

# *Beef Cattle Market Outlook*

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**American Society  
of Farm Managers  
& Rural Appraisers**

**KANSAS CHAPTER**



**AgManager**  
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# Overarching Beef Industry Economic Outlook

- Supplies
  - Commercial Beef Production Up, Increases Moderating
    - +3.8% in 2017, +2.6% in 2018, +1.1% in 2019,
    - +0.9% in 2020 (?), -1.5% in 2021(?)

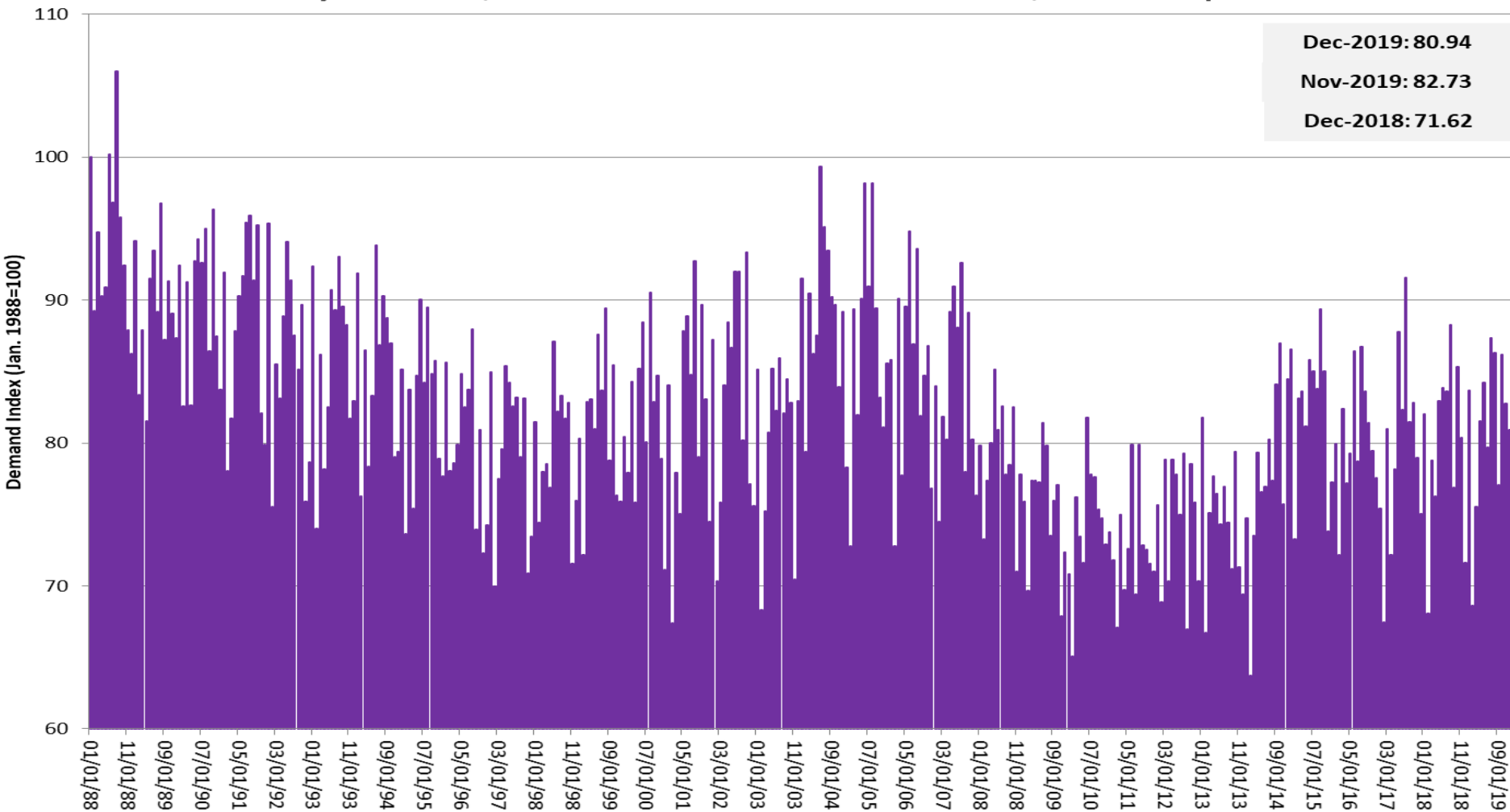
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    - +3.8% in 2017, +2.6% in 2018, +1.1% in 2019,
    - +0.9% in 2020 (?), -1.5% in 2021(?)
- Demand
  - **Key to supporting prices**

# All-Fresh Beef Retail Demand Index

(Monthly, Jan 1988=100)

## Monthly Domestic, All-Fresh Retail Beef Demand Index, Jan. 1988-present



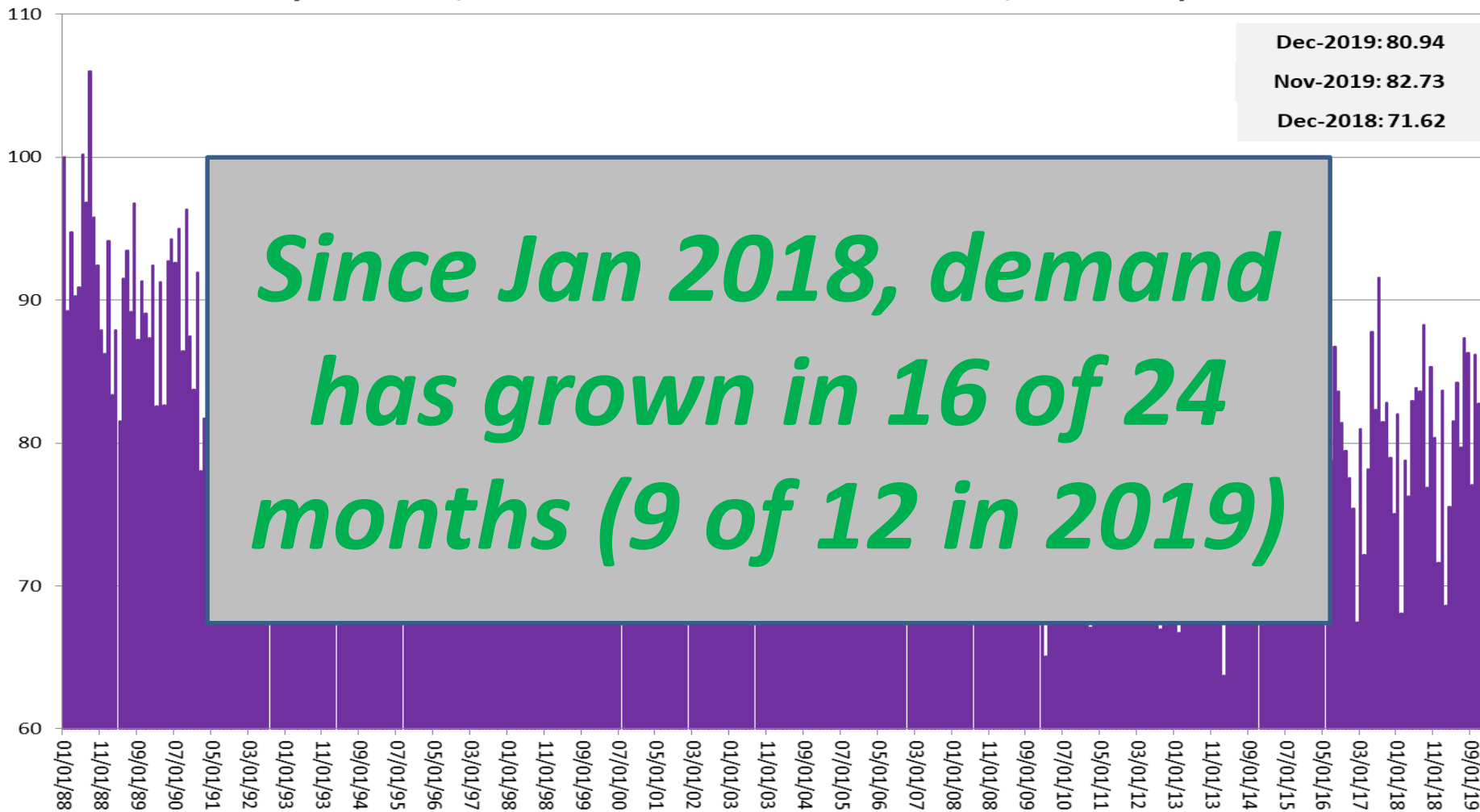
Source: Glynn T. Tonsor, Kansas State University

<http://agmanager.info/livestock-meat/meat-demand>

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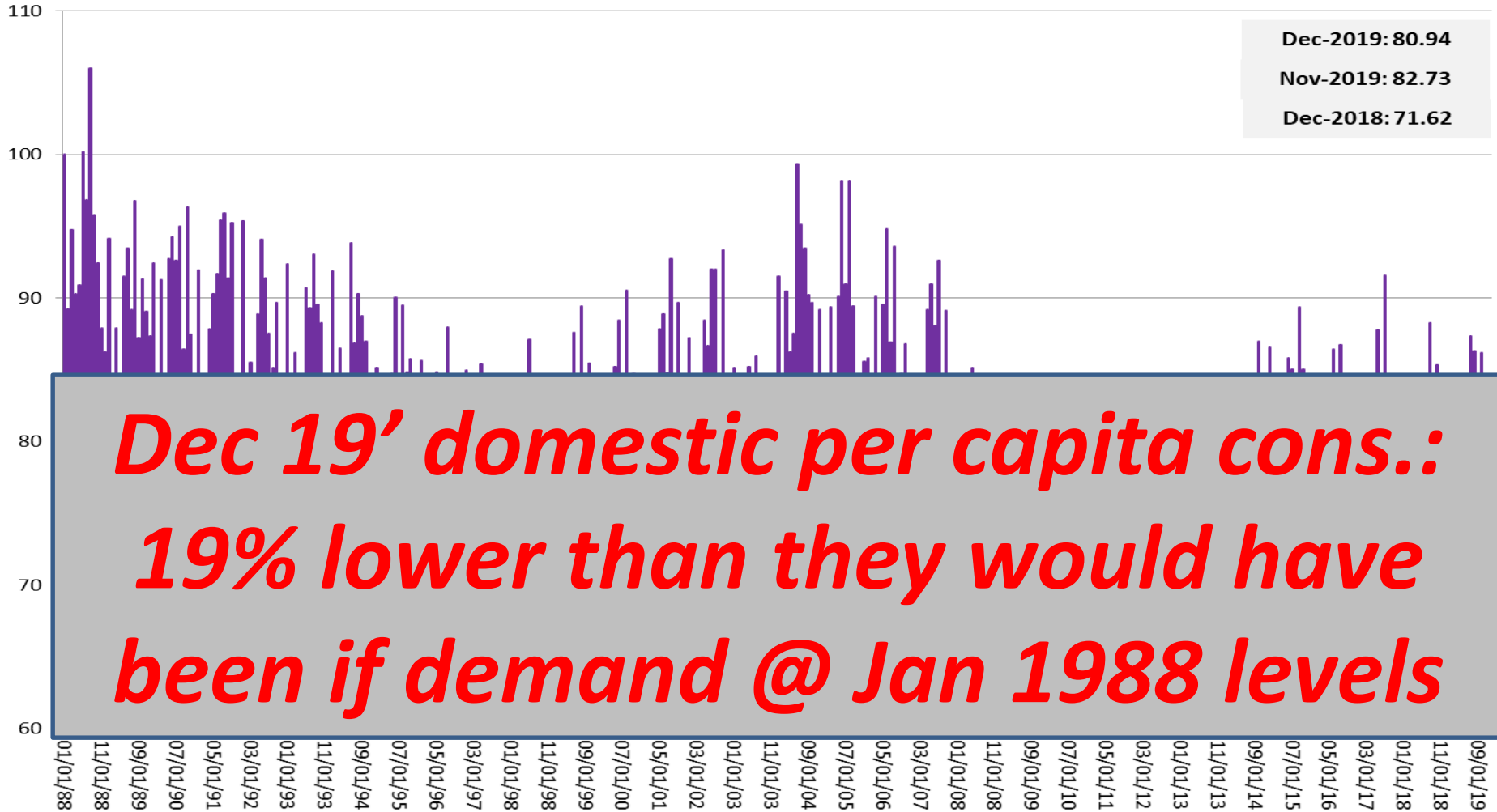
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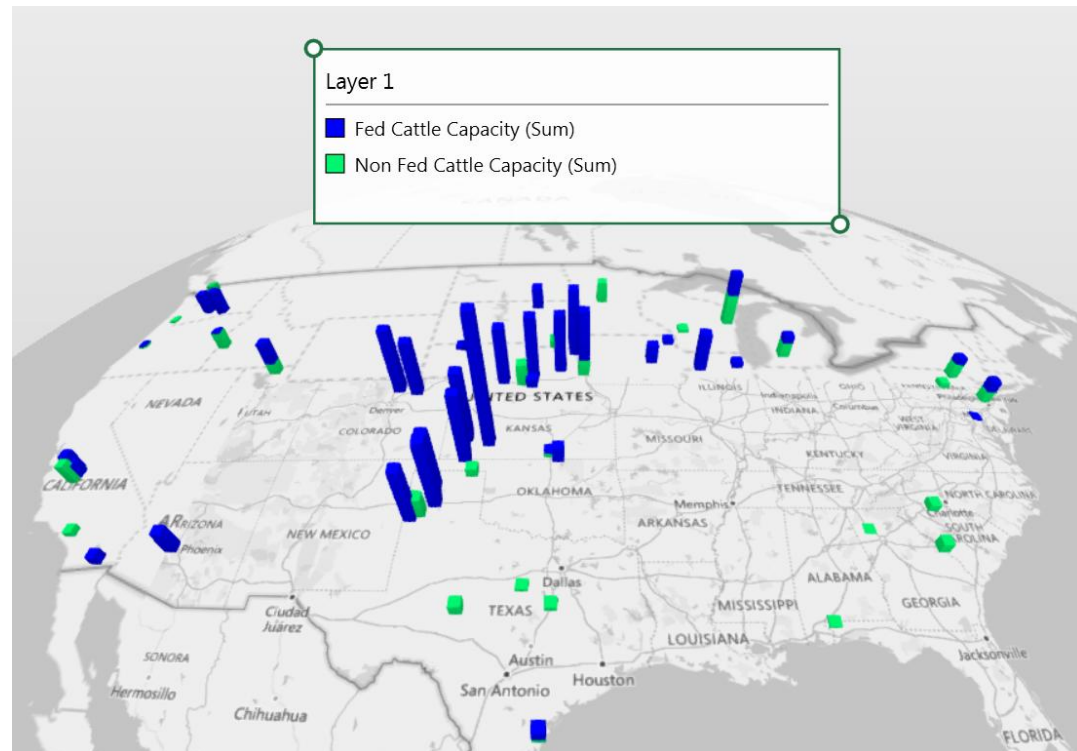


