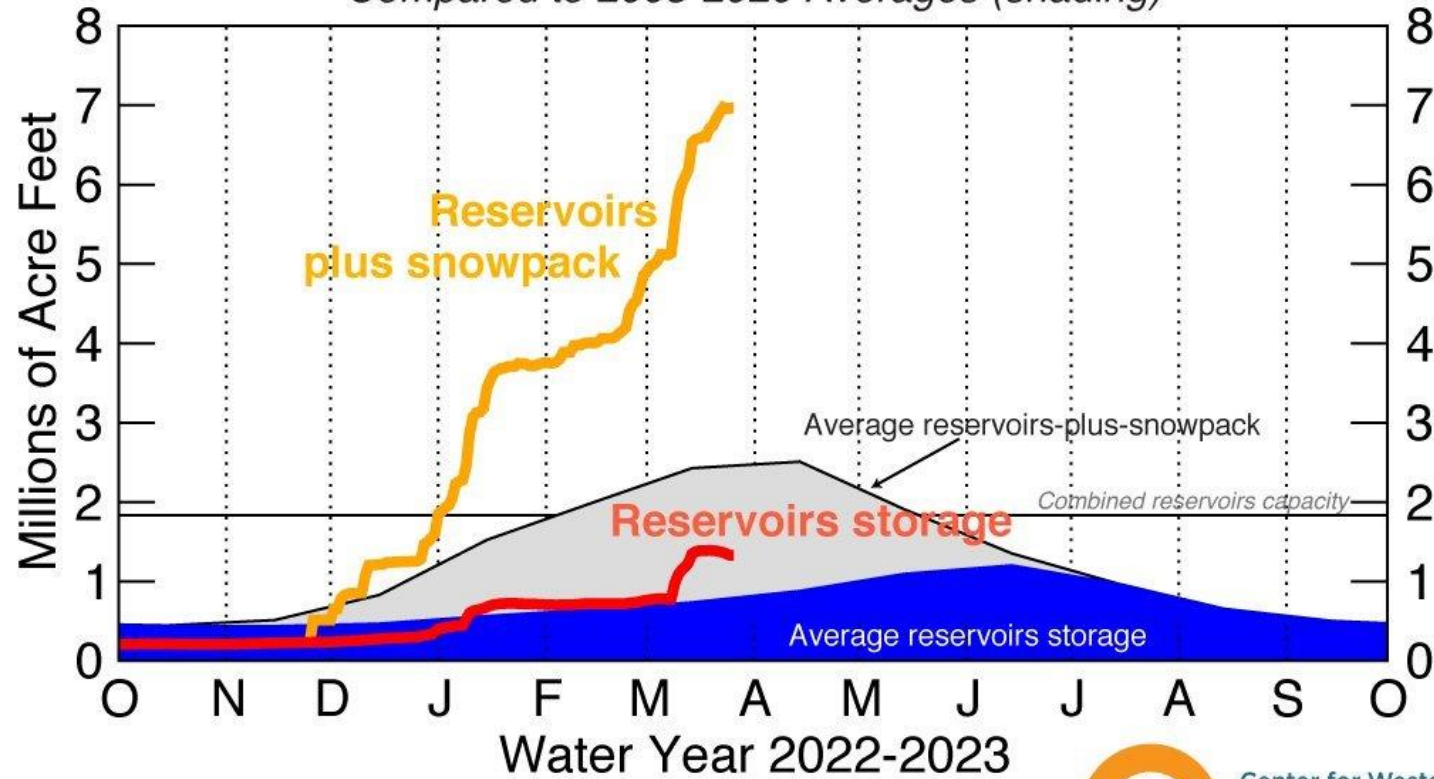
July 2023 Class III Milk Future Contracts



Source: CME

Water Stored in Four Tulare Basin Reservoirs plus Snowpack

Compared to 2003-2020 Averages (shading)



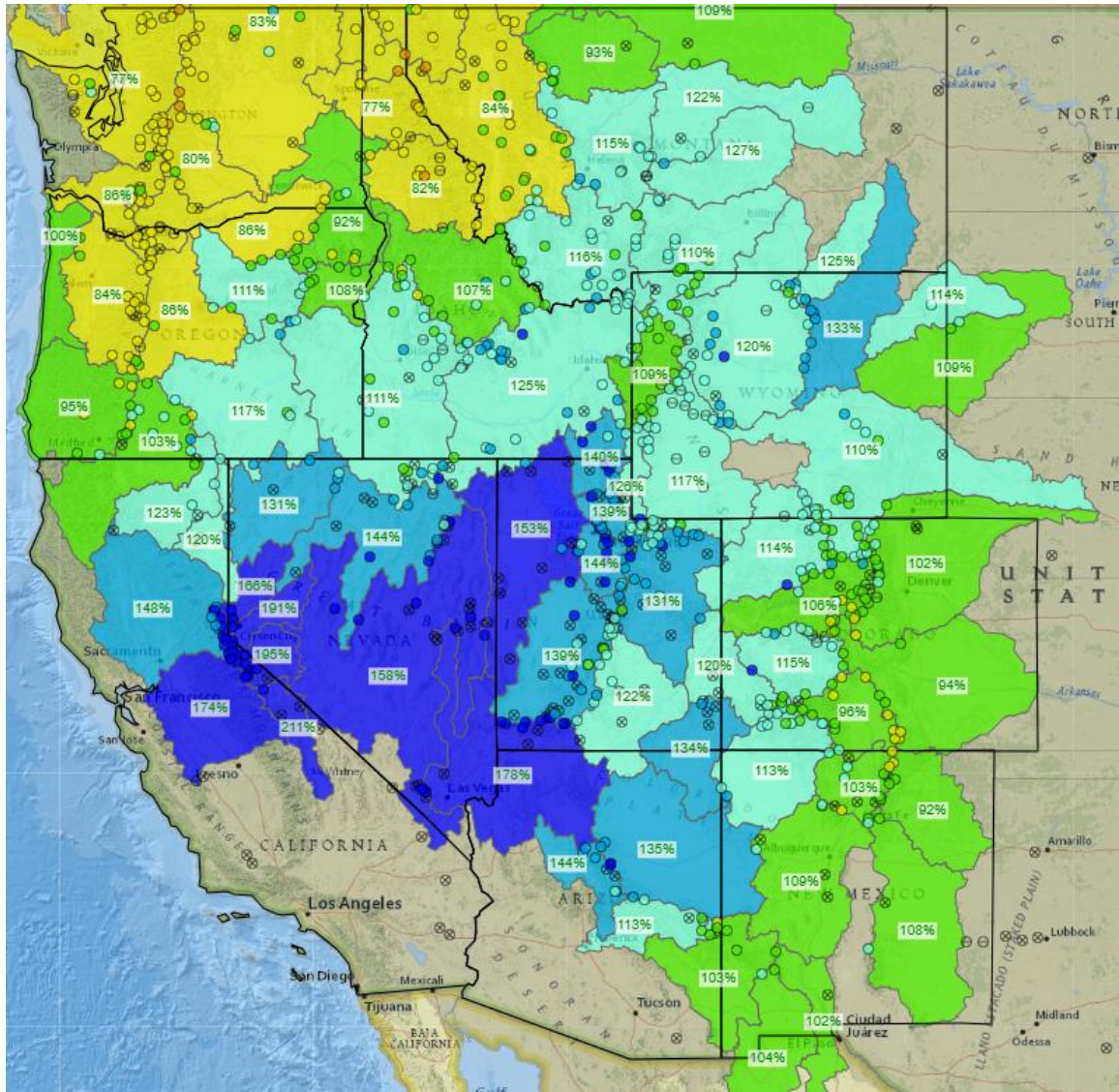
SOURCES: SWE dailies from <https://cdec.water.ca.gov/querySWC.html>
 SWE volume conversion factor based on Margulis et al, JHM 2016, SWE reanalysis
 Reservoir storage from <https://cdec.water.ca.gov/queryDaily.html>
Reservoirs: PNF, TRM, SCC, ISB



Center for Western Weather
and Water Extremes
SCRIPPS INSTITUTION OF OCEANOGRAPHY
AT UC SAN DIEGO

