



# Livestock Marketing- Intro AGEC 244



**Tim Petry**

Extension Livestock Marketing Economist

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

APR 2021

**Agribusiness and  
Applied Economics**

EXTENDING KNOWLEDGE >> CHANGING LIVES

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# Agriculture By the Numbers

April 2021

NDSU Extension Agribusiness and Applied Economics

Drought and Prevent  
Planting Crop Insurance

Production Disruption

Implications of U.S. and  
Canadian Beef Cow  
Inventories

Livestock Forage Program

Potential for Drought  
Can Impact Prices and  
Marketing Plans

## Drought and Prevent Planting Crop Insurance

By Ron Haugen, NDSU Extension Farm Management Specialist

Some producers have a misconception that they can collect prevent plant crop insurance proceeds because of drought. Prevent plant crop insurance is for producers who cannot plant because conditions do not warrant it.

Usually, that means wet, mud or excess moisture conditions in which planting cannot occur or will occur after the late planting date. Prevent plant loss claims are a discounted amount from a normal loss.

[www.ag.ndsu.edu/farmmanagement/agriculture-by-the-numbers-newsletter](http://www.ag.ndsu.edu/farmmanagement/agriculture-by-the-numbers-newsletter)

## Monthly Agricultural Markets Webinar Series

To learn more about the webinar series and to register for future webinars, visit <https://www.ag.ndsu.edu/farmmanagement/outlook>. Recordings and presentations from completed webinars will be archived on that page.

Webinars are scheduled for:

April 15, 2021

May 13, 2021

**Thursday 1-2 pm**

June 10, 2021

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EXTENSION AGRIBUSINESS

## Always excuses NOT to market!

- Marketing takes time and planning

## Look for excuses TO market!

- Get \$10/cwt. more for every calf, regardless of price level”

$$5.50 \text{ cwt.} \times \$10 = \$55$$

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# Differences in Livestock vs. Crop Marketing

- CYCLES: production and price
- Livestock Risk Protection (LRP)
- Price Discovery
- Storage
- Basis

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# Identify Your Market

- Most calves, cull cows and bulls, sheep and lambs, and goats are sold at livestock auction markets
- Most fed cattle and hogs sold directly to packers, feeder pigs to hog finishers, poultry and milk to processors
- Specialty livestock such as breeding livestock, bison, direct to consumers, organic, grass fed, free-range etc. may require you to find and develop markets

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# Need To Know Your Cost Of Production

www.ag.ndsu.edu/livestockeconomics/Budgets



## Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2021 <sup>1</sup>

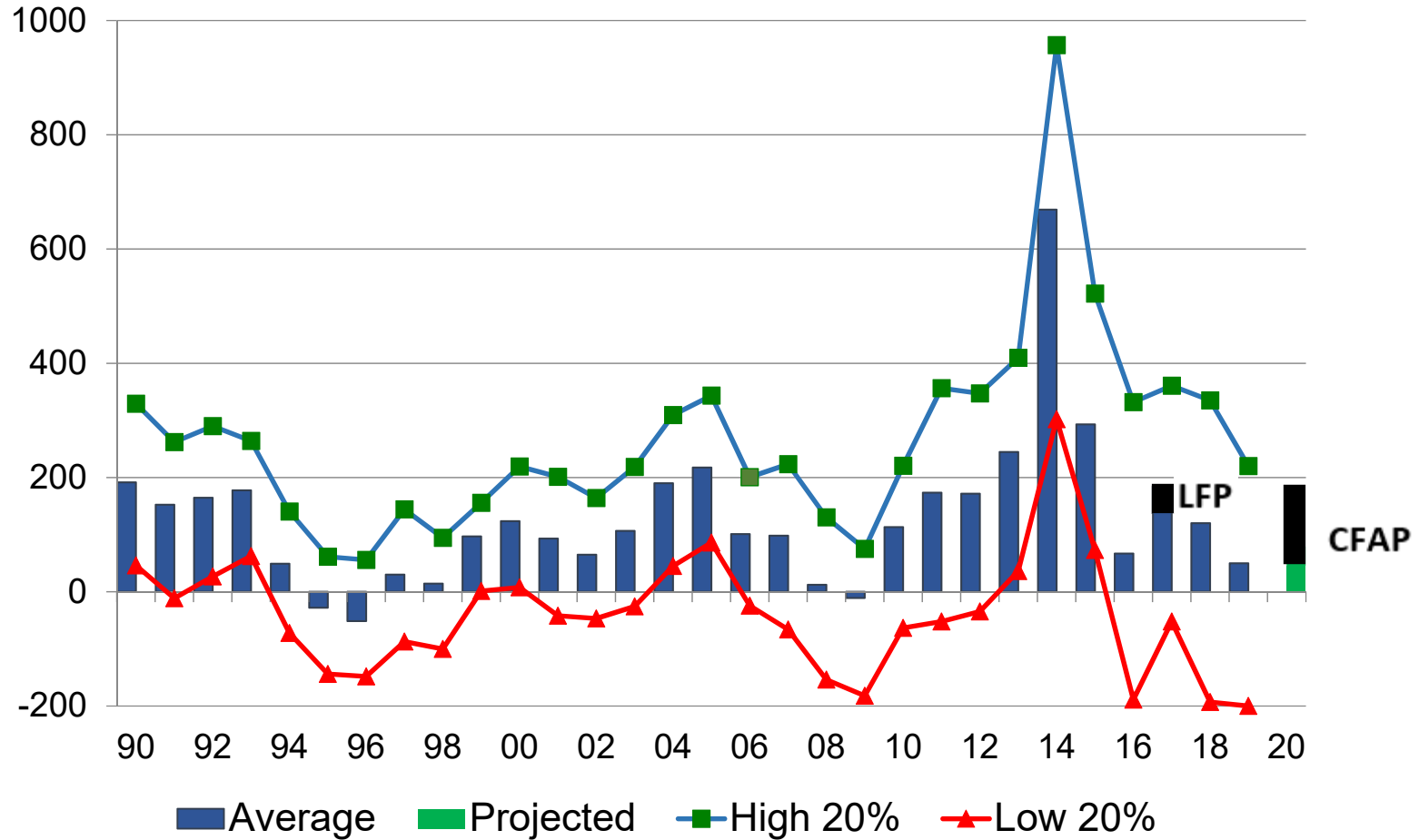
|  | N.D.<br>Avg.        | Your<br>Numbers  |         |
|--|---------------------|------------------|---------|
| <b>VARIABLE COST PER COW:</b>                          |                     |                  |         |
| 1. Summer Pasture                                      | \$ 135.00           | \$               |         |
| 2. Hay--silage   | 180.00              |                  |         |
| 3. Other feed  | 30.00               |                  |         |
| 4. Protein and Mineral                                 | 25.00               |                  |         |
| 5. Hired Labor, Custom Hire                            | 20.00               |                  |         |
| 6. Veterinary, Drugs, and Supplies                     | 30.00               |                  |         |
| 7. Utilities, Fuel, and Oil                            | 25.00               |                  |         |
| 8. Facilities and Equipment Repairs                    | 40.00               |                  |         |
| 9. Breeding Charge                                     | 10.00               |                  |         |
| 10. Marketing  | 15.00               |                  |         |
| 11. Miscellaneous                                      | 19.00               |                  |         |
| 12. Interest   | 15.00               |                  |         |
| <b>A. TOTAL VARIABLE COSTS</b>                         | <b>\$ 544.00</b>    | <b>\$ 0.00</b>   |         |
| <b>FIXED COSTS PER COW</b>                             |                     |                  |         |
| 13. Depreciation                                       | \$ 30.00            | \$               |         |
| 14. Interest   | 10.00               |                  |         |
| 15. Insurance  | 10.00               |                  |         |
| 16. Cow interest, death loss                           | 65.00               |                  |         |
| <b>B. TOTAL FIXED COSTS</b>                            | <b>\$ 115.00</b>    | <b>\$ 0.00</b>   |         |
| <b>C. TOTAL COSTS PER COW (A + B)</b>                  | <b>\$ 659.00</b>    | <b>\$ 0.00</b>   |         |
| <b>RETURNS PER COW <sup>2</sup></b>                    |                     |                  |         |
|  | <u>Your Numbers</u> |                  |         |
|  | %                   | x Weight x Price |         |
| 17. Steers: .45 x 590 x 1.65                           | ..... x .....       | \$ 438.08        | \$ 0.00 |
| 18. Heifers: .26 x 570 x 1.40                          | ..... x .....       | 207.48           | 0.00    |
| 19. Cull cows; .14 x 1300 x 0.55                       | ..... x .....       | 100.10           | 0.00    |
| 20. Cull heifers: .05 x 900 x 1.25                     | ..... x .....       | 56.25            | 0.00    |
| <b>D. GROSS RETURNS PER COW</b>                        | <b>\$ 801.91</b>    | <b>\$ 0.00</b>   |         |
| <b>E. RETURN OVER VARIABLE COSTS (D - A)</b>           | <b>\$ 257.91</b>    | <b>\$ 0.00</b>   |         |
| <b>F. RETURN OVER TOTAL COSTS (D - C) <sup>3</sup></b> | <b>\$ 142.91</b>    | <b>\$ 0.00</b>   |         |

<sup>1</sup> Information in this budget is based on the [North Dakota Farm and Ranch Business Management Annual Report, 2019](#).

<sup>2</sup> Returns are based on a 90 percent weaning rate, 45 steers sold, 26 heifers sold, 19 heifers kept for replacement, 14 cull cows sold, and 5 cull heifers sold. Prices are projected for fall.

<sup>3</sup> Return over total costs is return to unpaid family labor, management, and equity.

## Average Net Return to Labor and Management Per Beef Cow N.D. Farm Business Mgmt., Excluding Red River Valley



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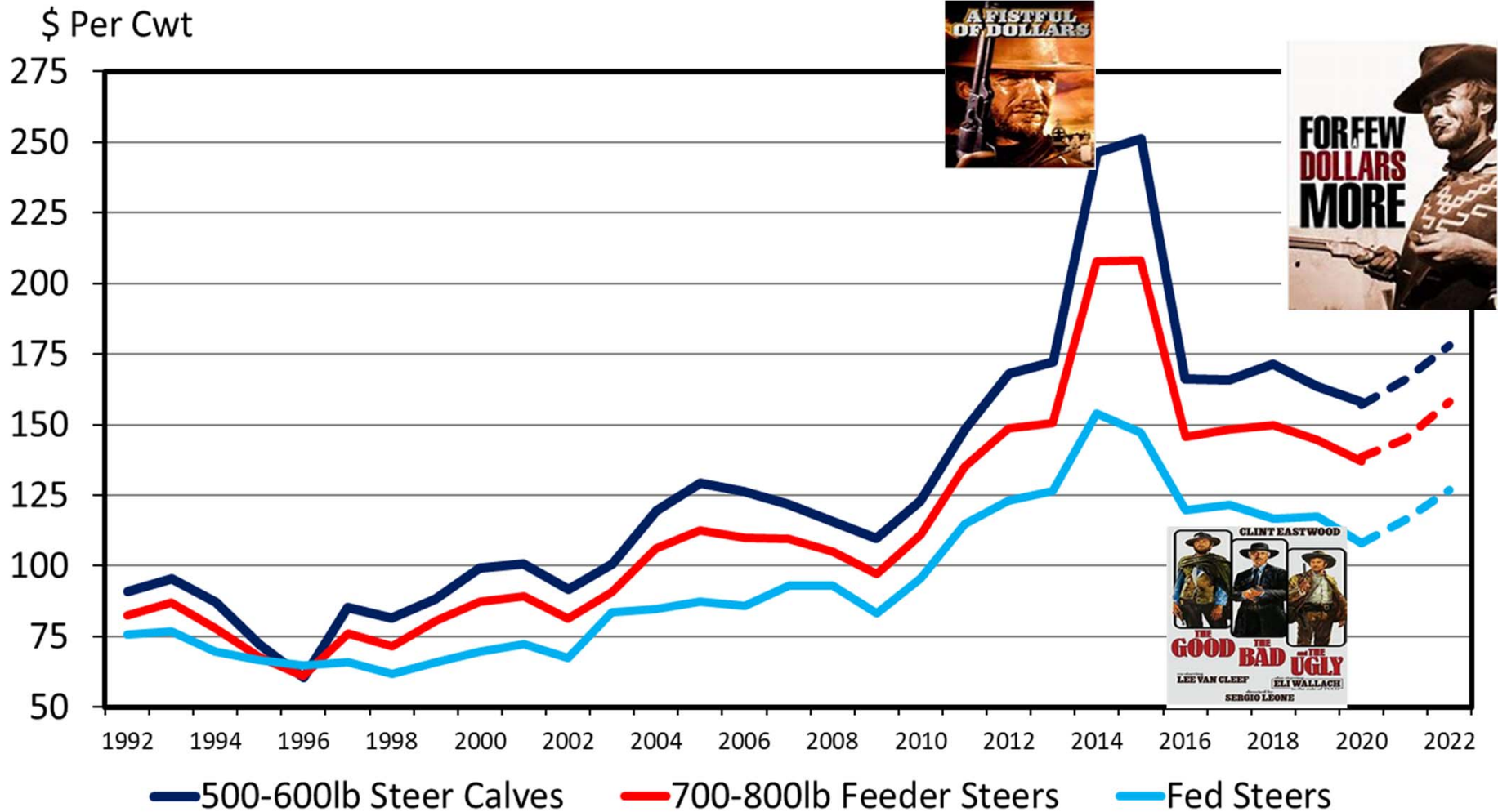
- **PRICE CYCLES**
  - Use for long run planning
- **SEASONAL PRICE PATTERNS**
  - Most important marketing tool
  - Reason for price risk management strategies
- **BOTH CAN BE AFFECTED BY UNEXPECTED EVENTS**
  - **COVID-19**
  - Tyson packing plant fire-2019
  - Drought
  - Volatile corn prices
  - BSE-2003