Source: Glynn T. Tonsor, Kansas State University

<http://agmanager.info/livestock-meat/meat-demand>

# Holcomb-Tyson Plant Fire

- Date: August 9th
- Processing Capacity Involved: 6k/day
  - ~5% of US Capacity (~24% of KS Capacity)
- Processor Map



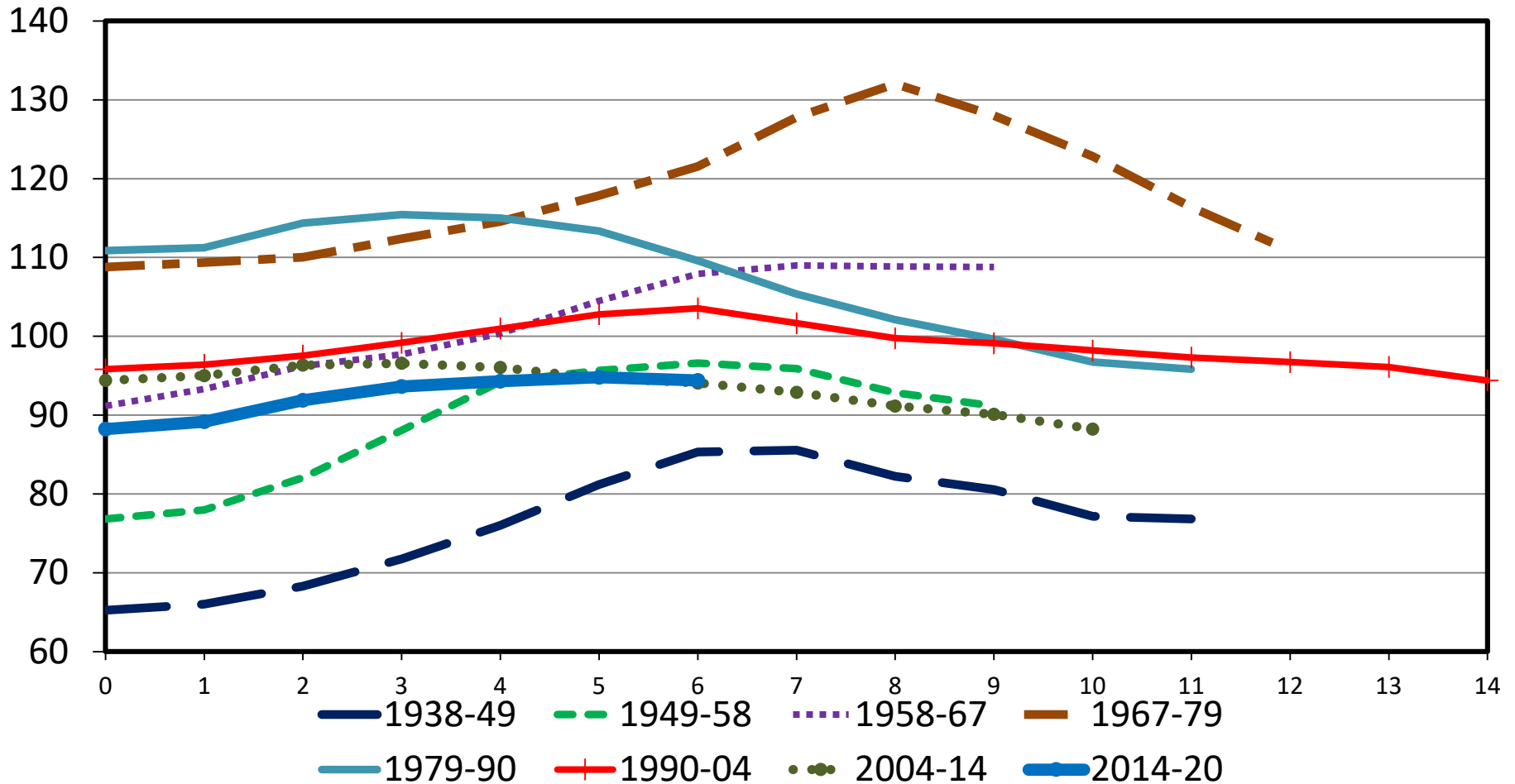
- Can listen to full talk at KSU Stocker Field Day for more, related information:
  - <https://www.asi.k-state.edu/events/stocker-conference.html>
  - <https://www.youtube.com/watch?v=DpTyq3SuZn8&list=PLst4YxRiGX9RSG0UO4WcavXCkwJmQz7lw&index=2&t=0s>