https://cnap.ucsd.edu/storage_in_sierra_ucrb

Updated thru: 03/27/2023



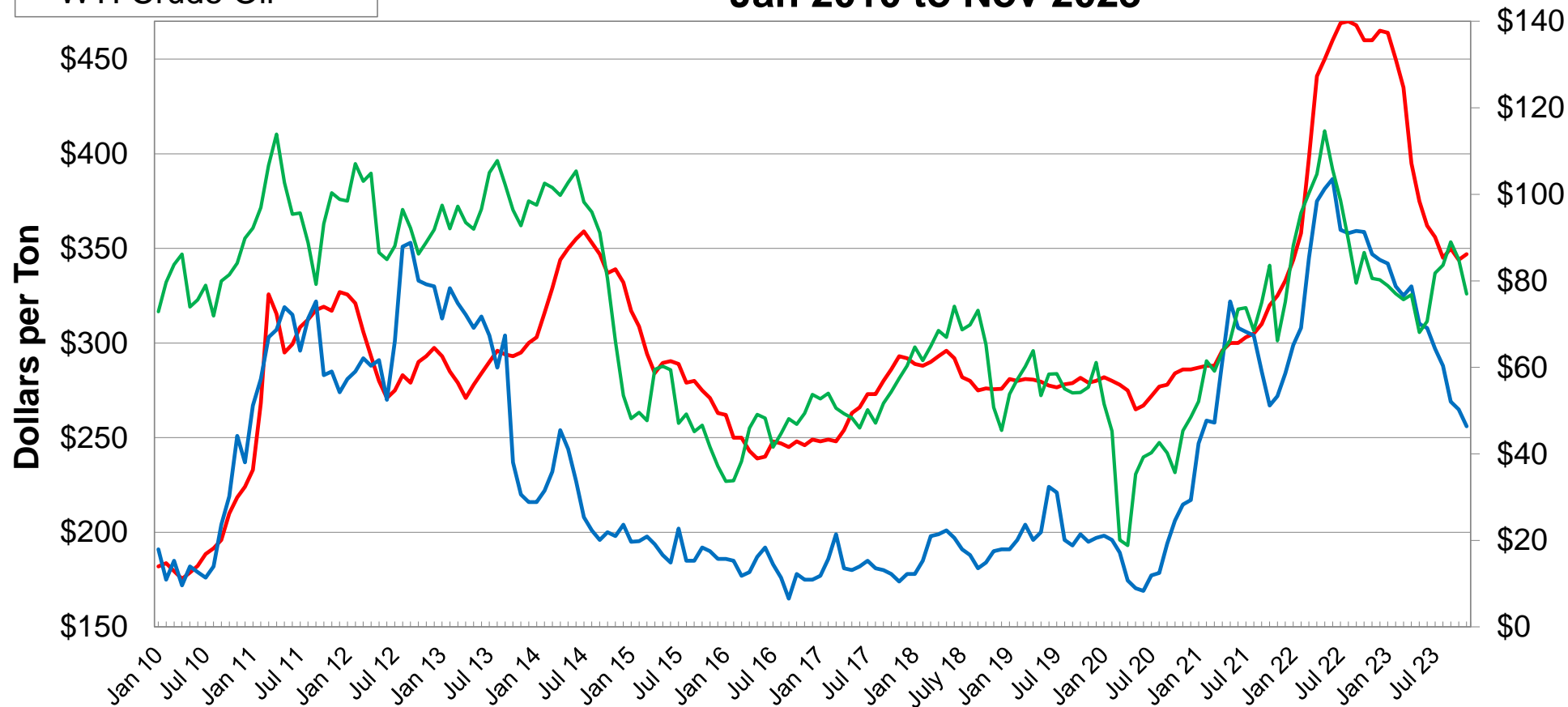
• Oct 1st Water Basin Conditions

- Record setting water year for Great Basin.
- About average for rest of West
- Lots of rain damaged hay
- Minimal Monsoon Season in Arizona
- Hurricane Hilary

U.S. West Coast Hay Prices

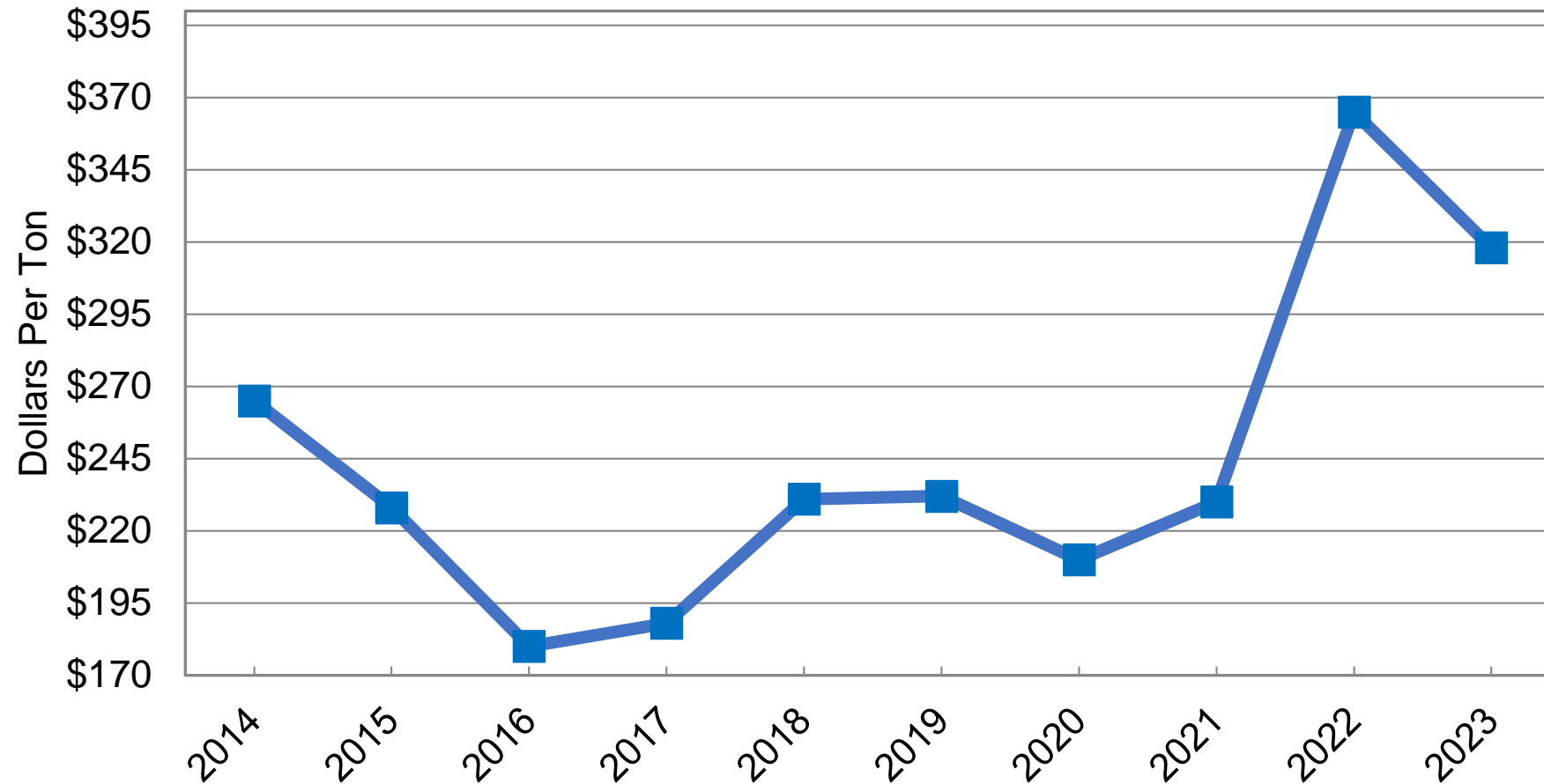
Delivered Prices to Tulare-Hanford Dairies Supreme Alfalfa Hay vs Rolled Corn & Oil Prices Jan 2010 to Nov 2023

- Supreme Alfalfa Hay
- Rolled Corn
- WTI Crude Oil



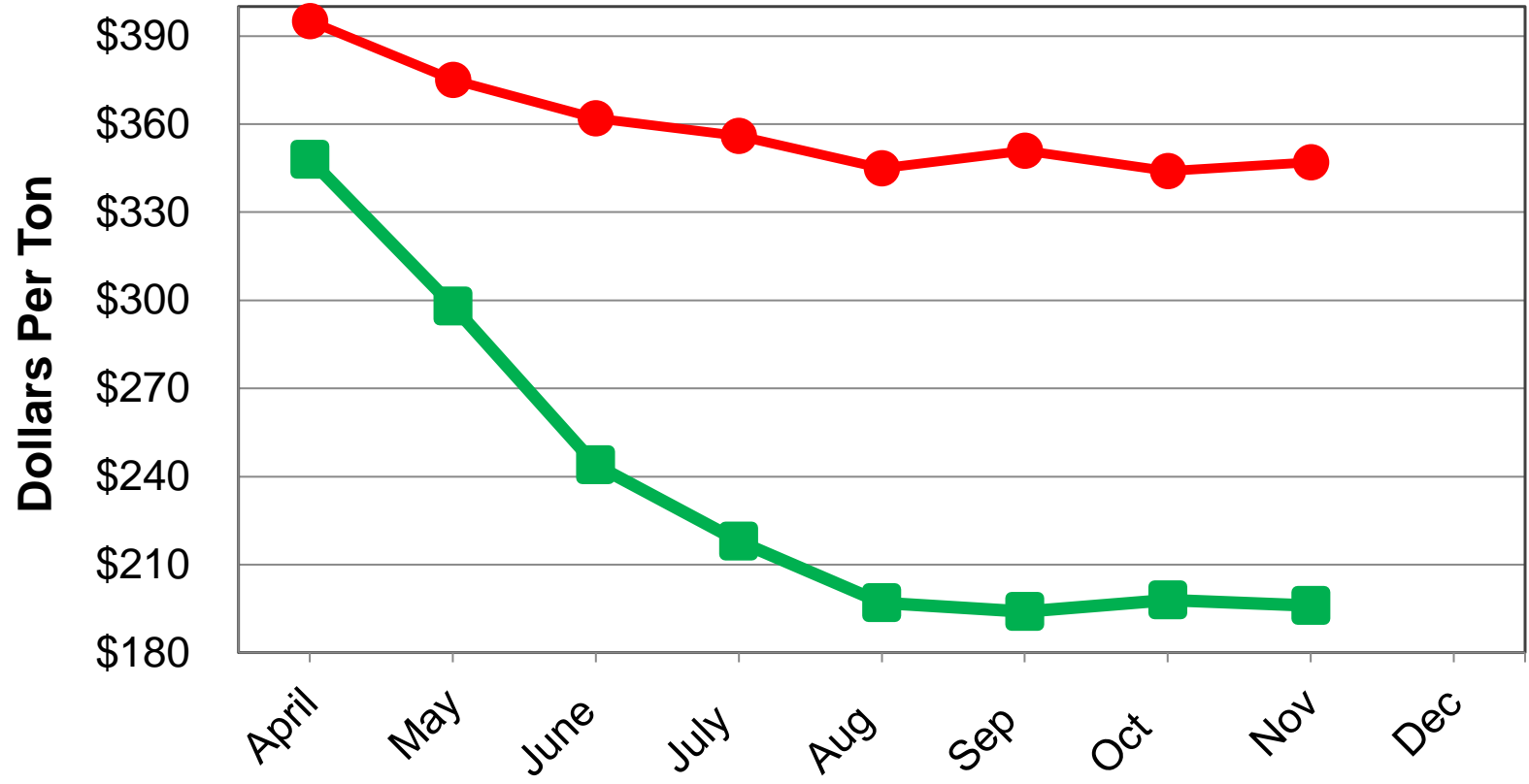
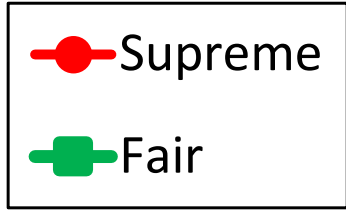
Sources: Rolled Corn - Western Milling , Alfalfa Hay-The Hoyt Report , Oil Prices - NYMEX

