

**NDSU**

EXTENSION

EXTENDING KNOWLEDGE >> CHANGING LIVES



# Cattle Situation and Outlook



Tim Petry, Livestock Marketing Economist

[www.ndsu.edu/livestockeconomics](http://www.ndsu.edu/livestockeconomics)

May 2021

Agribusiness and  
Applied Economics

Outlook 5-12-2021.pptx

# Livestock Fundamental Highlights



Record beef, pork, chicken, total meat production in 2020, 21

Prices for fed cattle higher than last year- **COVID-19**

Calf prices higher than 2020-less supply/increasing corn prices

Good demand for feeder cattle

Cow prices higher- large beef cow slaughter



Hog prices up-ASF/chicken prices strengthening



Beef cow herd expansion peaked in 2018, declined in 2019, 20, **21?**

Smaller calf crop supportive to prices, but **drought** and **corn?**

Beef demand??



US economy-**COVID-19**, unemployment, stimulus?



Record beef and pork exports supportive but??



Volatile prices-**COVID-19**, corn, weather, and economic uncertainty??



# World Agricultural Supply and Demand Estimates

## U.S Meat Production and Prices

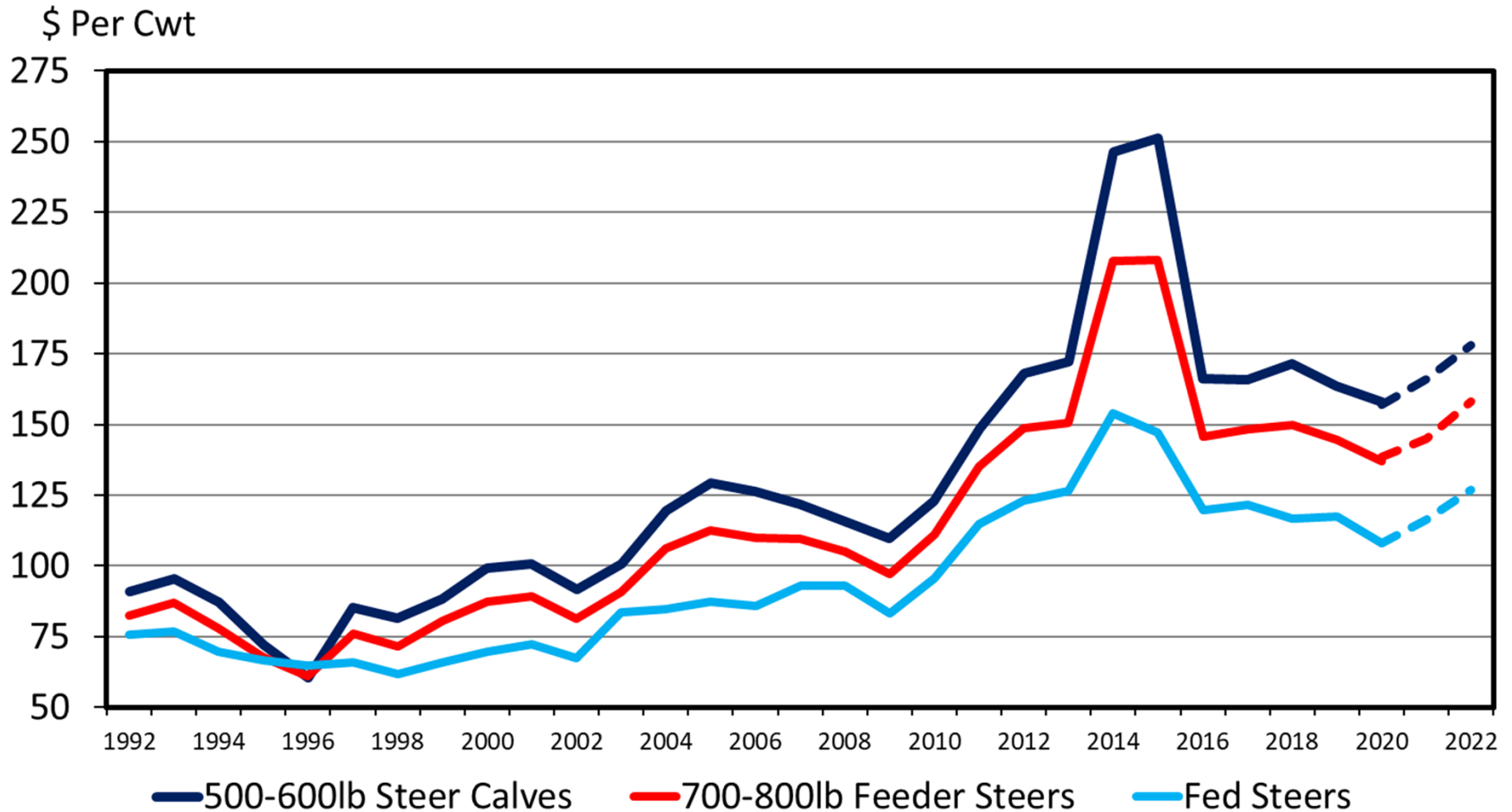
	2014	2015	2016 - 2018	2019	2020	2021 Forecast	2022 Forecast
<b>Production</b>	<i>Billion Pounds</i>		<i>Billion Pounds</i>		<i>Billion Pounds</i>		
Beef	24.25	23.70	26.87	27.15	27.15	27.90	27.34
Pork	22.84	24.50	26.31	27.64	28.30	28.22	28.55
Broilers	38.55	40.05	42.60	43.91	44.58	44.77	45.30
Turkey	5.76	5.63	5.88	5.82	5.74	5.63	5.69
<b>Total meat</b>	92.17	94.63	102.43	105.26	106.53	107.25	107.62
<b>Prices</b>	<i>Dollars/cwt</i>		<i>Dollars/cwt</i>		<i>Dollars/cwt</i>		
Steers	154.56	148.12	117.12	116.78	108.51	116.25	121.50
Hogs	76.03	50.23	45.93	47.95	43.18	67.18	55.75
	<i>Cents/lb.</i>				<i>Cents/lb.</i>		
Broilers	104.9	90.5	97.8	88.6	73.20	92.7	92.50
Turkey	107.6	116.2	80.2	89.2	106.5	114	115.5

 record high

May 12, 2021

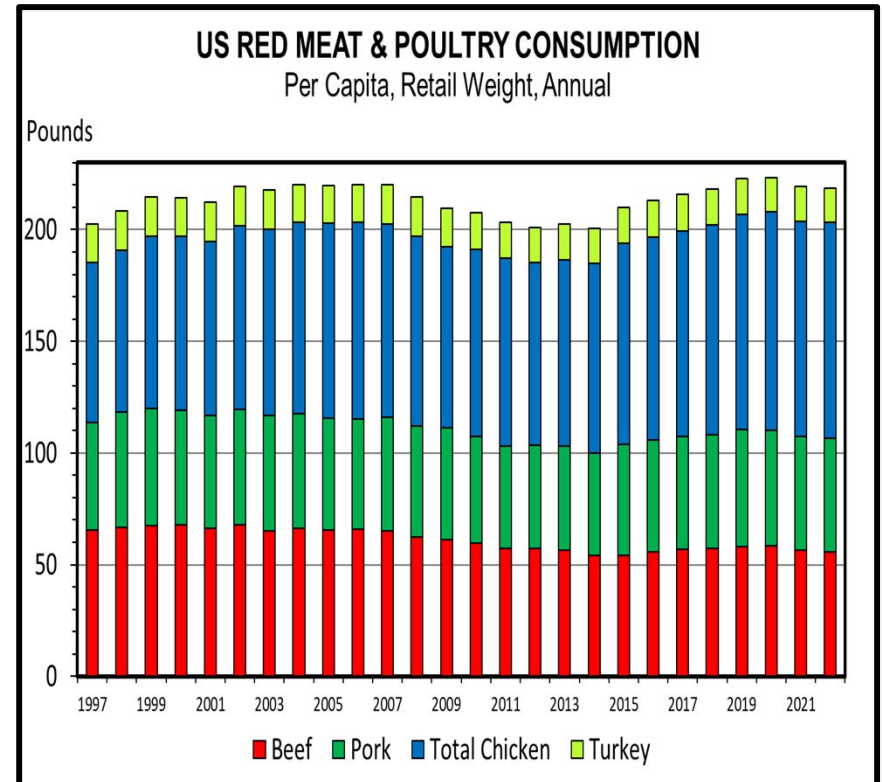
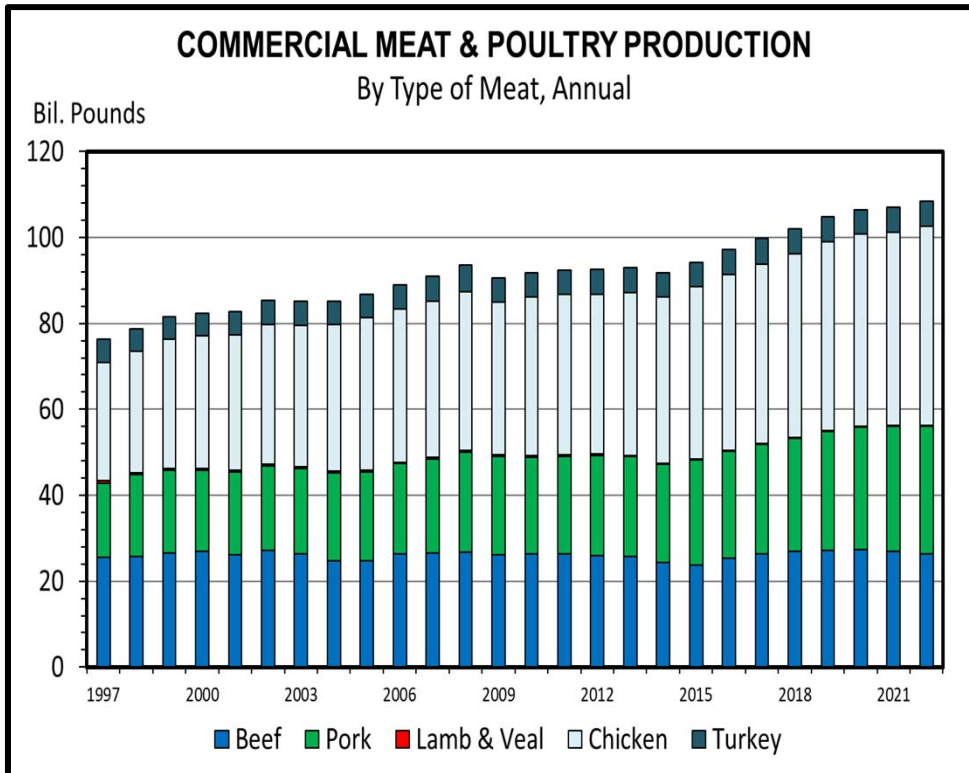
# U.S. CATTLE PRICE CYCLE

## AVERAGE ANNUAL CATTLE PRICES



Data Source: USDA-AMS Forecasts by LMIC

# Mountains of Meat



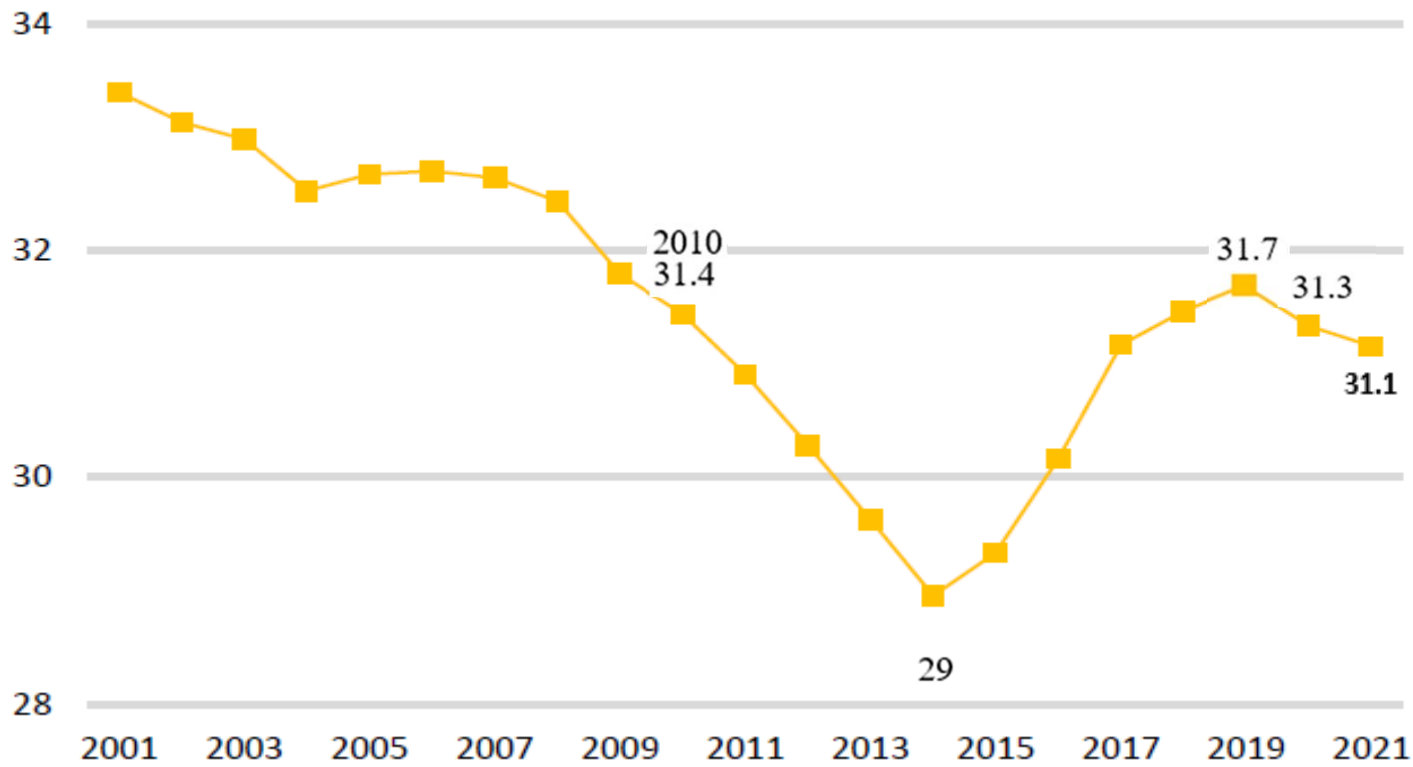
Data Source: USDA/NASS, Livestock Marketing Information Center



# United States Department of Agriculture National Agricultural Statistics Service

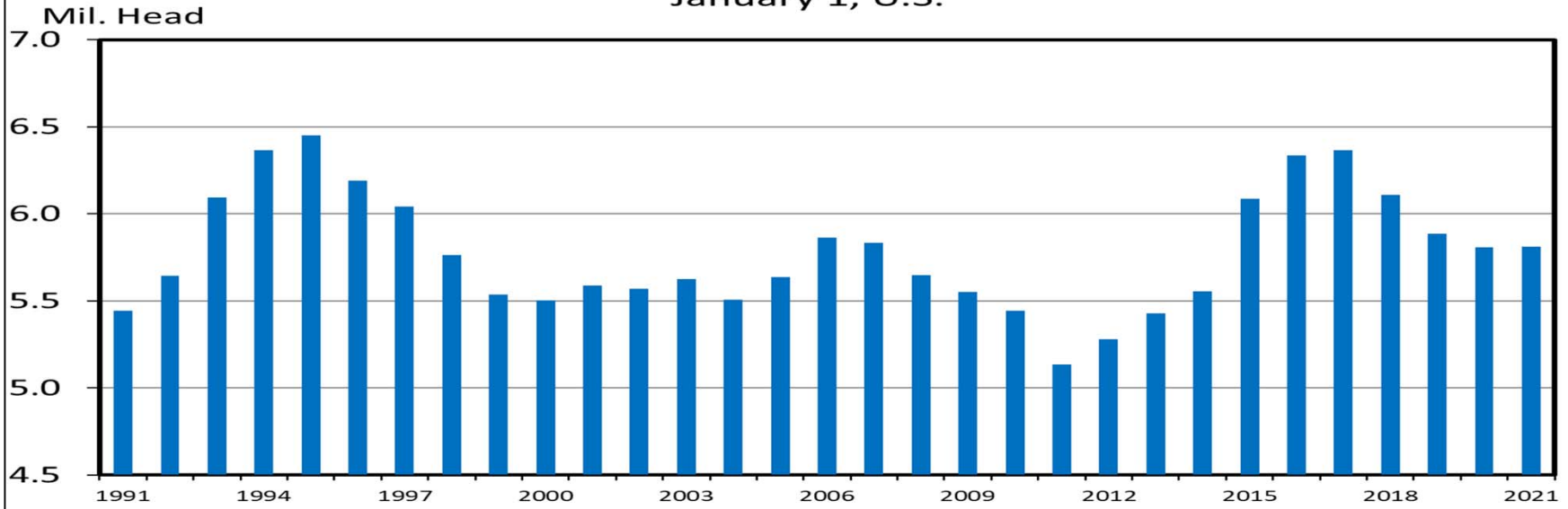
## January 1 Beef Cows United States

Million head



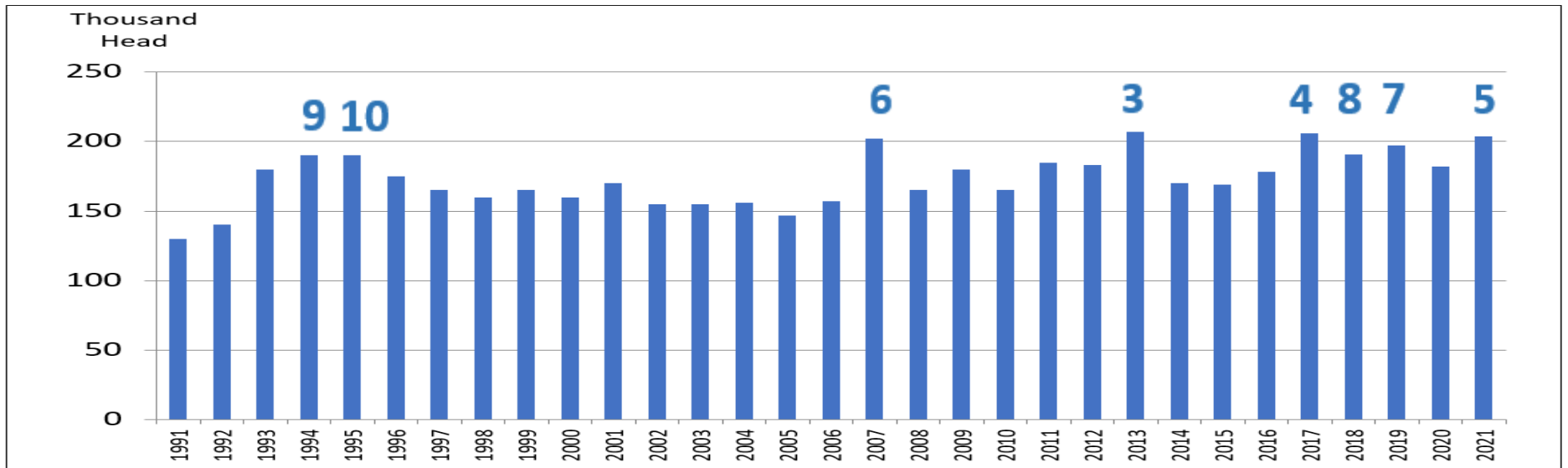
## HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, U.S.