# TOTAL CATTLE INVENTORY BY CYCLE

U.S., January 1

Mil. Head



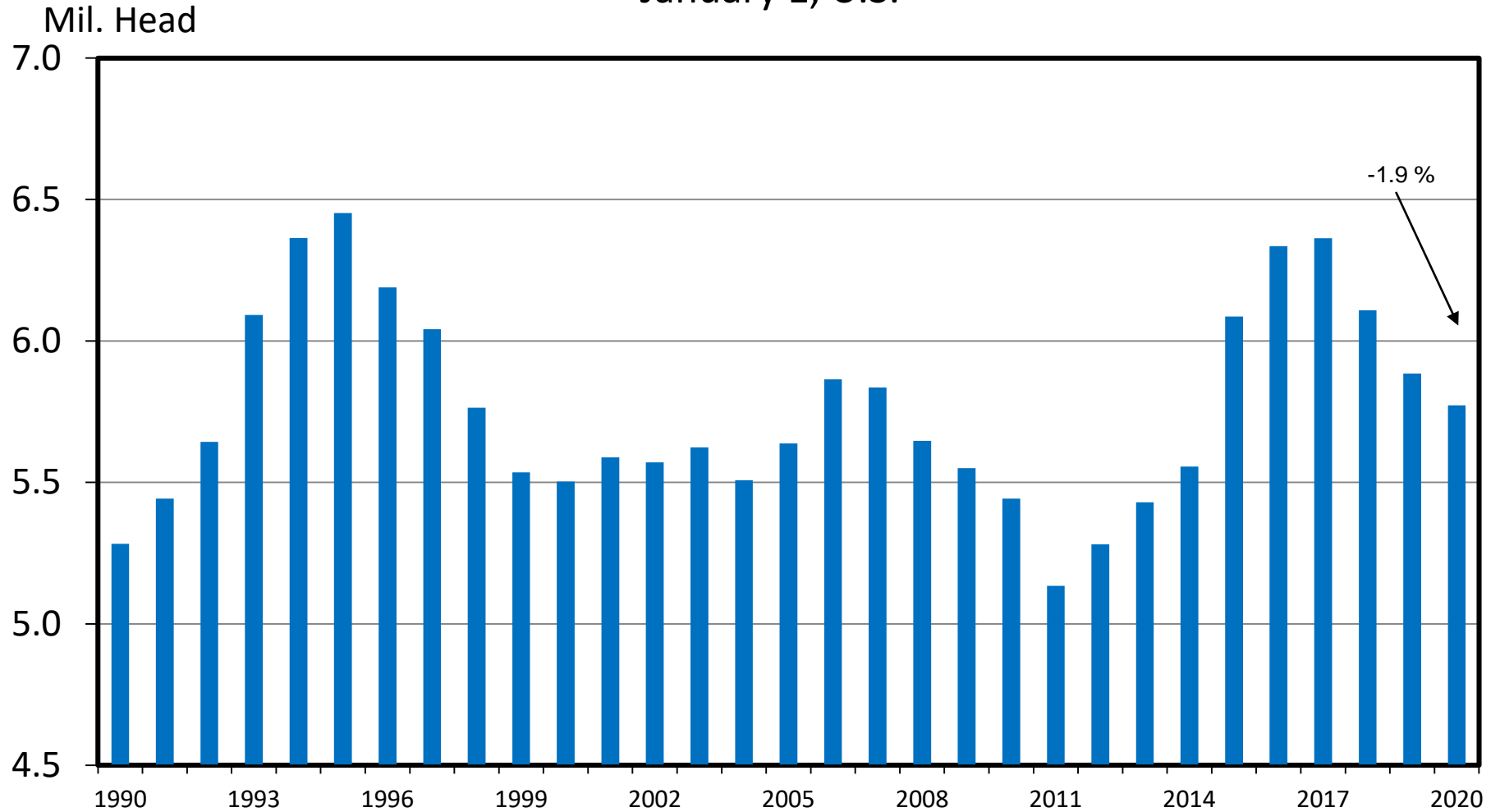
Data Source: USDA-NASS

Livestock Marketing Information Center

C-N-40  
01/31/20

# HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, U.S.

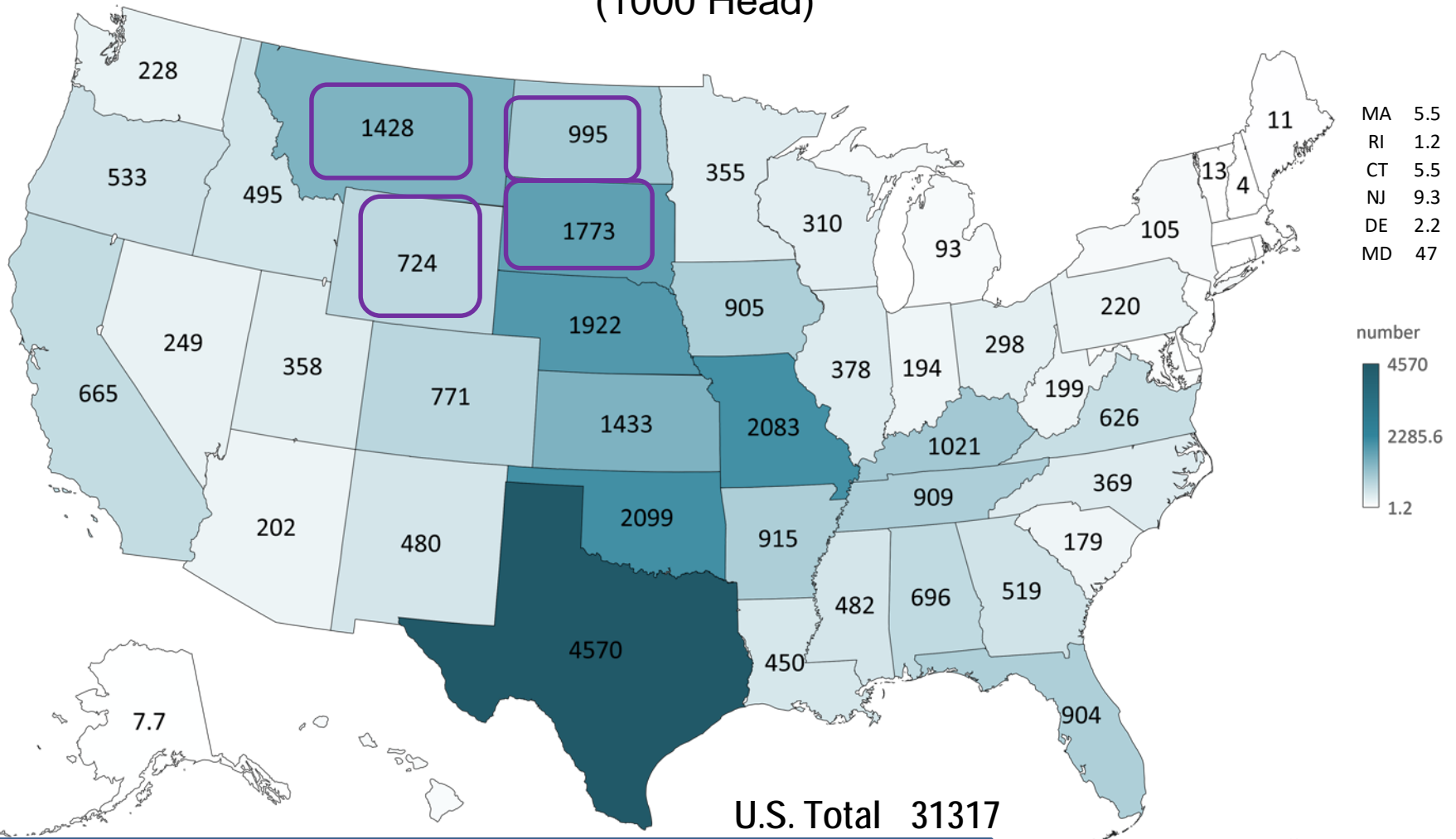


Data Source: USDA-NASS

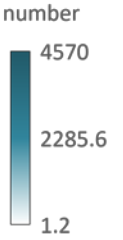
Livestock Marketing Information Center

C-N-38  
01/31/20

# BEEF COWS THAT CALVED JANUARY 1, 2020 (1000 Head)



MA	5.5
RI	1.2
CT	5.5
NJ	9.3
DE	2.2
MD	47



4 States have more Beef Cows than Residents:  
WY, ND, SD, MT (NE about even)

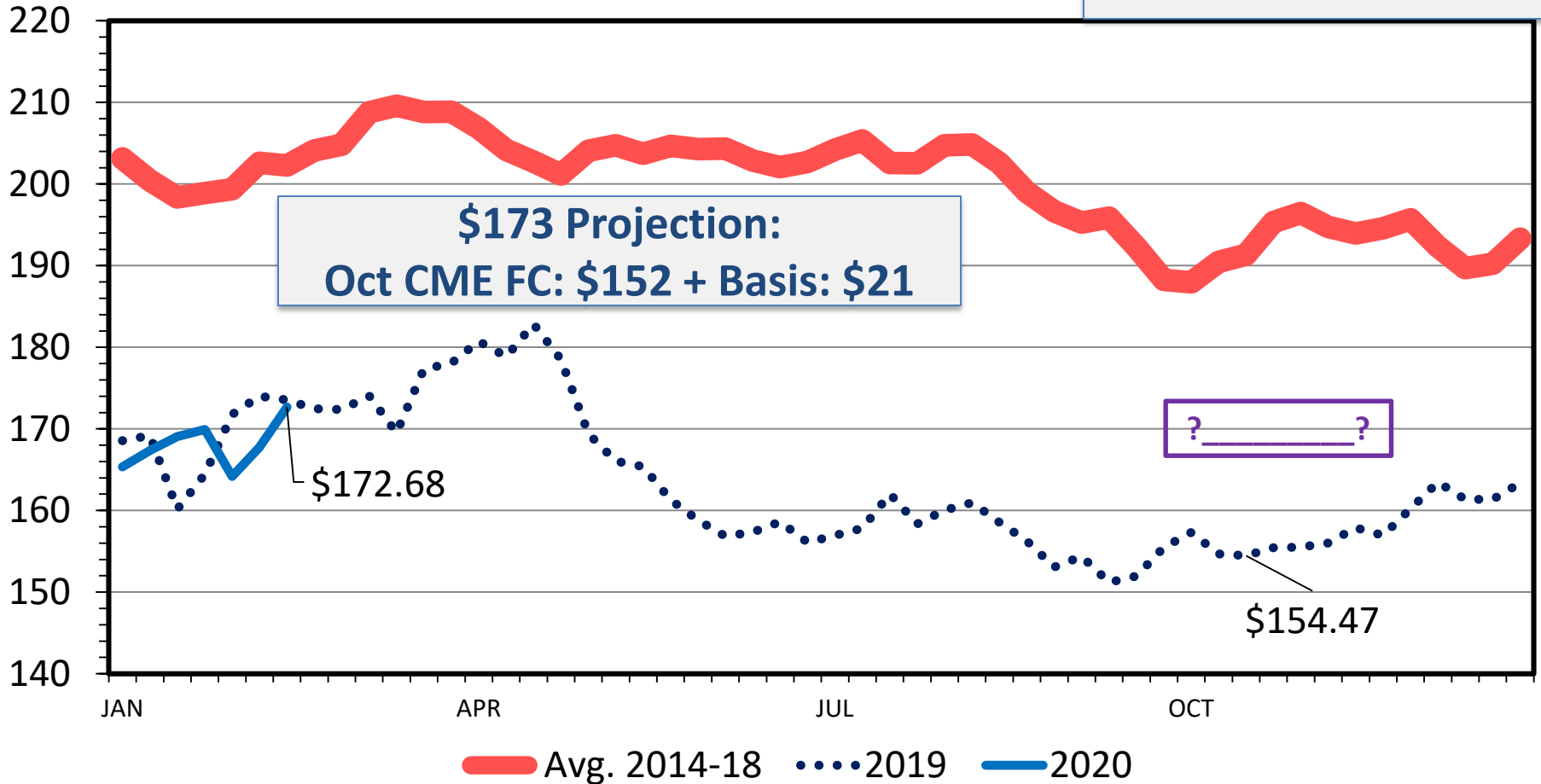
Powered by Bing  
© GeoNames, HERE, MSFT

BeefBasis.com, Salina,  
KS 2020 Projections  
(as of 2/18/20):  
Oct. 14: \$173

# MED. & LRG. #1 STEER CALF PRICES

500-600 Pounds, Southern Plains, Weekly

\$ Per Cwt.



Data Source: USDA-AMS

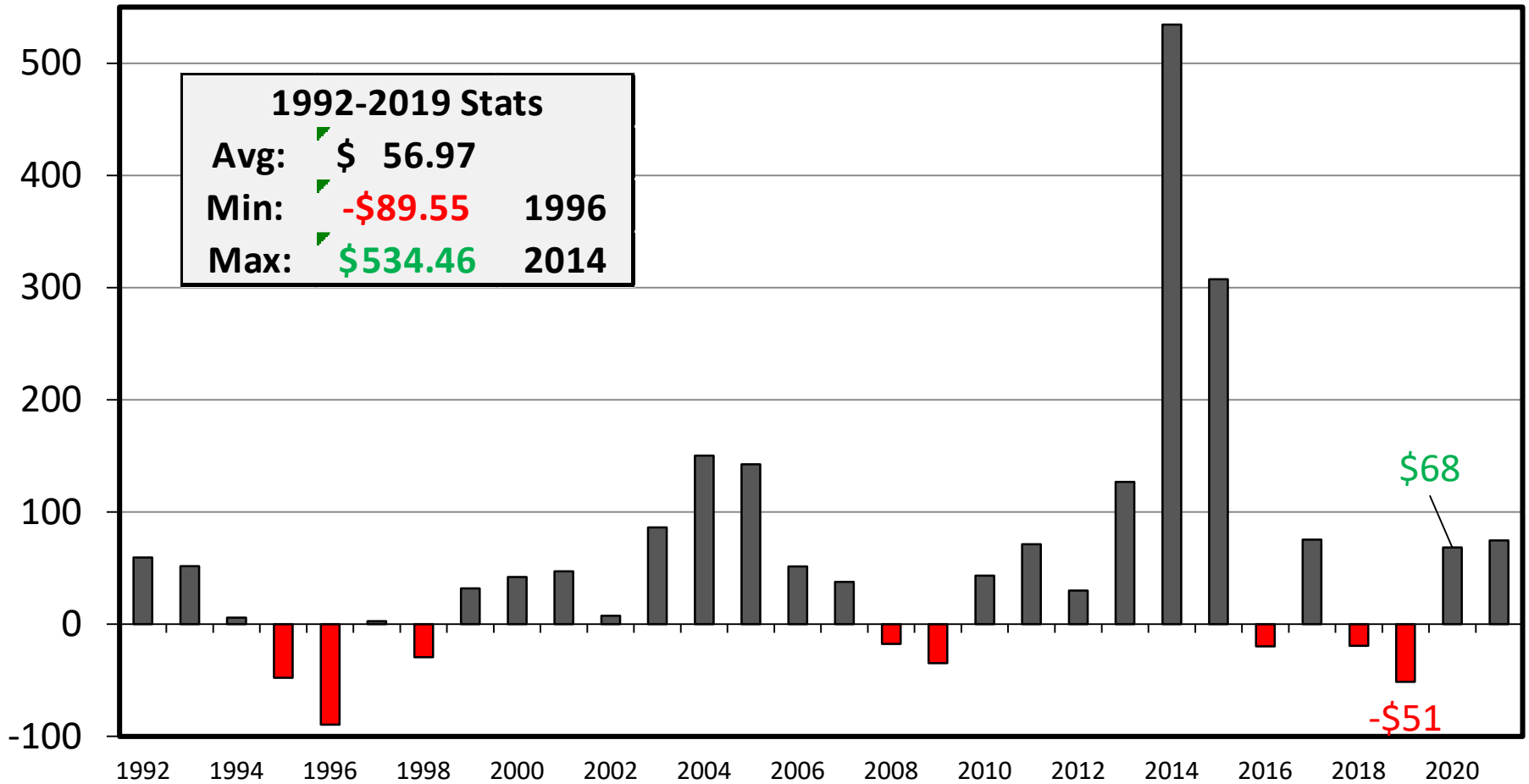
Livestock Marketing Information Center

C-P-54  
02/17/20

# ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

\$ Per Cow



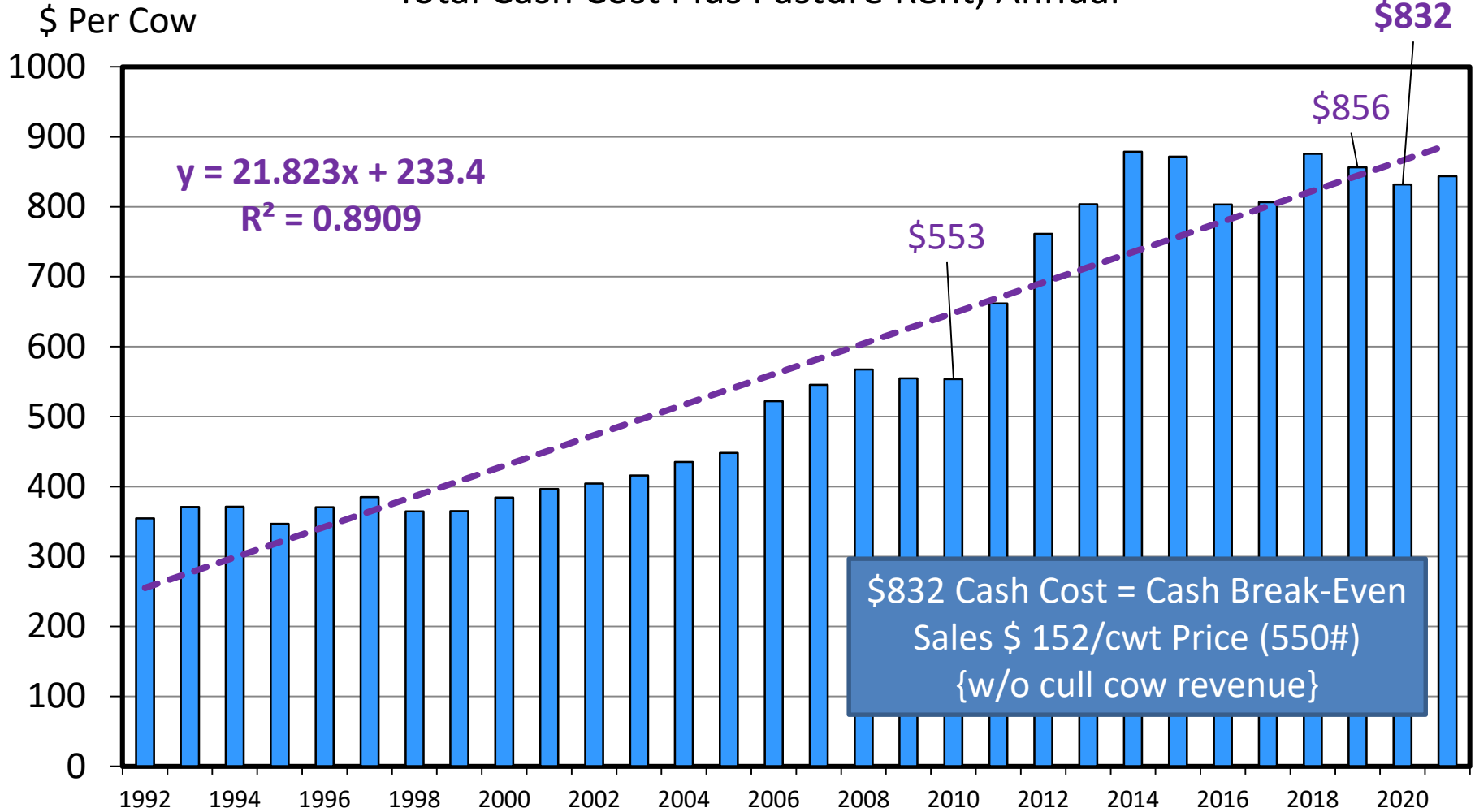
Data Source: USDA & LMIC, Compiled by LMIC

Livestock Marketing Information Center

C-P-66  
02/19/20

# ESTIMATED AVERAGE COW CALF COSTS

Total Cash Cost Plus Pasture Rent, Annual

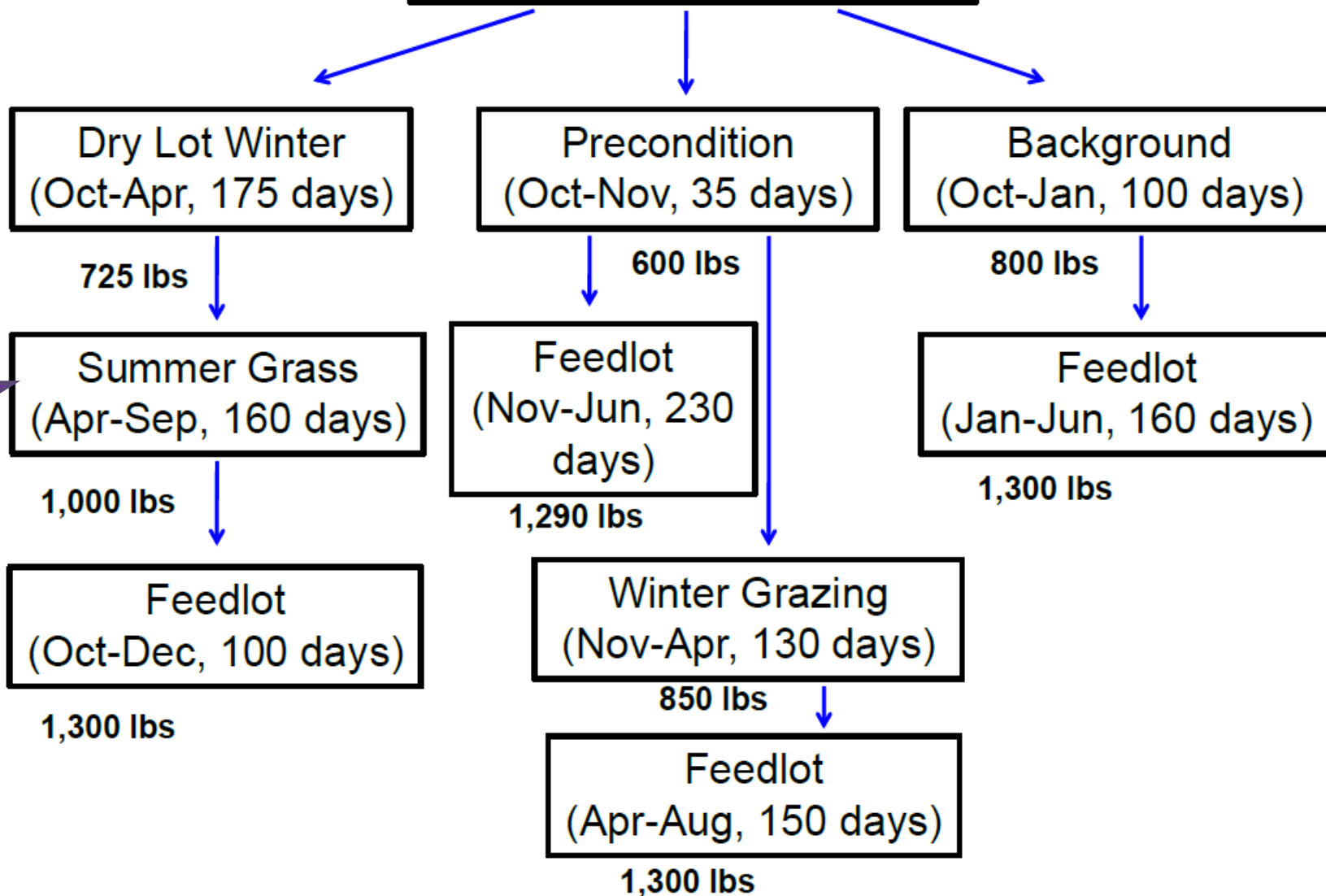


Data Source: USDA & LMIC, Compiled by LMIC

Livestock Marketing Information Center

02/19/20

# Fall Weaned 550# Calf



# Economic Outlook Overview: Post Weaning

## *Forward-Looking Margin Perspective*

<http://www.beefbasis.com/VOG.aspx>

- Salina, KS 2/18/20 Summer Grass situation:
  - Buy/Retain 725 lb steer on 4/15/20 (\$149.41)
  - Sell 1,000 lb steer on 9/15/20 (\$144.95) {1.8 ADG}
  - VOG: \$133/cwt (\$364/head)
    - Compare to COG