Imperial Valley Supreme Export Alfalfa Hay Big Bale FOB Prices First of April 2014-2023



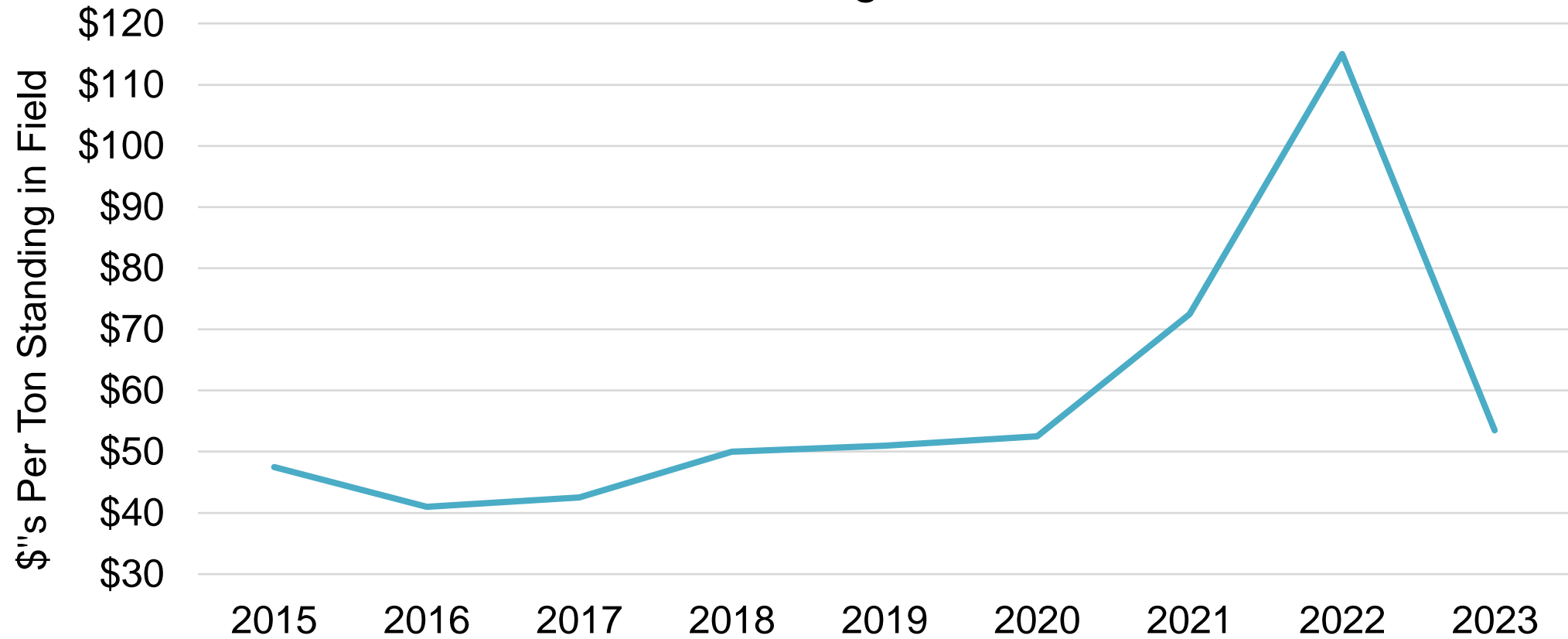
Source: The Hoyt Report

Monthly Average Price of Supreme & Fair Alfalfa hay in 2023 Delivered to Tulare/Visalia Dairies



Source: The Hoyt Report

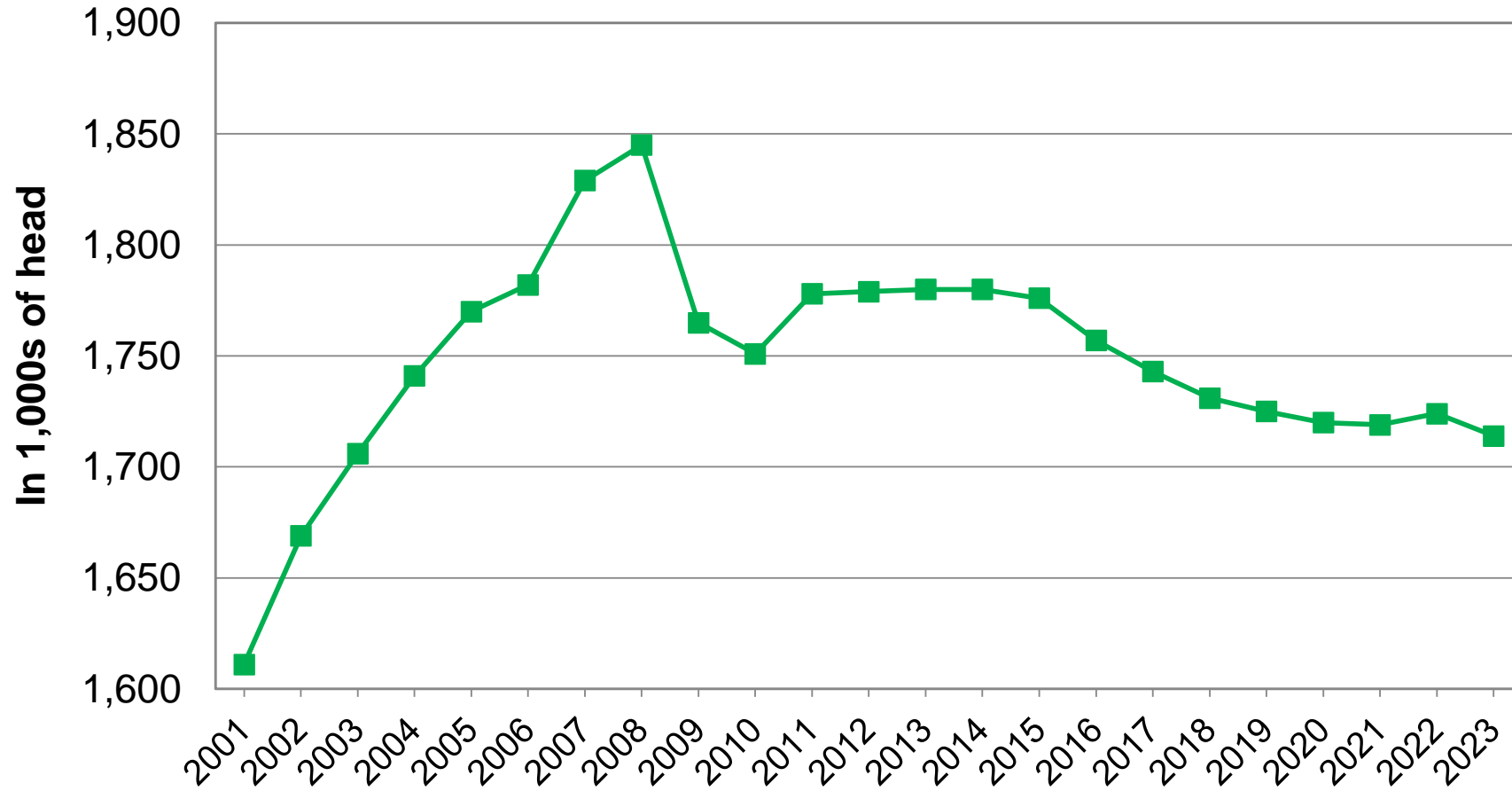
Corn Silage Prices Month of September Tulare & Kings Counties



Source: The Hoyt Report

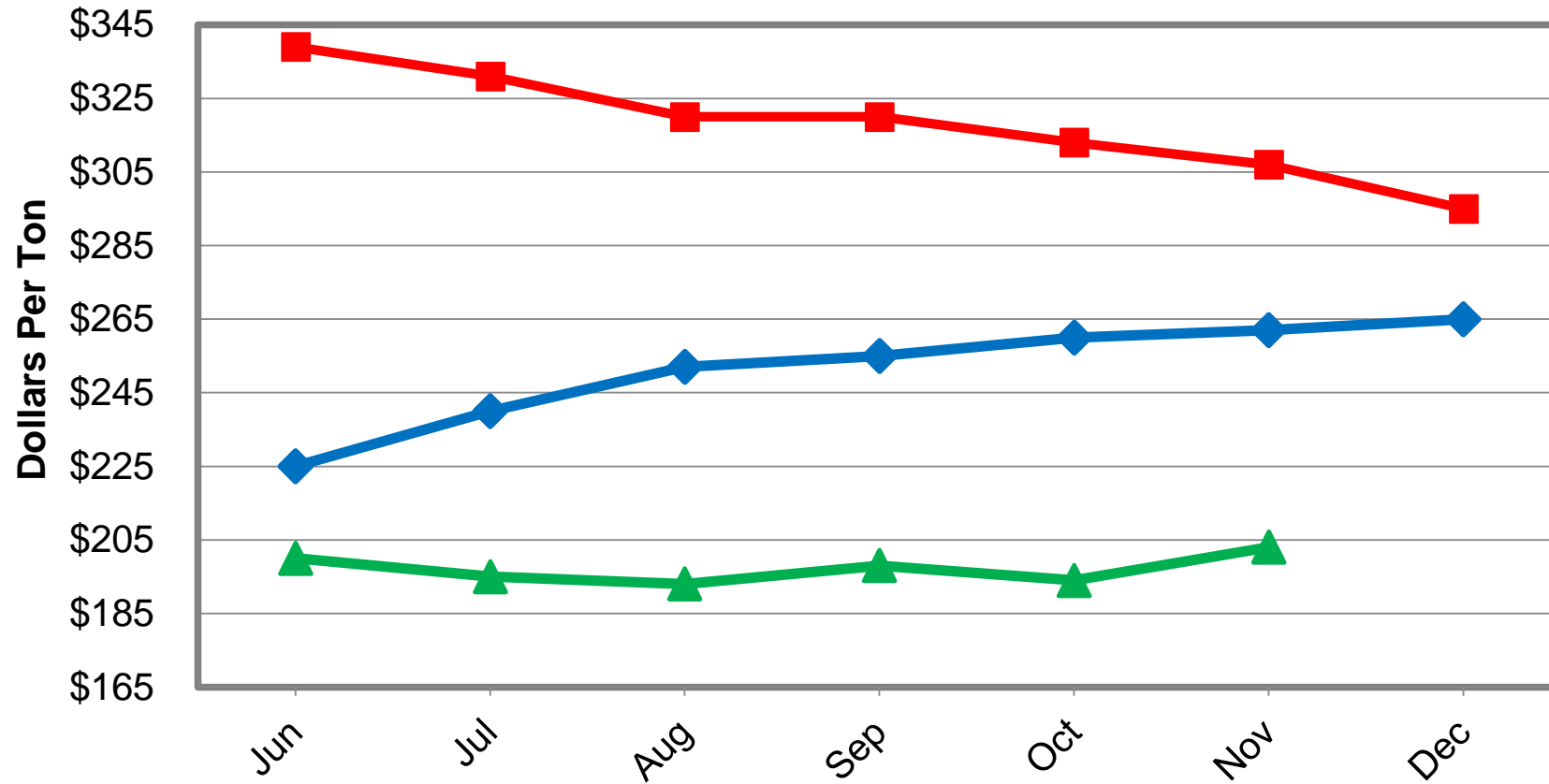
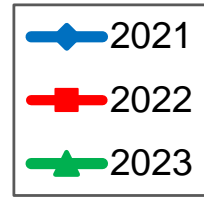
— Average Price