# U.S. CATTLE PRICE CYCLE

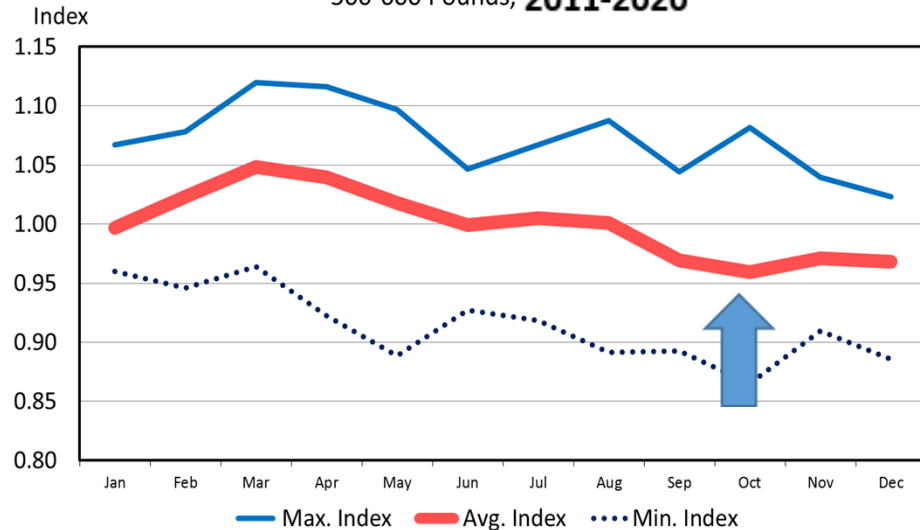
## AVERAGE ANNUAL CATTLE PRICES



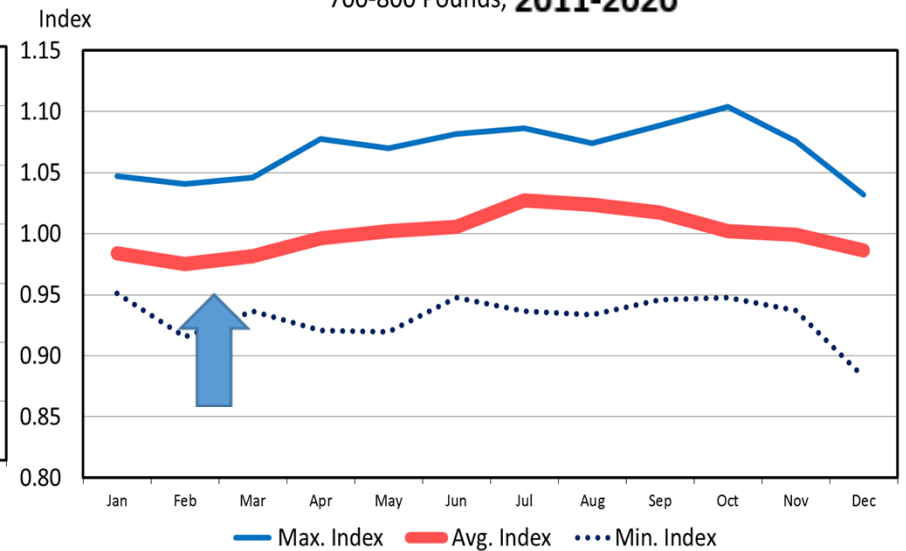
Data Source: USDA-AMS Forecasts by LMIC

# Seasonal Price Patterns are the Most Important Marketing Tool

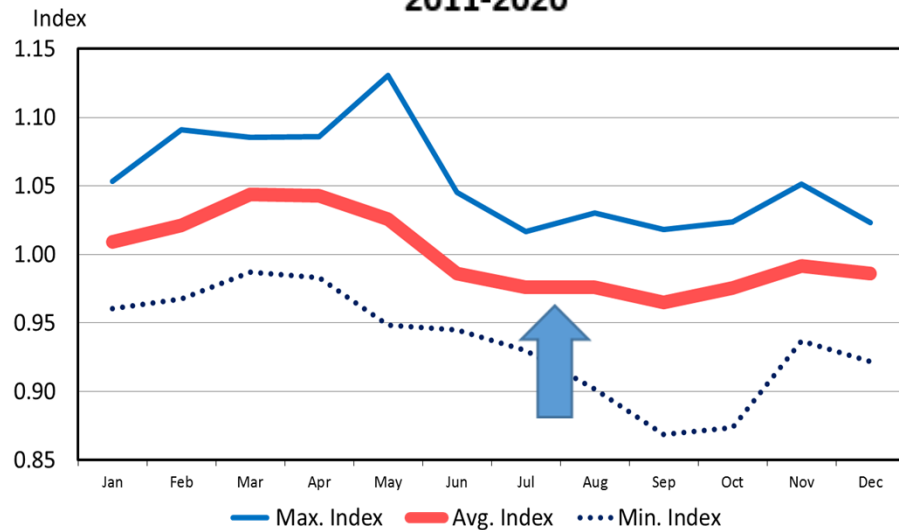
**SEASONAL PRICE INDEX – STEER CALVES**  
500-600 Pounds, **2011-2020**



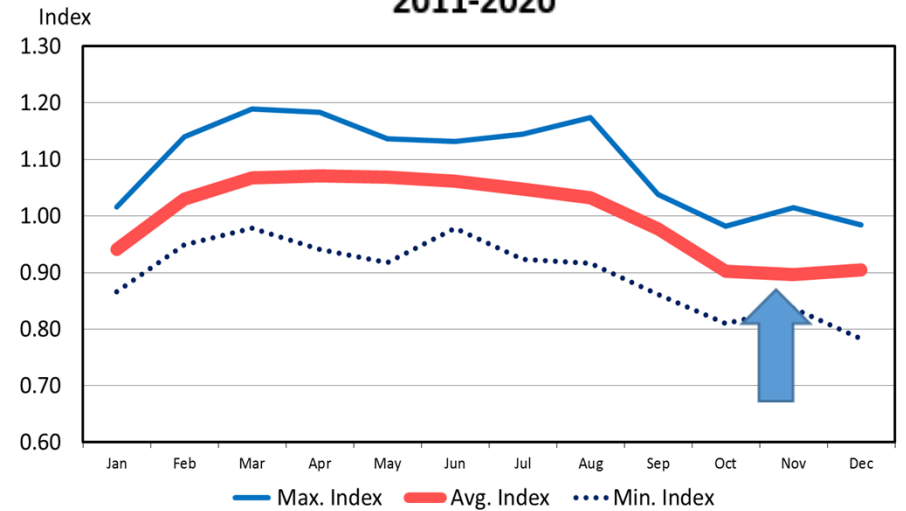
**SEASONAL PRICE INDEX – FEEDER STEERS**  
700-800 Pounds, **2011-2020**



**SEASONAL PRICE INDEX – FED STEERS**  
**2011-2020**



**SEASONAL PRICE INDEX – CULL COWS**  
**2011-2020**



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# Cattle Situation and Outlook



Tim Petry, Livestock Marketing Economist

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

April 19, 2021

**Agribusiness and  
Applied Economics**

# World Agricultural Supply and Demand Estimates

## U.S Meat Production and Prices

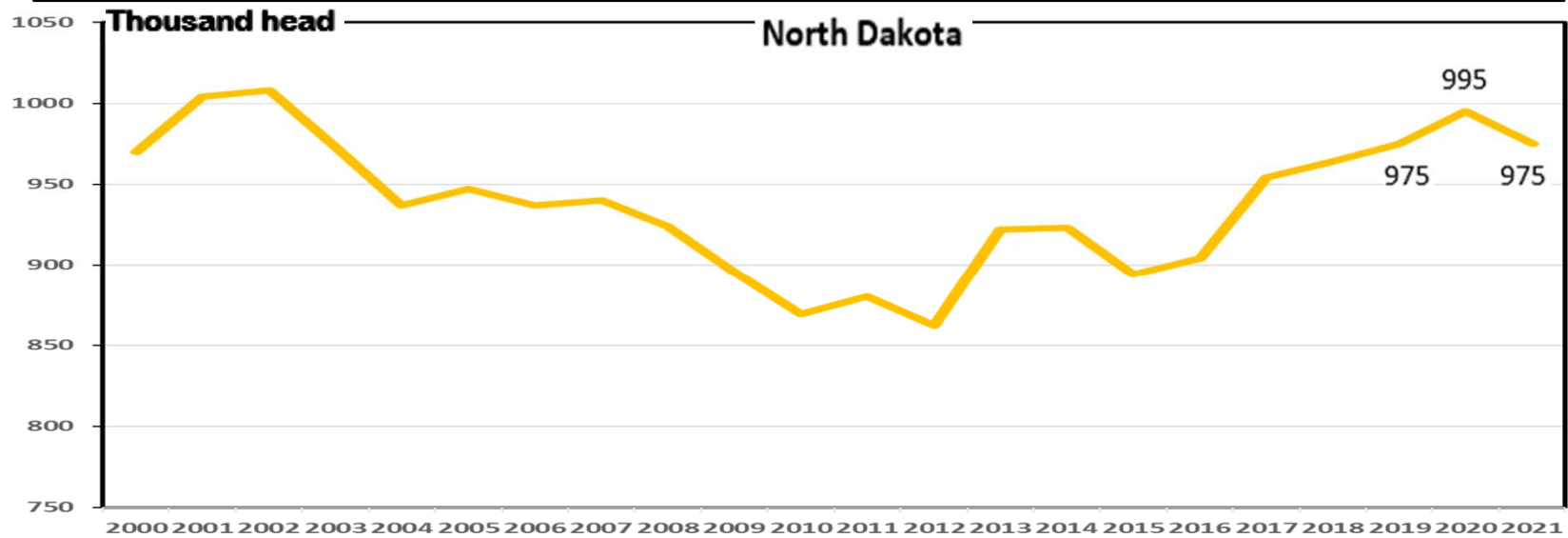
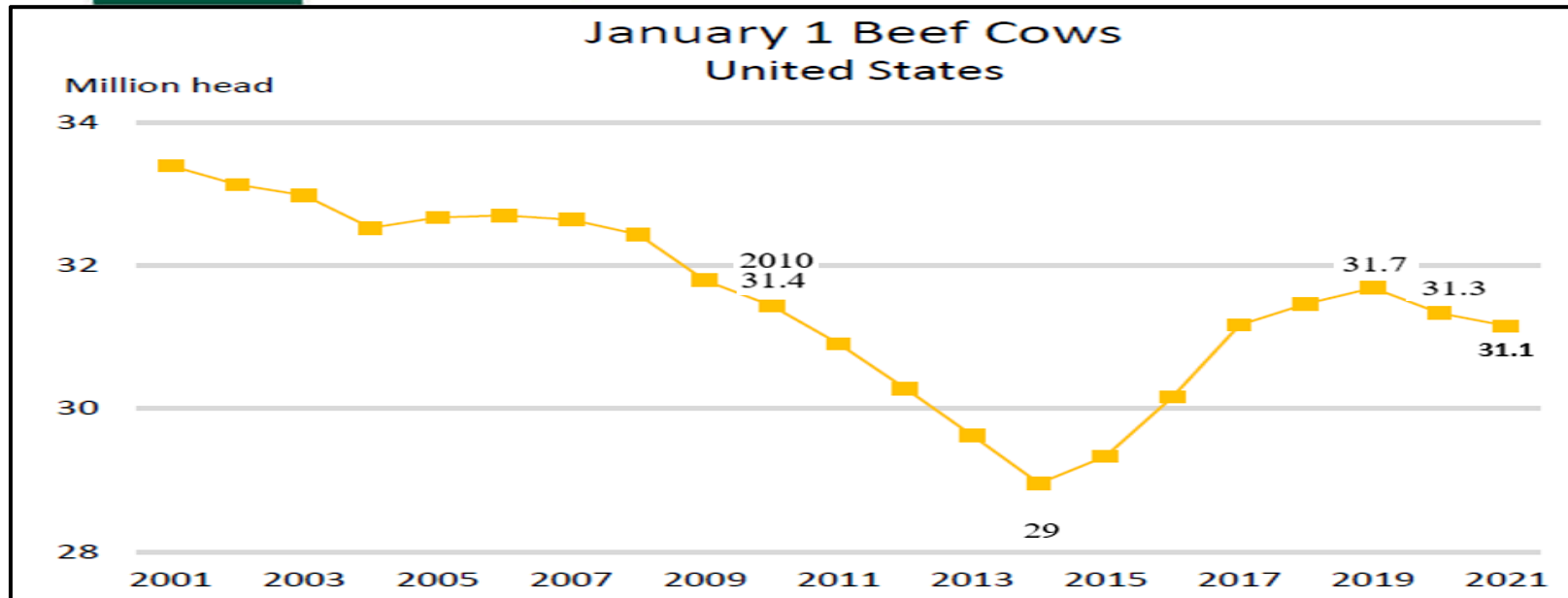
|                   | 2014                  | 2015         | 2016                | 2017          | 2018          | 2019          | 2020                | 2021<br>Forecast |
|-------------------|-----------------------|--------------|---------------------|---------------|---------------|---------------|---------------------|------------------|
| <b>Production</b> | <i>Billion Pounds</i> |              | <i>Pounds</i>       | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i>       | <i>Pounds</i>    |
| Beef              | 24.25                 | 23.70        | 25.22               | 26.19         | 26.87         | 27.15         | 27.15               | 27.64            |
| Pork              | 22.84                 | 24.50        | 24.94               | 25.58         | 26.31         | 27.64         | 28.30               | 28.28            |
| Broilers          | 38.55                 | 40.05        | 40.7                | 41.66         | 42.60         | 43.91         | 44.58               | 44.78            |
| Turkey            | 5.76                  | 5.63         | 5.98                | 5.98          | 5.88          | 5.82          | 5.74                | 5.66             |
| <b>Total meat</b> | <b>92.17</b>          | <b>94.63</b> | <b>97.6</b>         | <b>100.17</b> | <b>102.43</b> | <b>105.26</b> | <b>106.53</b>       | <b>107.09</b>    |
| <b>Prices</b>     | <i>Dollars/cwt</i>    |              | <i>Dollars/cwt.</i> |               |               |               | <i>Dollars/cwt.</i> |                  |
| Steers            | 154.56                | 148.12       | 120.85              | 121.52        | 117.12        | 116.78        | 108.51              | 116.25           |
| Hogs              | 76.03                 | 50.23        | 46.16               | 50.48         | 45.93         | 47.95         | 43.18               | 65.68            |
|                   | <i>Cents/lb.</i>      |              | <i>Cents/lb.</i>    |               |               |               | <i>Cents/lb.</i>    |                  |
| Broilers          | 104.9                 | 90.5         | 84.3                | 93.5          | 97.8          | 88.6          | 73.20               | 84.7             |
| Turkey            | 107.6                 | 116.2        | 117.1               | 96.1          | 80.2          | 89.2          | 106.5               | 111.8            |