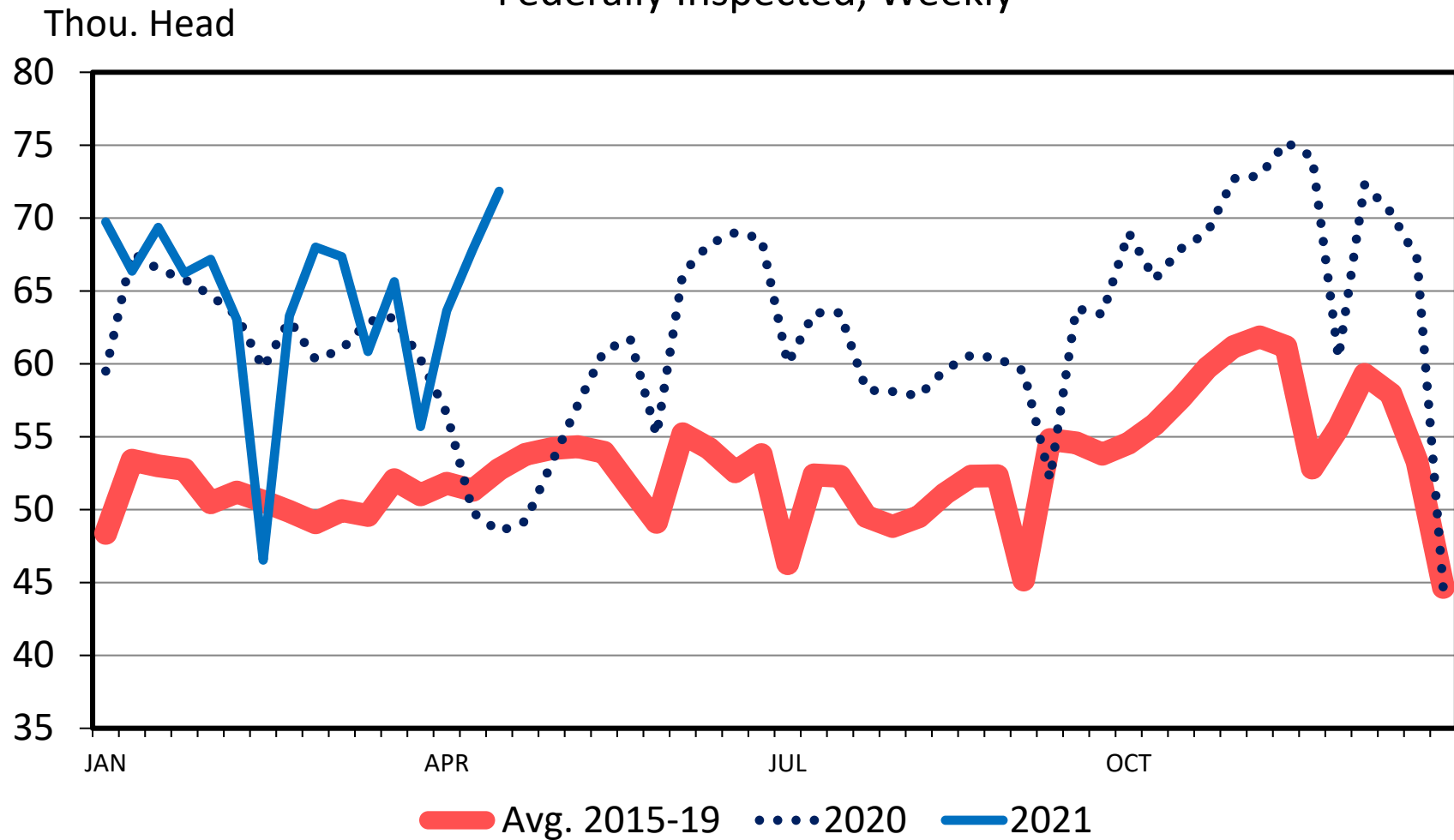
## HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, ND



# BEEF COW SLAUGHTER

Federally Inspected, Weekly



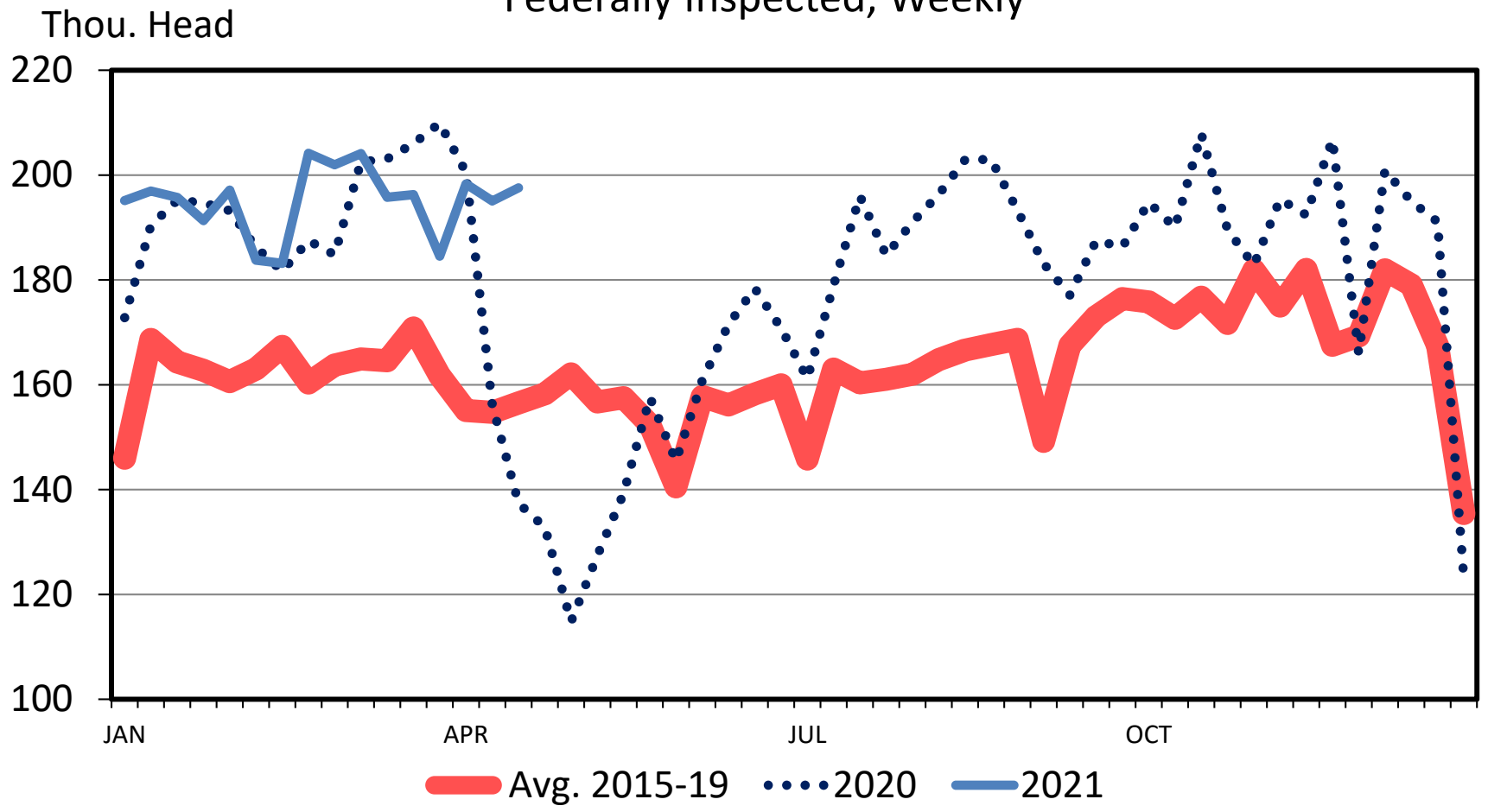
Data Source: USDA-AMS & USDA-NASS

Livestock Marketing Information Center



# HEIFER SLAUGHTER

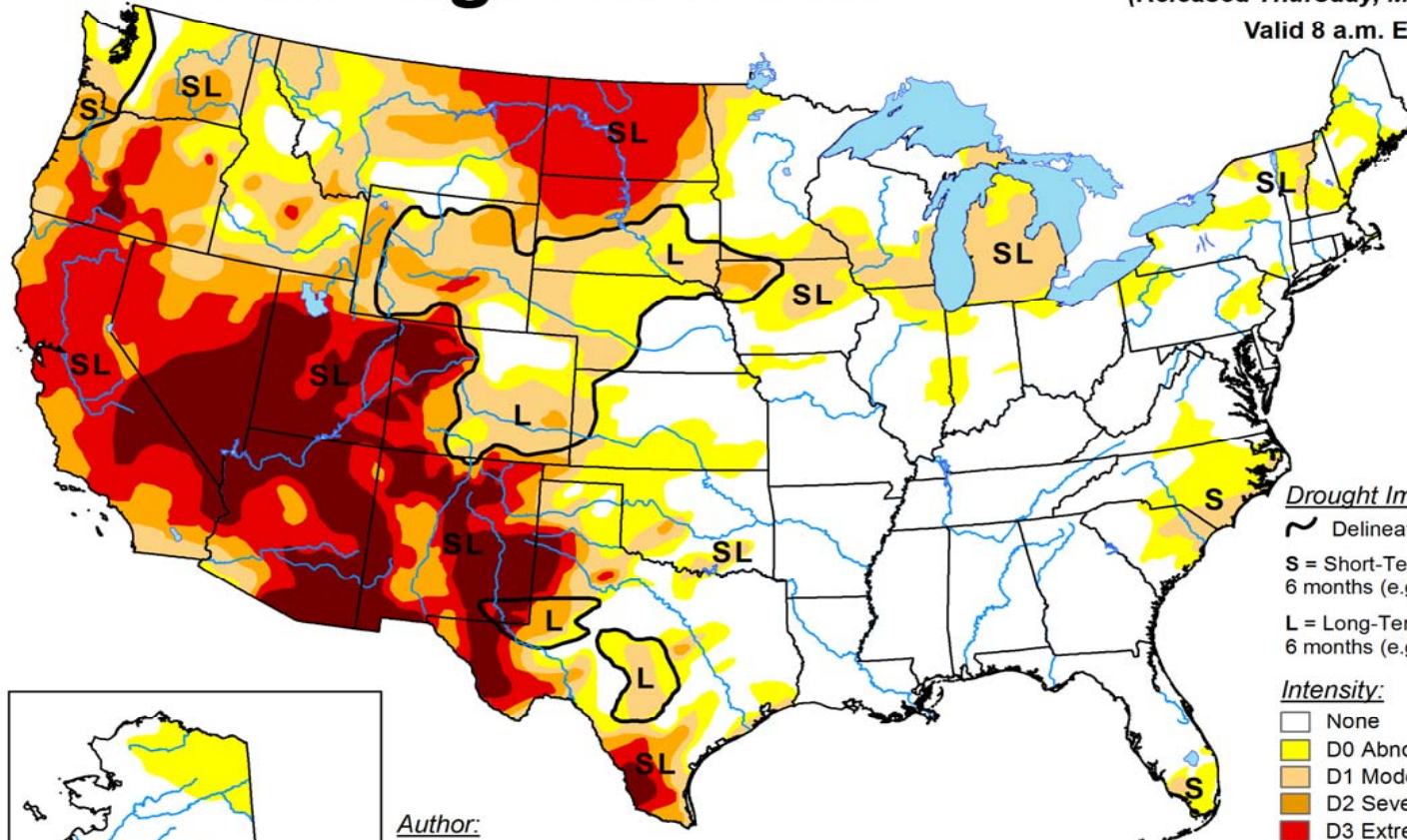
Federally Inspected, Weekly



Data Source: USDA-AMS & USDA-NASS  
Livestock Marketing Information Center

# U.S. Drought Monitor

May 11, 2021  
 (Released Thursday, May. 13, 2021)  
 Valid 8 a.m. EDT

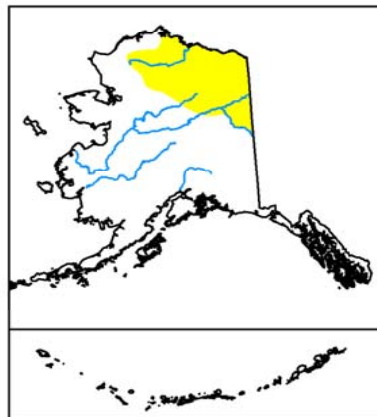


Drought Impact Types:

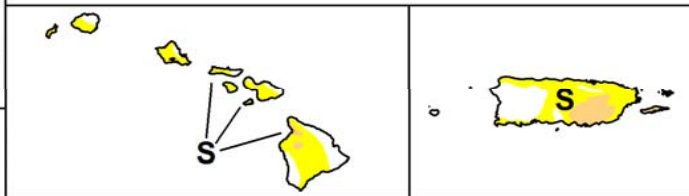
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



Author:  
 David Simeral  
 Western Regional Climate Center



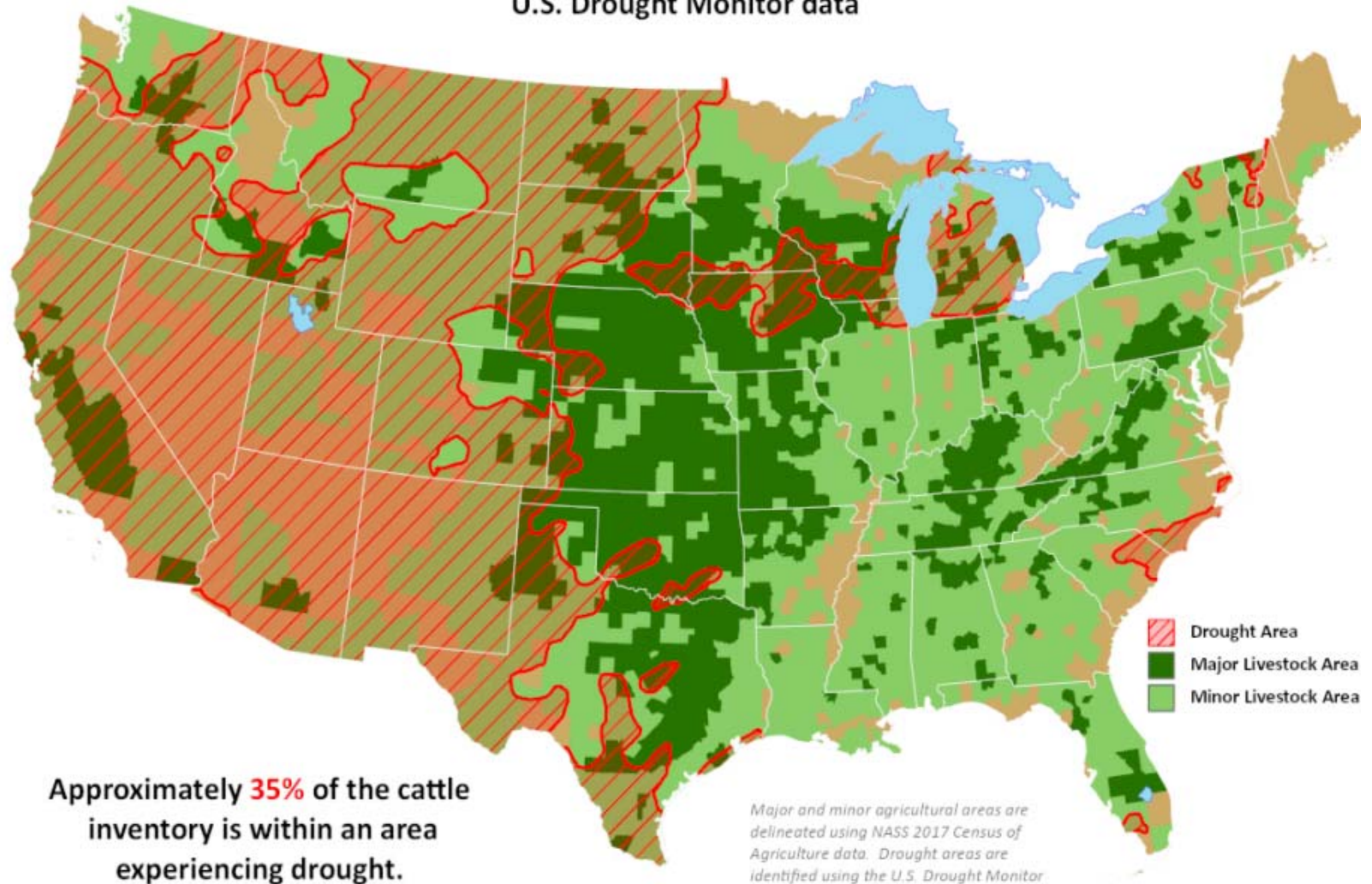
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

## ***Cattle Areas in Drought***

Reflects **May 11, 2021**  
U.S. Drought Monitor data

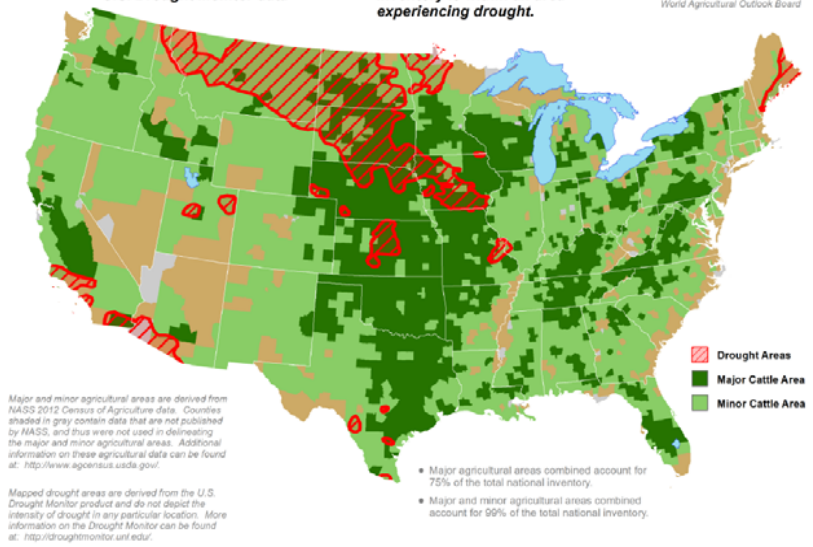


## U.S. Cattle Areas Experiencing Drought

Reflects **August 15, 2017**  
U.S. Drought Monitor data

Approximately **13%** of cattle inventory is within an area experiencing drought.