Total Milk Cows in California by Year



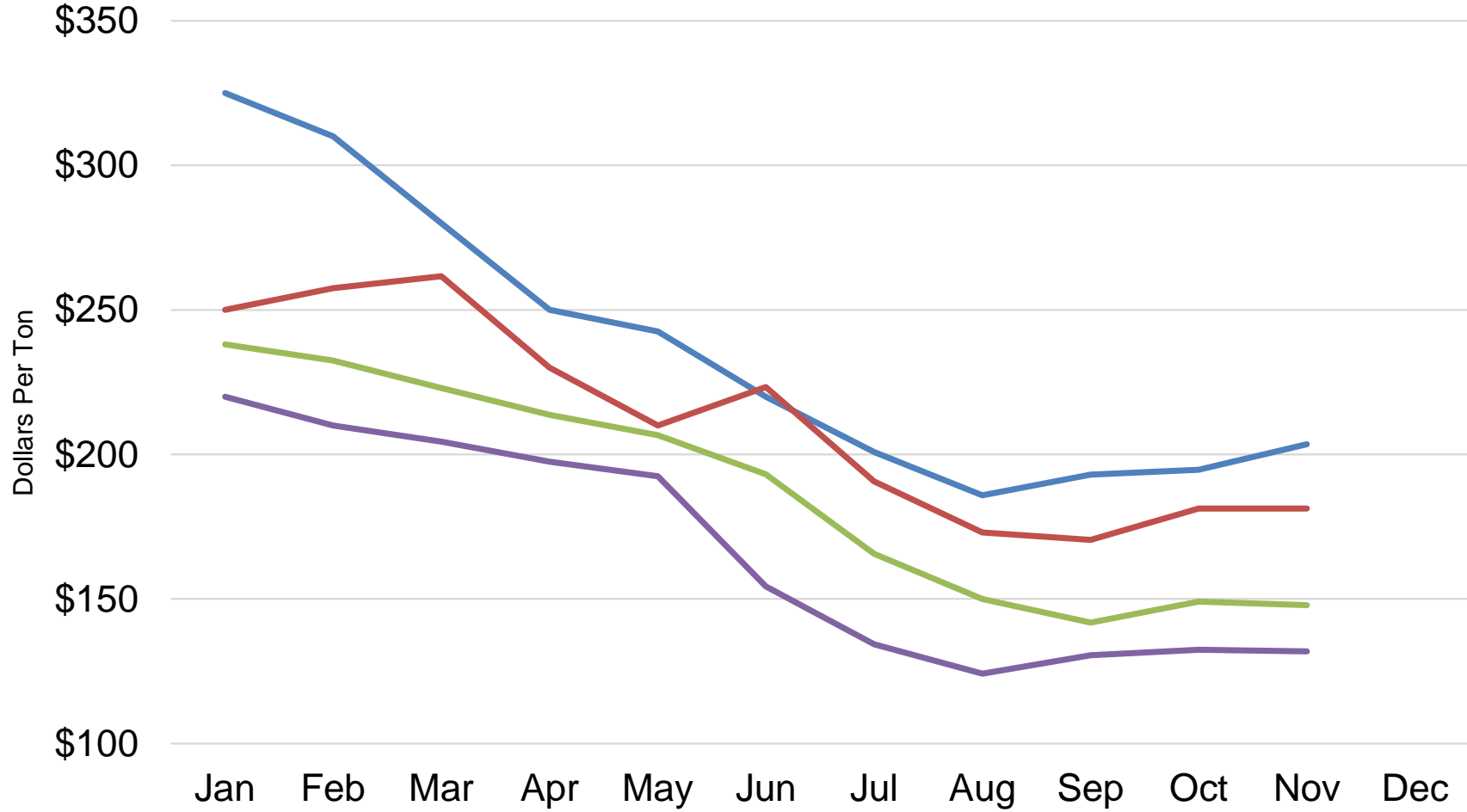
Source: USDA- NASS

Idaho Supreme Hay FOB Prices for Dairy & Export Jun-Dec 2020-2023



Source: The Hoyt Report

2023 Idaho Big Bale Alfalfa Hay Prices By Grades

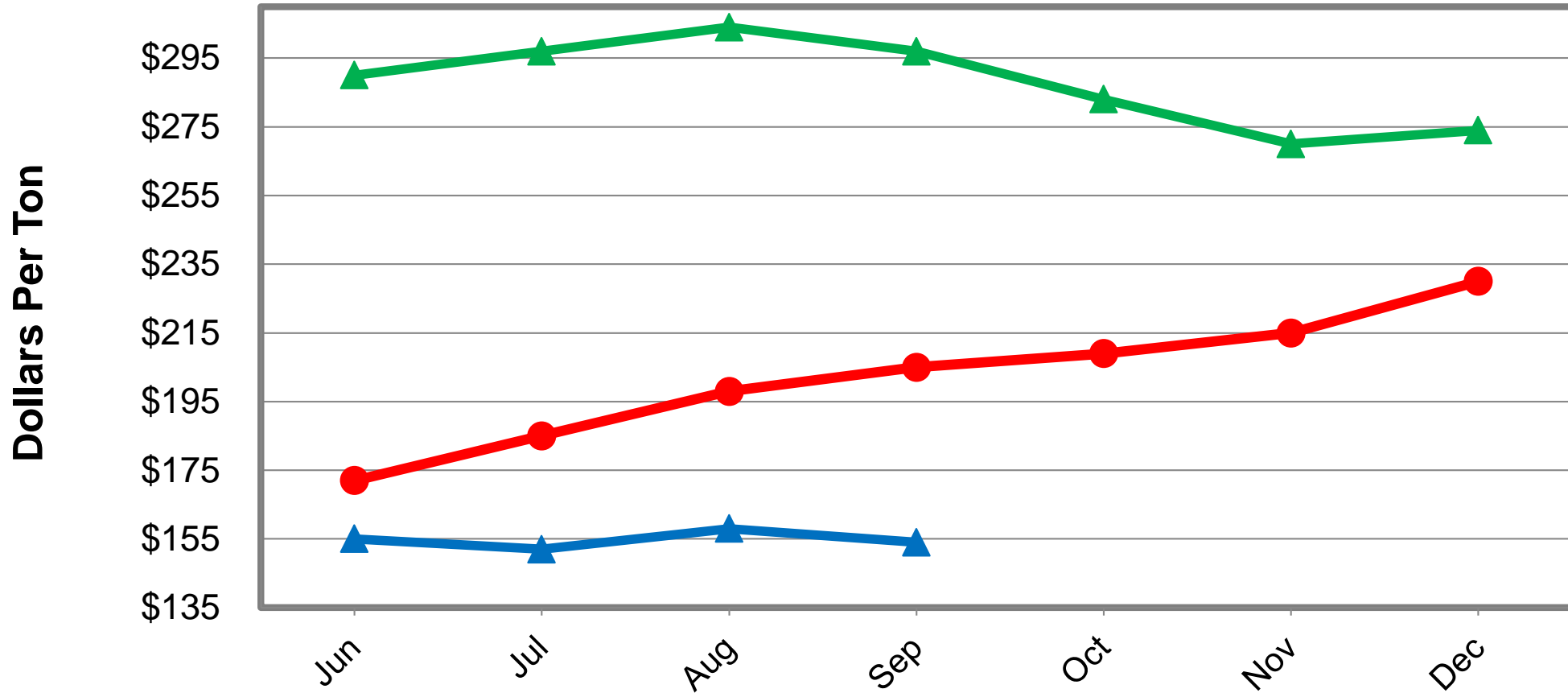


Source: The Hoyt Report

— Supreme — Premium — Good — Fair

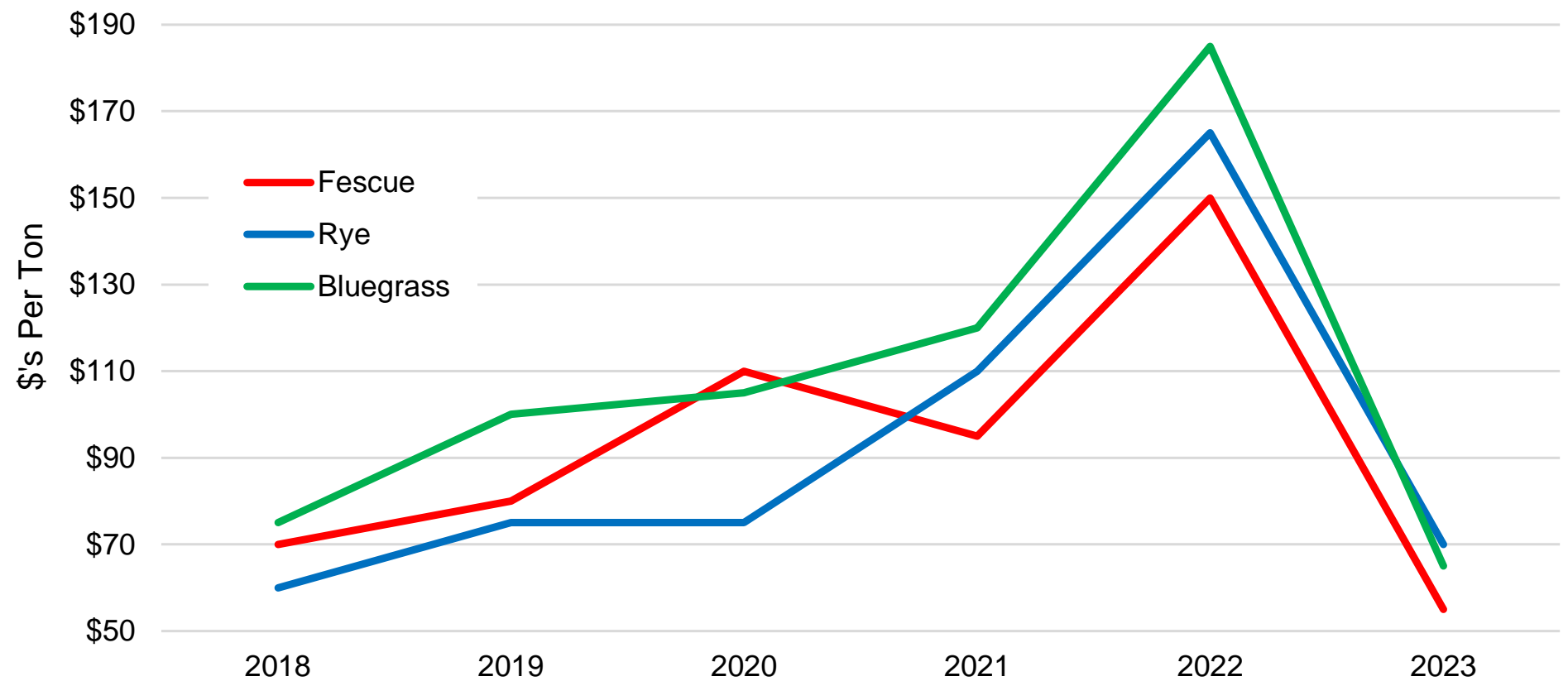
Washington Fair Alfalfa Hay for Dairies/Beef Cows FOB Prices June-December 2020-2023

● 2021
▲ 2022
▲ 2023



Source: The Hoyt Report

Columbia Basin Grass Straw FOB Prices



Source: The Hoyt Report

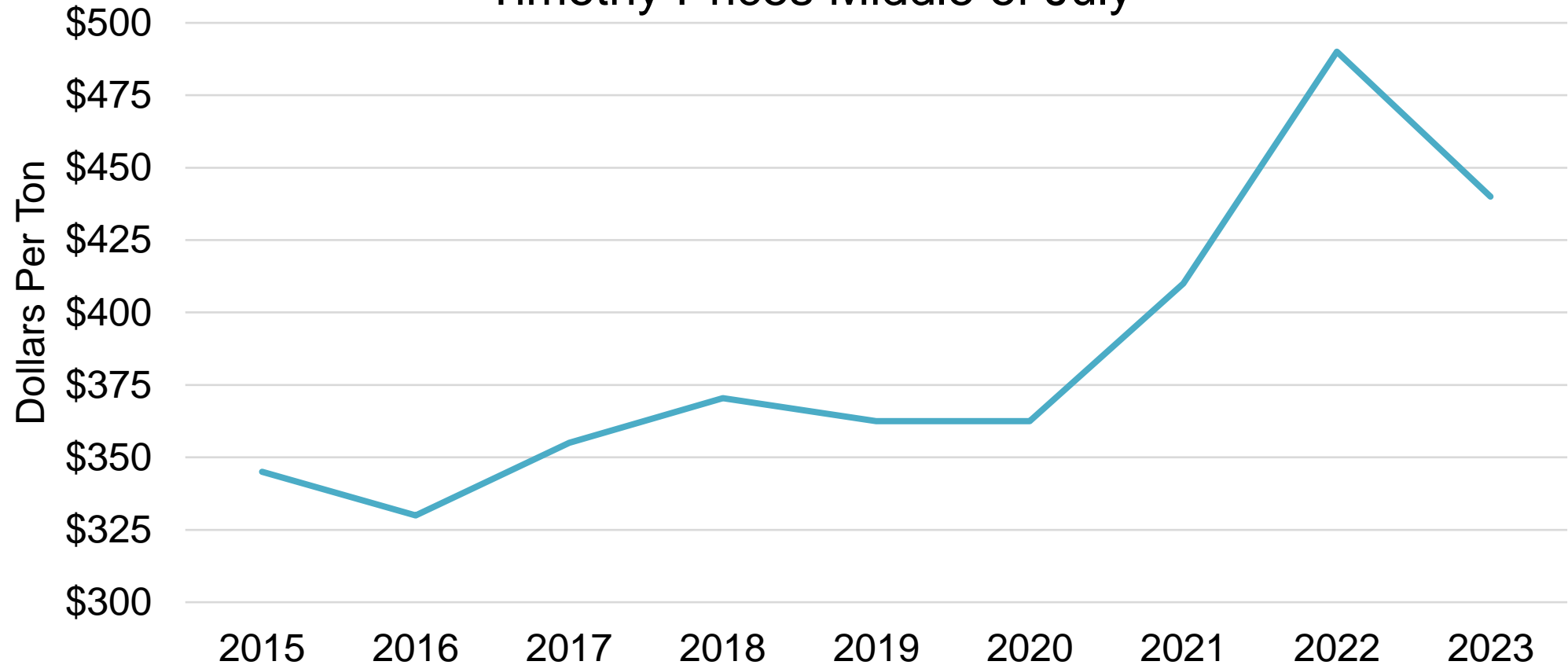
2023 First Cutting Export Timothy Prices FOB Wrapped Stacks WA-OR Columbia Basin

3-Tie Bales			Big Bales		
Quality	Avg Price	Price Range	Quality	Avg Price	Price Range
Premium Horse	\$327	\$270-\$350	Super Premium		
Low Premium Horse	\$300	\$260-\$320	Premium Dairy	\$221	\$210-\$230
#1 Horse	\$230	\$220-\$240	Low Premium Dairy	\$195	\$190-\$200
			#1 Dairy	\$170	\$165-\$175

2023 First Cutting Export Timothy Prices \$ Change From First Cutting 2022

3-Tie Bales			Big Bales		
Quality	\$	% Change	Quality	\$	% Change
Premium Horse	-\$95	-23%	Super Premium		
Low Premium Horse	-\$108	-26%	Premium Dairy	-\$179	-47%
#1 Horse	-\$153	-40%	Low Premium Dairy	-\$162	-45%
			#1 Dairy	-\$130	-43%