 record high

Apr. 9, 2021

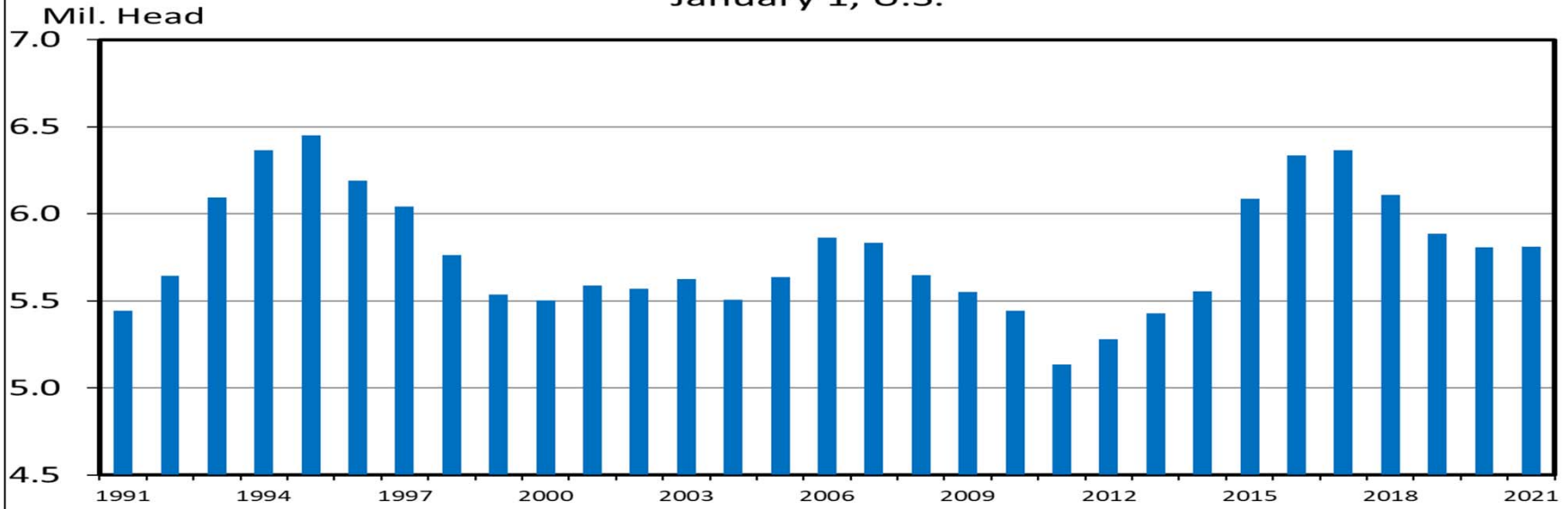


# United States Department of Agriculture National Agricultural Statistics Service



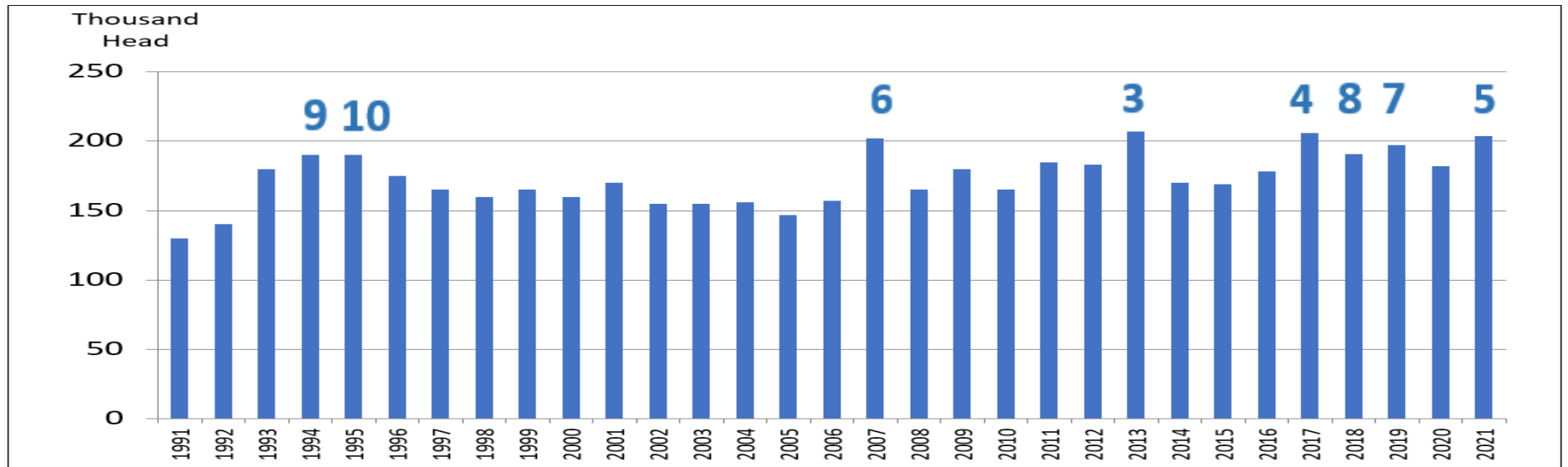
## HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, U.S.



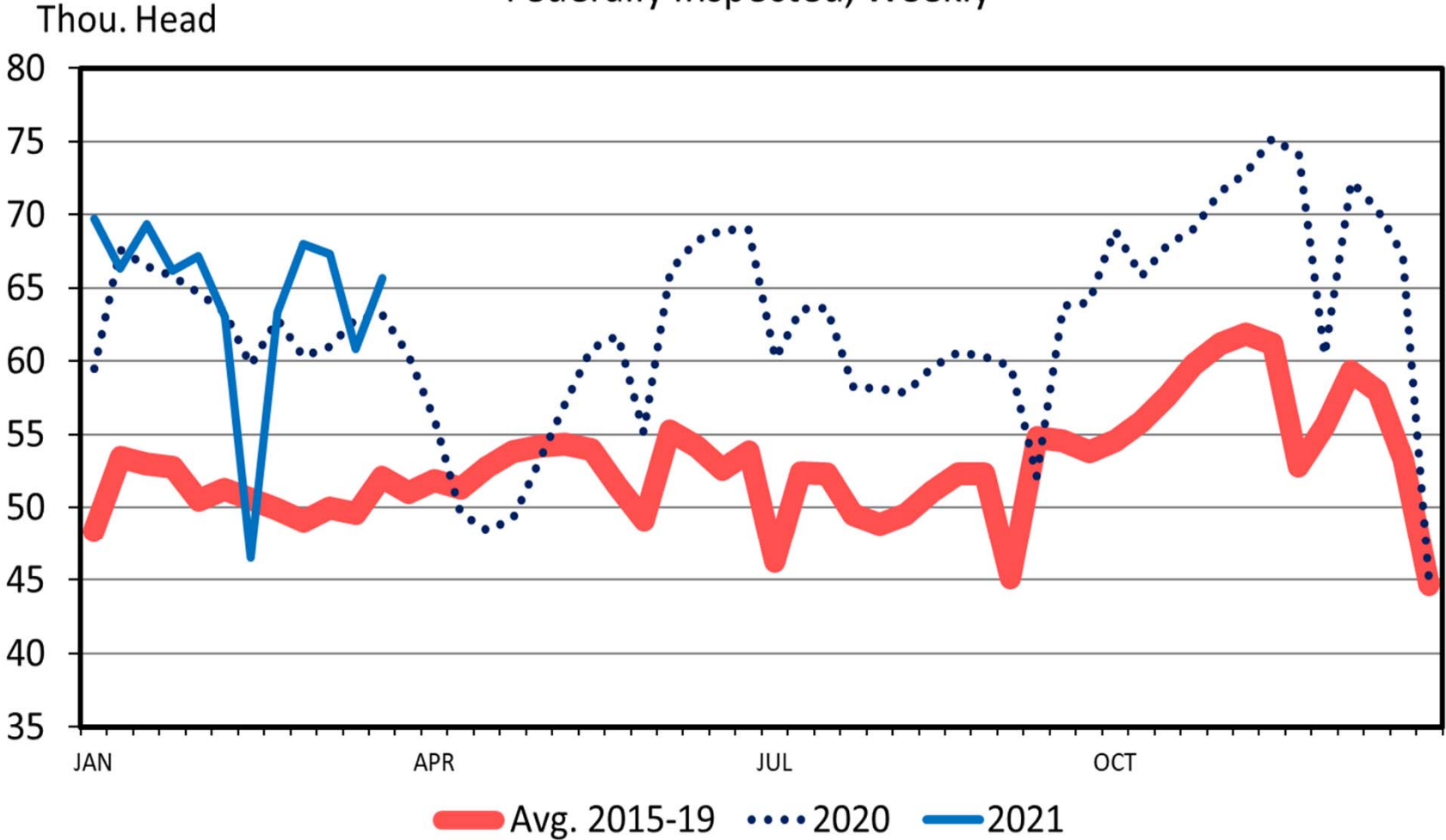
## HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, ND