**USDA** United States Department of Agriculture  
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board

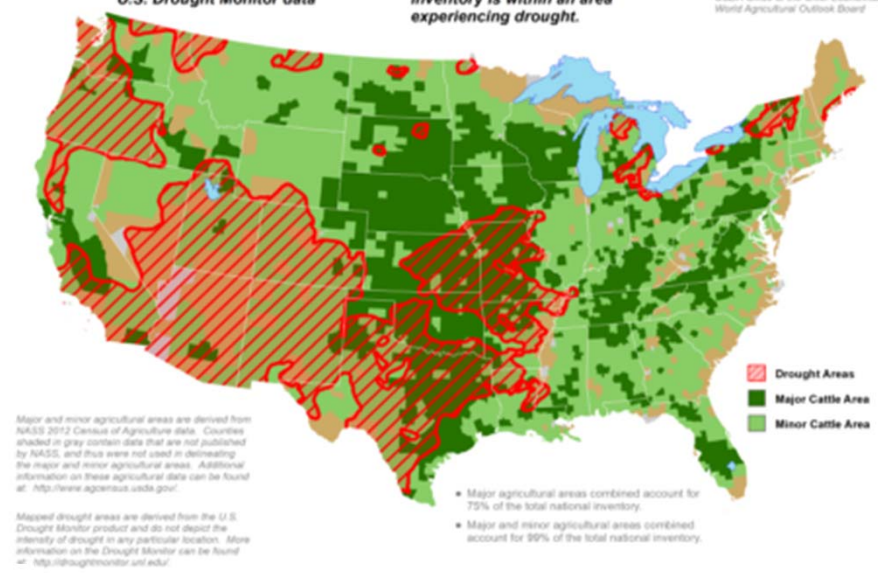


## U.S. Cattle Areas Experiencing Drought

Reflects **August 7, 2018**  
U.S. Drought Monitor data

Approximately **30%** of cattle inventory is within an area experiencing drought.

**USDA** United States Department of Agriculture  
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board

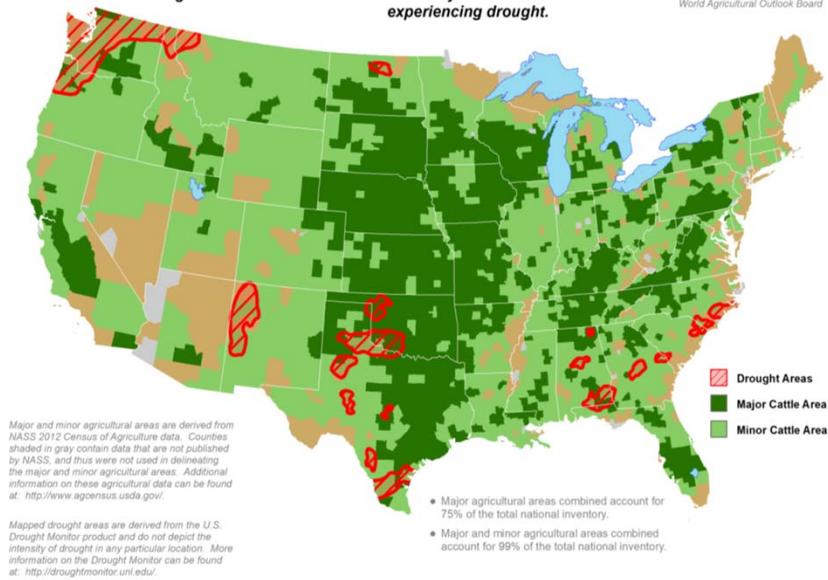


## U.S. Cattle Areas Experiencing Drought

Reflects **August 6, 2019**  
U.S. Drought Monitor data

Approximately **2%** of cattle inventory is within an area experiencing drought.

**USDA** United States Department of Agriculture  
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board

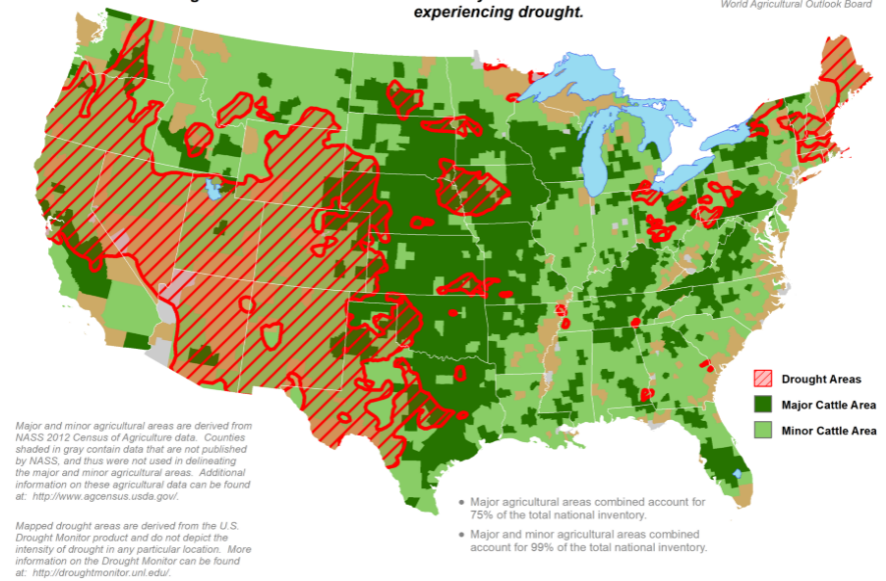


## U.S. Cattle Areas Experiencing Drought

Reflects **August 11, 2020**  
U.S. Drought Monitor data

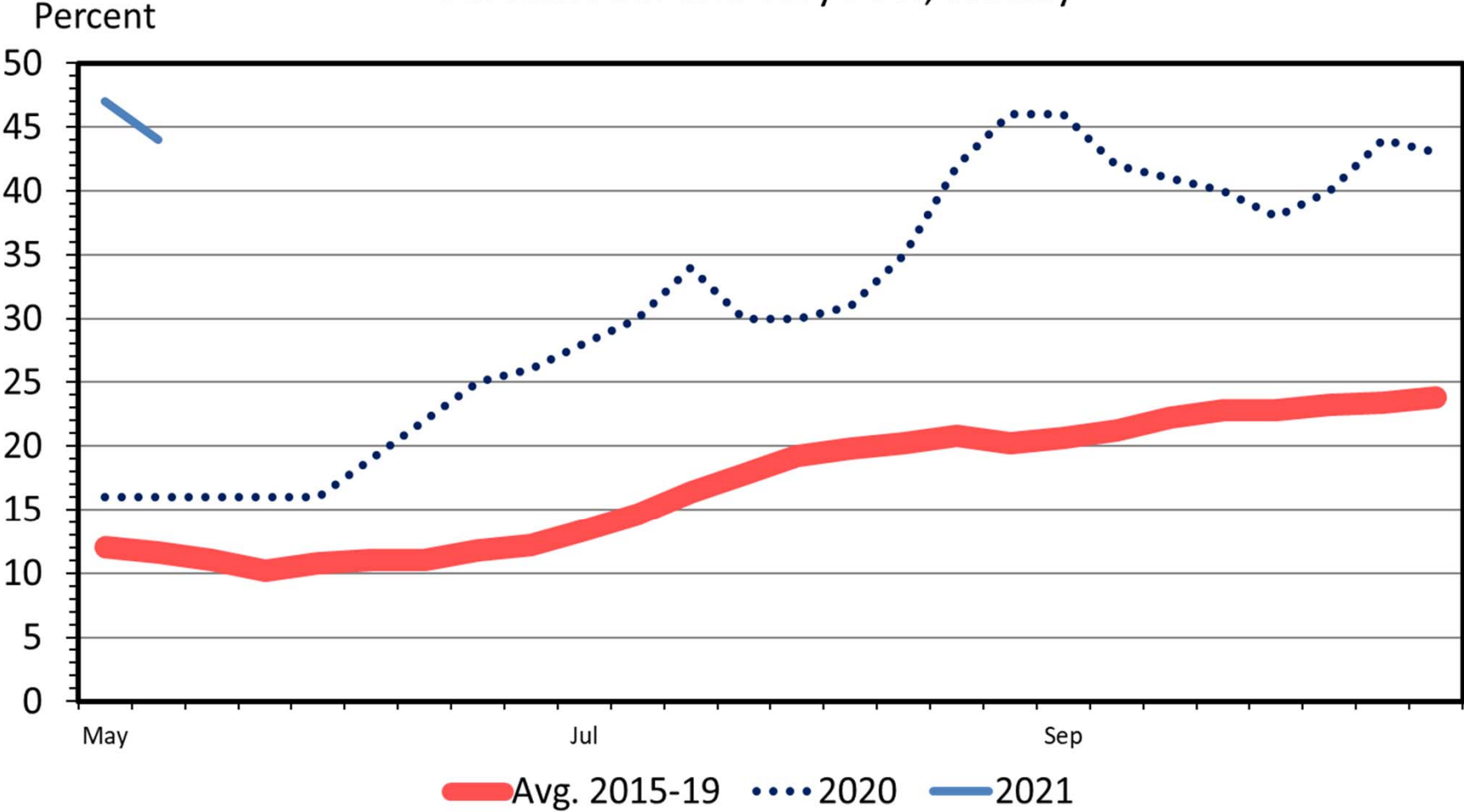
Approximately **27%** of cattle inventory is within an area experiencing drought.