# Economic Outlook Overview: Feedlots

# Historical and Projected Kansas Feedlot Net Returns (as of 2/8/20')

(<http://www.agmanager.info/livestock/marketing/outlook/newsletters/FinishingReturns/default.asp>)

**Dec 19': +\$80/steer**

**Table 1. Projected Values for Finishing Steers in Kansas Feedyards\***

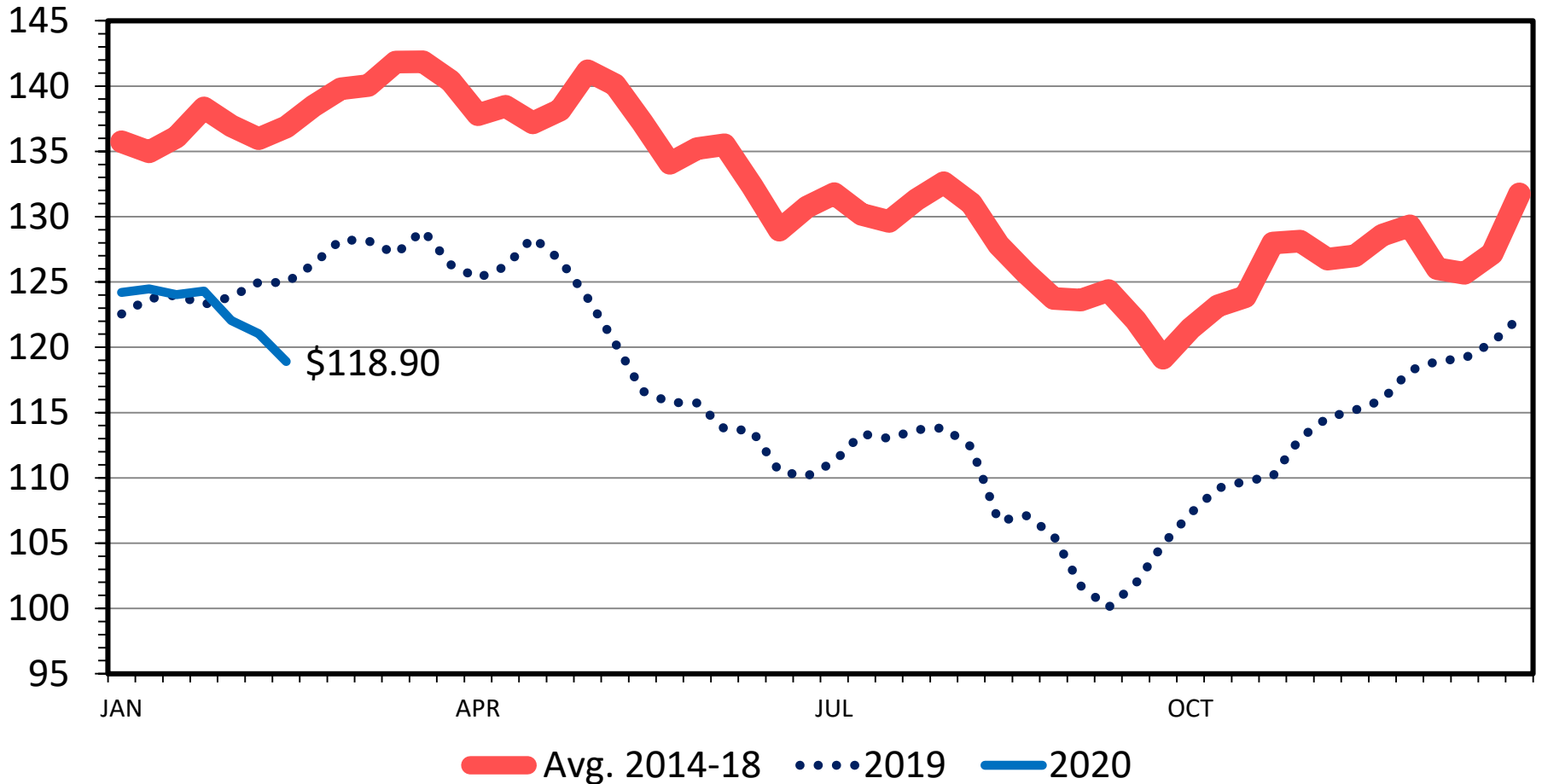
Closeout Mo-Yr	Net Return	FCOG**	Fed Price	Fed Futures	Fed Basis	Feeder Price	Breakeven FCOG**	Breakeven Fed Price	Breakeven Feeder Price
Jan-20	65.90	89.26	123.73	125.17	-1.45	140.35	99.49	119.06	148.94
Feb-20	-23.76	94.41	120.41	119.80	0.61	139.53	90.47	122.11	136.54
Mar-20	3.11	93.73	123.67	119.80	3.87	142.24	94.26	123.44	142.64
Apr-20	-126.26	89.54	114.14	111.28	2.86	146.36	68.69	123.41	129.67
May-20	-35.28	87.68	119.59	111.28	8.32	147.16	82.10	122.16	142.43
Jun-20	-104.48	87.33	113.15	109.88	3.28	146.44	71.27	120.73	132.09
Jul-20	-65.25	84.45	112.51	109.88	2.64	141.91	74.50	117.15	133.22
Aug-20	13.47	84.24	114.78	113.10	1.68	134.59	86.35	113.82	136.33
Sep-20	-31.49	84.38	113.58	113.10	0.48	138.78	79.46	115.83	134.63
Oct-20	-71.95	85.01	118.04	117.60	0.44	147.97	73.28	123.06	139.20

**Representative Barometer for Trends in Profitability**

# SLAUGHTER STEER PRICES

## 5 Market Weighted Average, Weekly

\$ Per Cwt.



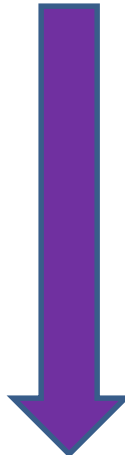
Data Source: USDA-AMS

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02/17/20

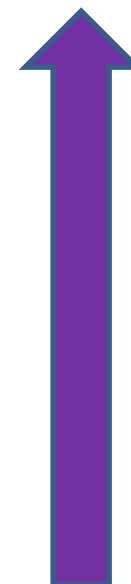
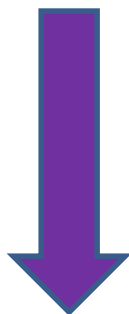
# Quarterly Forecasts (LMIC: 1/7/20)

Year Quarter	Comm'l Slaughter	% Chg. from Year Ago	Average Dressed Weight	% Chg. from Year Ago	Comm'l Beef Production	% Chg. from Year Ago
<b>2019</b>						
I	7,934	0.7	808.4	-1.5	6,414	-0.8
II	8,573	1.7	794.8	-0.4	6,814	1.3
III	8,541	2.2	810.5	-0.6	6,923	1.5
IV	8,508	2.0	824.7	0.2	7,016	2.2
<b>Year</b>	<b>33,556</b>	<b>1.7</b>	<b>809.6</b>	<b>-0.6</b>	<b>27,167</b>	<b>1.1</b>
<b>2020</b>						
I	8,069	1.7	818.6	1.3	6,606	3.0
II	8,567	-0.1	807.9	1.6	6,921	1.6
III	8,417	-1.5	824.1	1.7	6,937	0.2
IV	8,380	-1.5	828.1	0.4	6,939	-1.1
<b>Year</b>	<b>33,433</b>	<b>-0.4</b>	<b>819.6</b>	<b>1.2</b>	<b>27,403</b>	<b>0.9</b>
<b>2021</b>						
I	7,860	-2.6	821.5	0.4	6,457	-2.2
II	8,436	-1.5	813.3	0.7	6,861	-0.9
III	8,280	-1.6	830.2	0.7	6,874	-0.9
IV	8,159	-2.6	832.2	0.5	6,790	-2.1
<b>Year</b>	<b>32,735</b>	<b>-2.1</b>	<b>824.2</b>	<b>0.6</b>	<b>26,982</b>	<b>-1.5</b>



# Quarterly Forecasts (LMIC: 1/7/20)

	Live Sltr.	% Chg.	Feeder Steer Price	
Year	Steer Price	from	Southern Plains	
Quarter	5-Mkt Avg	Year Ago	7-800#	5-600#
2019				
I	125.27	-0.3	142.87	171.41
II	118.79	1.8	143.23	167.22
III	108	-2.4	144	157
IV	115	-0.4	148	158
<b>Year</b>	<b>117</b>	<b>-0.3</b>	<b>145</b>	<b>163</b>
2020				
I	123-125	-1.0	144-147	164-168
II	120-123	2.3	146-150	167-172
III	111-115	4.5	146-151	169-175
IV	116-121	3.2	148-154	168-174
<b>Year</b>	<b>118-120</b>	<b>1.9</b>	<b>146-150</b>	<b>167-172</b>
2021				
I	122-128	0.8	145-152	172-180
II	120-127	1.6	146-154	170-180
III	110-118	0.9	149-158	167-178
IV	116-125	1.7	152-162	167-179
<b>Year</b>	<b>119-123</b>	<b>1.7</b>	<b>150-154</b>	<b>171-177</b>

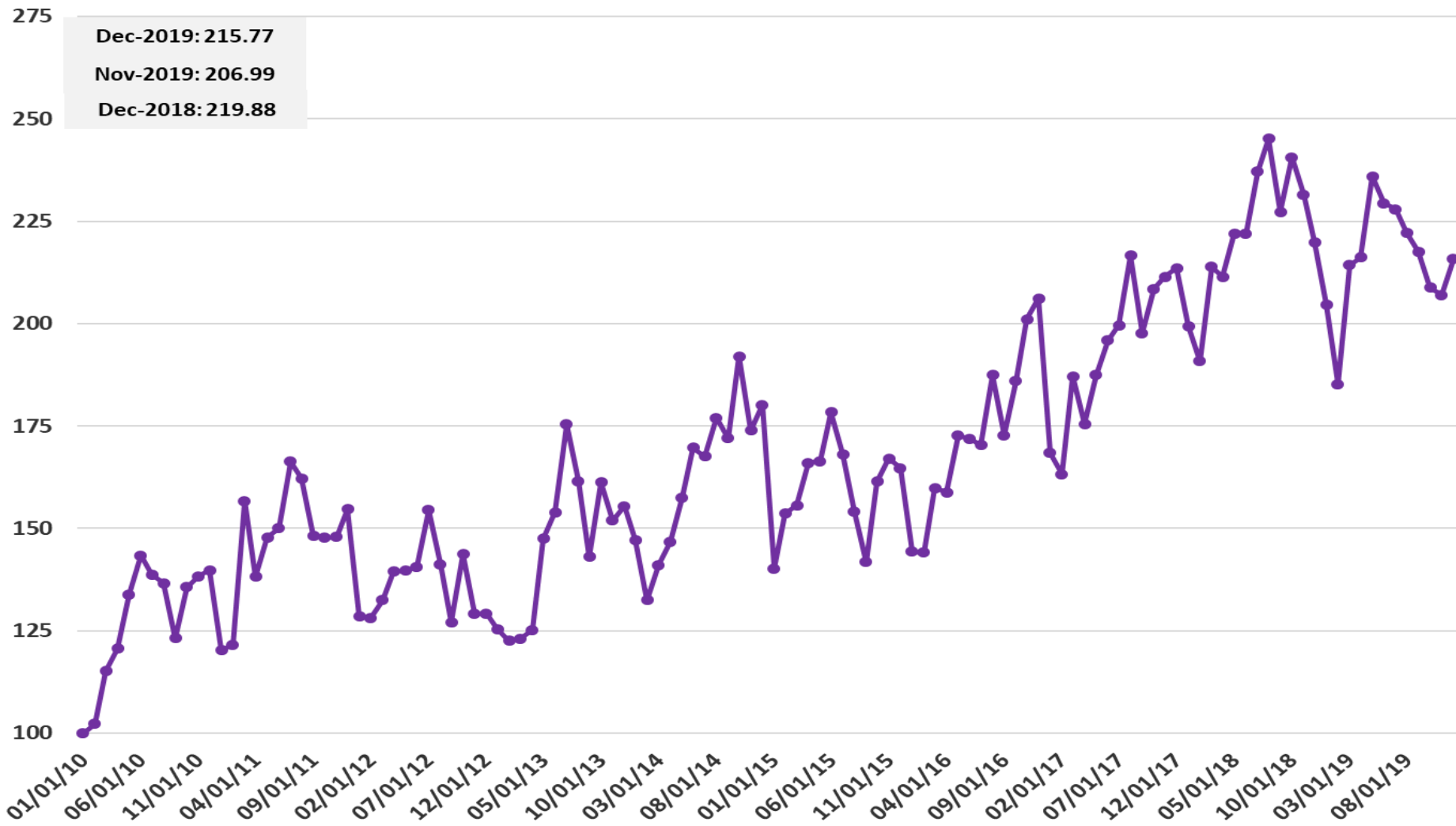


# Trade & Total Meat Context Update

# U.S. Beef Export Demand Index

(Monthly, Jan 2010=100)