# BEEF COW SLAUGHTER

Federally Inspected, Weekly

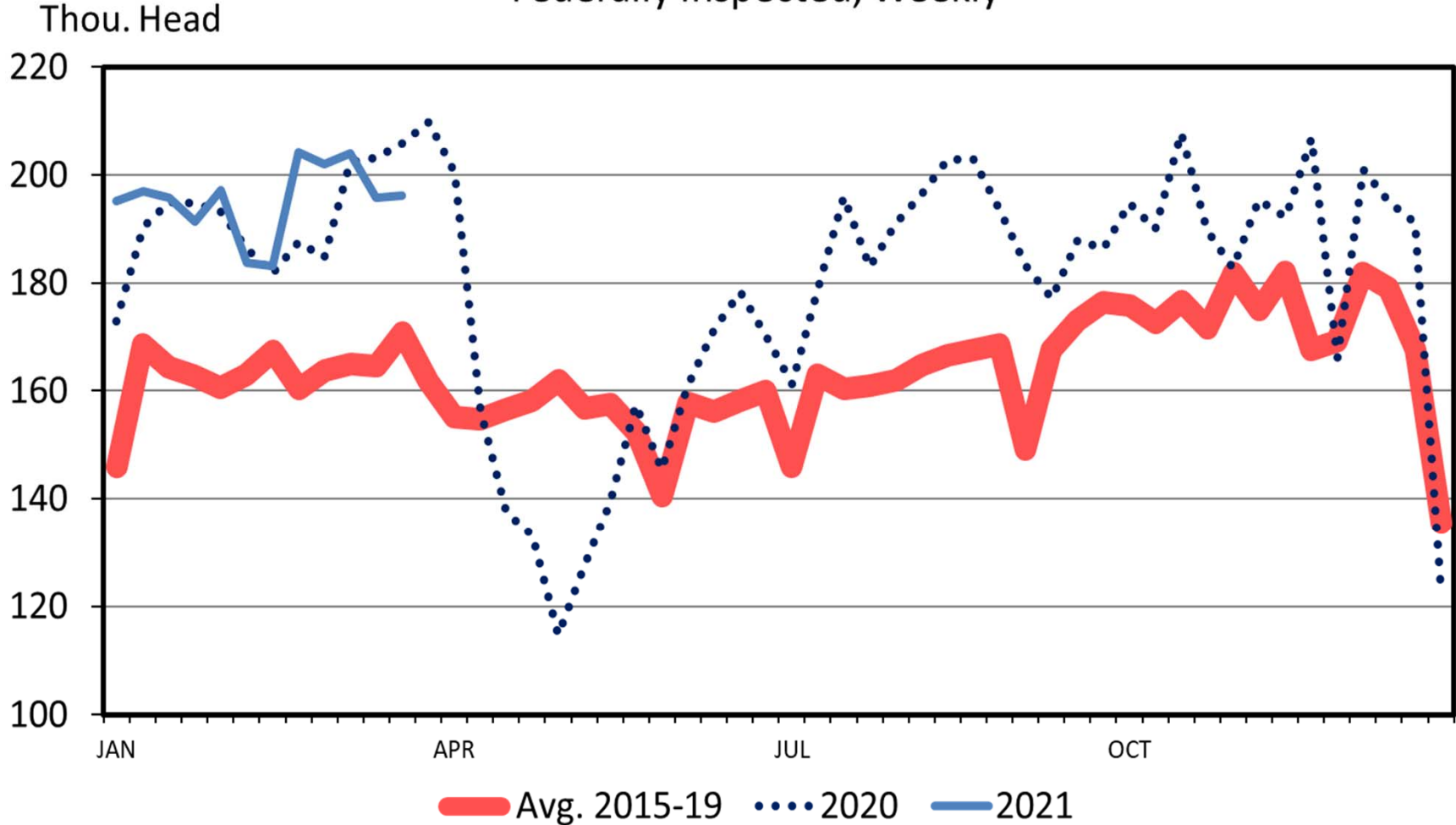


Data Source: USDA-AMS & USDA-NASS

Livestock Marketing Information Center

# HEIFER SLAUGHTER

Federally Inspected, Weekly

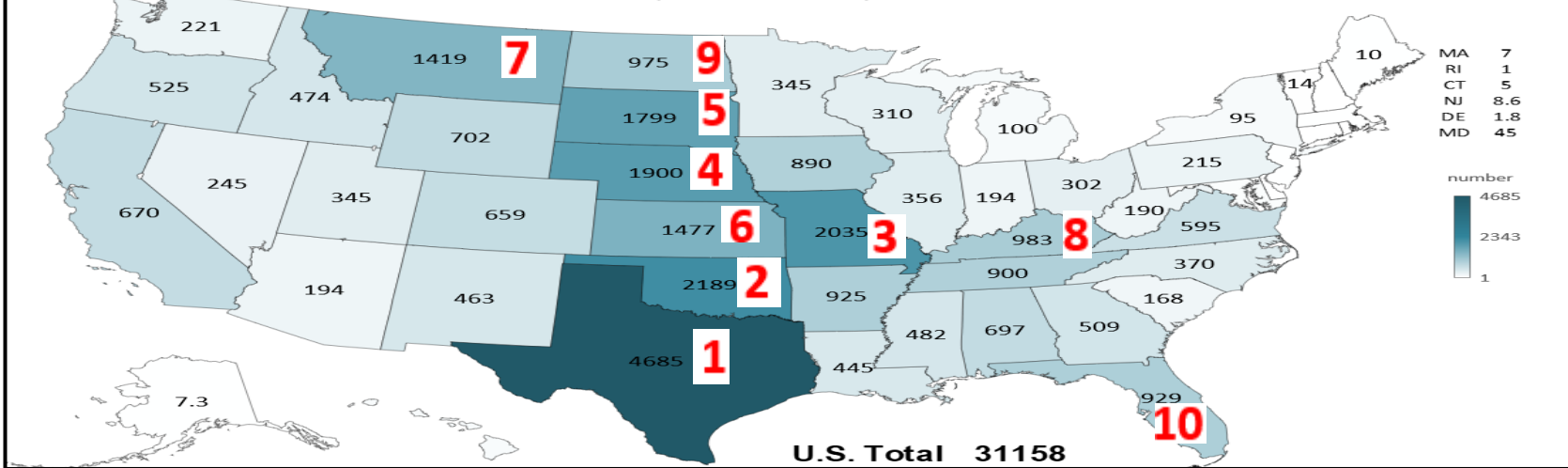


Data Source: USDA-AMS & USDA-NASS

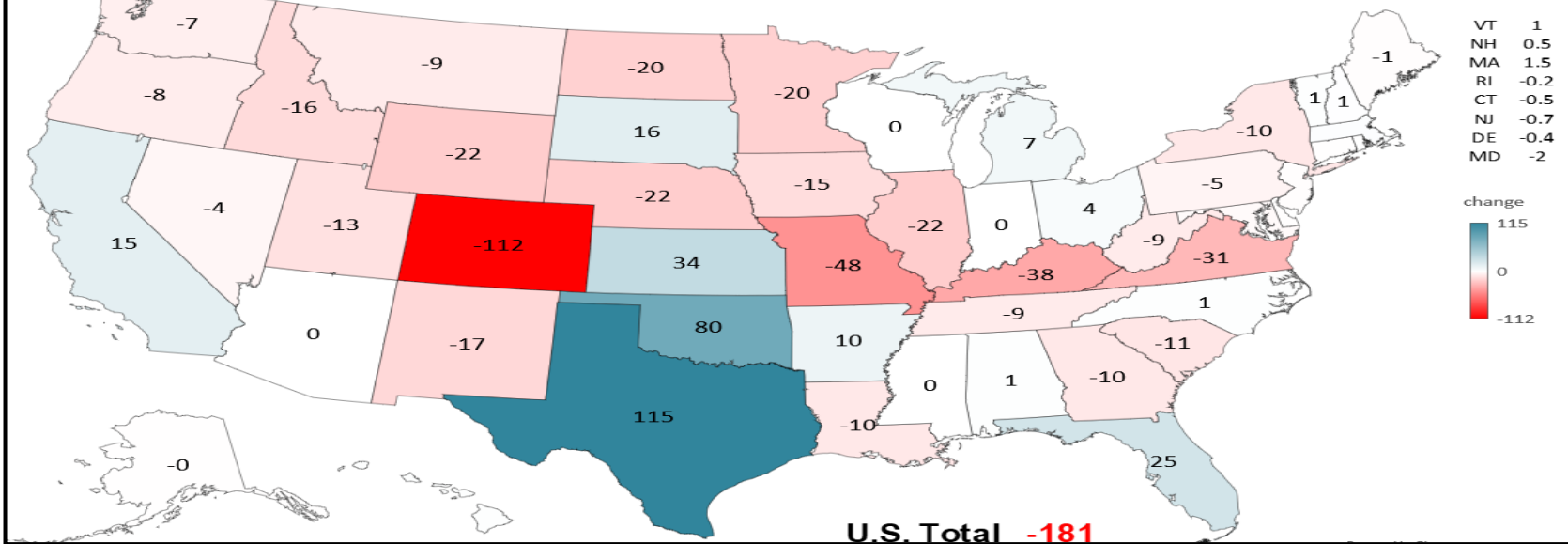
Livestock Marketing Information Center



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



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

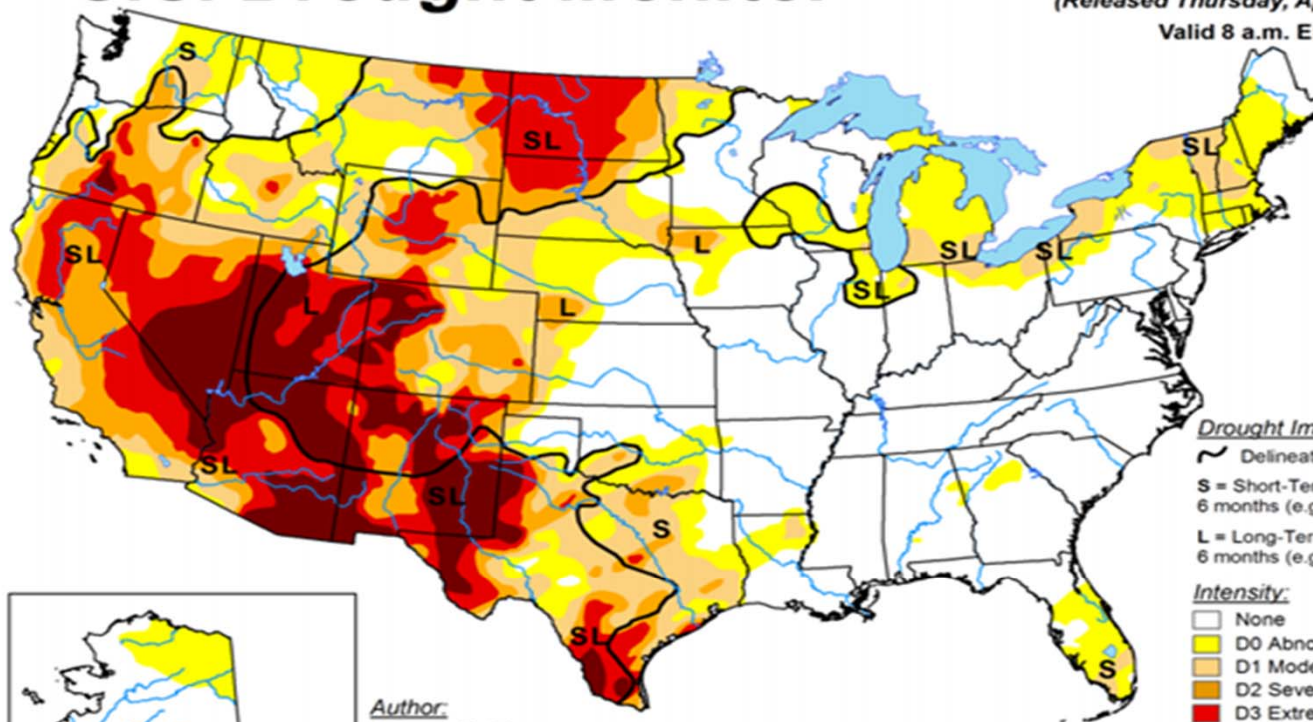


# U.S. Drought Monitor

April 13, 2021

(Released Thursday, Apr. 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:

None

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought

### Author:

Deborah Bathke

National Drought Mitigation 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)

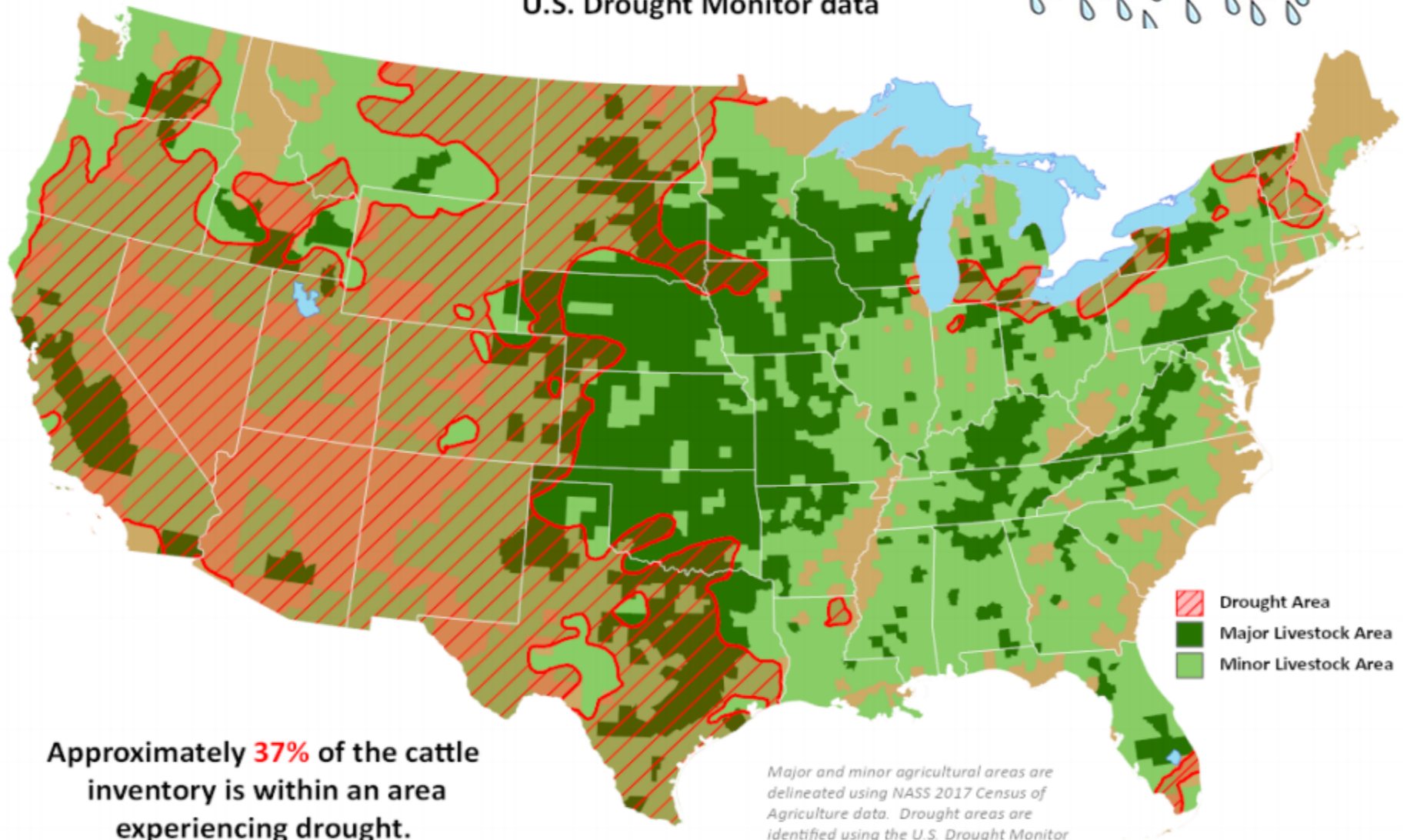


United States  
Department of  
Agriculture

*This product was prepared by the  
USDA Office of the Chief Economist (OCE)  
World Agricultural Outlook Board (WAOB)*