**USDA** United States Department of Agriculture  
This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



# US RANGE AND PASTURE CONDITION

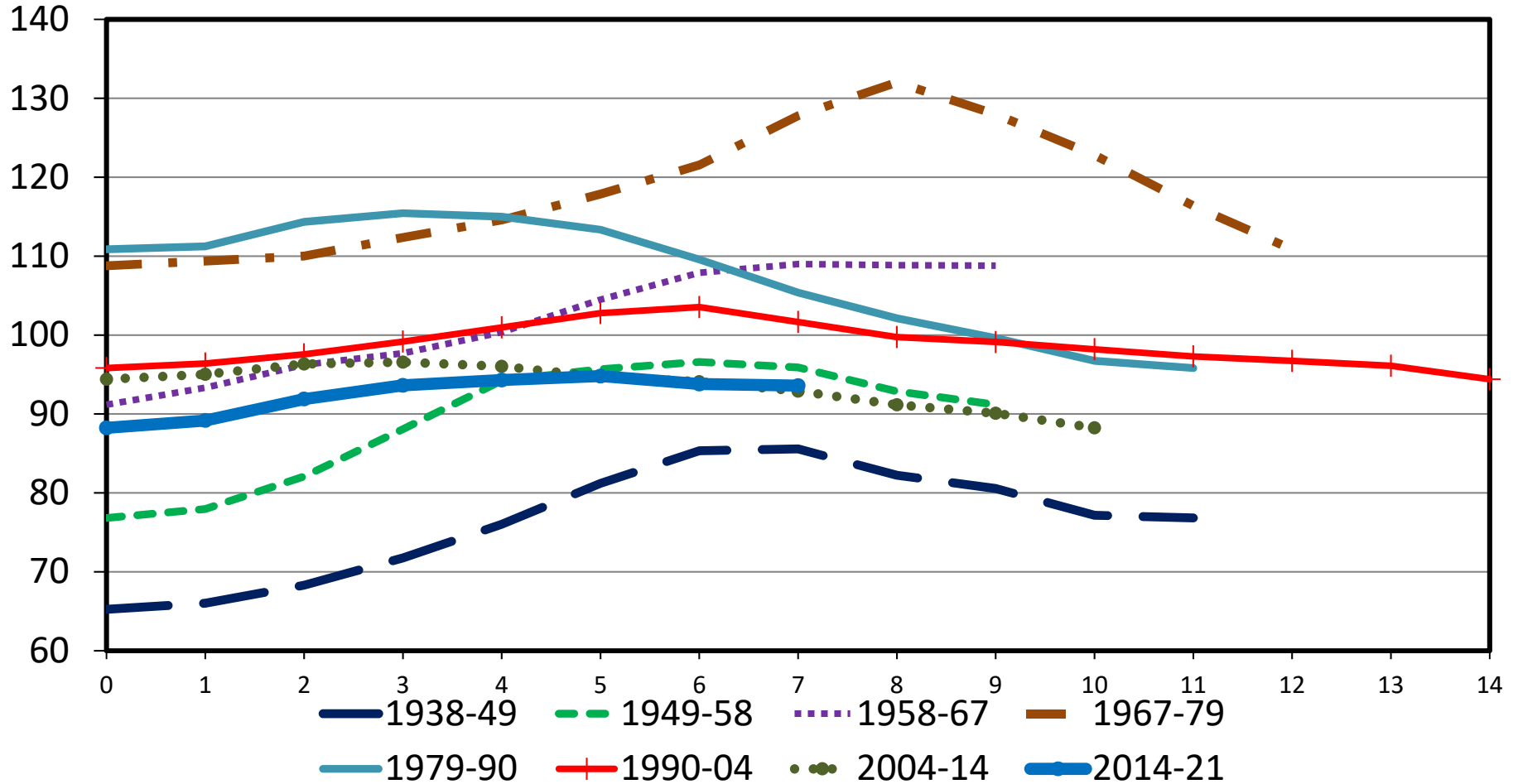
Percent Poor and Very Poor, Weekly



# TOTAL CATTLE INVENTORY BY CYCLE

U.S., January 1

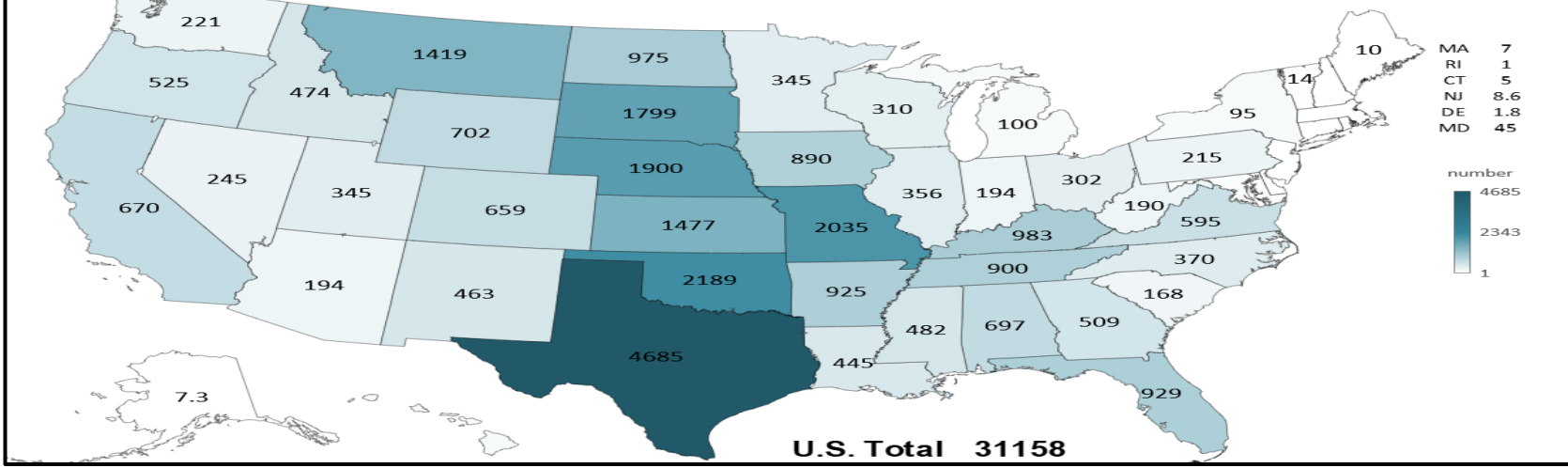
Mil. Head



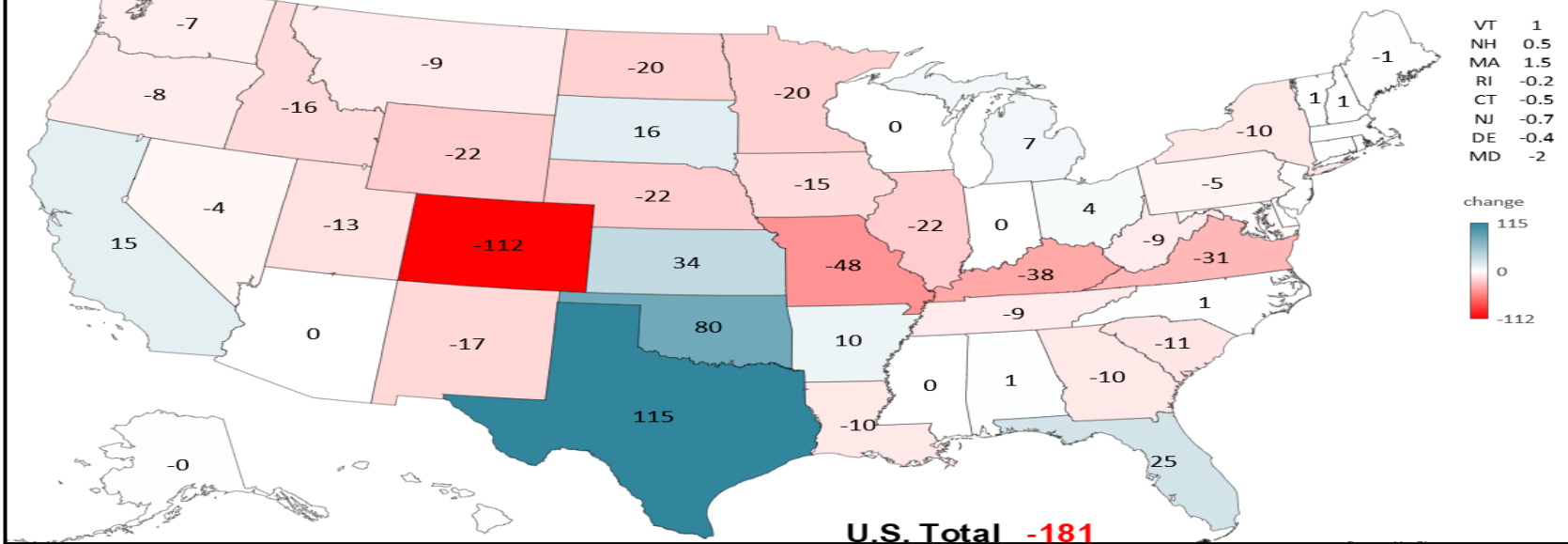
Data Source: USDA-NASS

Livestock Marketing Information Center

### BEEF COWS THAT CALVED JANUARY 1, 2021 (1000 Head)

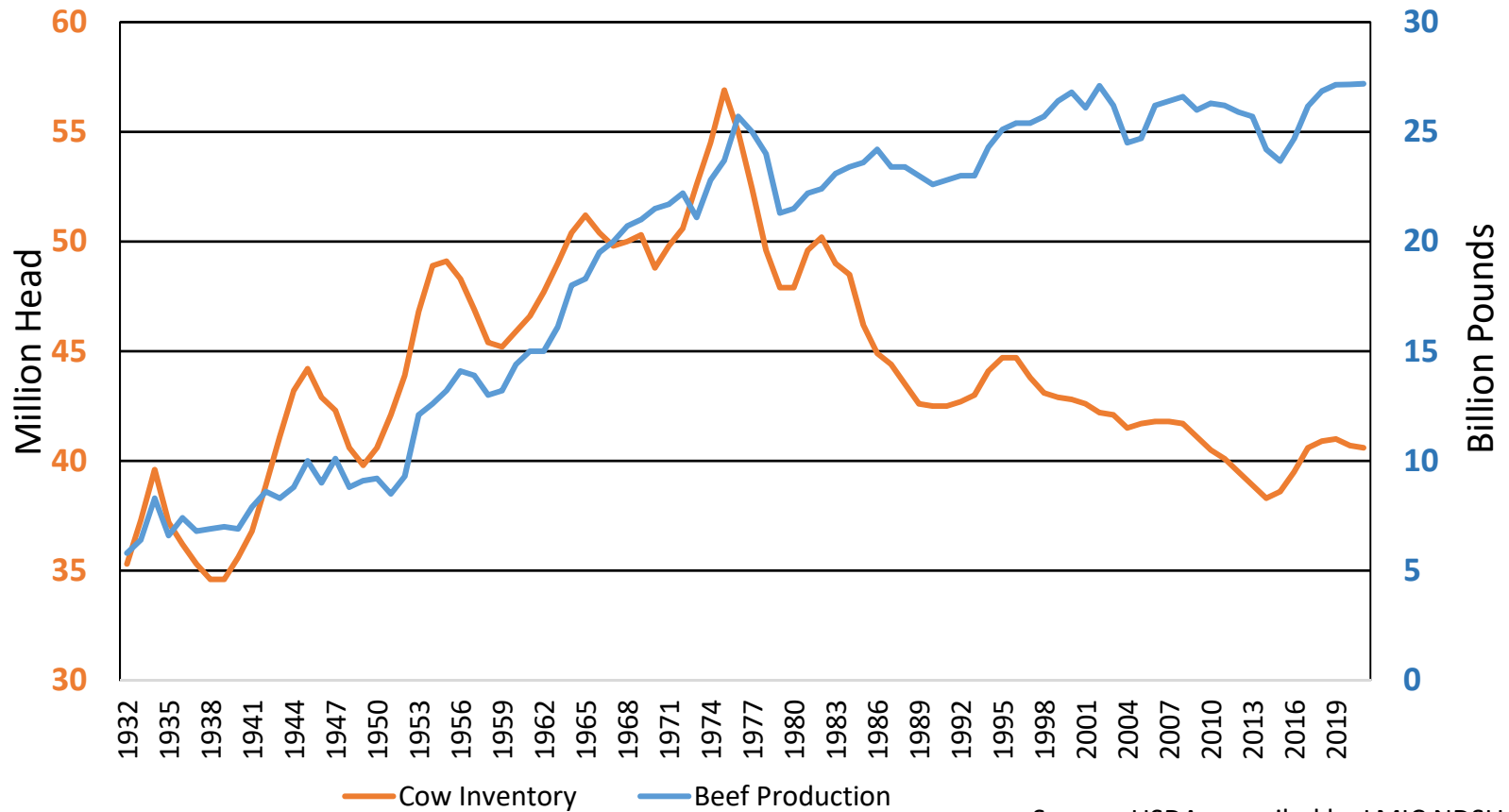


### CHANGE IN BEEF COWS 2020 TO 2021 (1000 Head)



# How much expansion is needed?

## Cow Inventory and Beef Production



Source: USDA compiled by LMIC, NDSU

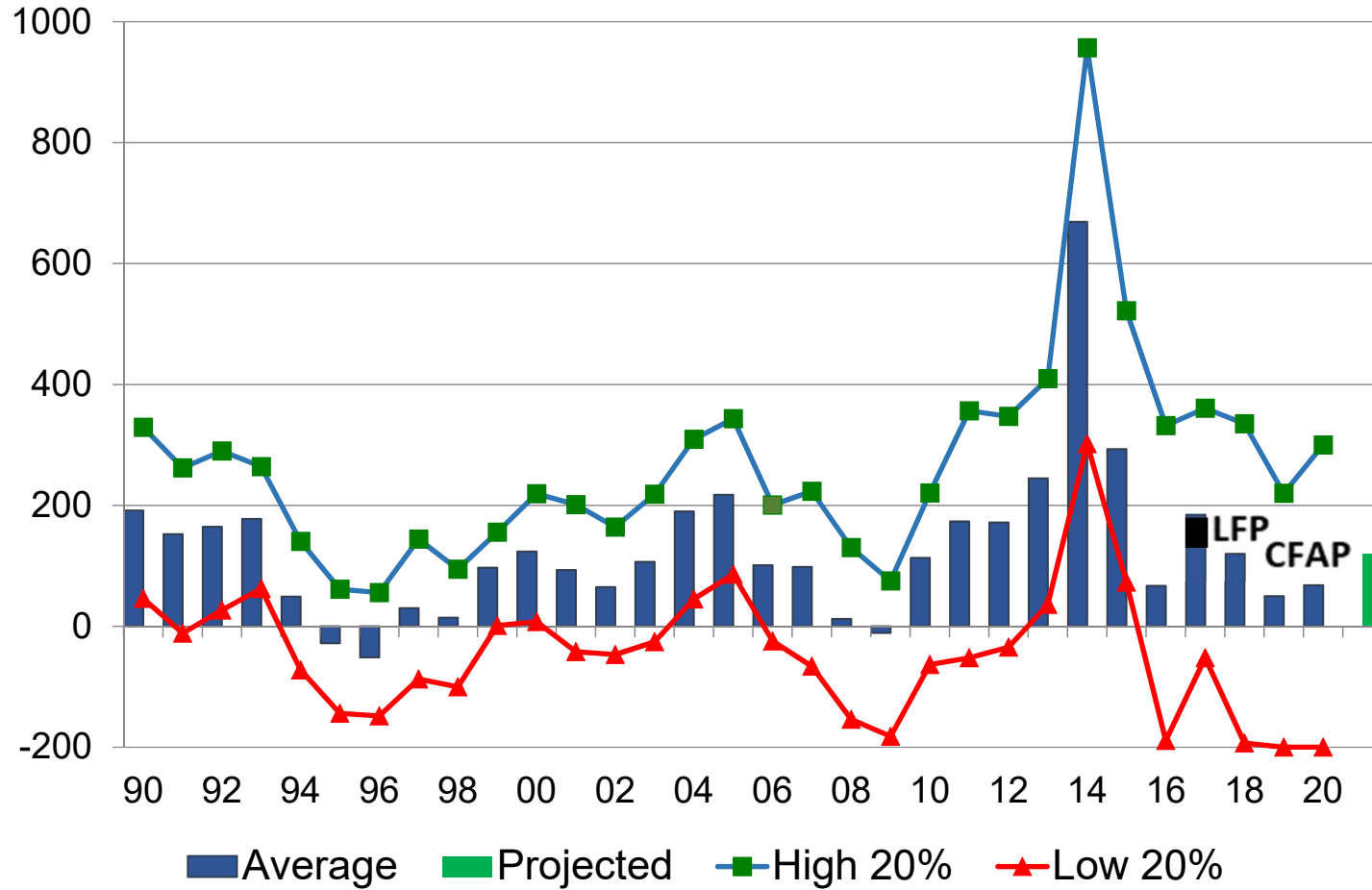
NDSU

EXTENSION



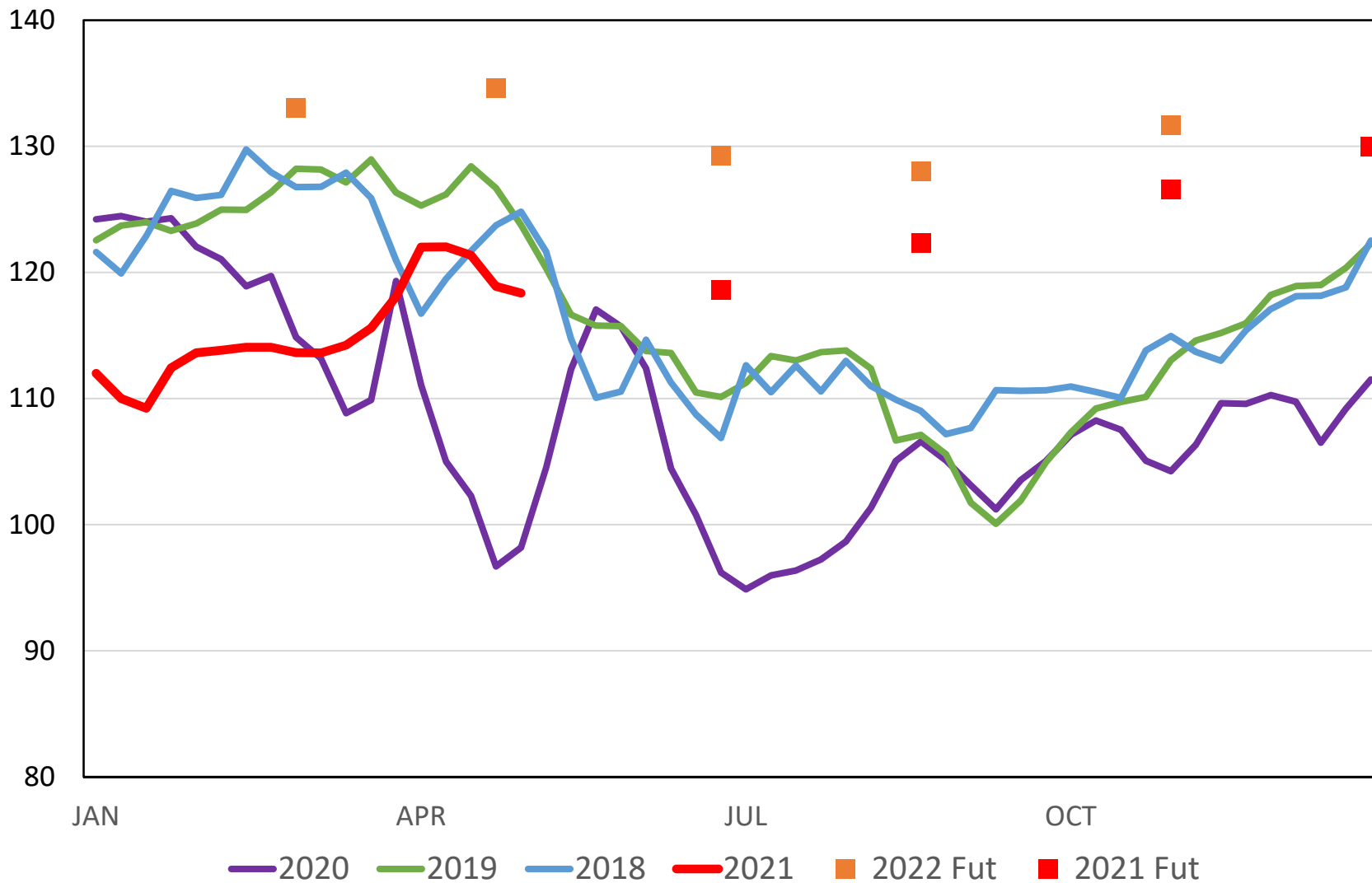
# Average Net Return to Labor and Management Per Beef Cow