Monthly U.S. Beef, Export Demand Index, Jan. 2010 (base) - present

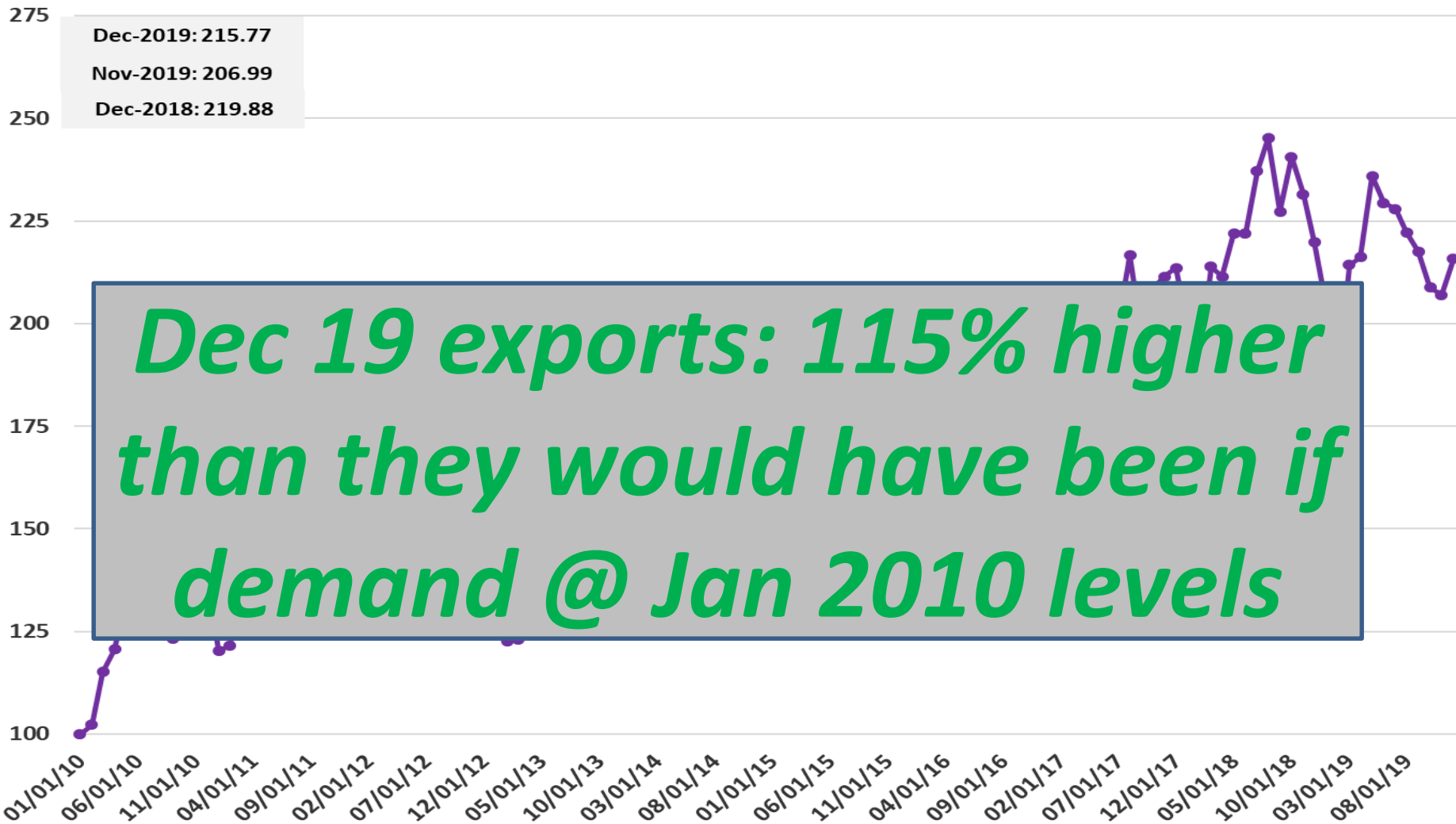


<http://agmanager.info/livestock-meat/meat-demand>

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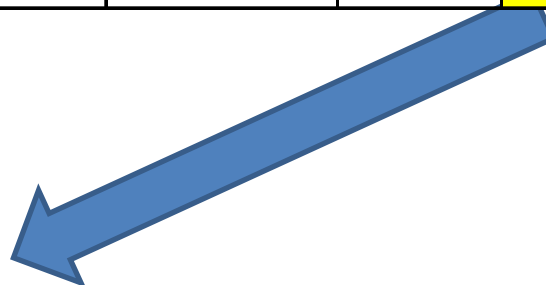


# USDA Long-Term projections

2/14/20 report (<http://www.usda.gov/oce/commodity/projections/>), October 2019 Projections

Per capita meat consumption, retail weight				
Item	2019	2020	2029	
Beef	57.2	57.7	57.6	
Veal	0.2	0.2	0.2	
Pork	51.7	52.1	49.4	
Lamb & mutton	1.1	1.1	1.0	
Total red meat	110.1	111.1	108.2	
Broilers	94.3	95.4	96.4	
Other chicken	1.3	1.4	1.5	
Turkeys	16.0	15.8	15.0	
Total poultry	111.6	112.7	112.9	
Red meat & poultry	221.7	223.8	221.0	

Year	Total Red Meat & Poultry
1995	205.4
2000	214.4
2005	219.7
2010	207.5
2014	200.1



# USDA Long-Term projections

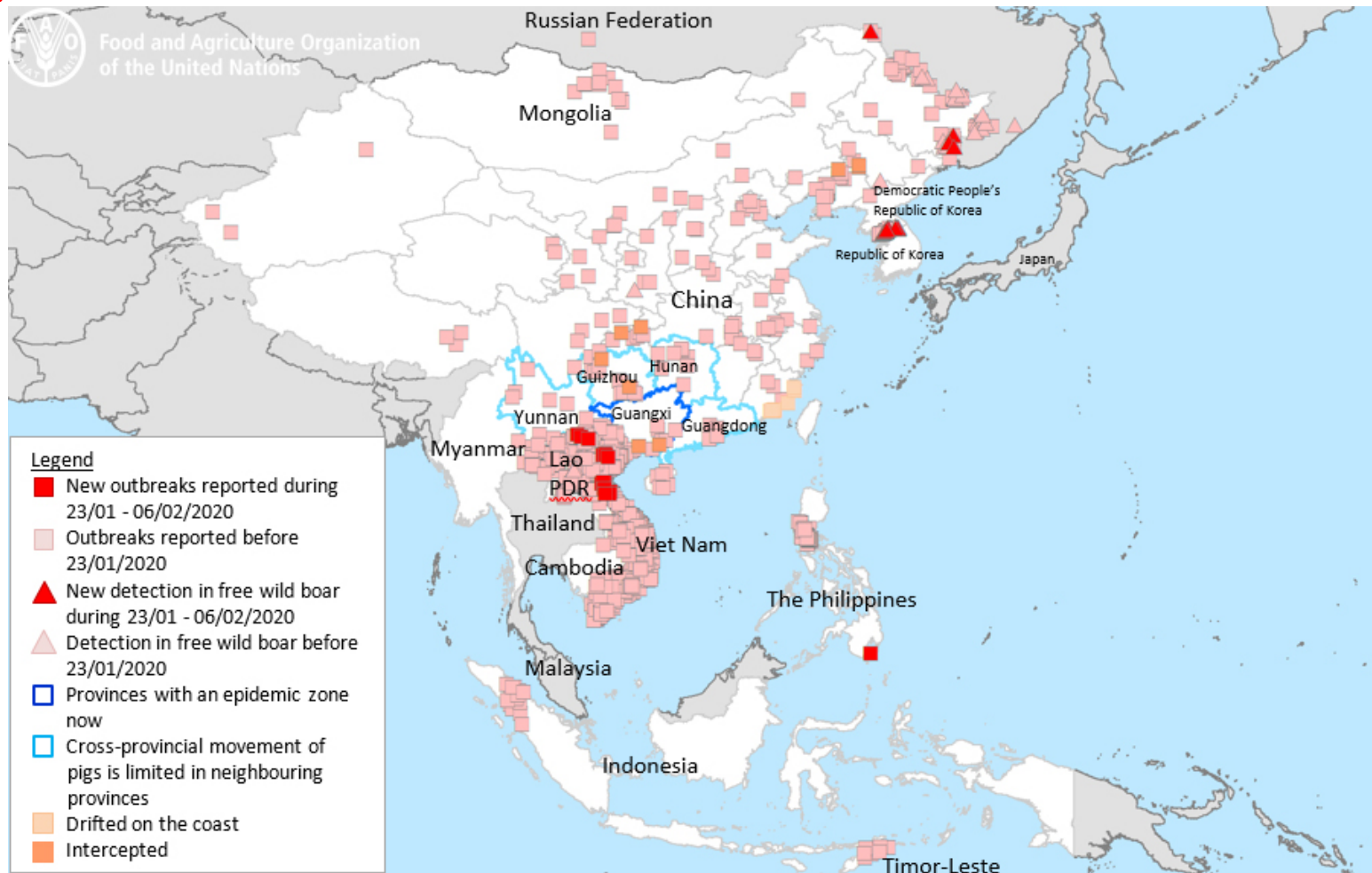
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Lamb & mutton	1.1	1.1	1.0	
Total red meat	110.1	111.1	108.2	
Broilers	94.3	95.4	96.4	
Other chicken	1.3	1.4	1.5	
Turkeys	16.0	15.8	15.0	
Total poultry	111.6	112.7	112.9	
Red meat & poultry	221.7	223.8	221.0	

**Projections INCLUDE export maintenance & growth**

# Additional Fodder for Thought...

❖ *What will be realized ASF-Asia “export boost” occur?*



# Additional Fodder for Thought...

International

Feb 15th 2020 edition

❖ *What will be realized coronavirus impact?*



A deadly disease disrupts

The new coronavirus could have a lasting impact on global supply chains

Multinationals have failed to take seriously the risk of disruption

<https://www.economist.com/international/2020/02/15/the-new-coronavirus-could-have-a-lasting-impact-on-global-supply-chains>

# Additional Fodder for Thought...

## Impossible Burger

**vs.**

## Beyond Burger

Nutrition Facts	
Serving Size: 1 serving (113.3g)	
Servings: 1	
Amount Per Serving	
Calories 290	Calories from Fat 160
% Daily Value*	
Total Fat 17g	27%
Saturated Fat 13g	67%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 570mg	24%
Potassium 350mg	10%
Total Carbohydrate 7g	2%
Dietary Fiber 0g	0%
Sugars 0g	
Protein 27g	
Vitamin A 0%	Vitamin C 0%
Calcium 2%	Iron 20%

\*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Textured Wheat Protein, Coconut Oil, Potato Protein, Natural Flavors, Leghemoglobin (soy), Yeast Extract, Salt, Soy Protein Isolate, Konjac Gum, Xanthan Gum, Vitamin C, Thiamin (Vitamin B1), Zinc, Niacin, Vitamin B6, Riboflavin (Vitamin B2), Vitamin B12.

Nutrition Facts	
Serving Size: 1 serving (113.0g)	
Servings: 1	
Amount Per Serving	
Calories 270	Calories from Fat 180
% Daily Value*	
Total Fat 20g	31%
Saturated Fat 5g	25%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 380mg	16%
Potassium 340mg	10%
Total Carbohydrate 5g	2%
Dietary Fiber 3g	12%
Sugars 0g	
Protein 20g	
Vitamin A 0%	Vitamin C 6%
Calcium 2%	Iron 30%

\*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Pea Protein Isolate, Expeller-Pressed Canola Oil, Refined Coconut Oil, Cellulose from Bamboo, Methylcellulose, Potato Starch, Natural Flavor, Maltodextrin, Yeast Extract, Salt, Sunflower Oil, Vegetable Glycerin, Dried Yeast, Gum Arabic, Citrus Extract (to protect quality), Ascorbic Acid (to maintain color), Beet Juice Extract (for color), Acetic Acid, Succinic Acid, Modified Food Starch, Annatto (for color).

❖ *What is role of “alternative proteins” in future of U.S. livestock?*

# Livestock Risk Management Considerations



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**Dept. of Agricultural Economics Kansas State University**



United States Department of Agriculture

<https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/livestock-indemnity/index>

**Farm Service Agency**

**LIP**

# Livestock Indemnity Program

**FACT SHEET**

July 2019

The Agriculture Improvement Act of 2018 (the 2018 Farm Bill) authorized the Livestock Indemnity Program (LIP) to provide benefits to eligible livestock owners or contract growers for livestock deaths in excess of normal mortality caused by eligible loss conditions, including eligible adverse weather, eligible disease and attacks by animals reintroduced into the wild by the federal government or protected by federal law, including wolves and avian predators. In addition, LIP provides assistance to eligible livestock owners that must sell livestock at a reduced price because of an injury from an eligible loss condition.



United States Department of Agriculture

<https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/livestock-indemnity/index>

## Farm Service Agency

### LIP

# Livestock Indemnity Program

FACT SHEET

July 2019

DATE OF LIVESTOCK DEATH AND/OR INJURY	FINAL DATE TO FILE NOTICE OF LOSS	FINAL DATE TO SUBMIT AN APPLICATION FOR PAYMENT
Calendar year 2019 and all subsequent years	30 calendar days of when the loss is first apparent	60 days after the calendar year in which the eligible loss condition occurred

“Yes, Republic County, Kansas has about 110 Notice of Losses filed for 2019 LIP – compared to last year with zero Notice of Losses filed under LIP. The majority of the Notice of Losses were filed due to the extreme cold, there are a few losses due to blizzard as well,” said Sarah Heeger, County Executive Director/Republic County FSA in Belleville, Kansas.