## Cattle Areas in Drought

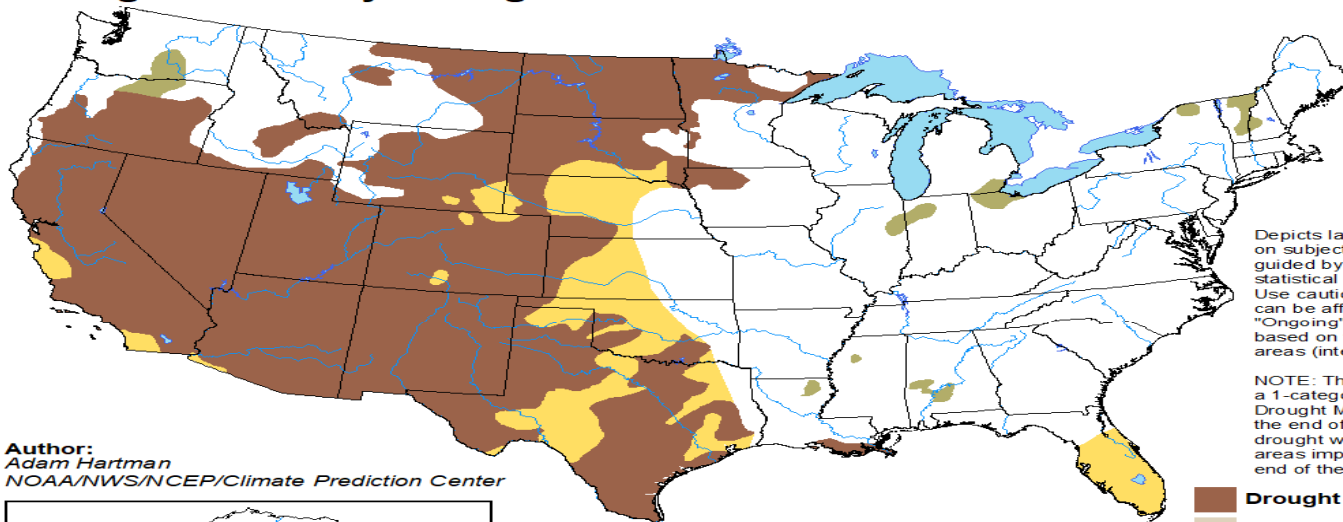
Reflects **April 13, 2021**  
U.S. Drought Monitor data



# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

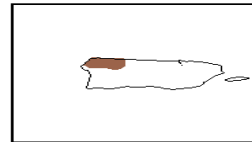
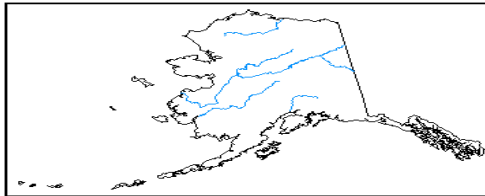
Valid for March 18 - June 30, 2021  
Released March 18



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Adam Hartman  
NOAA/NWS/NCEP/Climate Prediction Center



- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

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# Navigating Drought Webinars

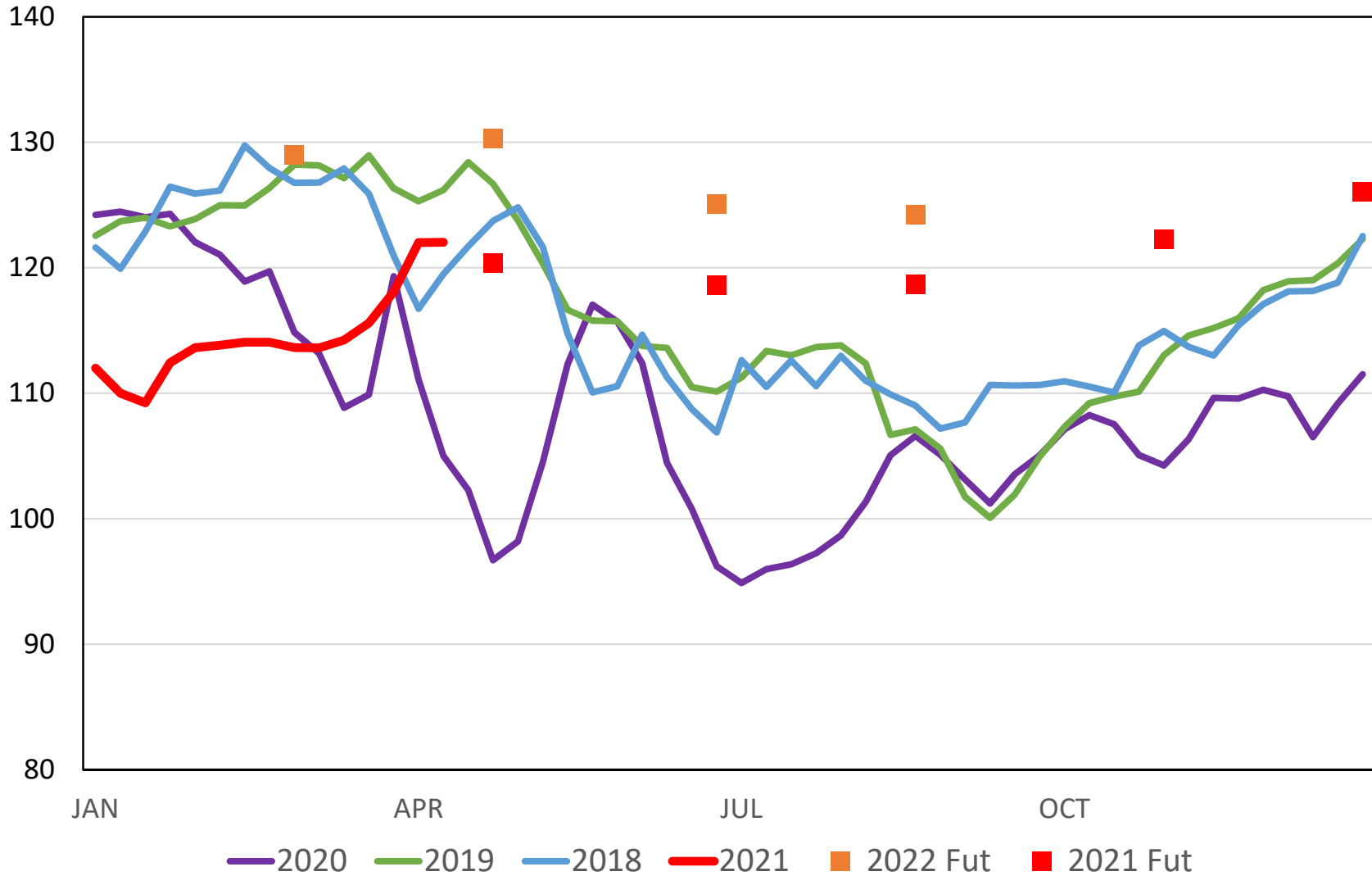
## Join us the last Thursdays of the month

- Apr 29, 2021 01:00 PM
- May 27, 2021 01:00 PM
- Jun 24, 2021 01:00 PM
- Jul 29, 2021 01:00 PM
- Aug 26, 2021 01:00 PM
- Sep 30, 2021 01:00 PM

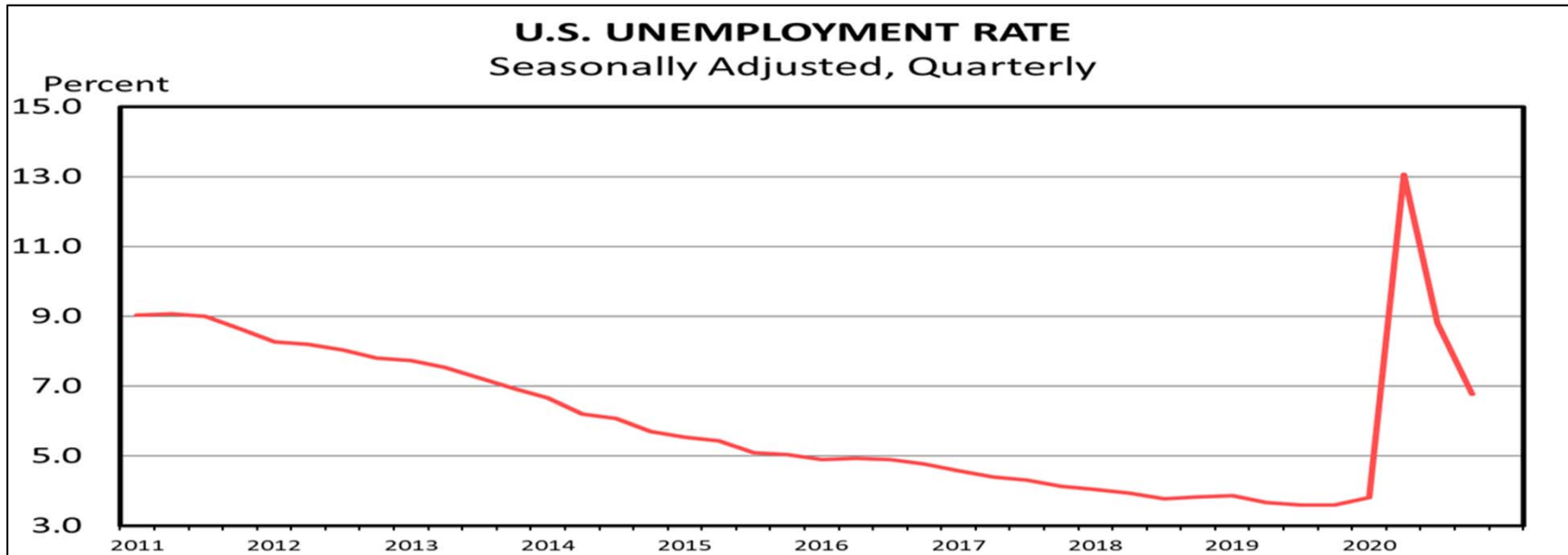
[www.ag.ndsu.edu/drought](http://www.ag.ndsu.edu/drought)