Diamond Valley, NV First Cutting Retail Timothy Prices Middle of July

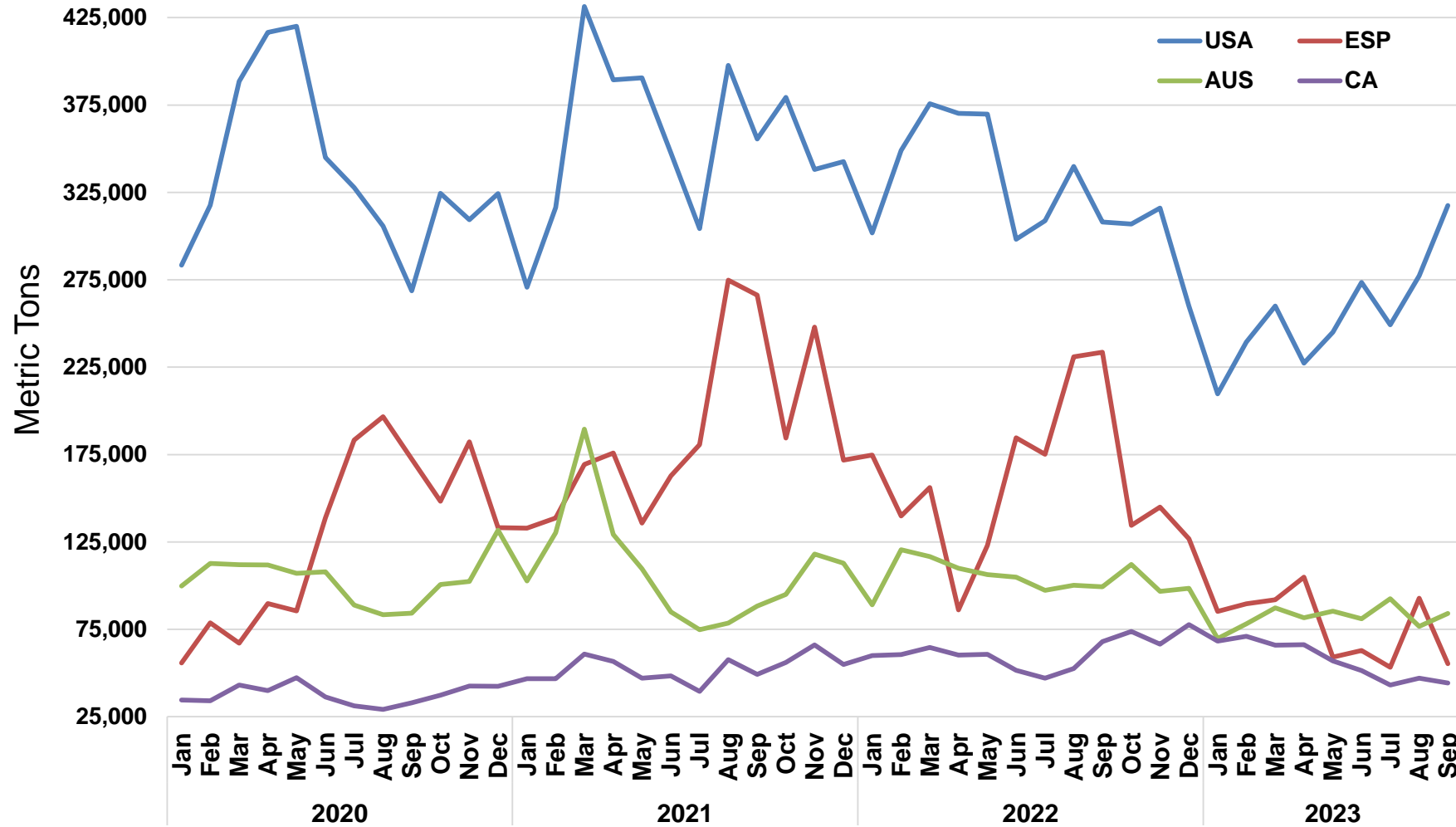


Source: The Hoyt Report

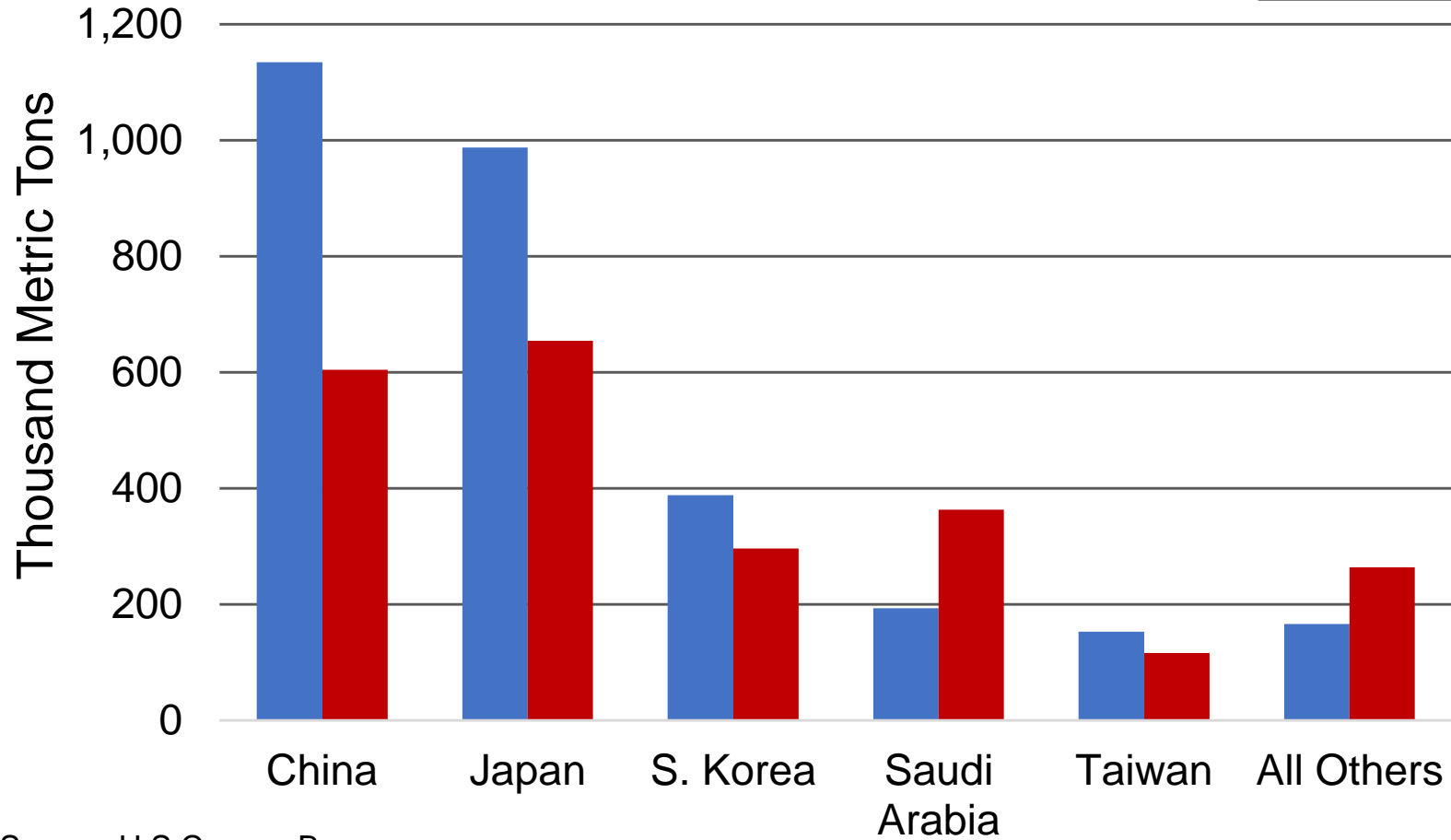
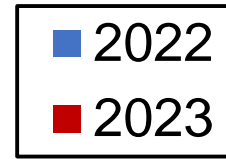
— Average Price