## N.D. Farm Business Mgmt., Excluding Red River Valley

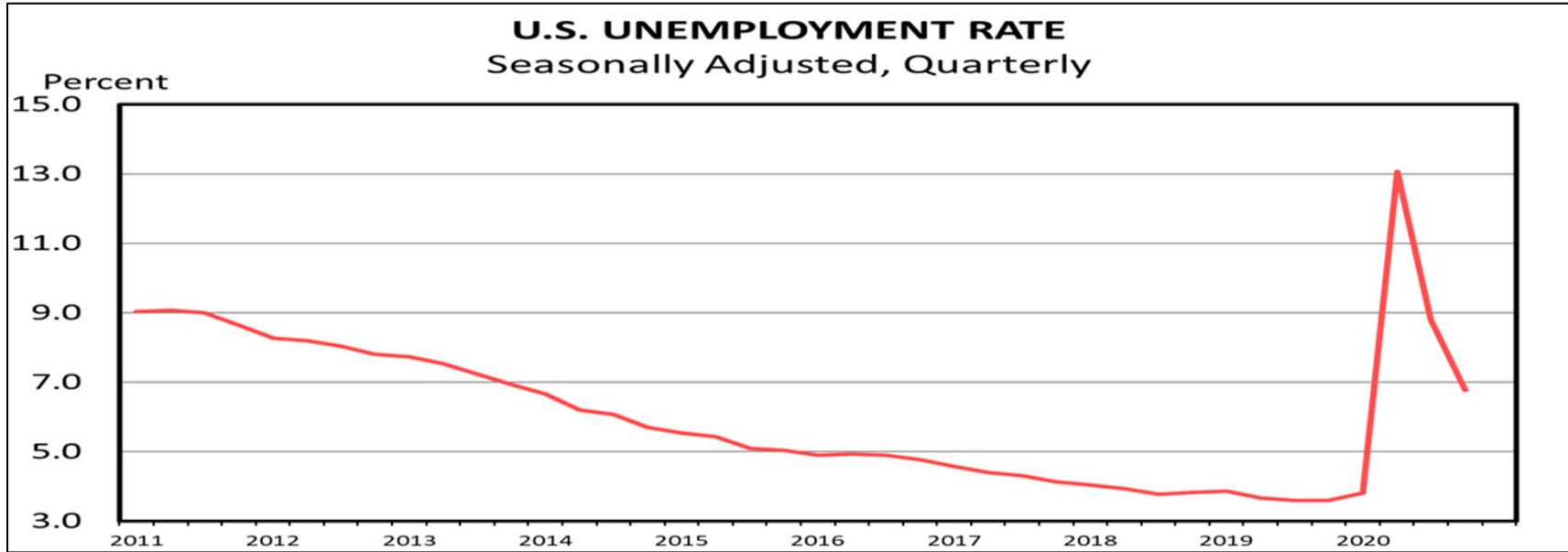


# SLAUGHTER STEER PRICES

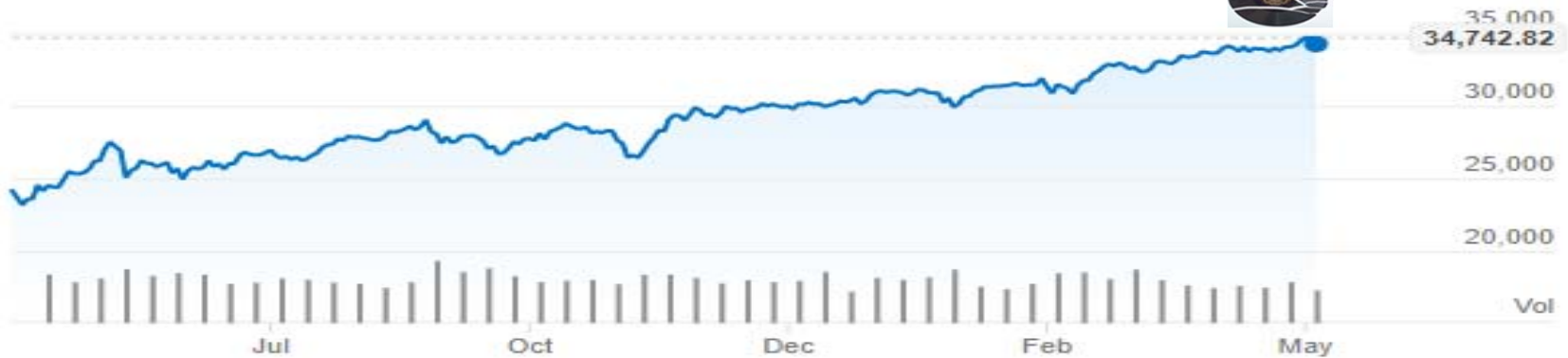
5 Market Weighted Average, Weekly



# US ECONOMY?



## Dow Jones Industrial Average

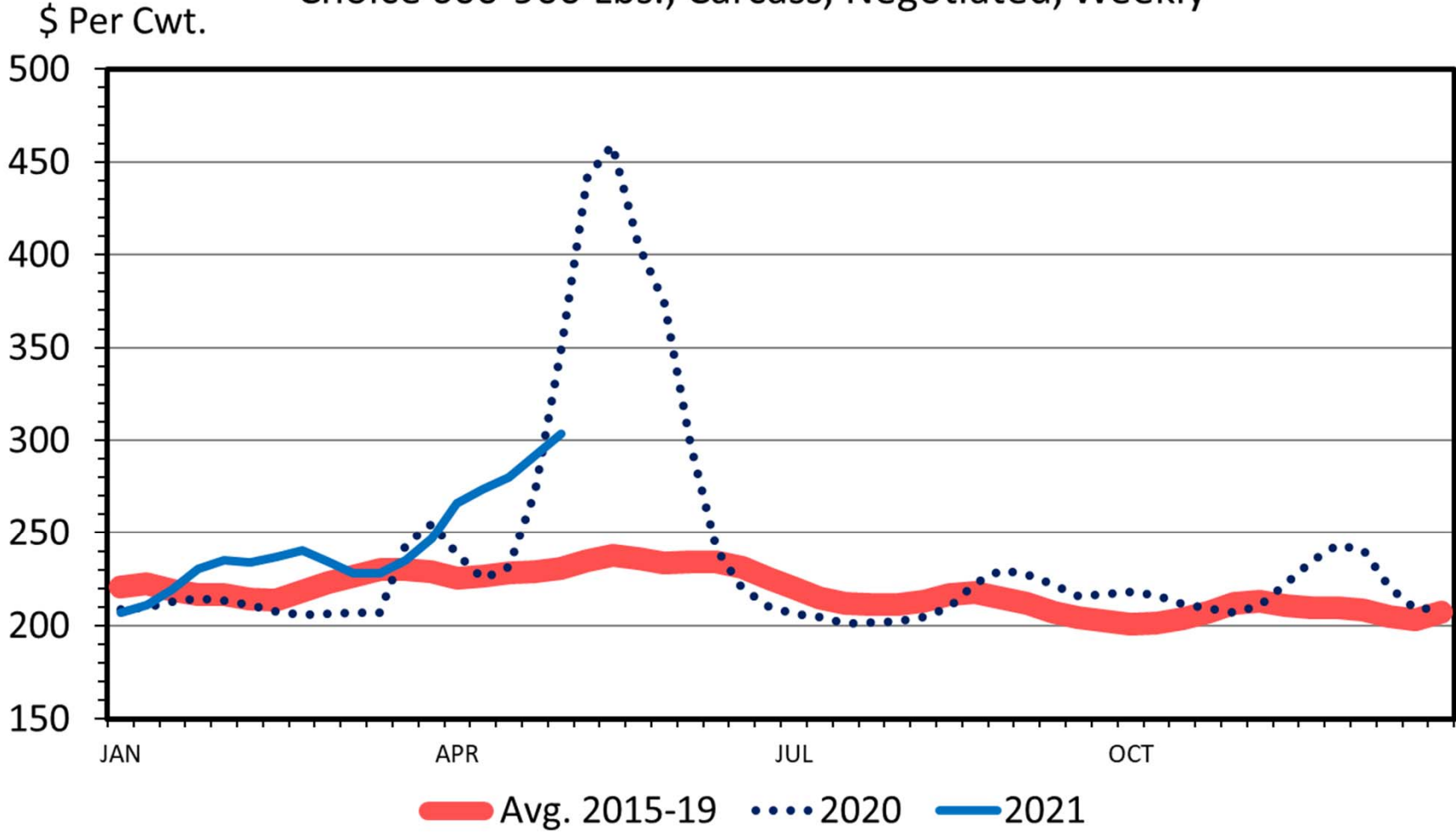


**High** 34777.76 on May 7, 2021

**Low** 23247.97 on May 13, 2020

# BOXED BEEF CUTOUT VALUE

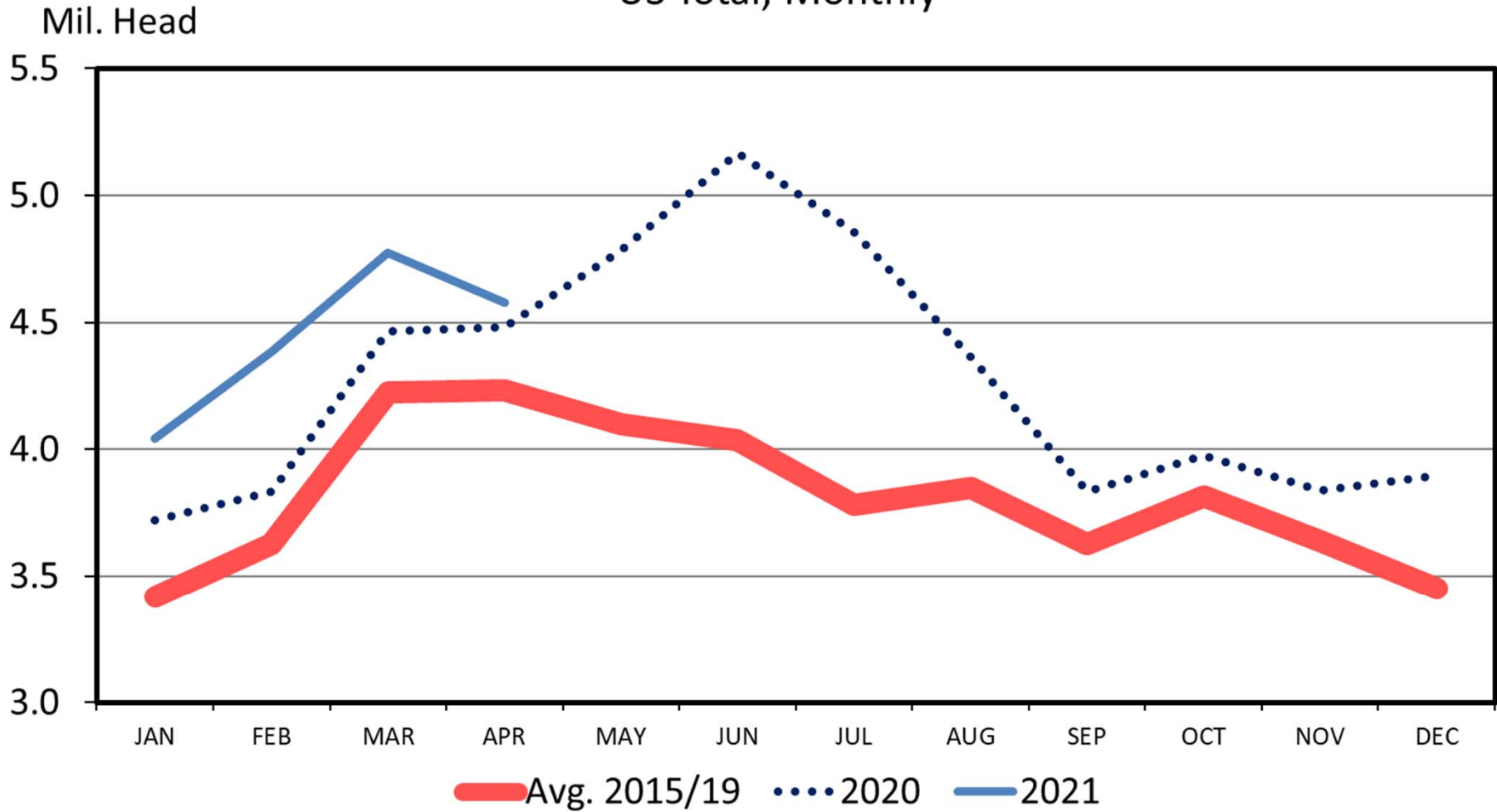
Choice 600-900 Lbs., Carcass, Negotiated, Weekly



USDA-AMS, Compiled & Analysis by LMIC

# CATTLE ON FEED OVER 120 DAYS

US Total, Monthly

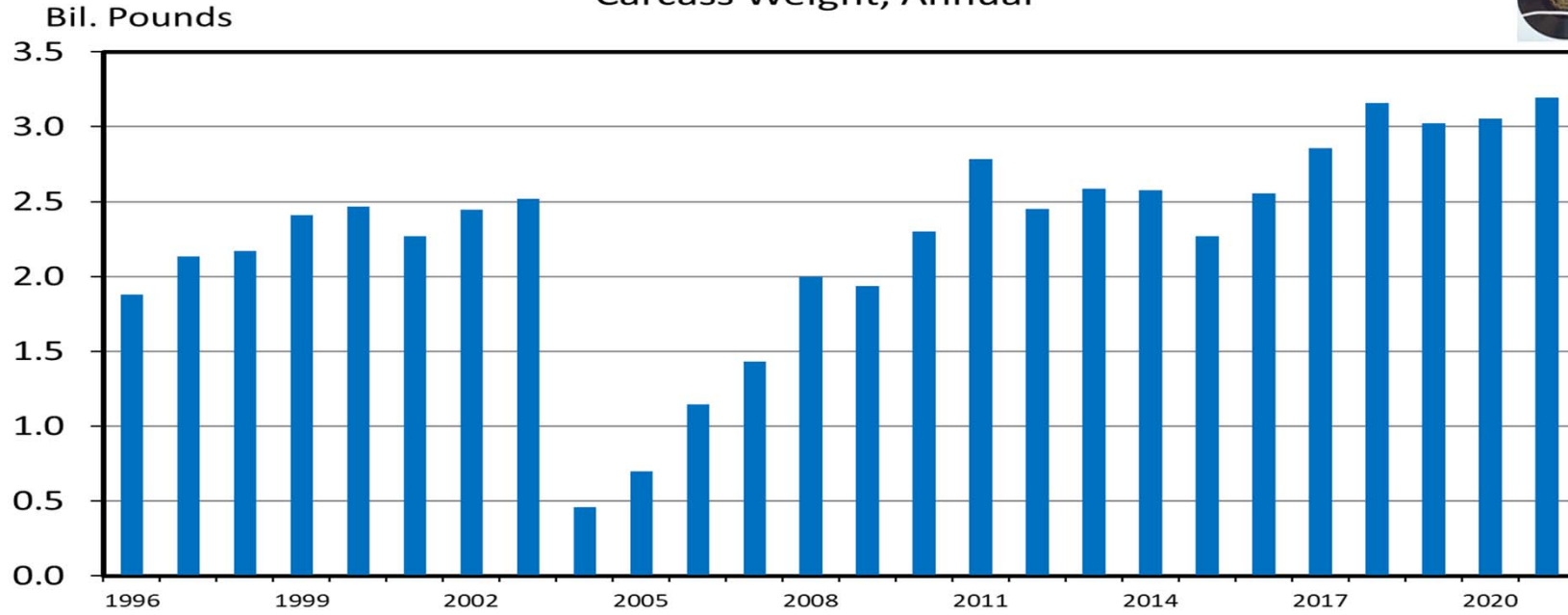


Data Source: USDA-NASS

Livestock Marketing Information Center

# U.S. BEEF AND VEAL EXPORTS

## Carcass Weight, Annual



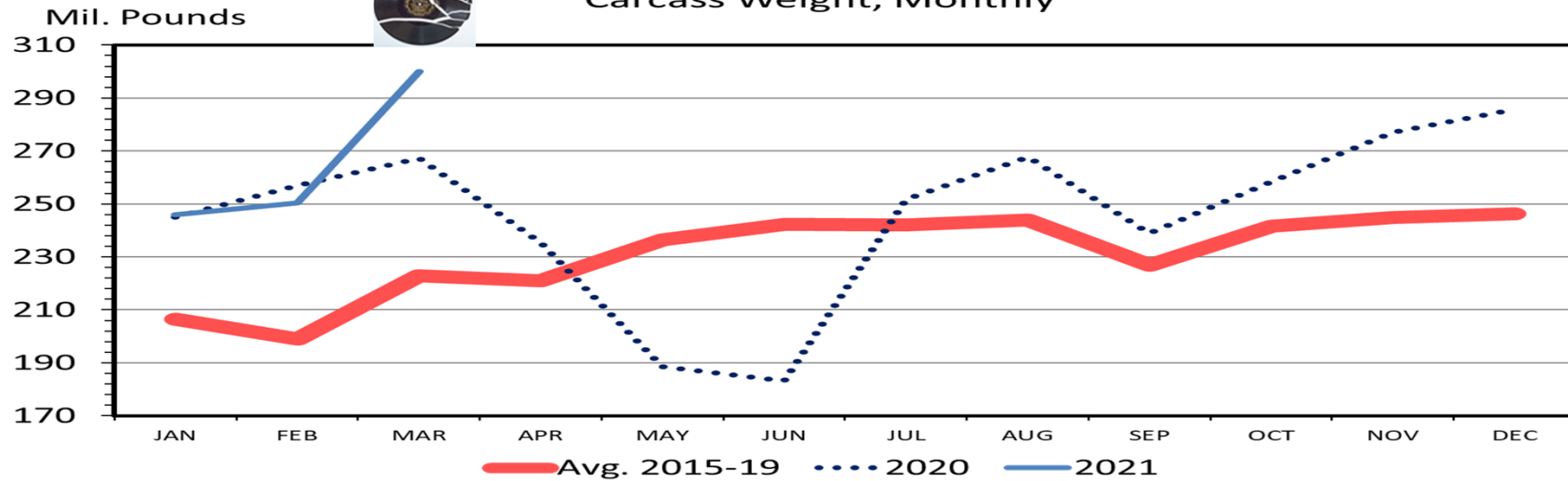
Data Source: USDA-ERS & USDA-FAS

Livestock Marketing Information Center



# US BEEF AND VEAL EXPORTS

## Carcass Weight, Monthly

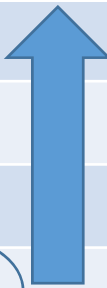


# U.S. Ranking in World



# Major U.S. Meat Export Customers

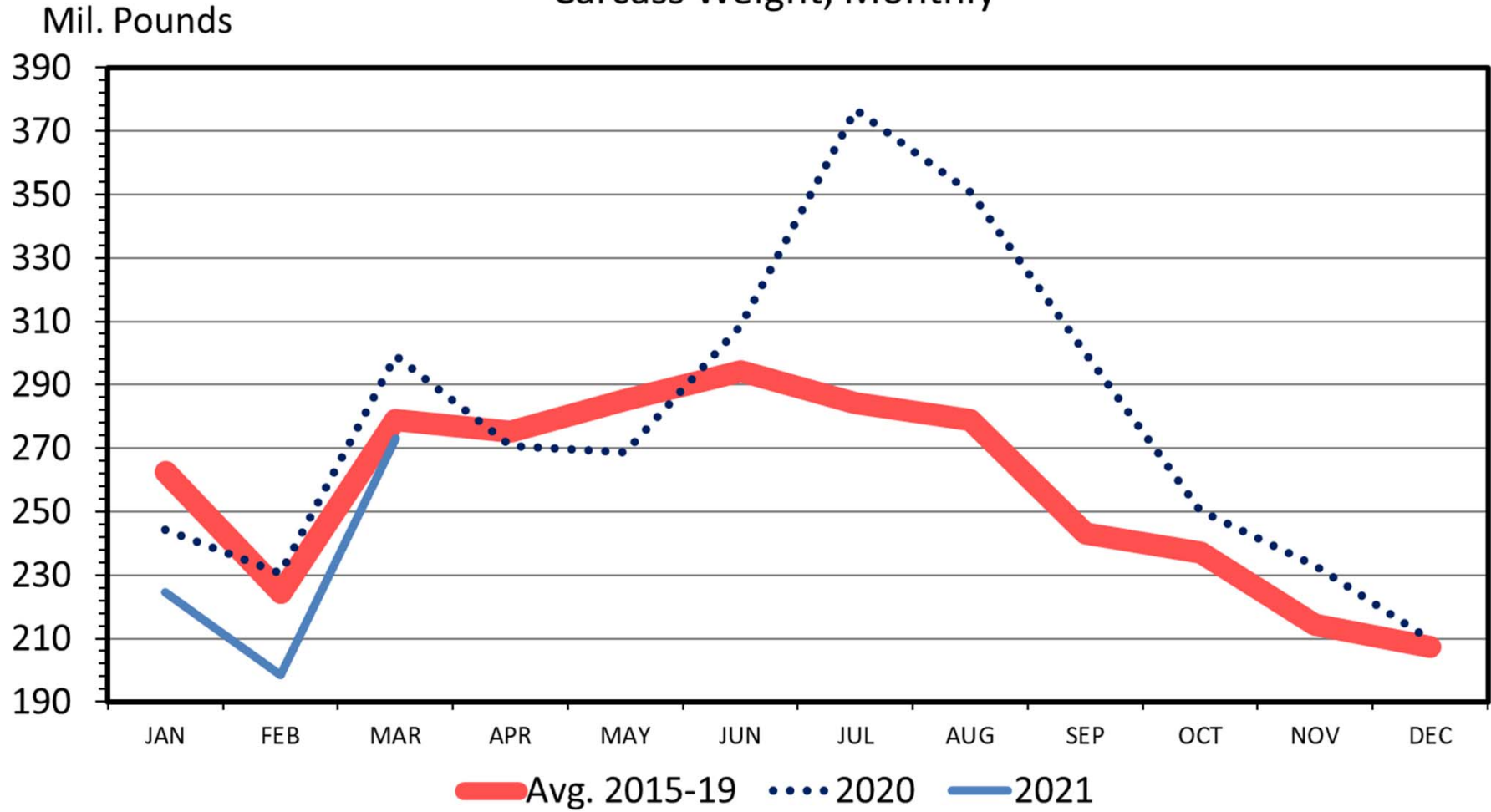
BEEF	PORK	CHICKEN
Japan	Mexico	Mexico
Korea	Japan	Canada
Mexico	Canada	Cuba
Canada	China	Hong Kong
Hong Kong	Korea	Taiwan
China?	Australia	China <del>Ø</del>