# SLAUGHTER STEER PRICES

## 5 Market Weighted Average, Weekly



# US ECONOMY?

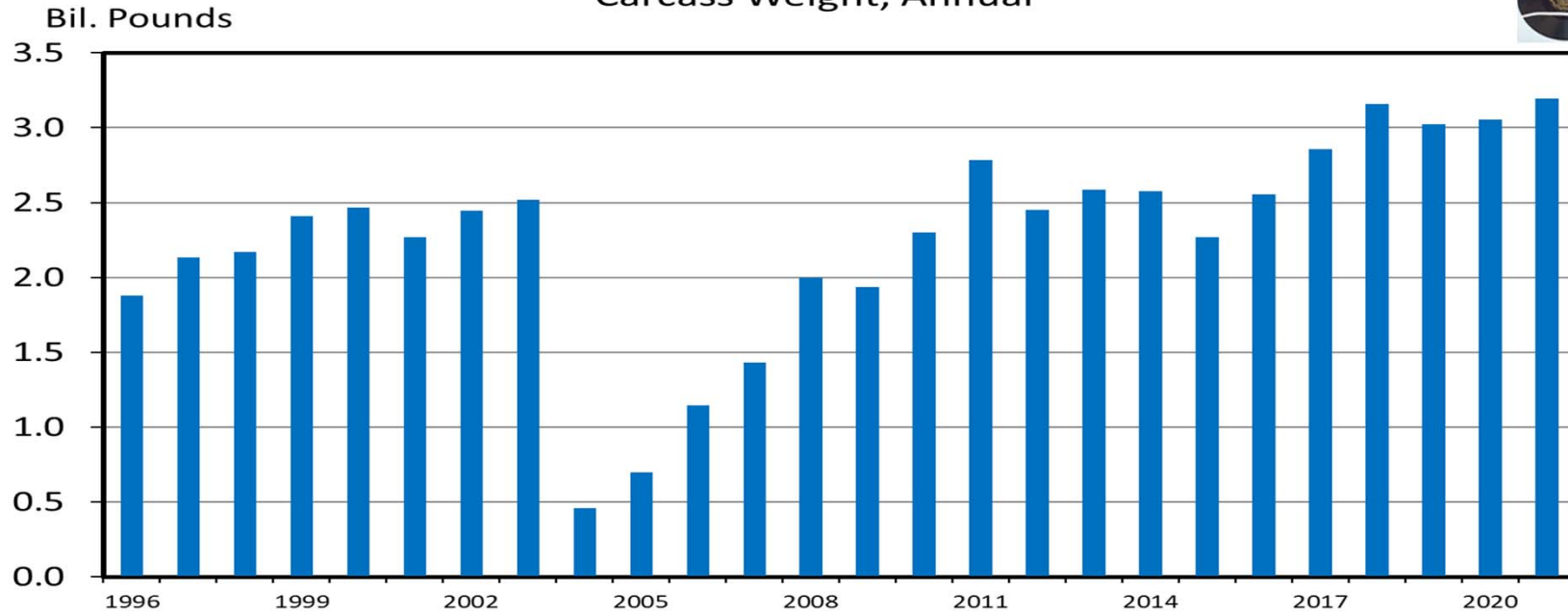


High 34200.67 on Apr 16, 2021

Low 23018.88 on Apr 21, 2020

# U.S. BEEF AND VEAL EXPORTS

## Carcass Weight, Annual

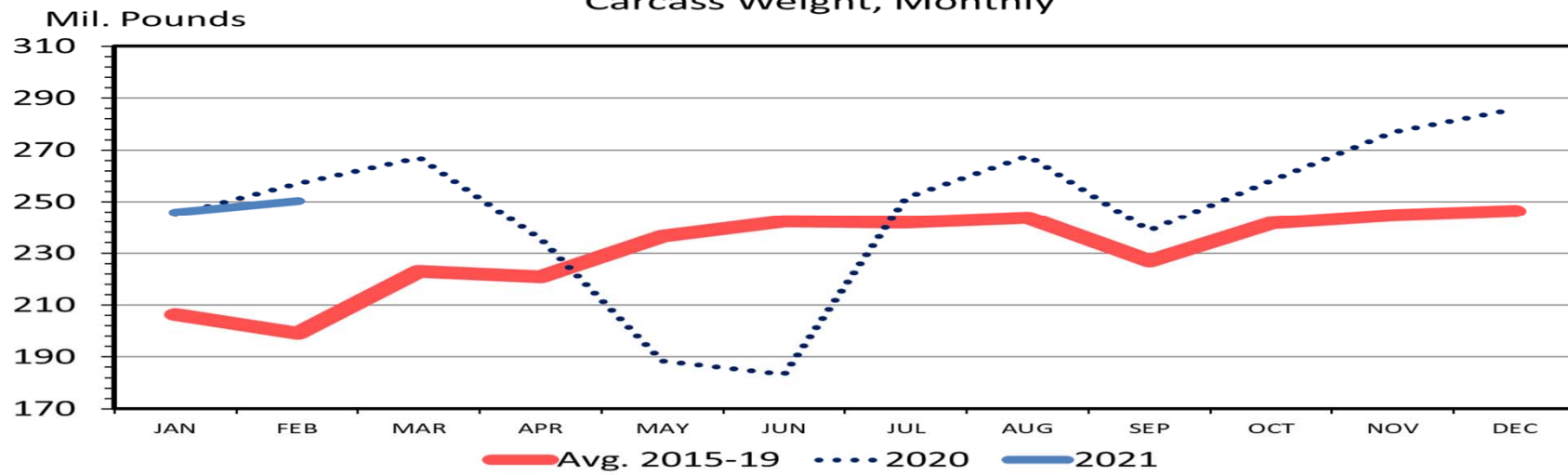


Data Source: USDA-ERS & USDA-FAS

Livestock Marketing Information Center

# US BEEF AND VEAL EXPORTS

## Carcass Weight, Monthly



# U.S. Ranking in World





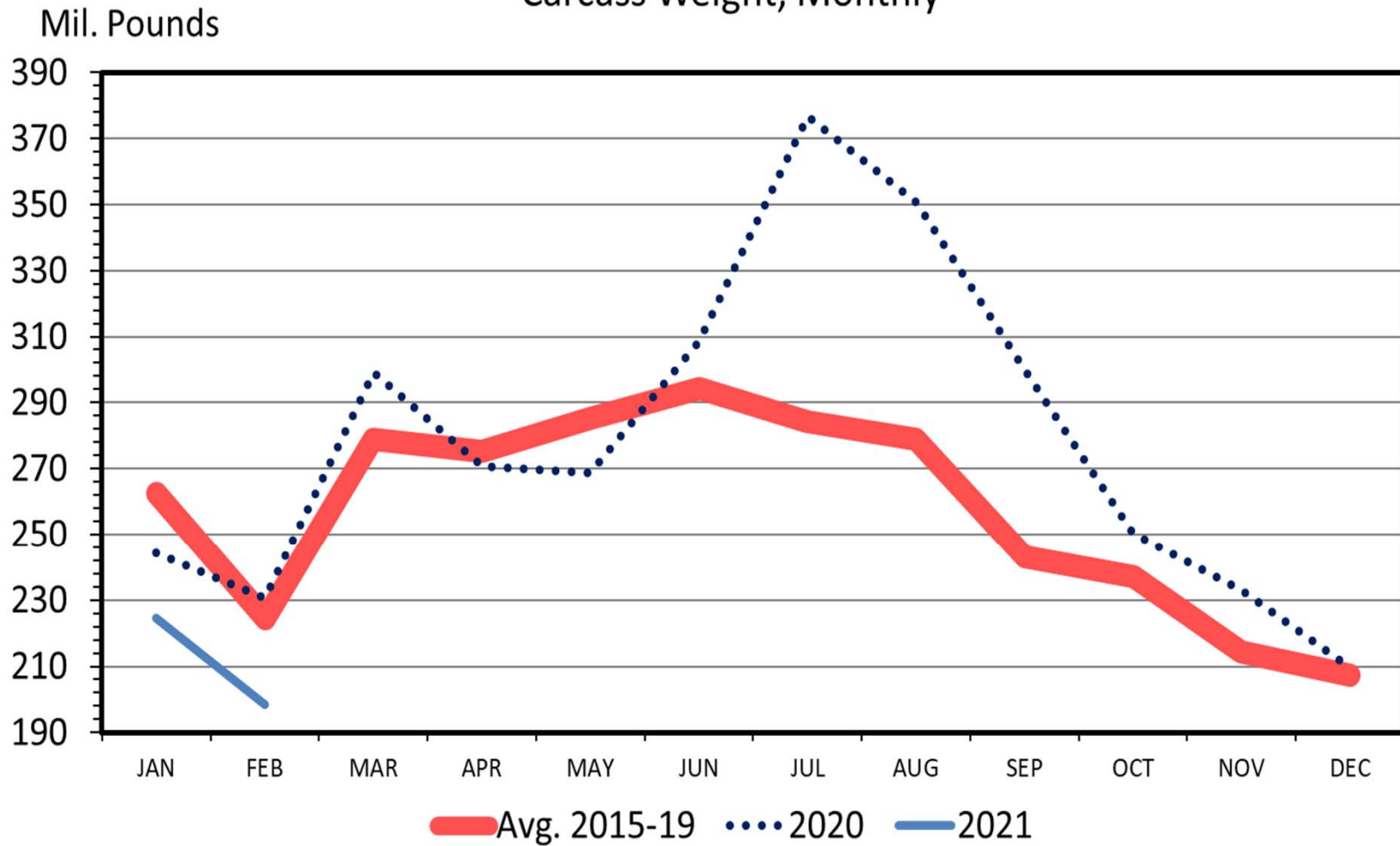
# Major U.S. Meat Export Customers

| 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

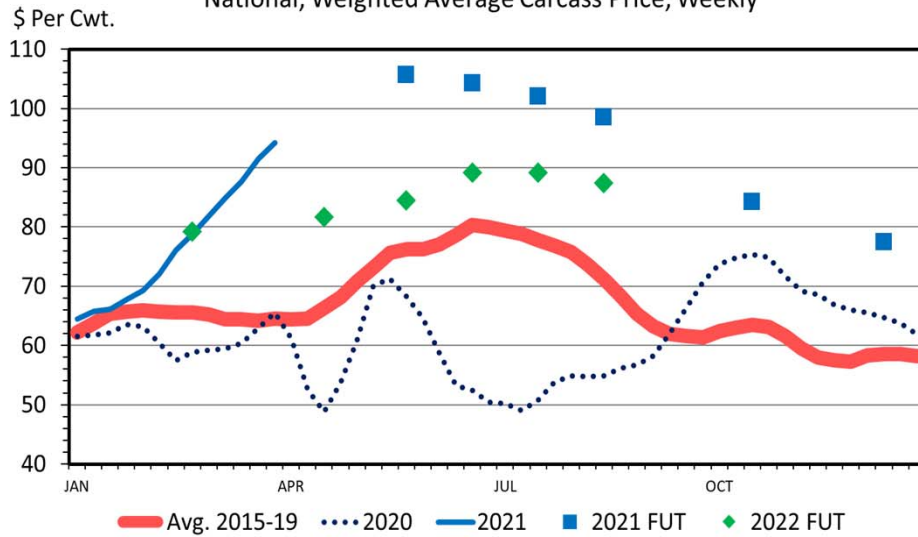


Data Source: USDA-ERS & USDA-FAS

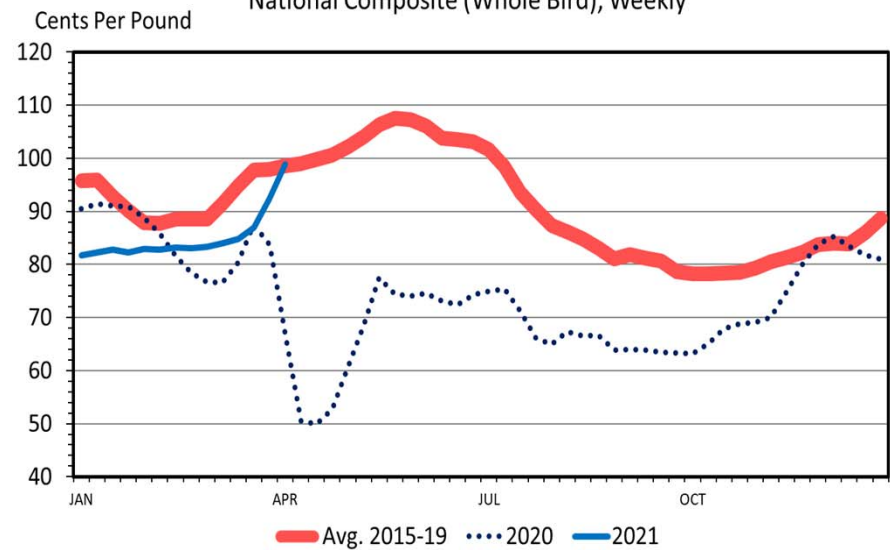
Livestock Marketing Information Center

# Other Livestock

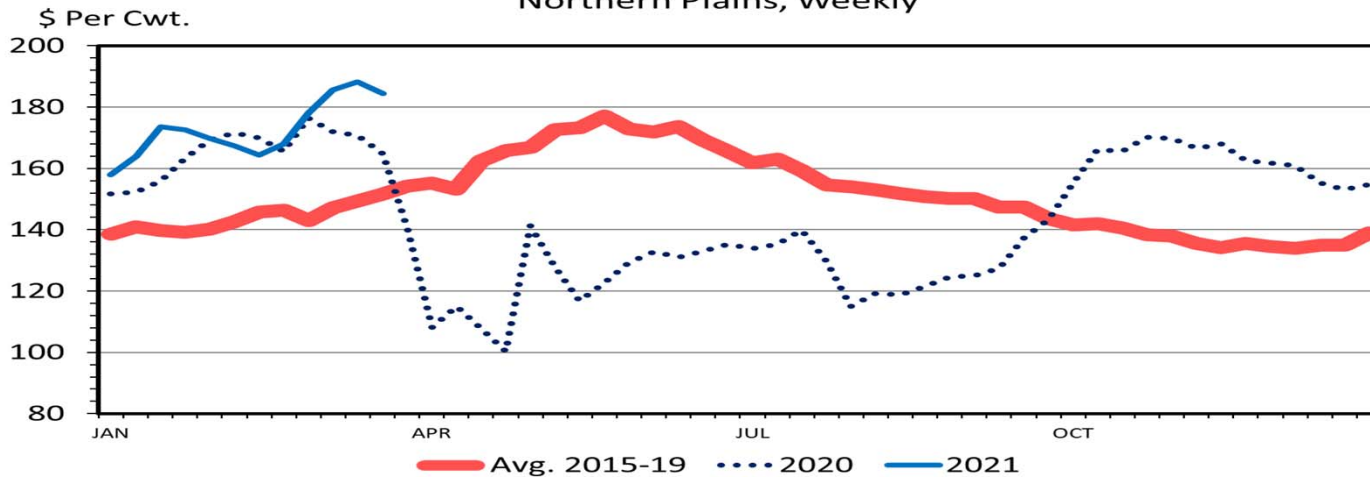
**BASE SLAUGHTER HOG PRICES**  
National, Weighted Average Carcass Price, Weekly