Hay Exports

Forage Exports By Four Major Exporting Countries

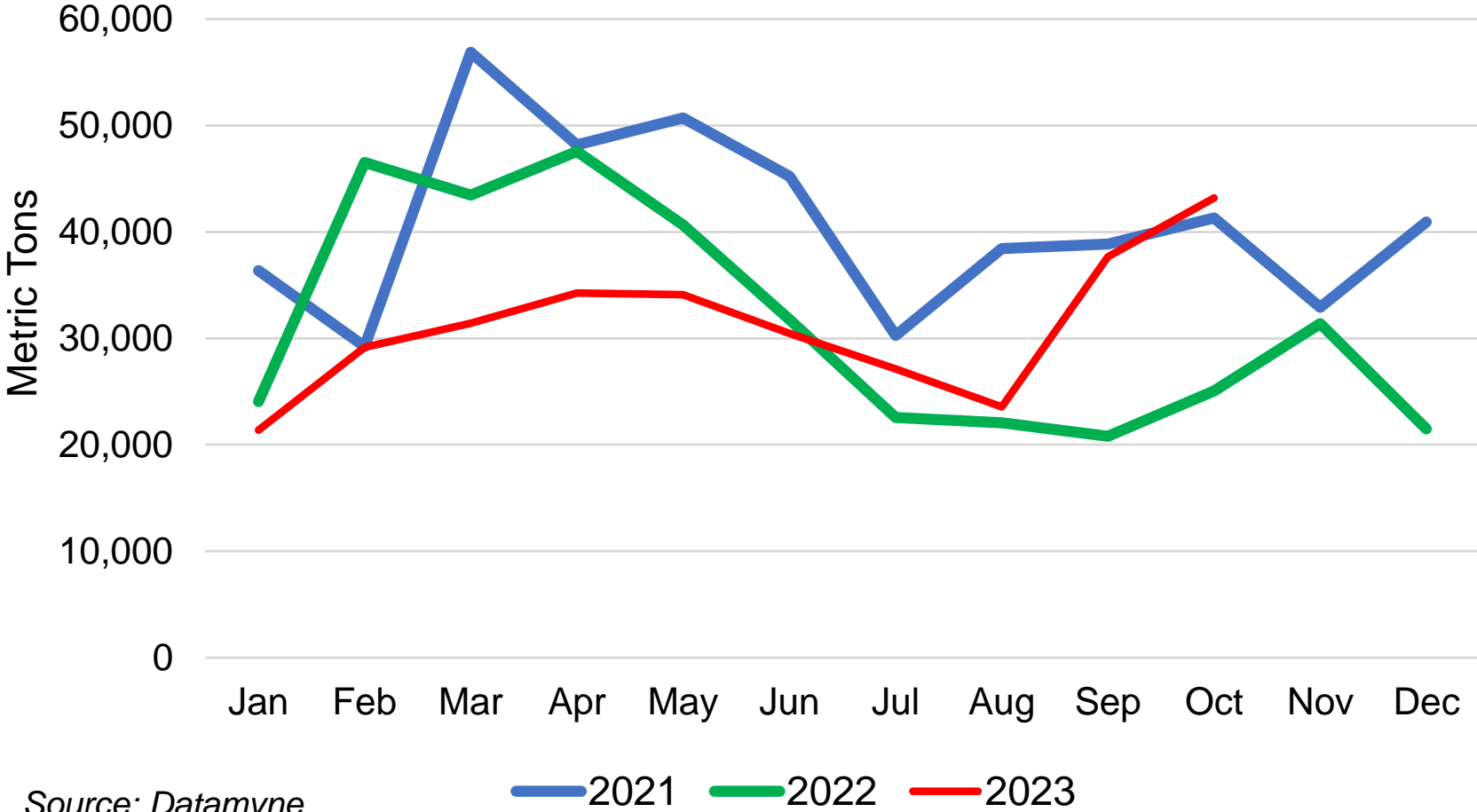


U.S. All-Hay Exports 2022 vs 2023 Thru Sep



Source: U.S Census Bureau

U.S. Timothy Hay Exports To All Destinations 2021-2023

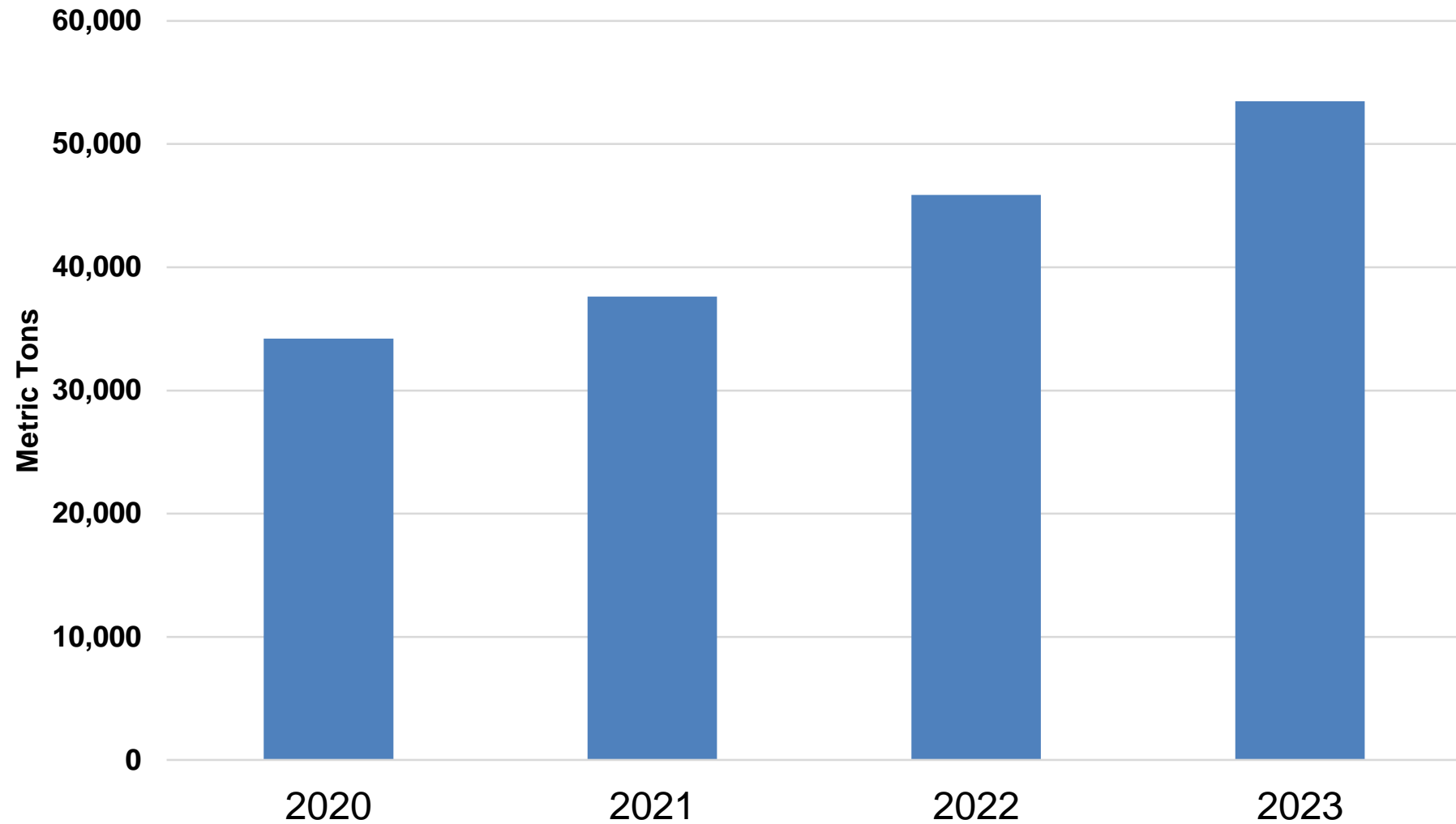


Source: Datamyne

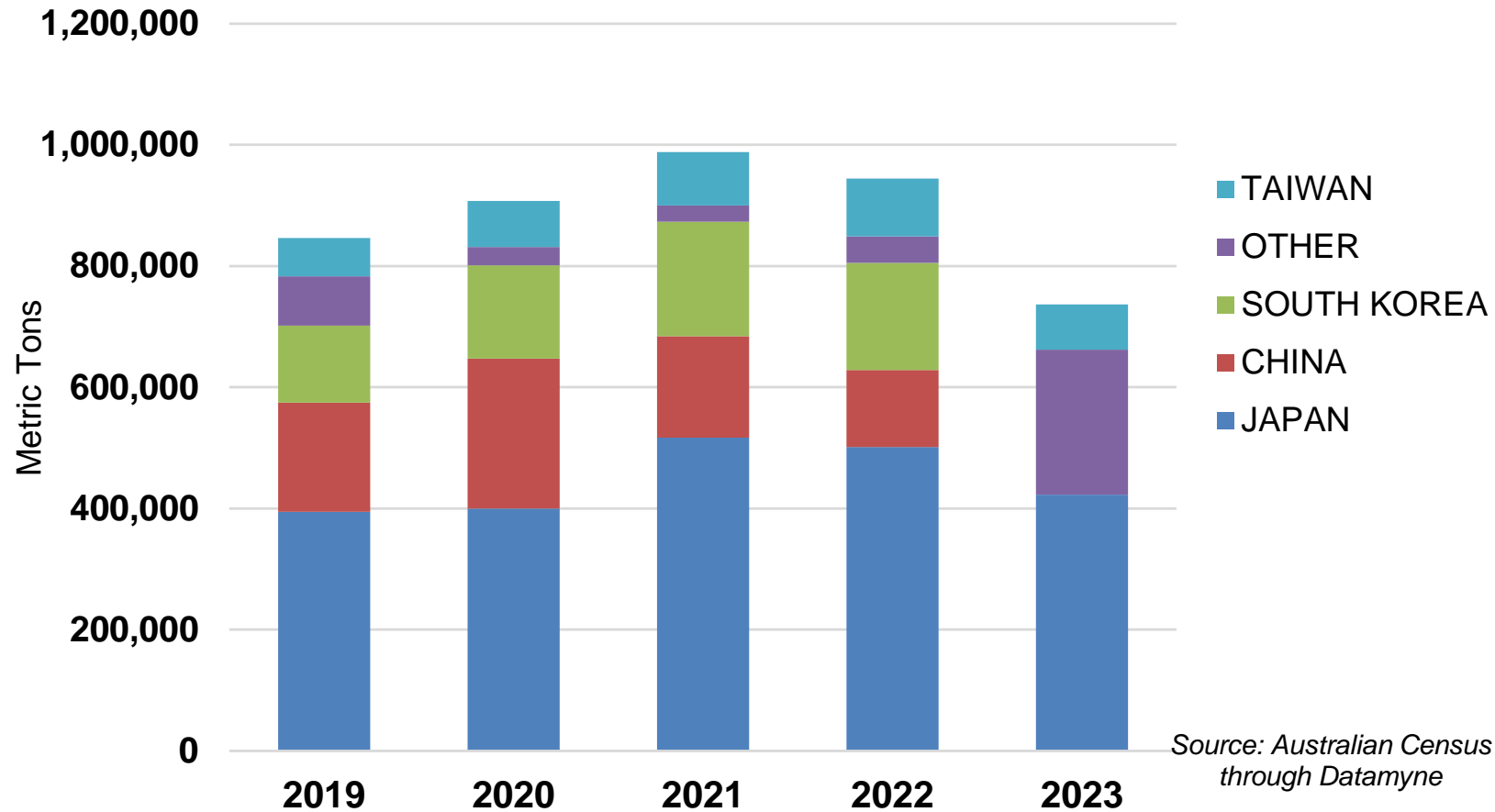
Canadian All Hay Exports Q1-Q3 by Year In Metric Tons

Country	2021	2022	2023	% Change From Q1-Q3 2023	
USA	187,093	180,235	246,325	↑	37%
JAPAN	165,787	240,594	202,070	↓	-16%
SOUTH KOREA	53,443	82,575	47,078	↓	-43%
CHINA	41,341	9,467	6,671	↓	-30%
TAIWAN	1,263	1,895	3,621	↑	91%
UAE	5,036	5,543	6,544	↑	18%
OTHER	5,117	12,522	12,026	↘	-4%
Total	459,080	532,831	524,335	↘	-2%