# US BEEF AND VEAL IMPORTS

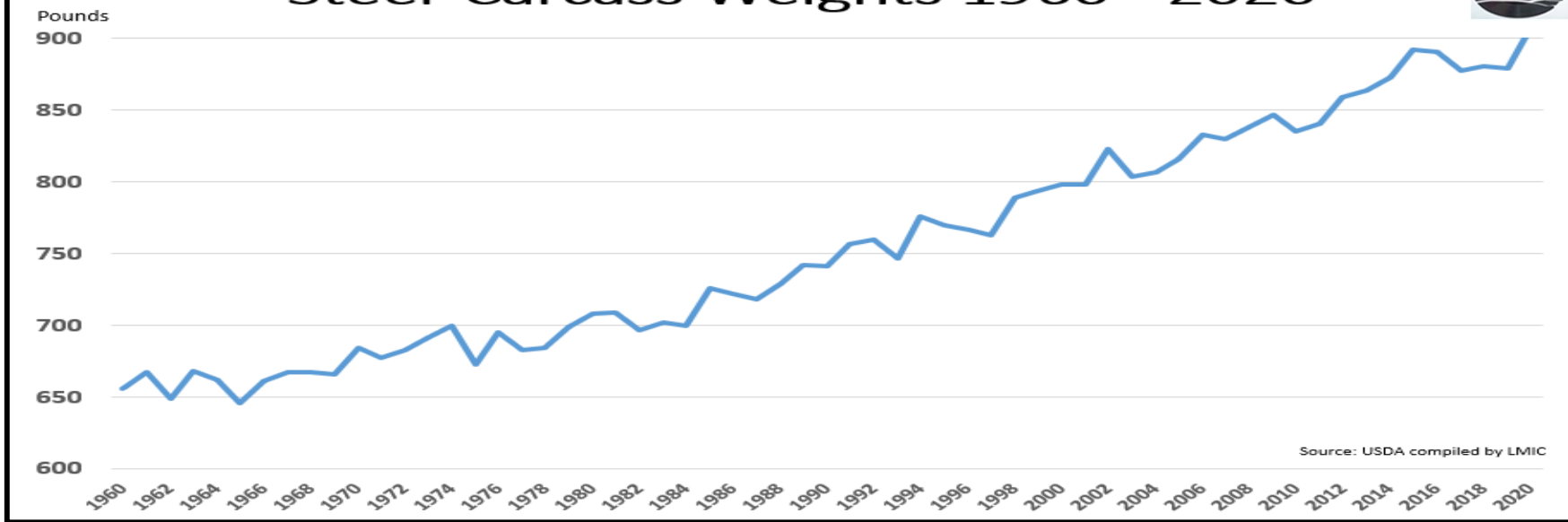
Carcass Weight, Monthly



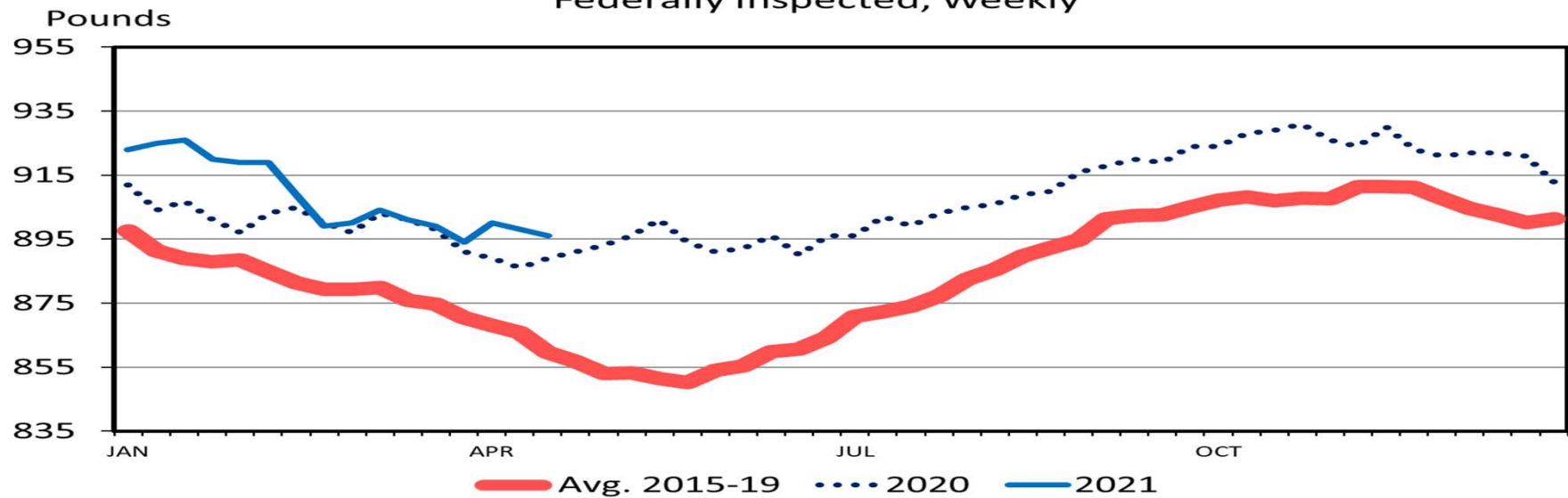
Data Source: USDA-ERS & USDA-FAS

Livestock Marketing Information Center

# Steer Carcass Weights 1960 - 2020



## STEER DRESSED WEIGHT Federally Inspected, Weekly

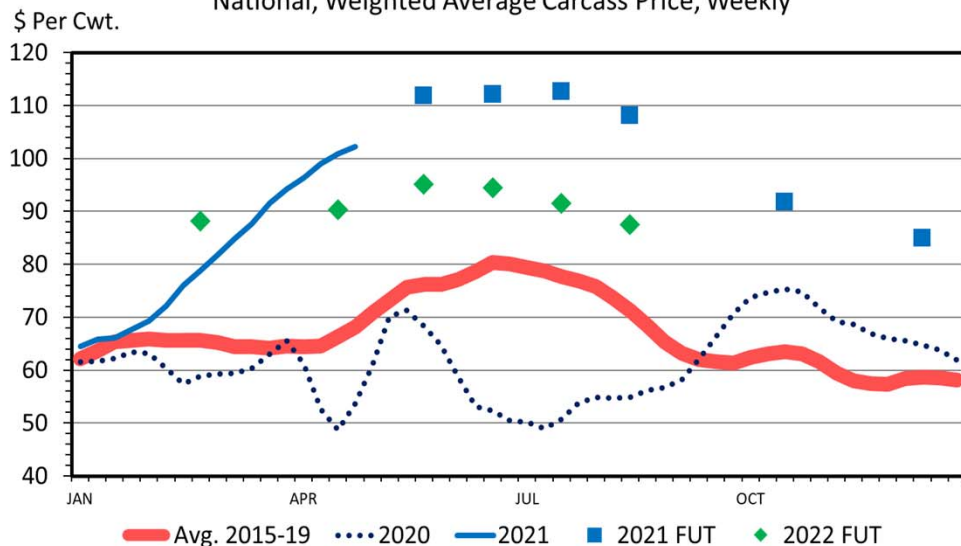


Data Source: USDA-AMS & USDA-NASS - Livestock Marketing Information Center

# Other Livestock

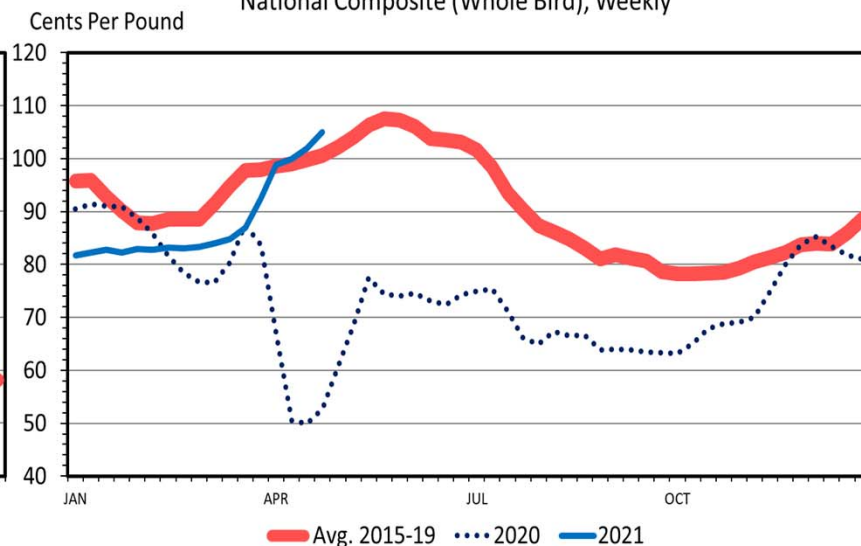
## BASE SLAUGHTER HOG PRICES

National, Weighted Average Carcass Price, Weekly



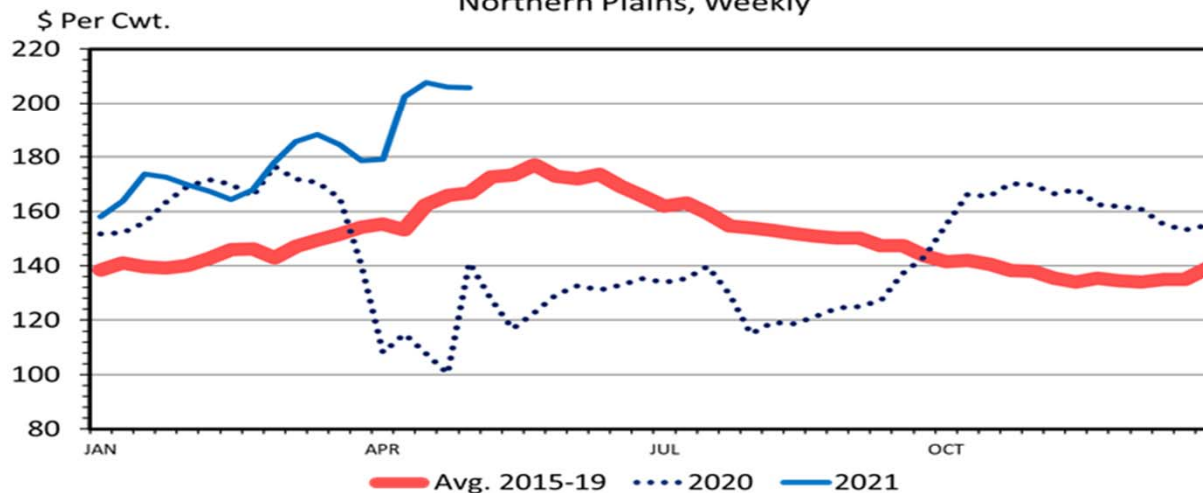
## BROILER PRICES

National Composite (Whole Bird), Weekly



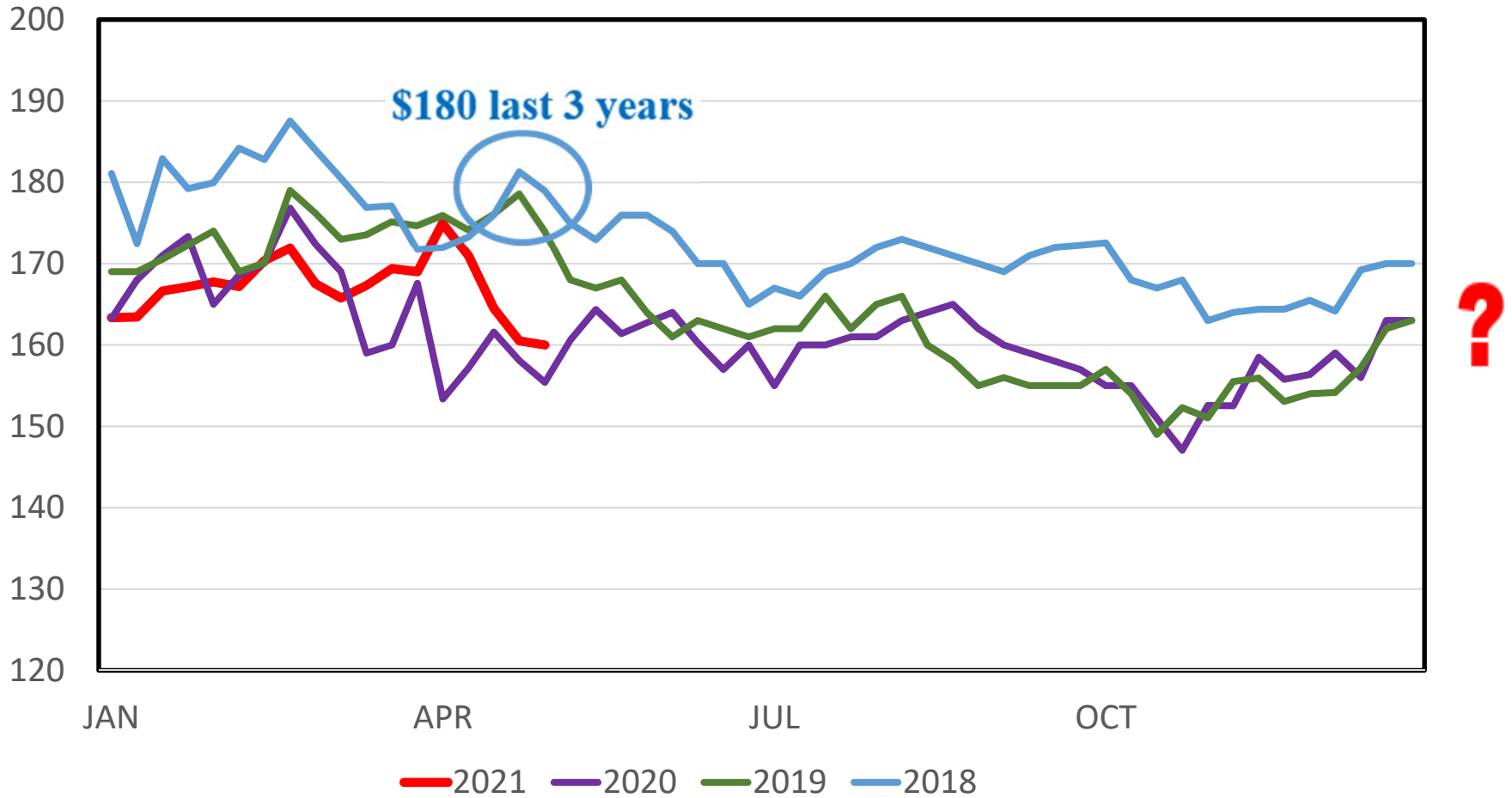
## SLAUGHTER LAMB PRICES

Northern Plains, Weekly



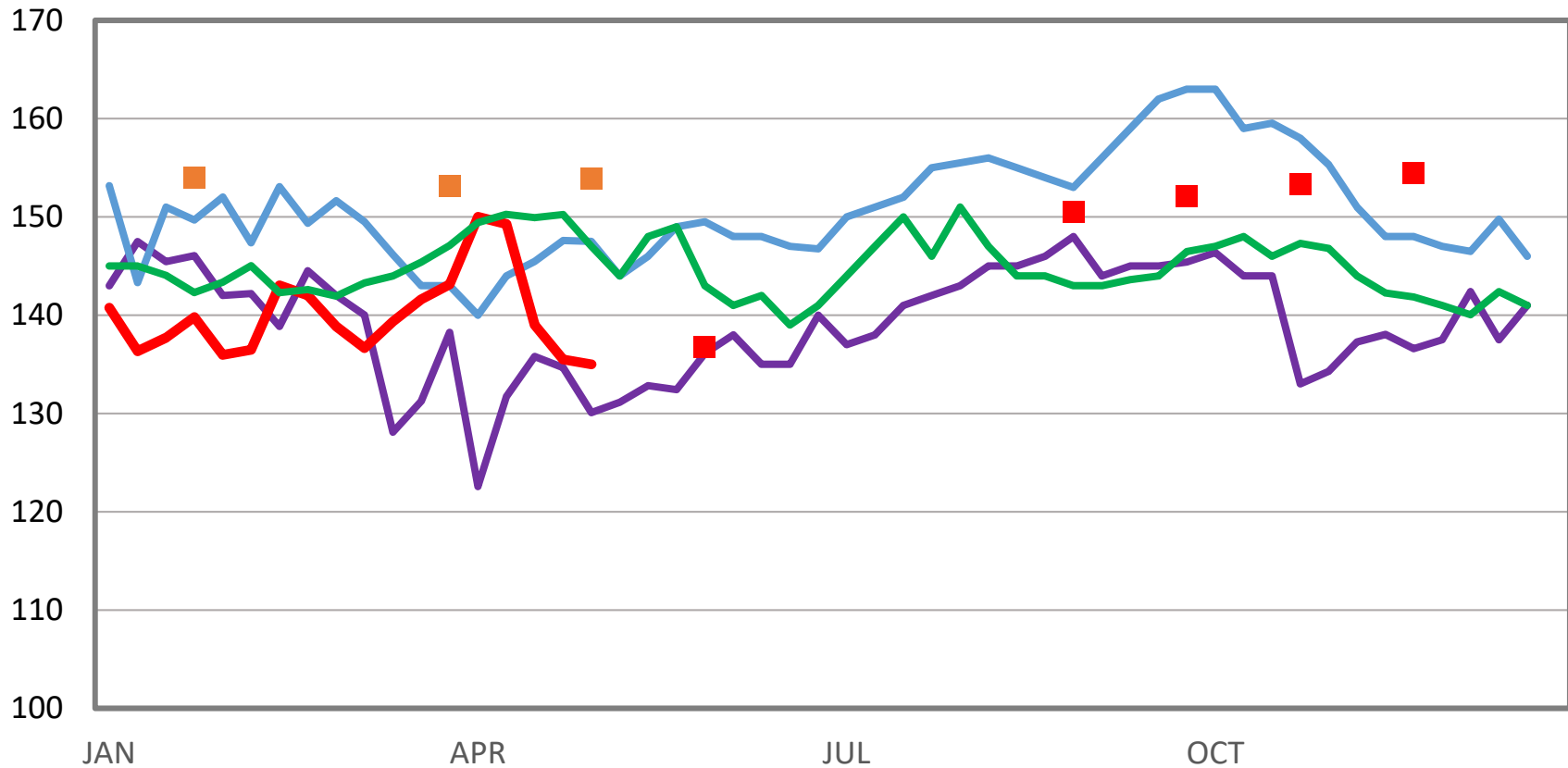
Data Source: USDA-AMS; Livestock Marketing Information Center