**BROILER PRICES**  
National Composite (Whole Bird), Weekly

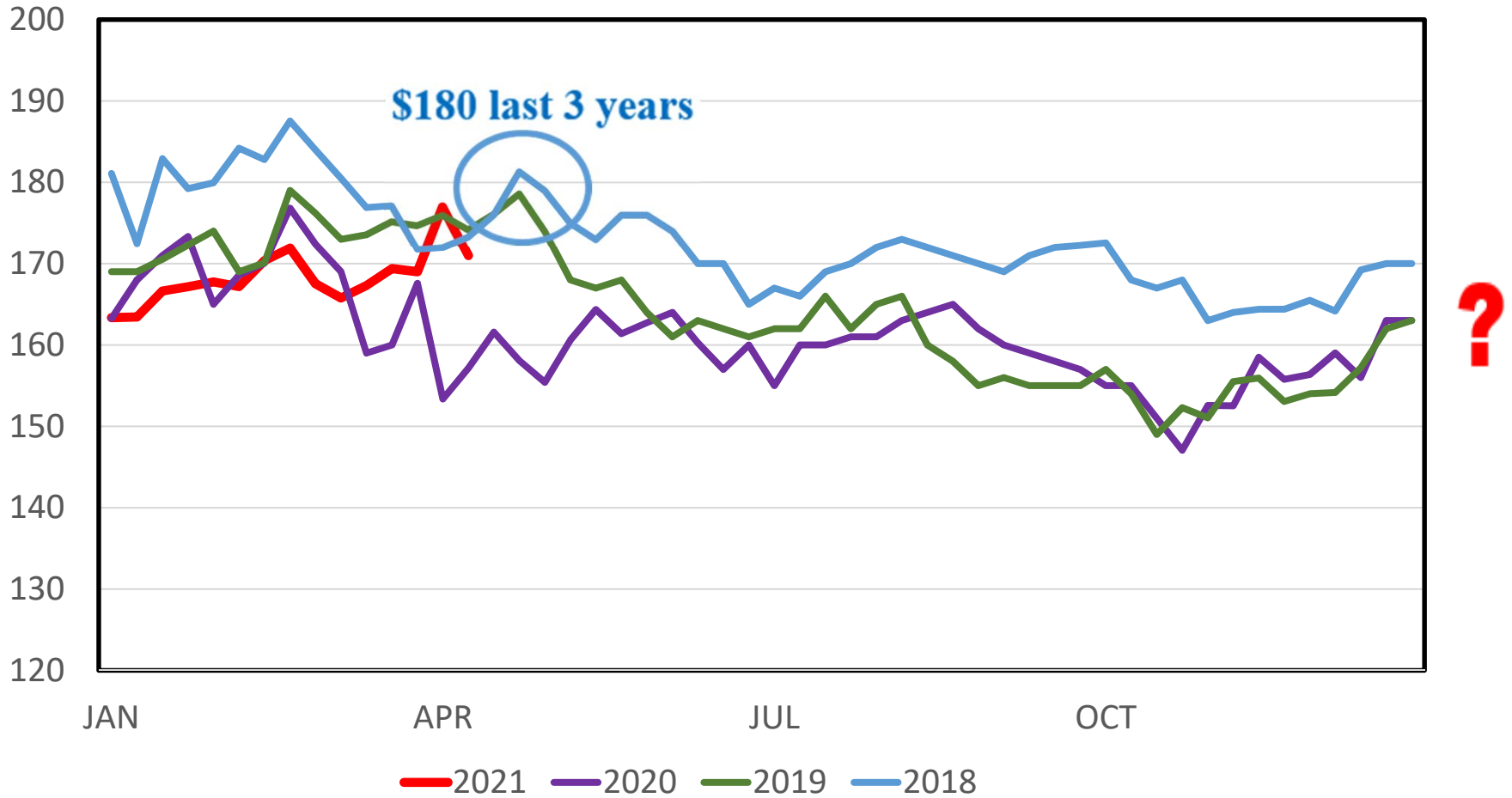


**SLAUGHTER LAMB PRICES**  
Northern Plains, Weekly



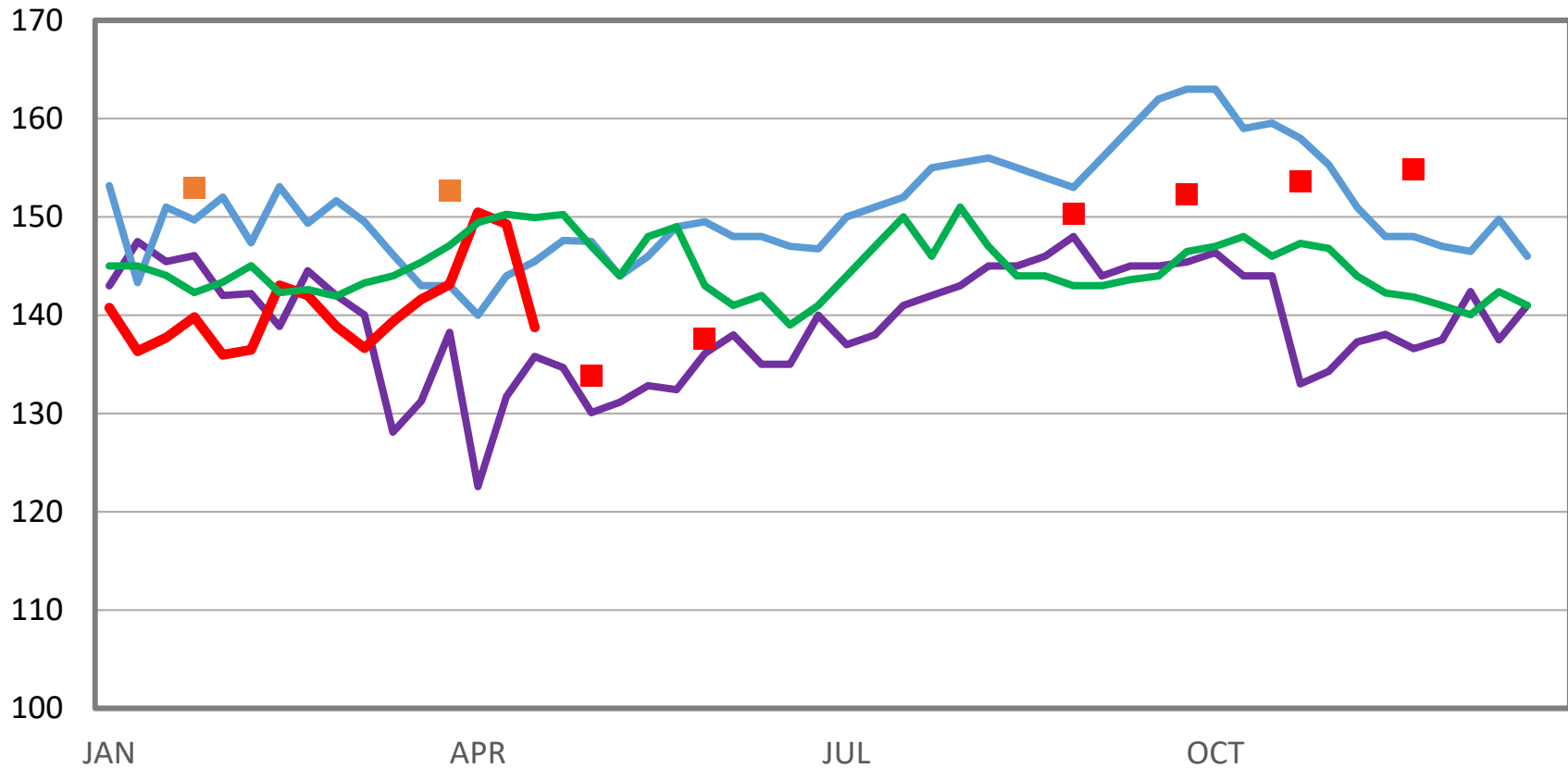
Data Source: USDA-AMS; Livestock Marketing Information Center

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



# MED. & LRG. #1 FEEDER STEER PRICES

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



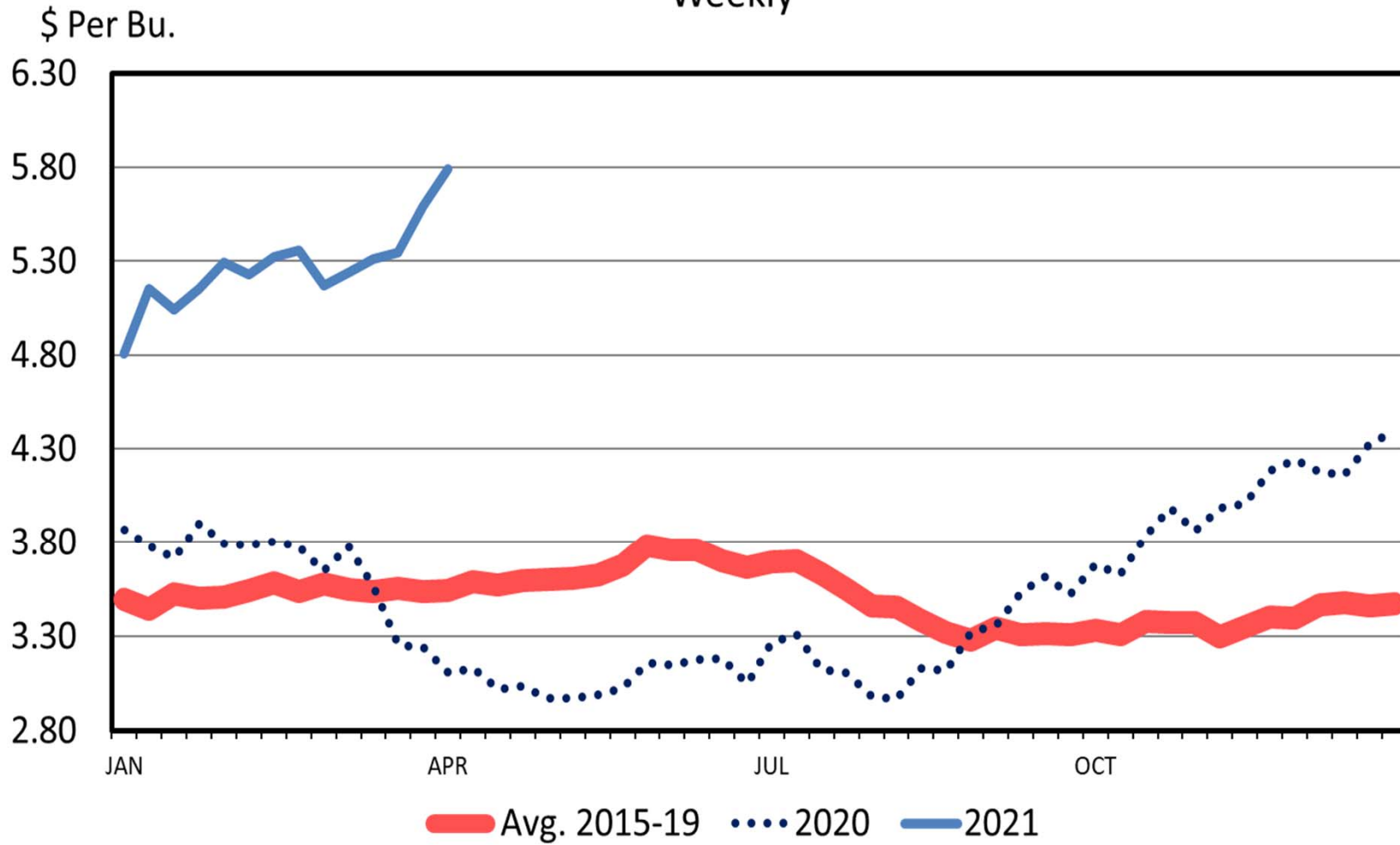
2022 Futures 2020 2018 2021 2019 2021 Futures