# USDA LRP Changes

<https://www.rma.usda.gov/News-Room/Press/Press-Releases/2019-News/USDA-Announces-Enhancements-to-Livestock-and-Dairy-Insurance-Programs>

4/29/2019

USDA Announces Enhancements to Livestock and Dairy Insurance Programs | RMA



United States Department of Agriculture

## News Release

# USDA Announces Enhancements to Livestock and Dairy Insurance Programs

*KSU-Feeder Cattle Risk Management Tool*

An Excel spreadsheet for evaluating feeder cattle risk management strategies



Version- 2.18.2020



**KANSAS STATE UNIVERSITY** Agricultural Economics

<https://www.agmanager.info/k-state-feeder-cattle-risk-management-tool>

# Cow-Calf Output Price Hedging Considerations (as of 2/18/20)

- Salina, KS situation:
  - Plan to sell 550 lb steers on Oct 13, 2020 = \$173.42
- Considering price protection on Oct sale
  - **USE: *FeederCattleRiskMgmtTool.xlsx***

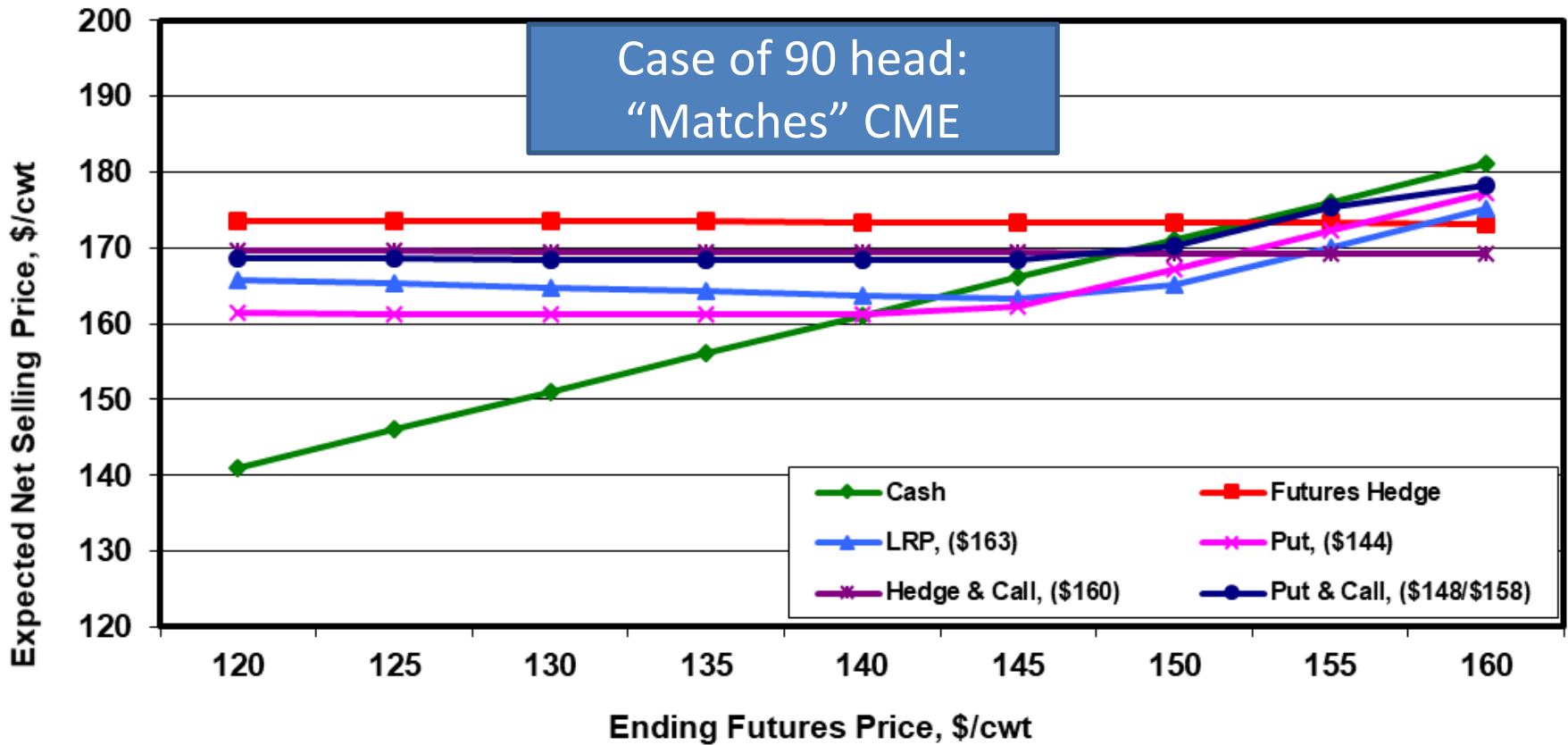
# Cow-Calf Output Price Hedging Considerations (as of 2/18/20)

- Case of 90 hd @ 550 lbs =
  - Compare alternatives:
    - a) 90 hd on LRP, b) 1 FC Futures Contract (+/- 91 hd per contract), c) 1 FC Options Contract or d) Cash
  - OCT FC: \$152.35; Exp. Basis: +\$21.07; Exp. Cash: \$173.42
  - LRP Coverage Price: \$162.62 & Premium: \$5.939
  - OCT Put @ \$144: \$3.75 premium

# Cow-Calf Output Price Hedging Considerations (as of 2/18/20)

Comparison of Alternative Expected Net Selling Prices

Case of 90 head:  
"Matches" CME



# Cow-Calf Output Price Hedging Considerations (as of 2/18/20)

	Futures	LRP	Put	Call	Put	Call
Number of contracts	1	90	1	1	1	1
Strike price(s), \$/cwt		\$162.62	\$144.00	\$160.00	\$148.00	\$158.00
Premium, \$/cwt		\$5.939	\$3.750	\$3.900	\$5.175	\$4.600

## Expected Net Selling Prices

Futures price	Cash	Hedge	LRP	Put	Hedge & Call	Put & Call
\$120.00	\$141.07	\$173.63	\$165.75	\$161.40	\$169.63	\$168.59
\$125.00	\$146.07	\$173.58	\$165.25	\$161.35	\$169.58	\$168.54
\$130.00	\$151.07	\$173.52	\$164.75	\$161.30	\$169.52	\$168.49
\$135.00	\$156.07	\$173.47	\$164.25	\$161.25	\$169.47	\$168.44
\$140.00	\$161.07	\$173.42	\$163.75	\$161.20	\$169.42	\$168.39
\$145.00	\$166.07	\$173.37	\$163.25	\$162.22	\$169.37	\$168.34
\$150.00	\$171.07	\$173.32	\$165.13	\$167.22	\$169.32	\$170.37
\$155.00	\$176.07	\$173.27	\$170.13	\$172.22	\$169.27	\$175.37
\$160.00	\$181.07	\$173.22	\$175.13	\$177.22	\$169.22	\$178.29

\$5.00 <= futures price increment

Signifies maximum price in row

# Outlook Wrap-Up

- Broad Profitability Outlook

- Supply side factors are “well established”

- Herd size plateau; Lower beef volumes in 2021?

- Demand factors are key and uncertain

- What will be beef (and meat broadly) export situation?

- When will next U.S. recession occur?

- **Will favorability of high-protein diet (and cattle’s role) persist?**

More information available at:



This presentation will be available in PDF format at:

<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

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## About AgManager.info

AgManager.info website is a comprehensive source of information, analysis, and decision-making tools for agricultural producers, agribusinesses, and others. The site serves as a clearinghouse for applied outreach information emanating from the Department of Agricultural Economics at Kansas State University. It was created by combining departmental and faculty sites as well as creating new features exclusive to the AgManager.info site. The goal of this coordination is to improve the organization of web-based material and allow greater access for agricultural producers and other clientele.





# Receive Weekly Email Updates for AgManager.Info:

[http://www.agmanager.info/about/  
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# Holcomb-Tyson Plant Fire

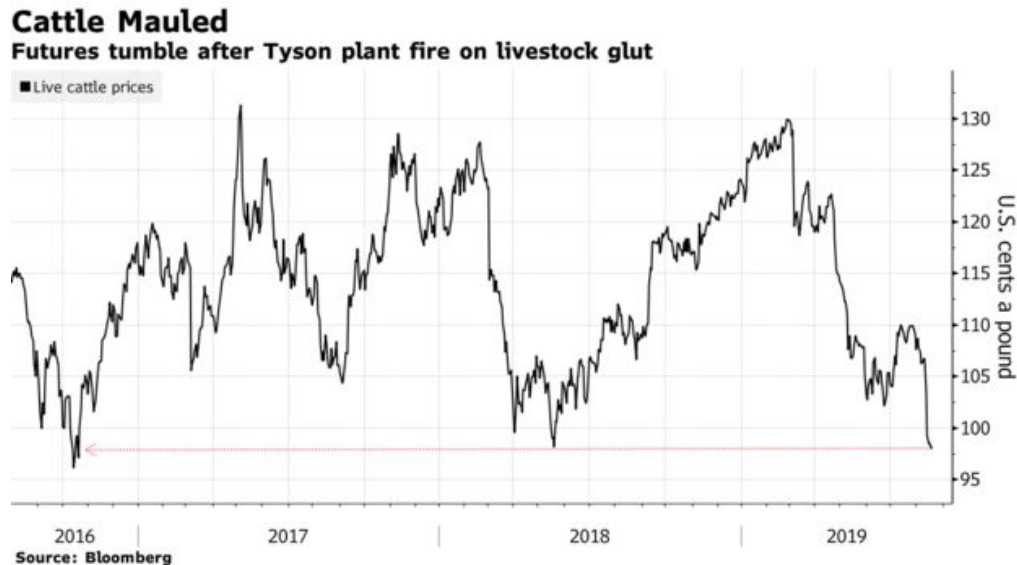
- Price Impact on Cattle

- Expected:

- Derived Demand Decline = Cattle Price Decline

- Realized:

- CME limit down 1<sup>st</sup> two days
    - LC Cash down \$5-\$7 1<sup>st</sup> week; FC Cash down ~\$10



# Holcomb-Tyson Plant Fire

- Price Impact on Beef

- Expected:

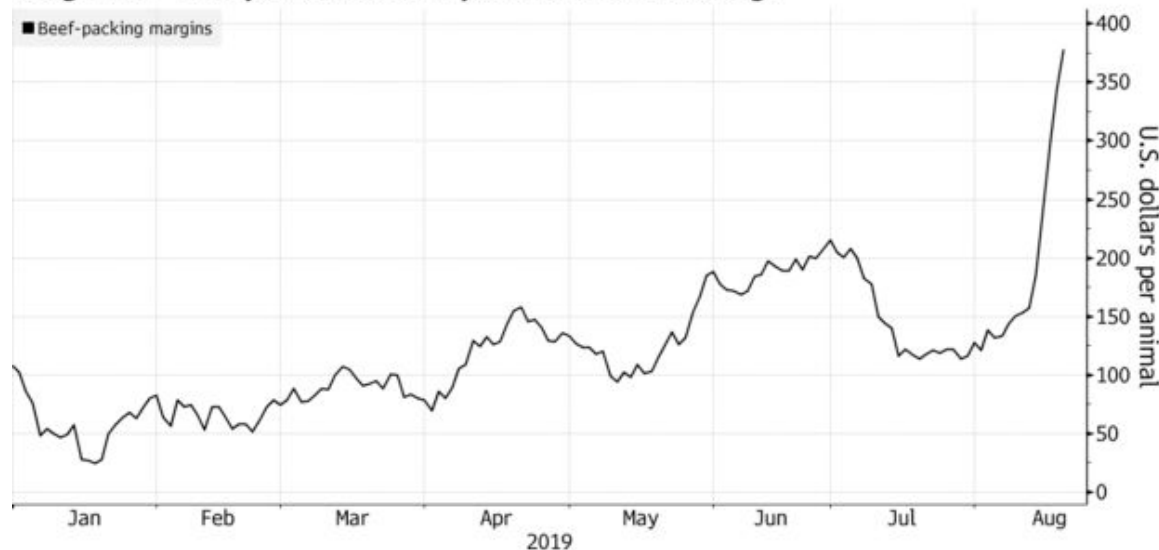
- Processing Cost Up = Beef Price Increase

- Realized:

- Two largest daily cutout price increases on-record (post-MPR)

## Packer Win

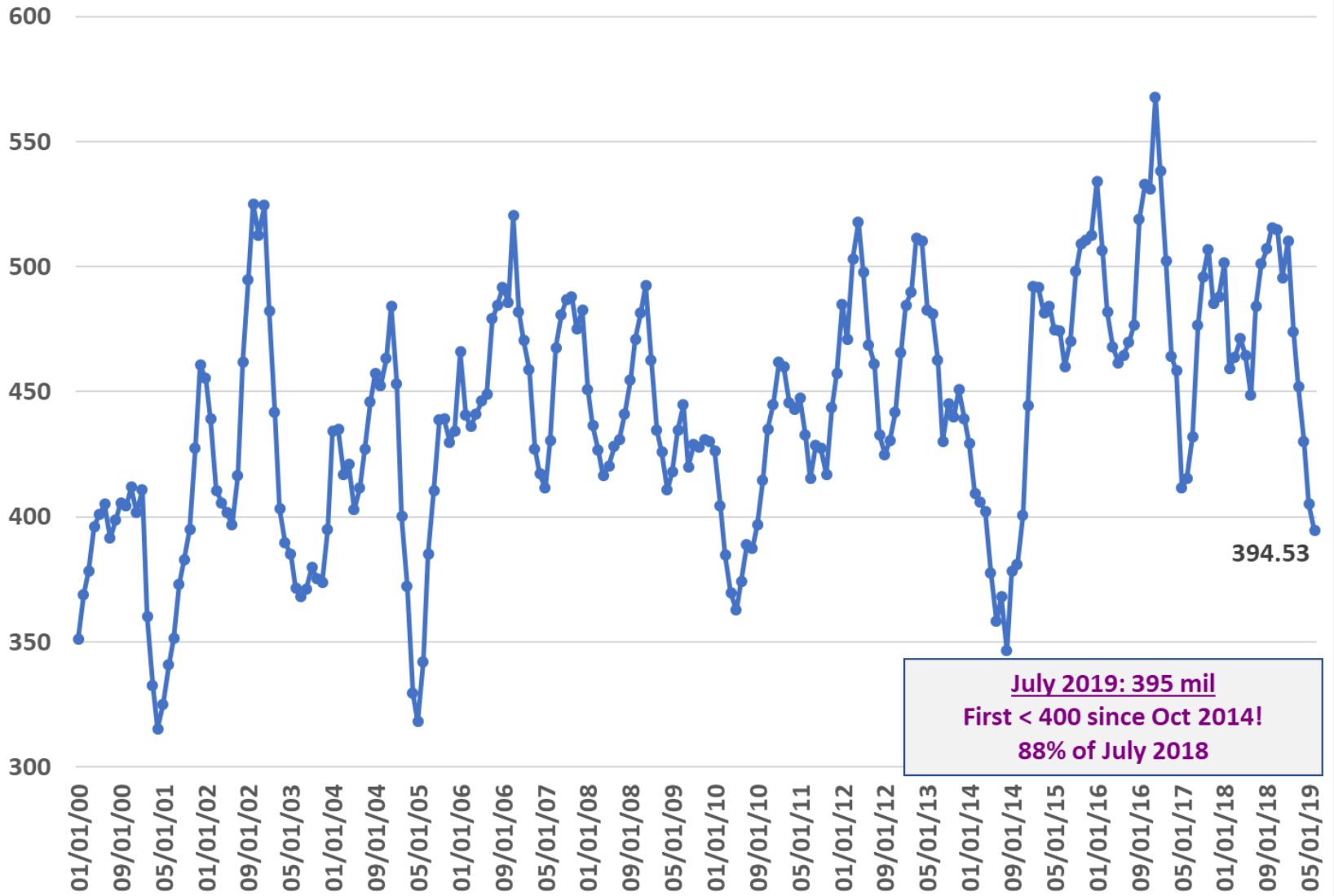
Margins for beef packers have expanded to a record high