All-Hay Exports from Canada to Florida by Year

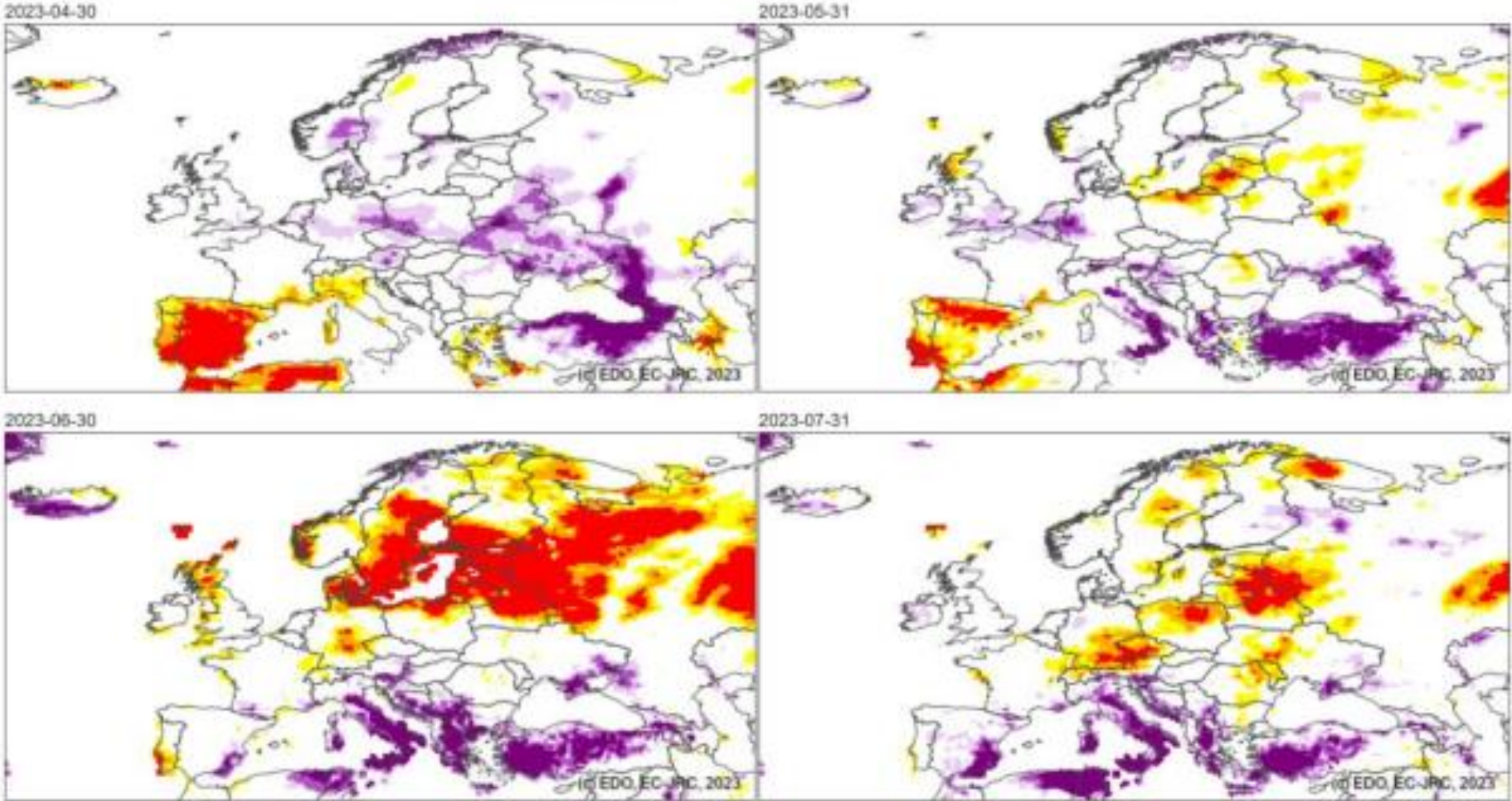


Australian All-Hay and Straw Exports First Nine Months of each Year



Source: Australian Census
through Datamyne

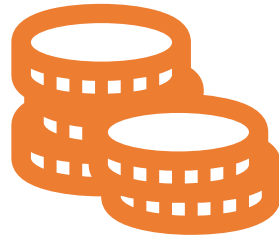
Drought Monitor for Europe



Outlook for
23/24



Two Key
Elements
for good
demand

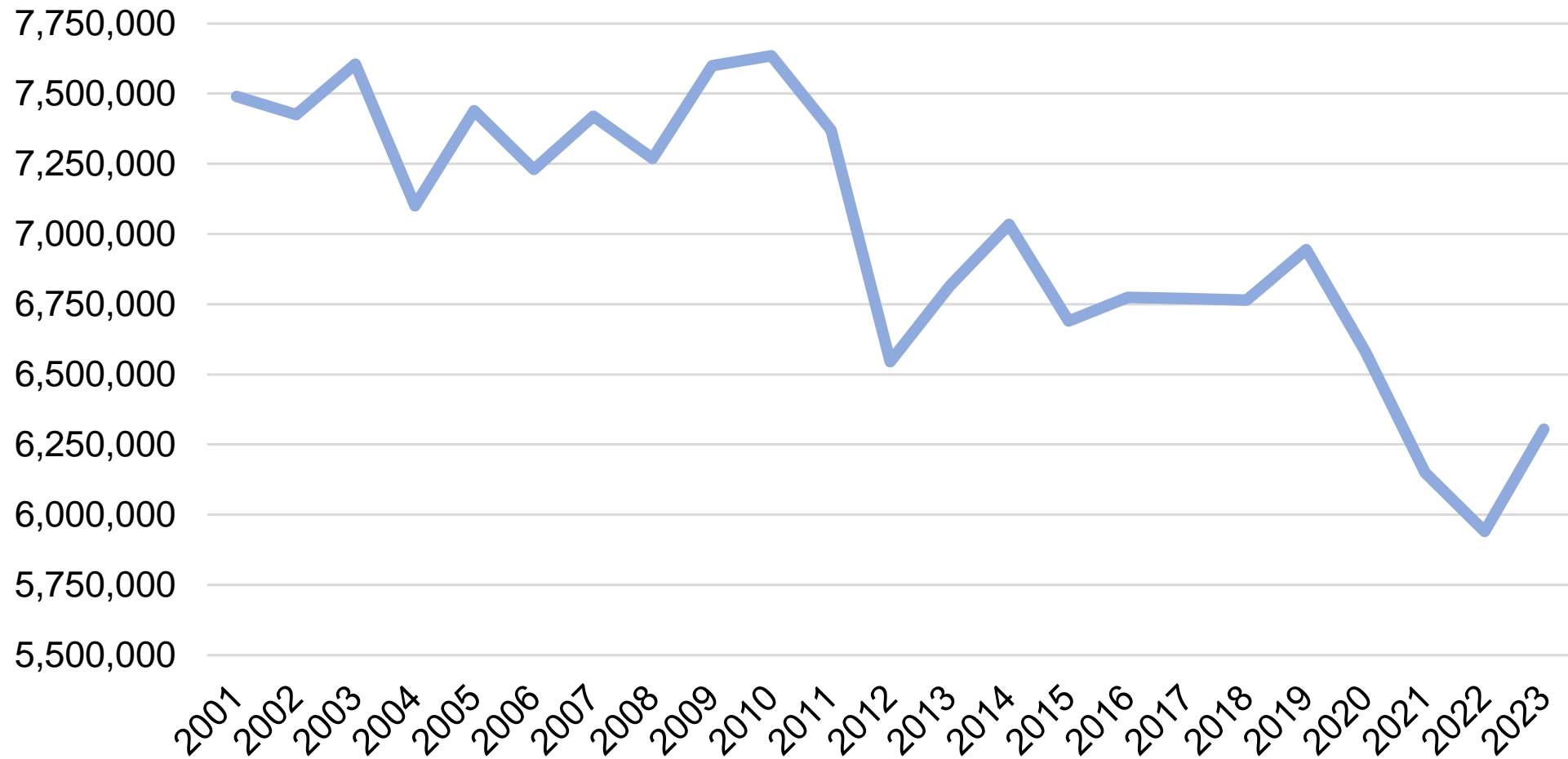


Milk prices need to
Improve. Not just in the
U.S., Globally.



How Does the 2023
Winter Go? How much
carryover gets used.

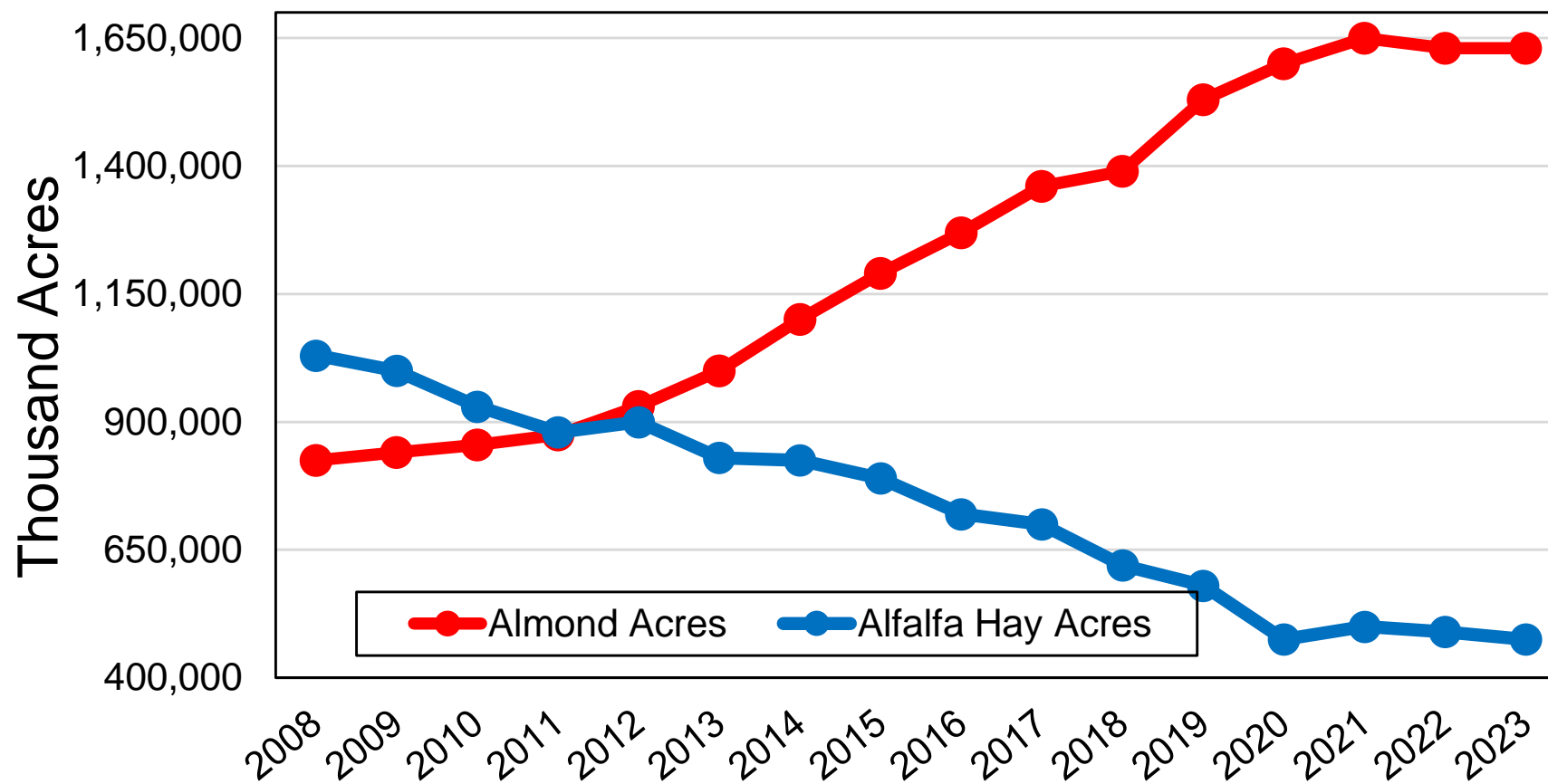
Alfalfa Hay Acres in the 11 Western States



Source: USDA/NASS

— Acres

Alfalfa Hay Acres Vs Almonds in California 2008 to 2023



Source: USDA/NASS Note: 2023 Non-Bearing & Alfalfa Acres Estimated

Impacts on Alfalfa Hay Prices



Utilization of alfalfa hay in rations has increased



Impact of water agreements on the Colorado River



Will the El Nino winter happen?



Falling prices for other crops.

Will Global
Milk Prices
Improve?

Supplies of Lower Grades are Burdensome

May be some upside to Premium or better Alfalfa

Beef prices have set records but there is plenty of grass

Water Outlook has improved in the West and Europe.

Hay Exports



Will China's economy recover, will the U.S. Dollar continue to come down?



How will losses on timothy impact overall demand?



Strong competition among exporting countries?



THE HOYT REPORT

HAY MARKET INSIGHTS & ANALYSIS

Thank You!