Beef Cattle Market Outlook

Glynn T. Tonsor

Dept. of Ag. Economics,

Kansas State Univ.

gtonsor@ksu.edu

Twitter: @TonsorGlynn

February 20, 2020





Thursdays
Feb. 13th—Mar. 26th, 2020
5:00 pm—9:00 pm
PrairieLand Partners Meeting Room
1181 18th Road Clay Center, KS



Overarching Beef Industry Economic Outlook

Supplies

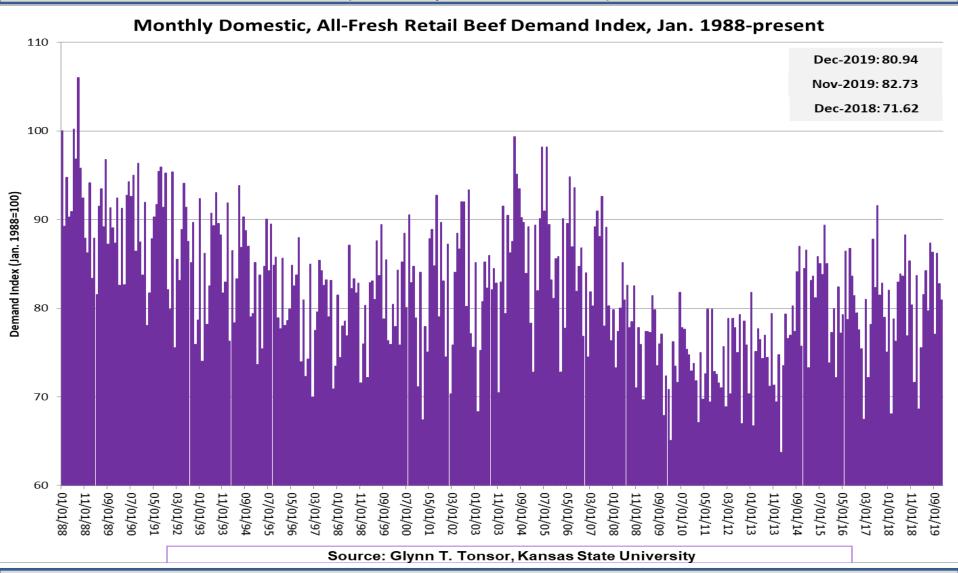
- Commercial Beef Production Up, Increases Moderating
 - +3.8% in 2017, +2.6% in 2018, +1.1% in 2019,
 - +0.9% in 2020 (?), -1.5% in 2021(?)

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(?)
- Demand
 - Key to supporting prices

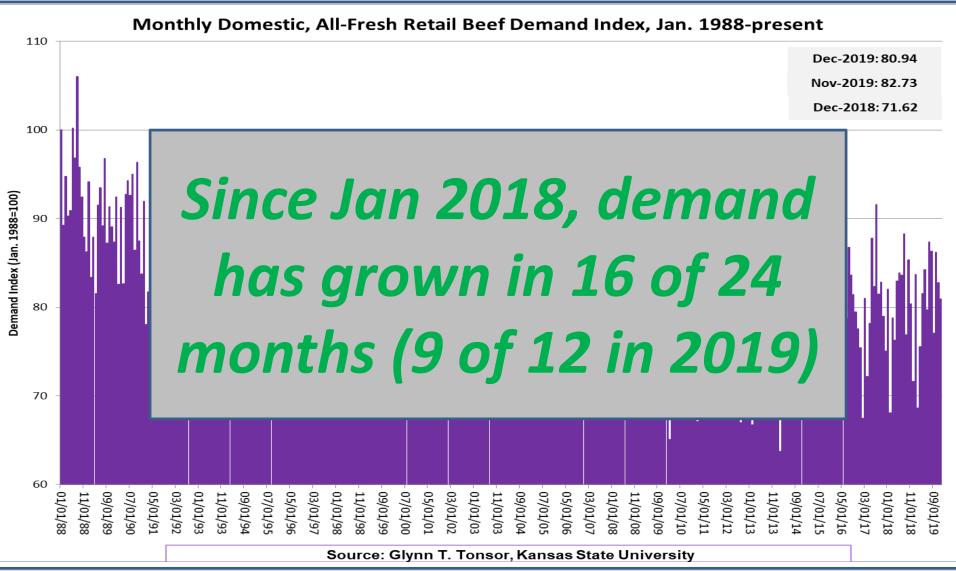
All-Fresh Beef Retail Demand Index

(Monthly, Jan 1988=100)