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# OMAHA CORN PRICES

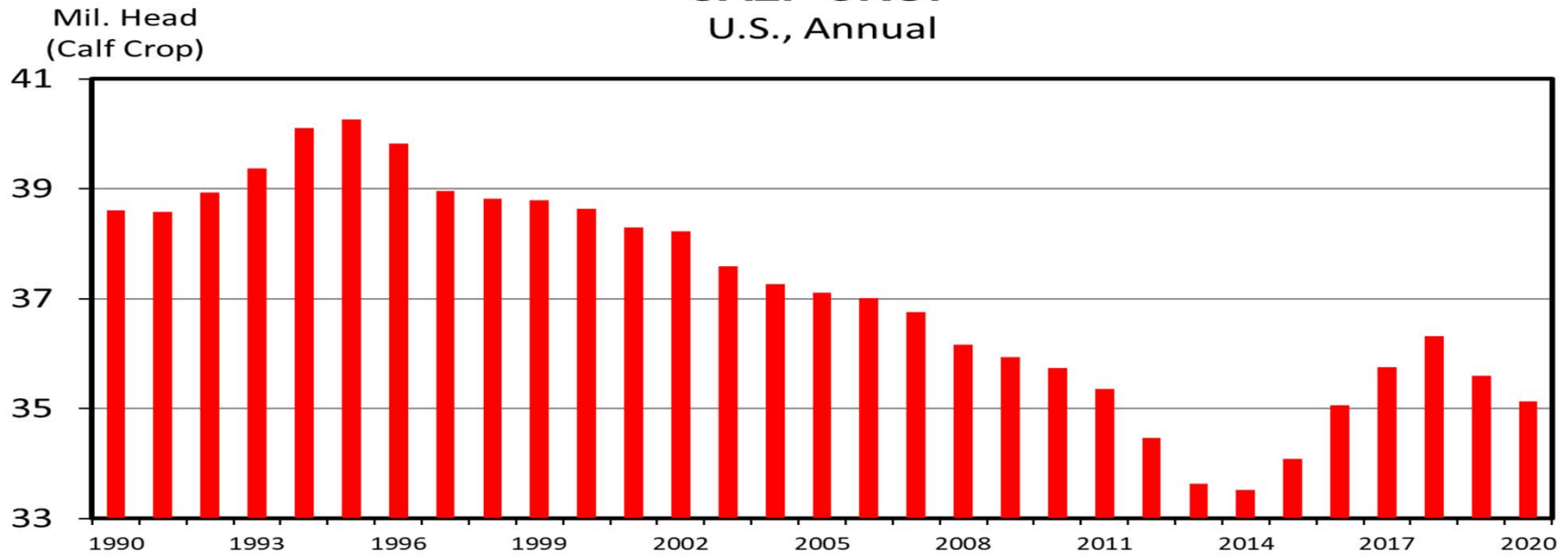
## Weekly



**Data Source: USDA-AMS**  
Livestock Marketing Information Center

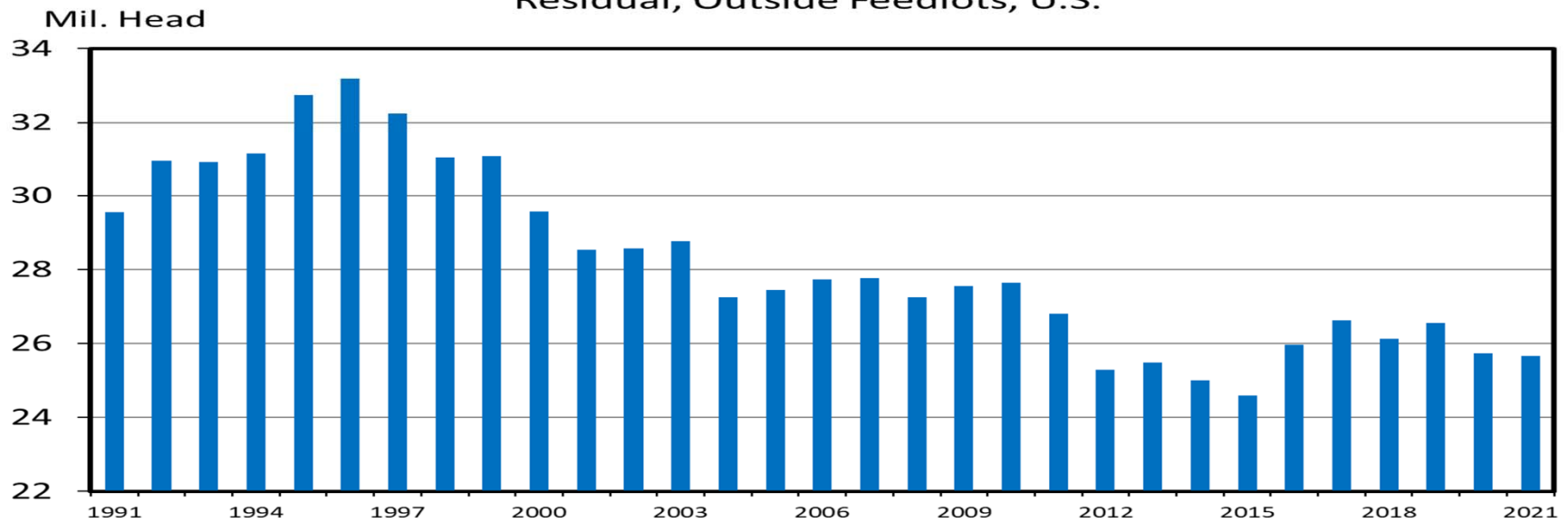
# CALF CROP

U.S., Annual



## JANUARY 1 FEEDER CATTLE SUPPLIES

Residual, Outside Feedlots, U.S.

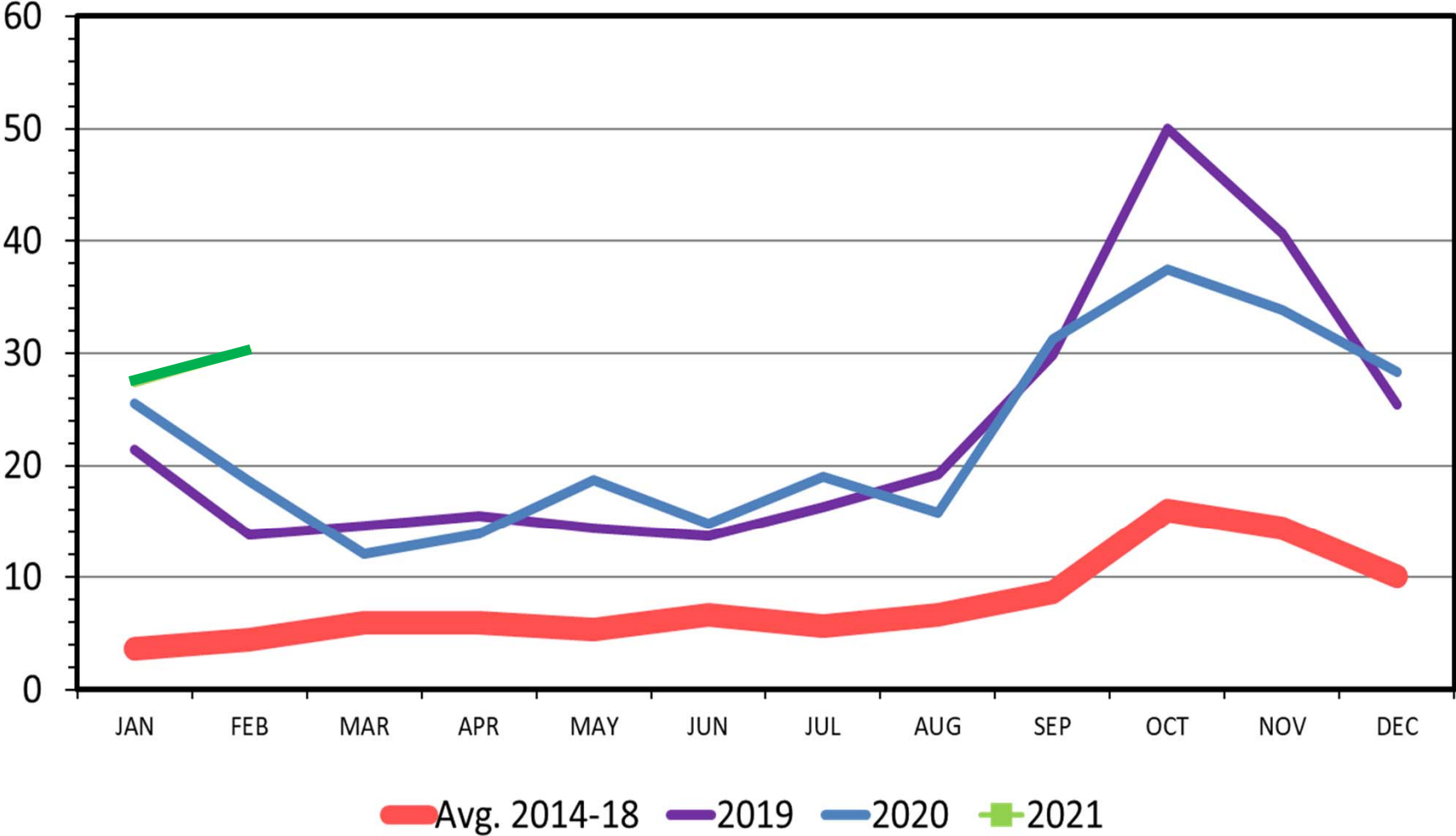


Data Source: USDA-NASS Livestock Marketing Information Center

# US FEEDER CATTLE EXPORTS TO CANADA

Monthly

Thou. Head



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





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

| Head | Wt Range | Avg Wt | Price Range   | Avg Price |
|------|----------|--------|---------------|-----------|
| 11   | 365-385  | 378    | 183.00-212.00 | 193.19    |
| 17   | 418      | 418    | 197.75        | 197.75    |
| 65   | 454-486  | 465    | 172.00-196.50 | 190.79    |
| 32   | 510-544  | 535    | 173.50-183.50 | 179.18    |
| 212  | 560-592  | 572    | 158.00-180.00 | 171.00    |
| 214  | 608-647  | 618    | 155.00-171.75 | 168.11    |
| 162  | 650-693  | 662    | 150.50-164.00 | 158.09    |
| 342  | 705-748  | 727    | 140.00-152.50 | 150.74    |
| 195  | 755-796  | 769    | 140.00-153.00 | 149.28    |
| 123  | 803-844  | 828    | 135.00-140.50 | 138.73    |
| 33   | 851-874  | 859    | 127.50-137.75 | 135.32    |
| 46   | 901-946  | 934    | 125.00-130.50 | 129.43    |
| 7    | 998      | 998    | 128.00        | 128.00    |

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

| Head | Wt Range | Avg Wt | Price Range   | Avg Price |             |
|------|----------|--------|---------------|-----------|-------------|
| 8    | 388      | 388    | 167.50        | 167.50    |             |
| 31   | 483-486  | 486    | 146.50-156.00 | 148.02    |             |
| 162  | 509-544  | 520    | 154.00-165.00 | 160.77    |             |
| 154  | 558-598  | 581    | 141.00-160.50 | 148.81    |             |
| 354  | 603-642  | 626    | 139.00-155.50 | 149.58    |             |
| 11   | 648      | 648    | 150.00        | 150.00    | Replacement |
| 294  | 650-693  | 675    | 127.50-144.75 | 138.95    |             |
| 55   | 684      | 684    | 146.00        | 146.00    | Replacement |
| 458  | 700-749  | 729    | 129.00-140.00 | 135.16    |             |
| 295  | 764-796  | 780    | 124.00-132.50 | 129.08    |             |
| 90   | 754-766  | 764    | 134.75-136.00 | 135.81    | Replacement |
| 292  | 801-844  | 829    | 120.50-131.50 | 126.87    |             |
| 10   | 838      | 838    | 128.50        | 128.50    | Replacement |
| 312  | 850-899  | 870    | 122.25-128.00 | 123.88    |             |
| 41   | 901-944  | 920    | 119.50-121.25 | 120.61    |             |
| 66   | 964-991  | 974    | 119.25-120.00 | 119.71    |             |

**CWT. 22**      **HD. 127**

**13**      **101**

# Adding Value To Calves

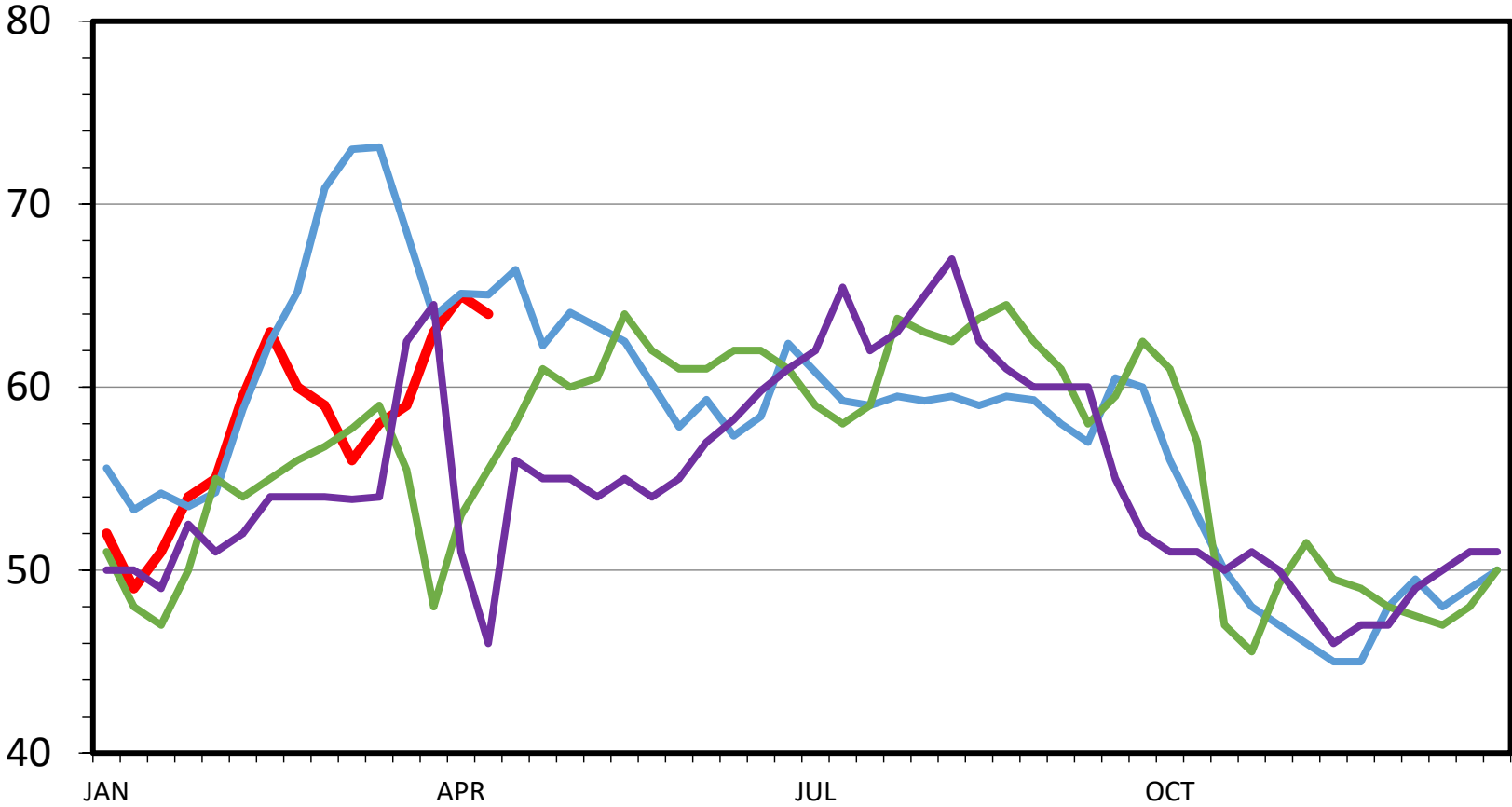
- Weaned
- Verified vaccination program
- Source/age verified/no implants
- Natural (no antibiotics or implants)
- Bovine Viral Diarrhea persistently infected (BVD-PI) tested negative
- Beef Quality Assurance (BQA) – packers requiring
- Replacement quality heifers
- \* *The more information you provide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

**NDSU**

EXTENSION AGRIBUSINESS  
EXTENDING KNOWLEDGE >> CHANGING LIVES

# HINDSIGHT IS 2020 BUT 2021?



African Swine Fever

Record Meat Production



Exports



Trade Agreements



Drought/Blizzards/Floods

Corn Prices

Consumer Demand

COMPETING MEATS

# 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”**

# LIVESTOCK MARKETING CAN BE FUN!



Questions?

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