Source: HedgersEdge

# Holcomb-Tyson Plant Fire

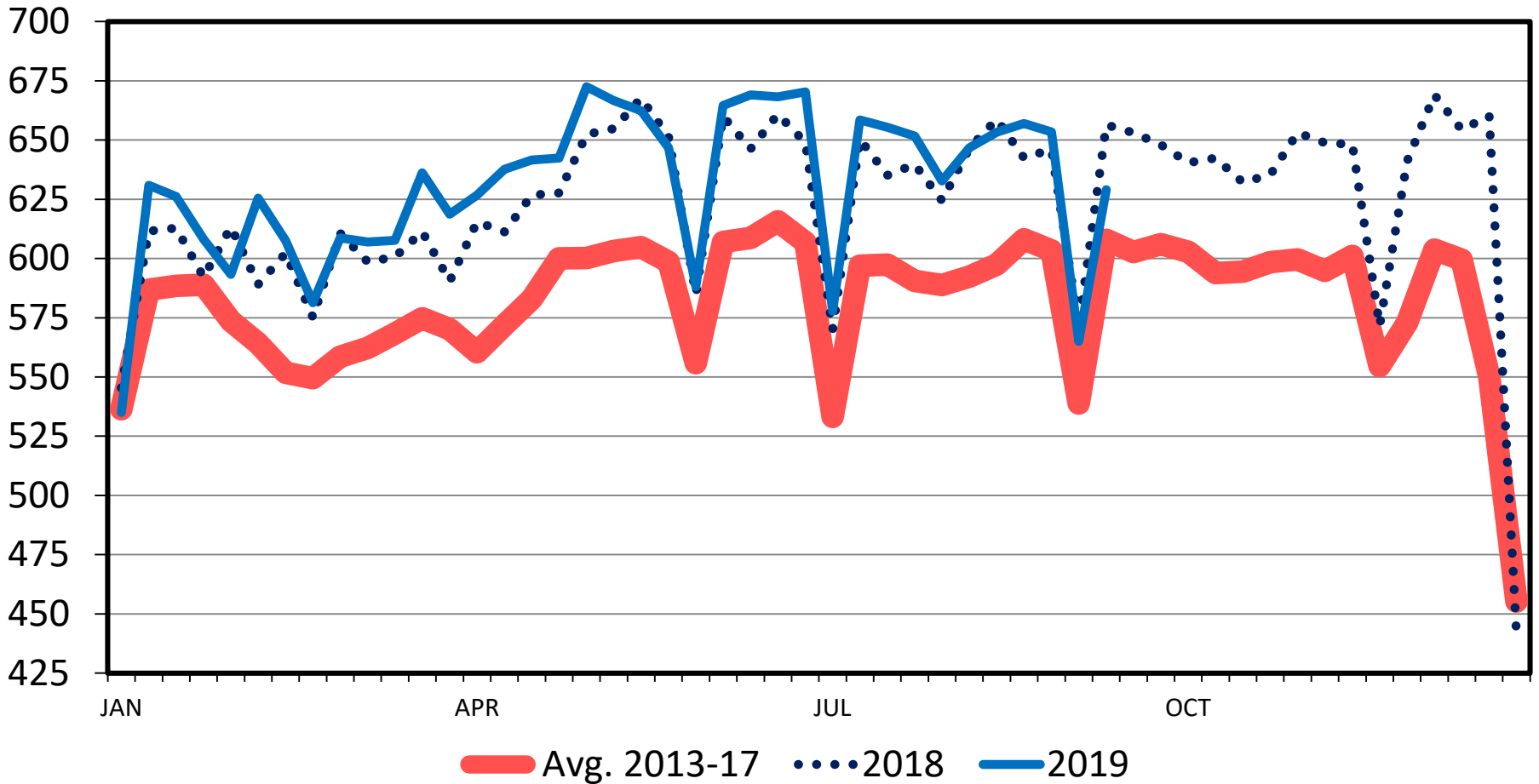
Beef Cold Storage Stocks (Mil lbs), Jan 2000-July 2019



# CATTLE SLAUGHTER

## Federally Inspected, Weekly

Thou. Head



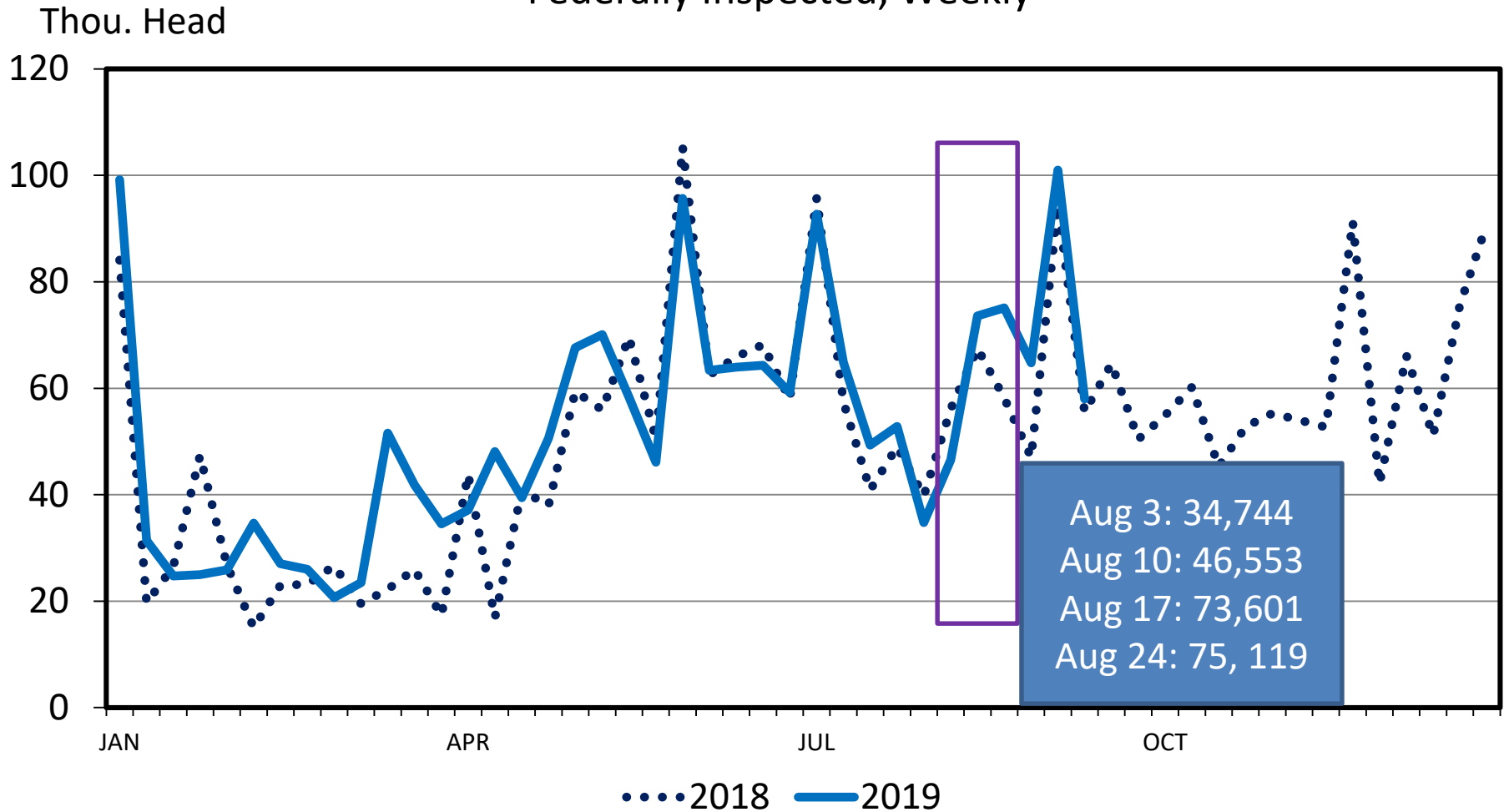
Data Source: USDA-AMS & USDA-NASS

Livestock Marketing Information Center

C-S-08  
09/13/19

# SATURDAY CATTLE SLAUGHTER

Federally Inspected, Weekly

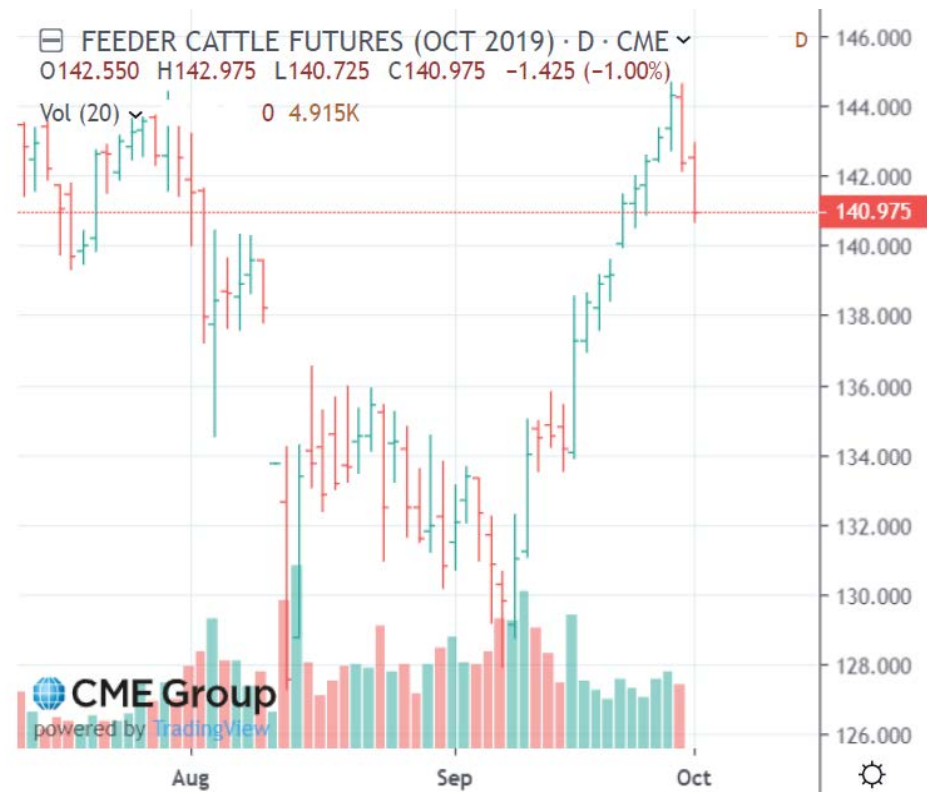
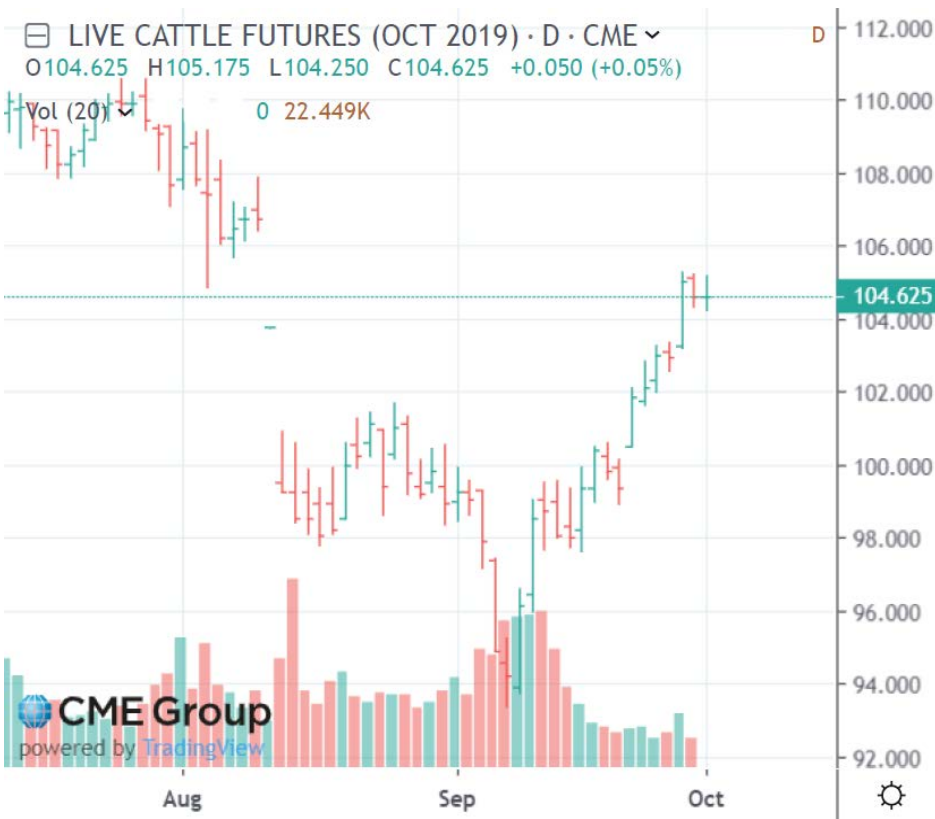