# MED. FRAME #1 STEER CALF PRICES 550-600 Pounds, N.D., Weekly



# MED. & LRG. #1 FEEDER STEER PRICES

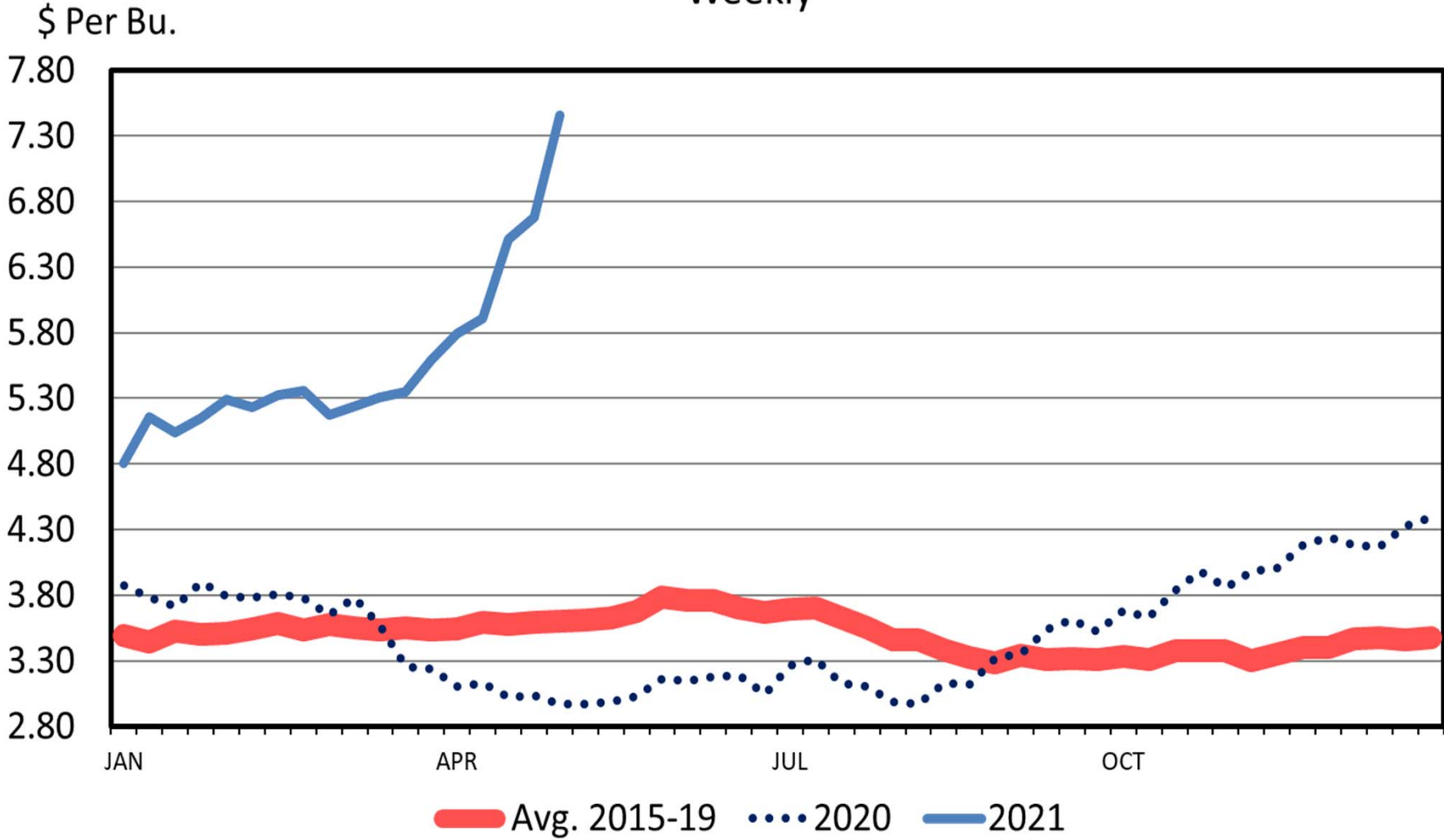
## 750-800 Pounds, N.D., Weekly



2022 Futures 2020 2018 2021 2019 2021 Futures

# OMAHA CORN PRICES

Weekly

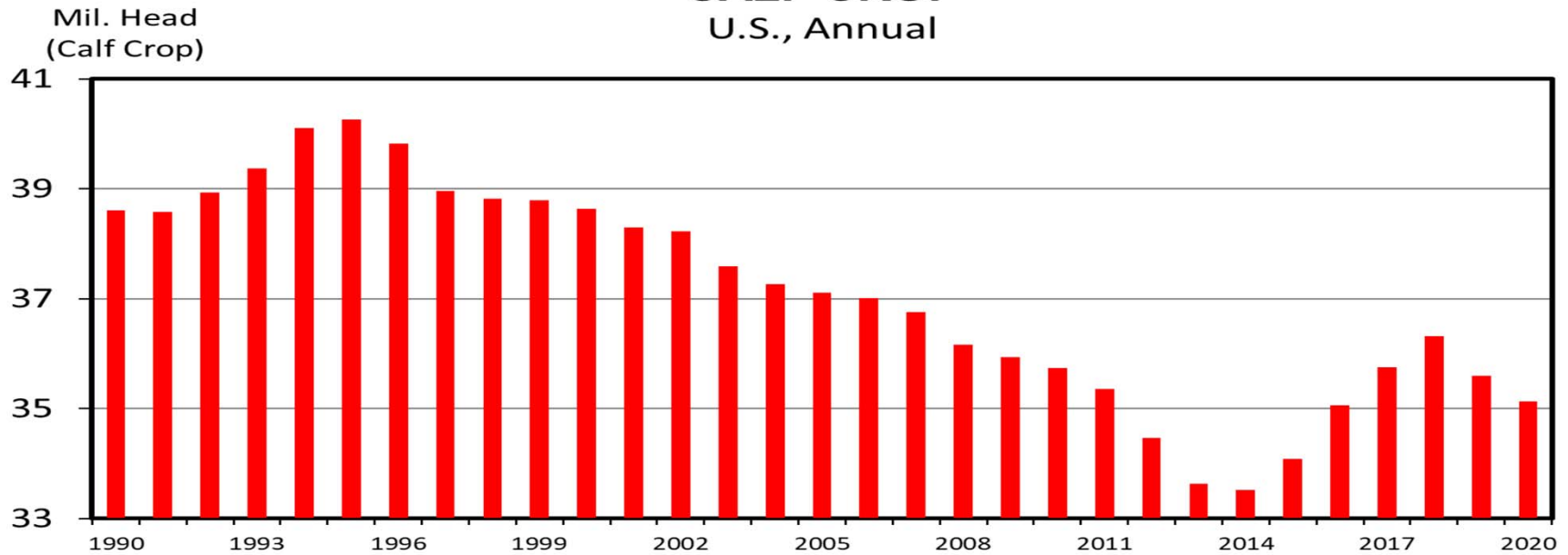


Data Source: USDA-AMS

Livestock Marketing Information Center

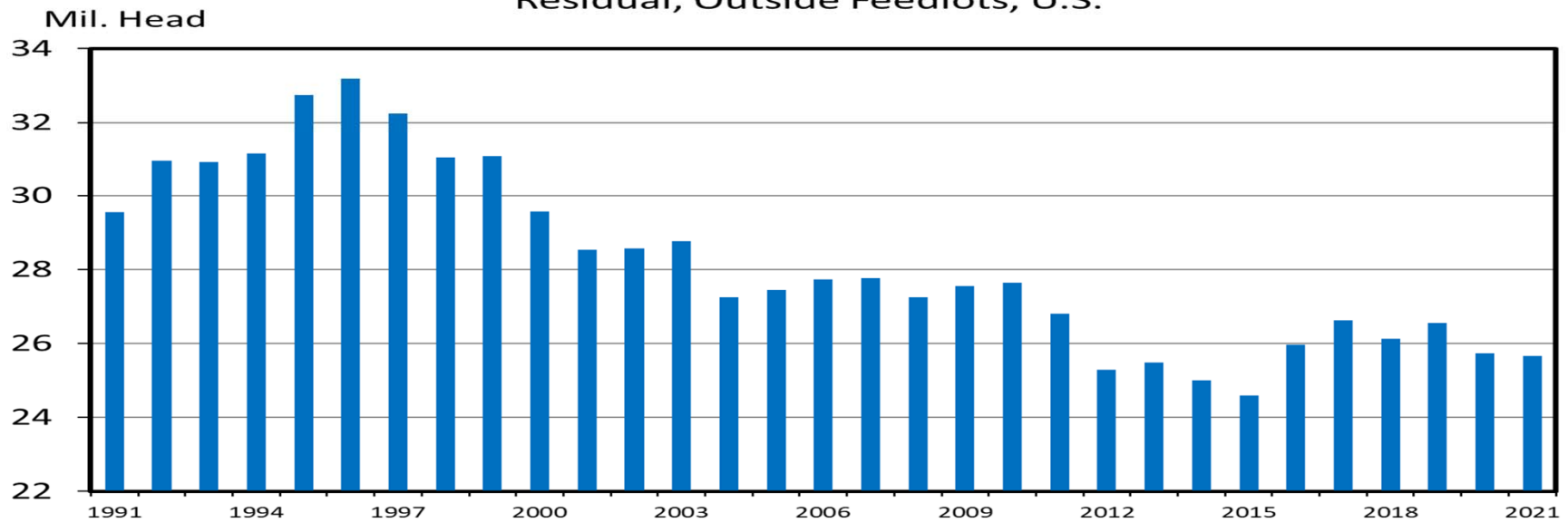
# CALF CROP

U.S., Annual



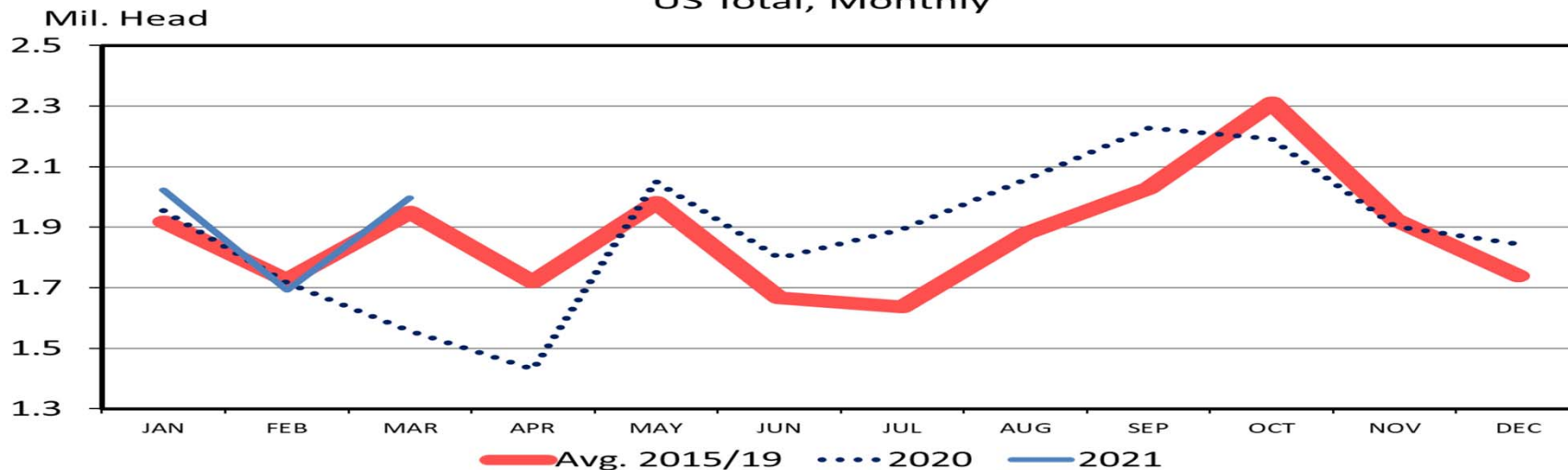
## JANUARY 1 FEEDER CATTLE SUPPLIES

Residual, Outside Feedlots, U.S.

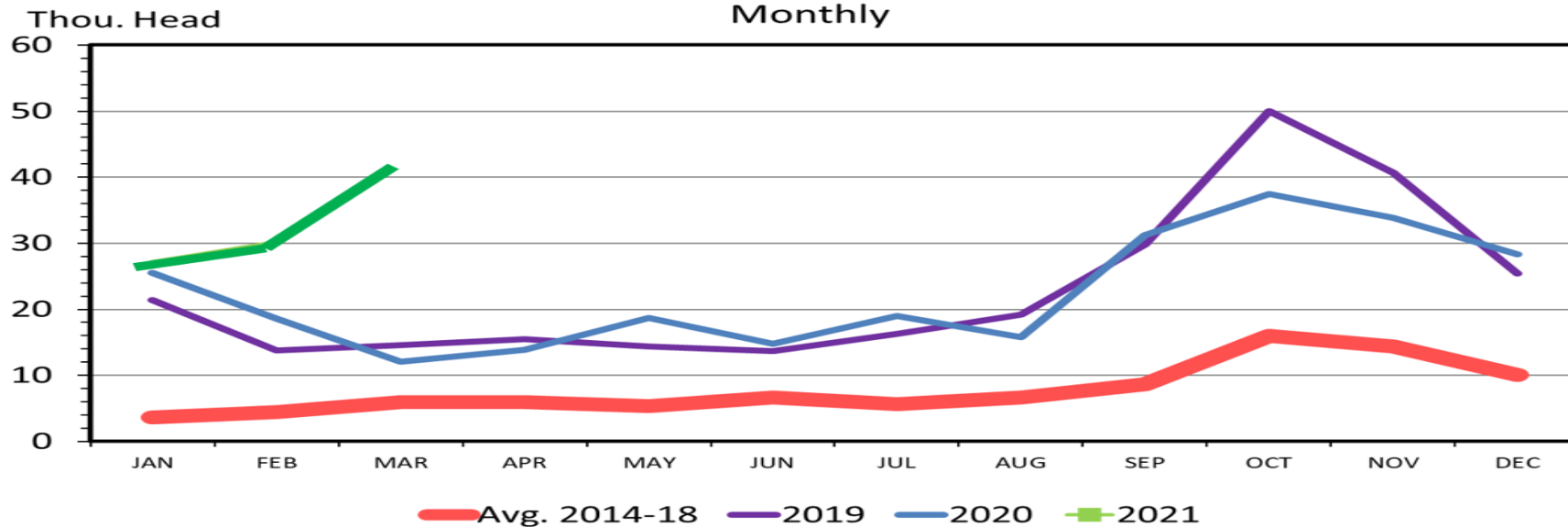


Data Source: USDA-NASS Livestock Marketing Information Center

## FEEDLOT PLACEMENTS US Total, Monthly



## US FEEDER CATTLE EXPORTS TO CANADA Monthly



**Data Source: USDA-ERS & USDA-FAS - Livestock Marketing Information Center**





North Dakota Weekly Cattle Auction Summary  
AMS Livestock, Poultry, & Grain Market News  
North Dakota Dept of Ag Mrkt News

**STEERS - Medium and Large 1 (Per Cwt / Actual Wt)**

<u>Head</u>	<u>Wt Range</u>	<u>Avg Wt</u>	<u>Price Range</u>	<u>Avg Price</u>
34	349	349	185.00	185.00
7	437	437	170.00	170.00
66	472-482	481	189.00-196.00	195.38
12	535	535	162.50	162.50
99	582-598	585	164.50-174.00	170.92
33	609-613	610	169.00-171.00	170.70
72	687-698	692	149.50-157.50	154.06
8	700-737	714	137.00-143.00	139.32
33	759-777	768	144.00-148.00	145.36
25	818-822	822	136.50-138.00	136.68
99	853-893	886	125.50-127.85	127.52
133	901-912	906	127.85-129.00	128.48
60	980	980	124.00	124.00

**HEIFERS - Medium and Large 1 (Per Cwt / Actual Wt)**

<u>Head</u>	<u>Wt Range</u>	<u>Avg Wt</u>	<u>Price Range</u>	<u>Avg Price</u>
19	314	314	170.00	170.00
18	354-392	381	140.00-148.50	146.31
67	434-448	441	150.00-165.75	163.07
20	487-499	494	138.50-147.00	143.29
89	500-549	535	142.00-154.00	152.17
97	573-593	583	138.00-151.00	144.75
15	614-628	621	137.00-139.00	137.94
103	660-686	680	127.00-135.00	133.16
81	713-733	725	121.00-133.50	129.87
134	765-799	786	122.00-131.25	128.00
69	811-845	827	127.50-131.00	129.64
22	923	923	117.00	117.00
46	951-969	962	111.50-114.00	113.46