Data Source: USDA-AMS & USDA-NASS

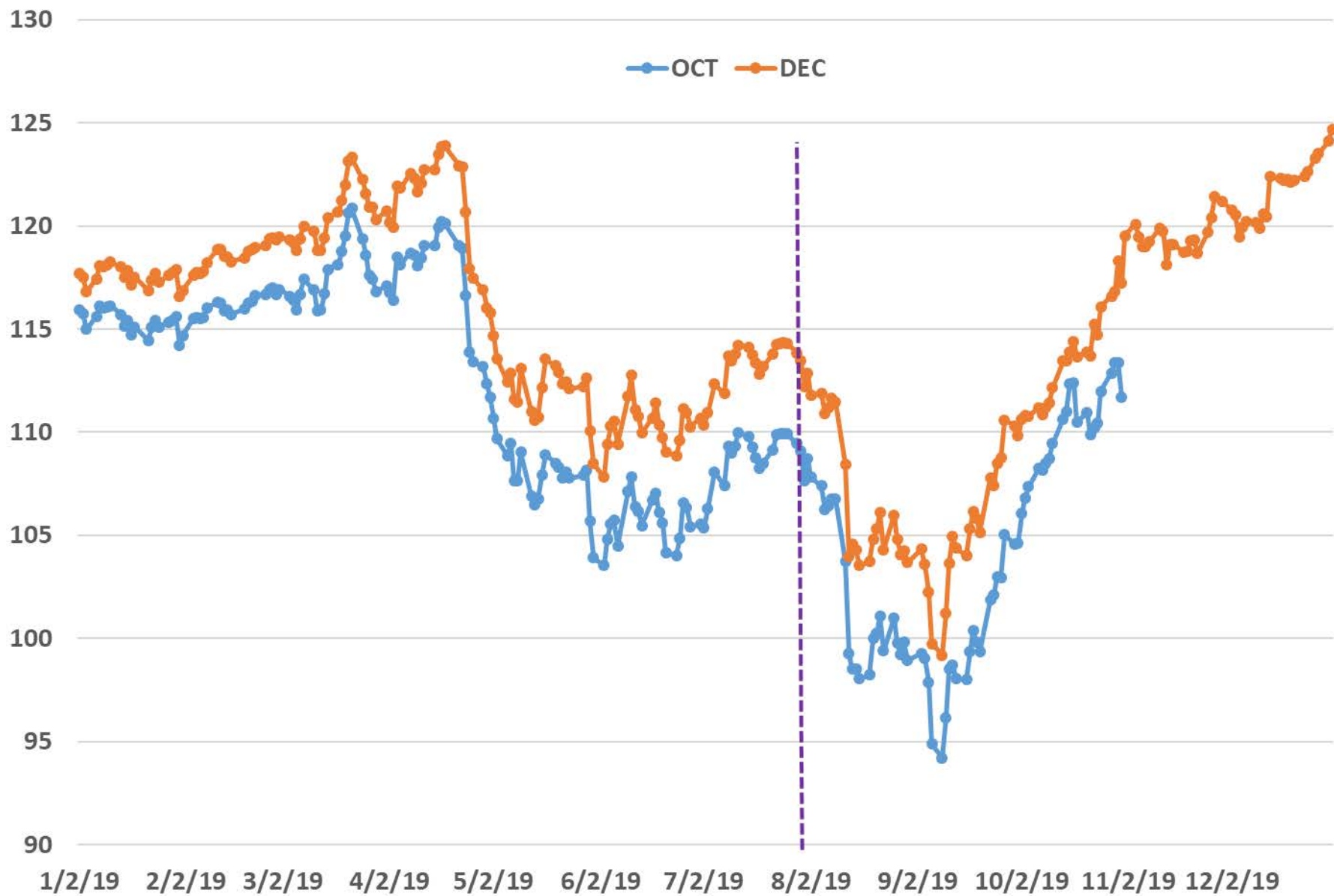
Livestock Marketing Information Center

C-S-03  
09/13/19

# Markets Often Operate Like A Pendulum

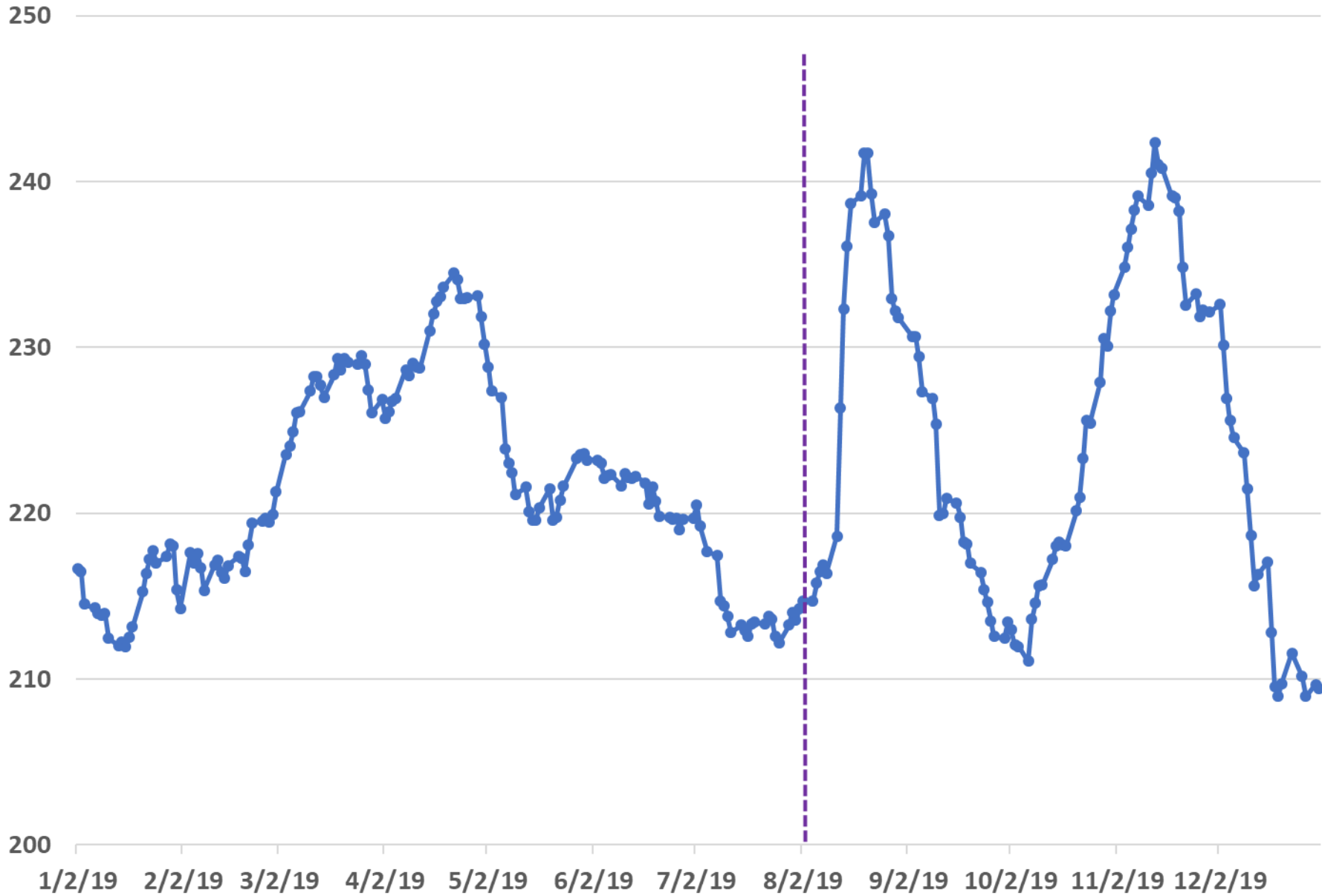


### CME Fed Cattle Prices: Oct & Dec Contracts, 2019



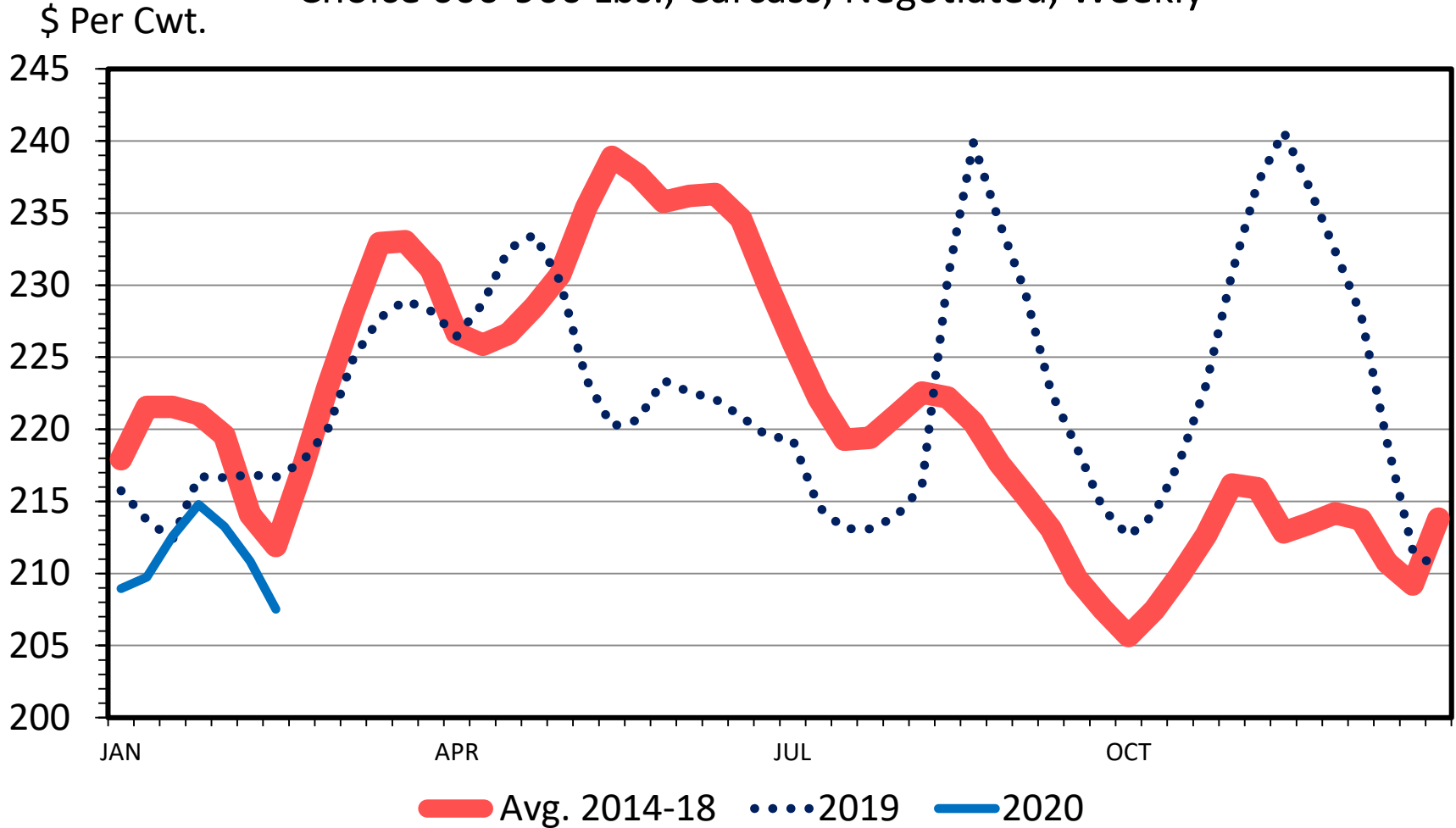


# Choice Cutout, 2019



# BOXED BEEF CUTOUT VALUE

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



Data Source: USDA-AMS

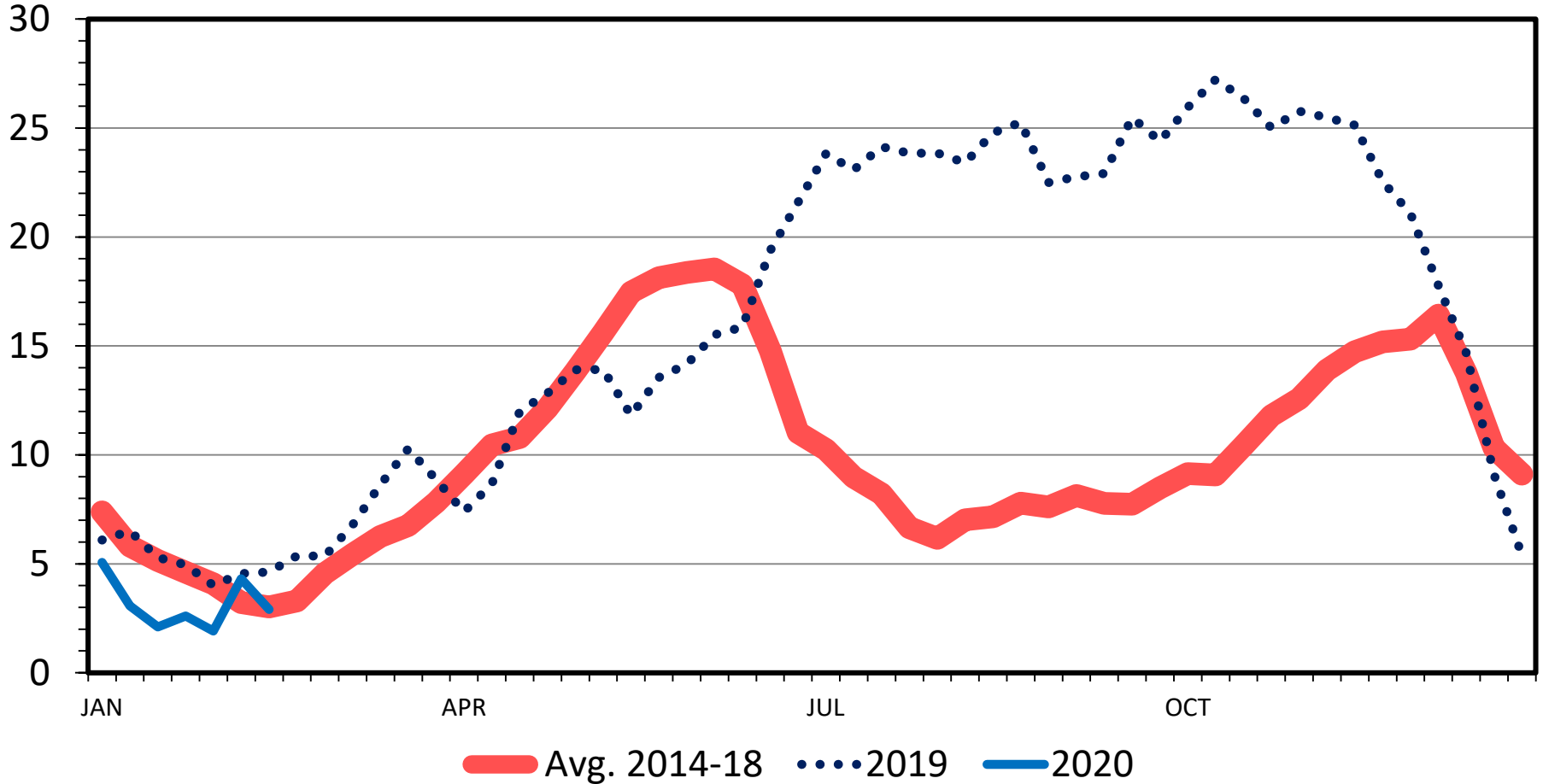
Livestock Marketing Information Center

C-P-62  
02/17/20

# CHOICE MINUS SELECT BEEF PRICES

Carcass Cutout Value 600-900 Lbs., Negotiated, Weekly

\$ Per Cwt.



Data Source: USDA-AMS, Compiled by LMIC

Livestock Marketing Information Center

C-P-68  
02/17/20