# Adding Value To Calves

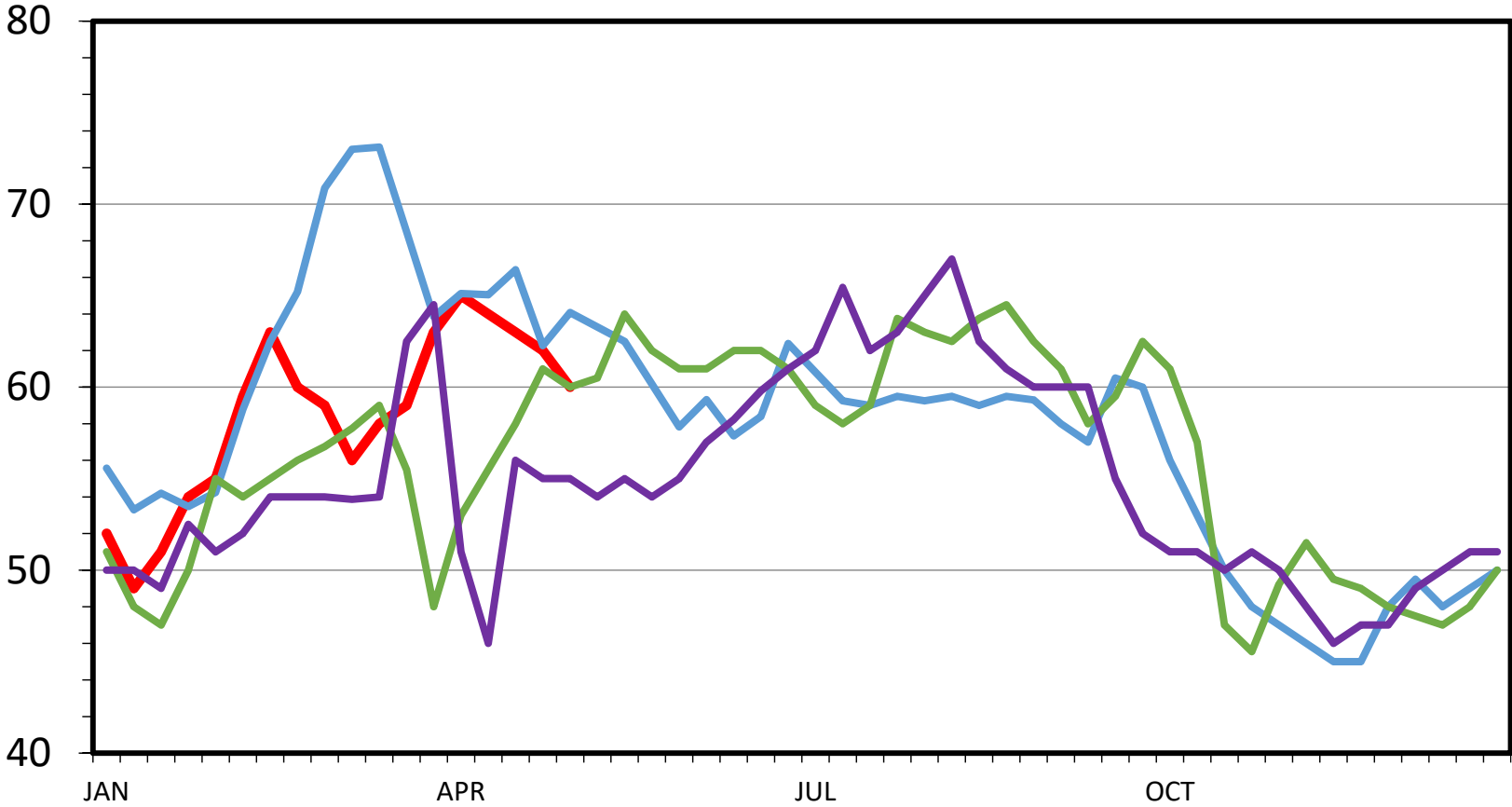
- Weaned
- Verified vaccination program
- Source/age verified/no implants
- Natural (no antibiotics or implants)
- Bovine Viral Diarrhea persistently infected (BVD-PI) tested negative
- Beef Quality Assurance (BQA) – packers requiring
- Replacement quality heifers
- \* *The more information you provide the better*
- \* *Check with your market before selling*

# BEEF CULL COW PRICES

Average 85-90% Lean, Weekly

MT/SD Ave

\$ Per Cwt.



— 2021 — 2018 — 2019 — 2020

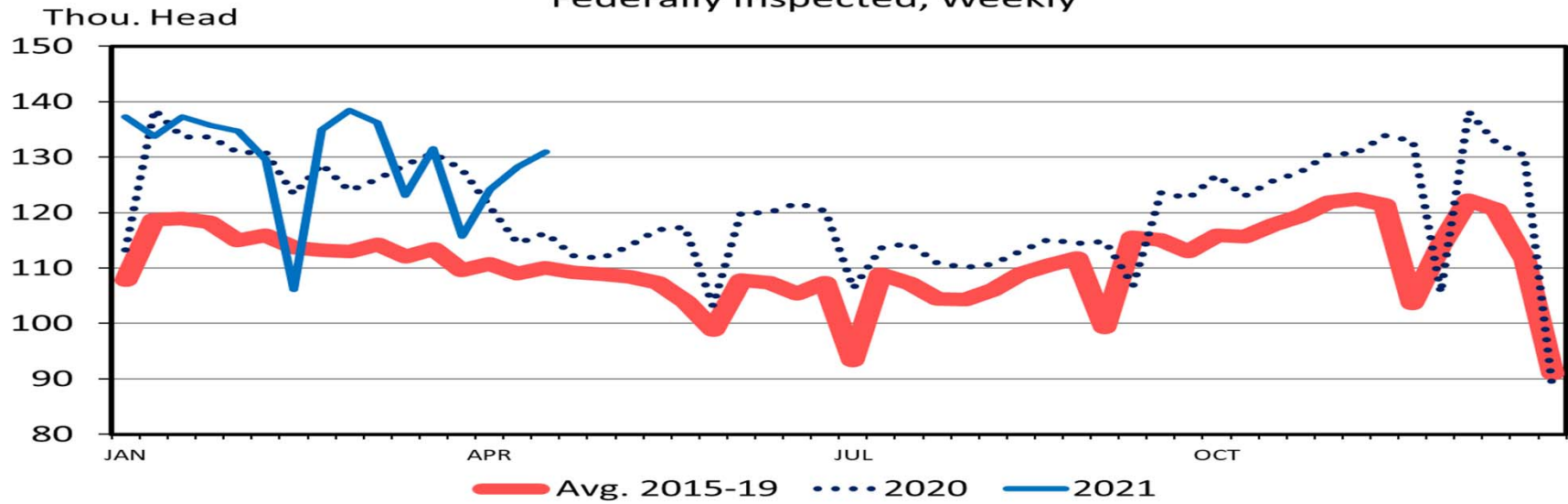
USDA-AMS, Compiled & Analysis by

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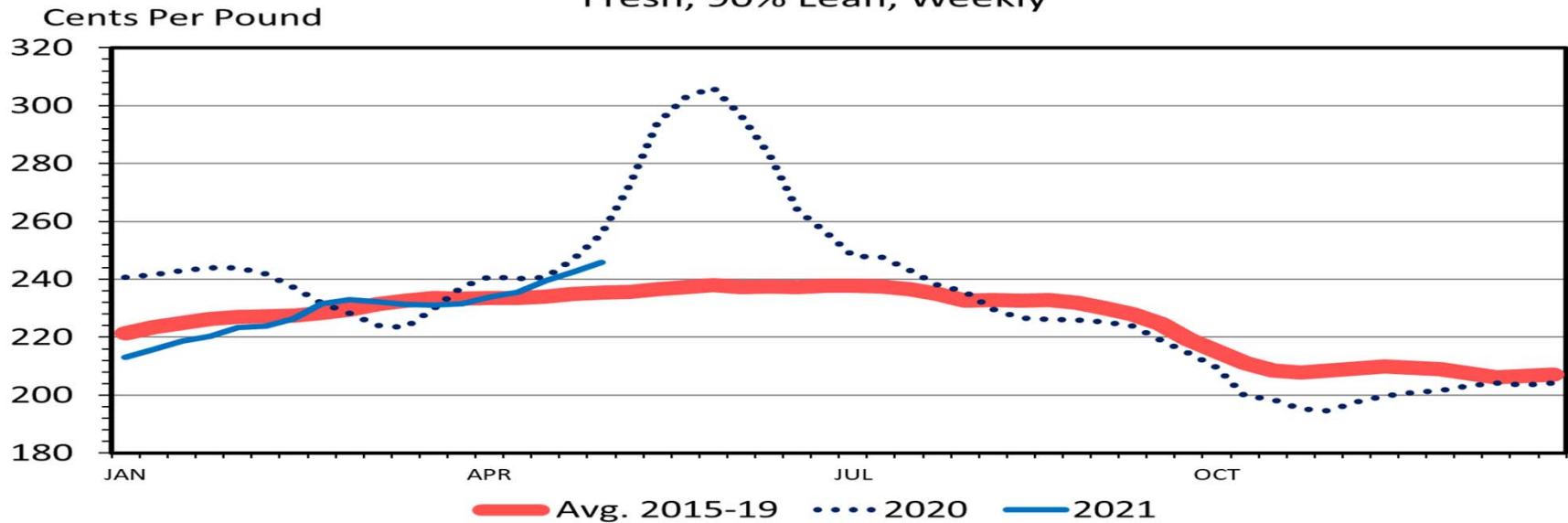
## TOTAL COW SLAUGHTER

Federally Inspected, Weekly



## WHOLESALE BONELESS BEEF PRICES

Fresh, 90% Lean, Weekly

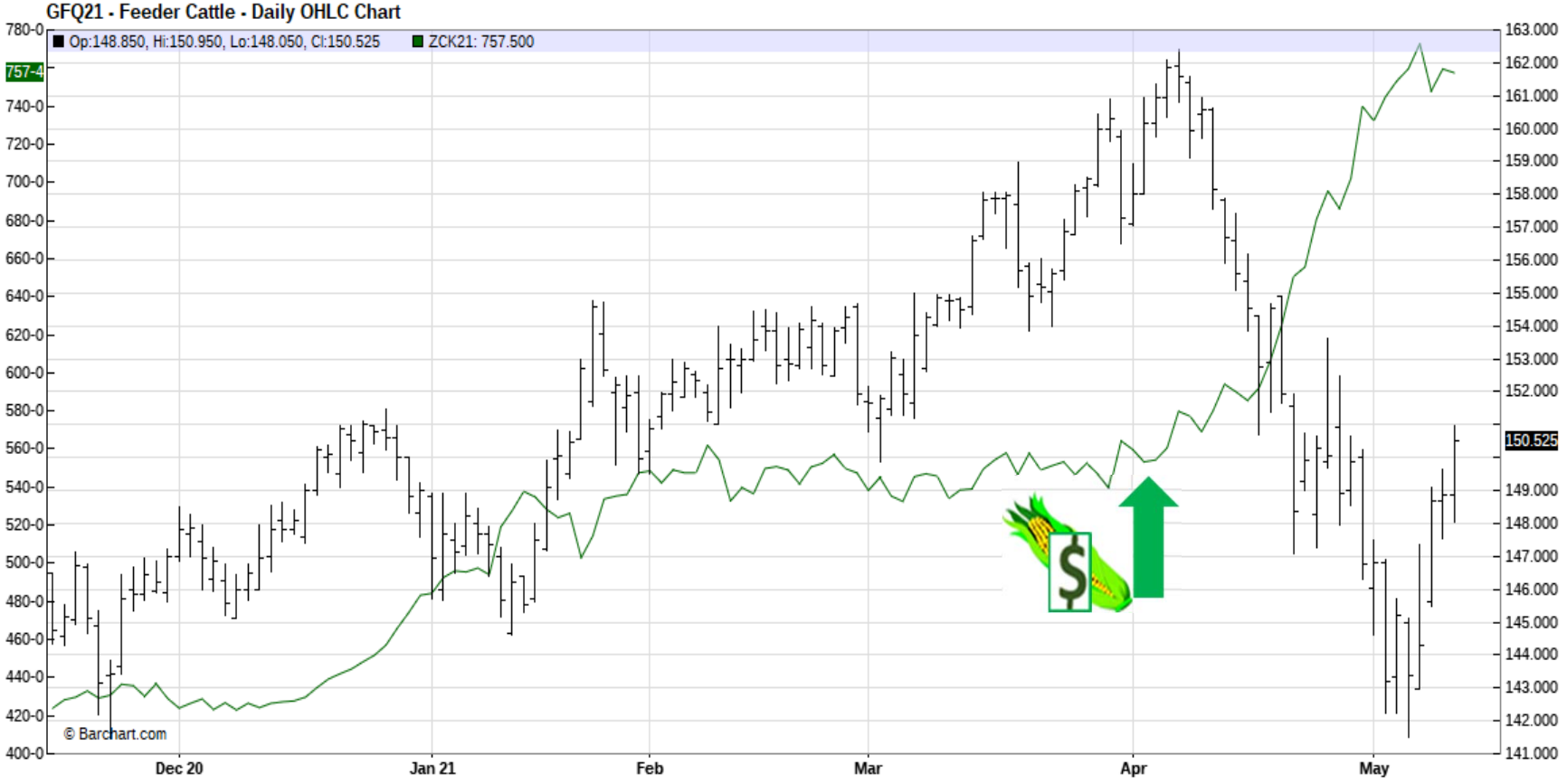


Data Source: USDA-AMS - Livestock Marketing Information Center

# Price Risk Management Tools

- Cash forward contract
- Video and internet auctions
- CME futures
- CME options
- Livestock Risk Protection (LRP)
- Which one or combination fits your marketing plan?
- **“If you don’t manage risk, risk will manage you”**

# AUG FDR CAT and MAY CORN





## NEW LRP Premium Subsidy Rates

Coverage Level %

Subsidy Rate %

95-100

35

90-94.99

40

85-89.99

45

80-84.99

50

70-79.99

55

Effective 9-14-2020/Retroactive to 7-1-2020

(13% Subsidy for many years)



Pay premium ~~to agent~~ - Pay at maturity

# Over 600 lb. Feeder Steers



## LRP Coverage Prices, Rates, and Actual Ending Values - Report for 05/12/2021

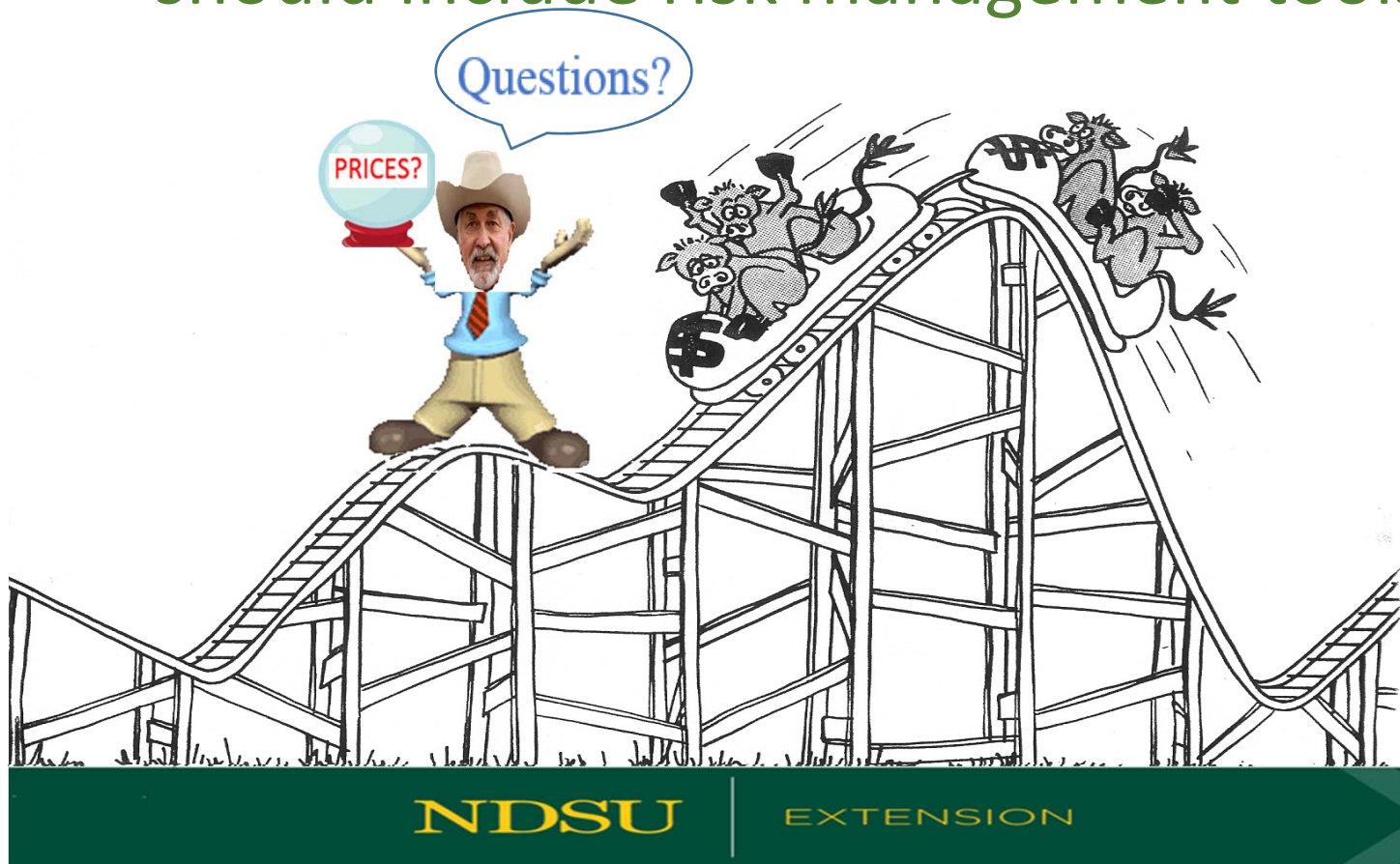
State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	Producer Premium Per CWT	End Date
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	208 Endorsement Ending in August Yr1	2021	150.153	\$149.630	0.996500	0.043113	6.451	4.19	08/11/2021
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	208 Endorsement Ending in August Yr1	2021	150.153	\$147.630	0.983200	0.036801	5.433	3.53	08/11/2021
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	208 Endorsement Ending in August Yr1	2021	150.153	\$145.630	0.969900	0.030989	4.513	2.93	08/11/2021
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	208 Endorsement Ending in August Yr1	2021	150.153	\$143.630	0.956600	0.026053	3.742	2.43	08/11/2021
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	208 Endorsement Ending in August Yr1	2021	150.153	\$141.630	0.943200	0.021613	3.061	1.84	08/11/2021

**AUG FDR CAT Futures - \$150.52/CME FC INDEX-\$131.01**

<https://public.rma.usda.gov/livestockreports/main.aspx>



2021: **COVID**, Weather, Corn, and Economy?  
Causing **Volatility** and **Risk** , especially on  
seasonal basis. Flexible marketing plans  
should include risk management tools



NDSU

EXTENSION