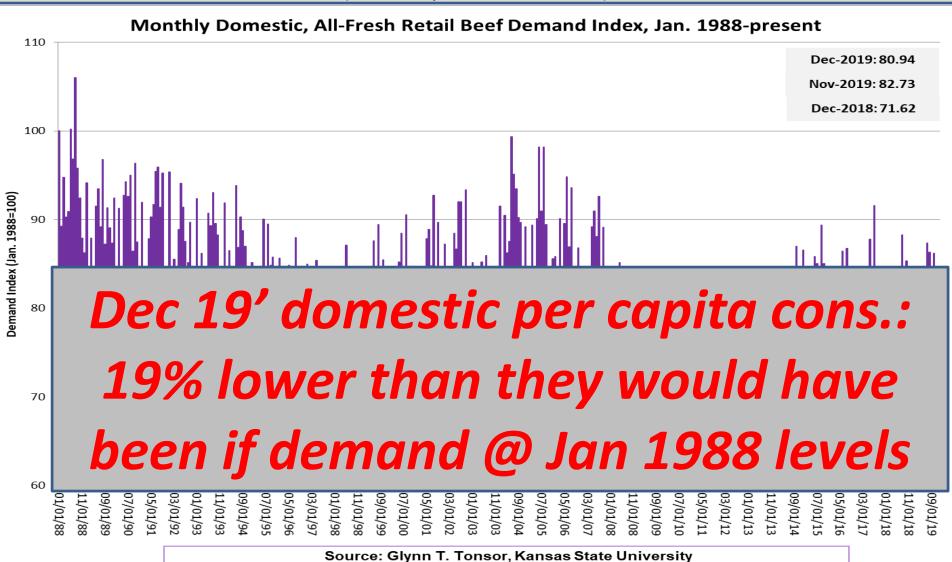
All-Fresh Beef Retail Demand Index

(Monthly, Jan 1988=100)



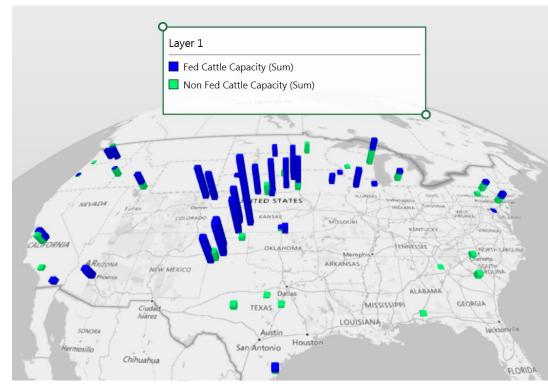
All-Fresh Beef Retail Demand Index

(Monthly, Jan 1988=100)



Holcomb-Tyson Plant Fire

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

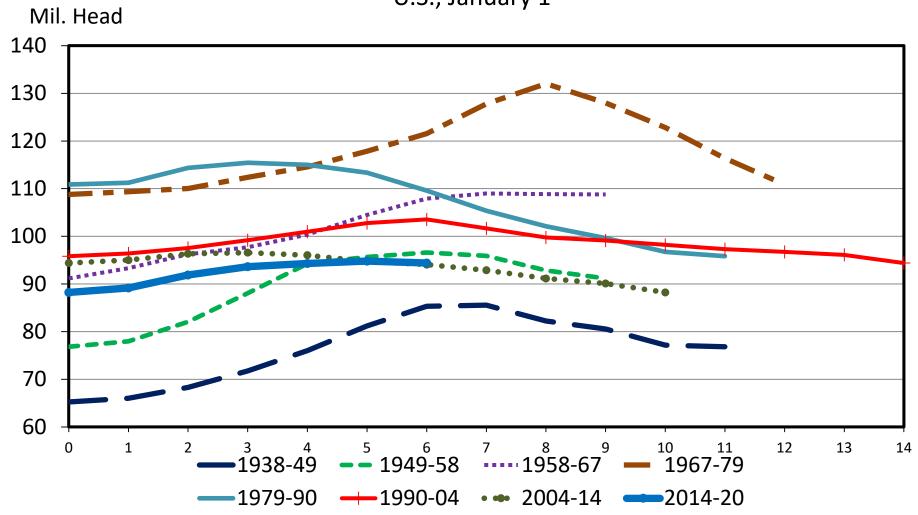


- Can listen to full talk at KSU Stocker Field Day for more, related information:
 - https://www.asi.k-state.edu/events/stockerconference.html

https://www.youtube.com/watch?v=DpTyq3SuZn 8&list=PLst4YxRiGX9RSG0UO4WcavXCkwJmQz7lw &index=2&t=0s

TOTAL CATTLE INVENTORY BY CYCLE

U.S., January 1

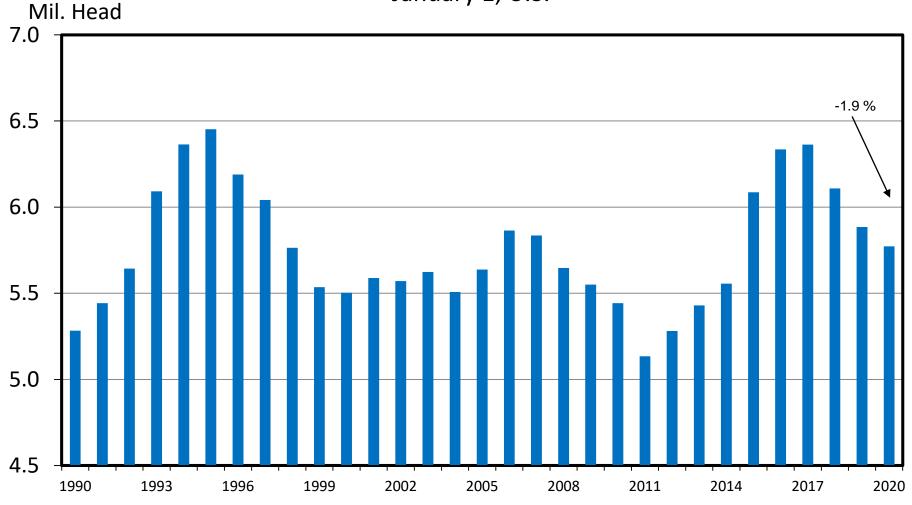


Data Source: USDA-NASS

C-N-40 01/31/20

HEIFERS HELD AS BEEF COW REPLACEMENTS

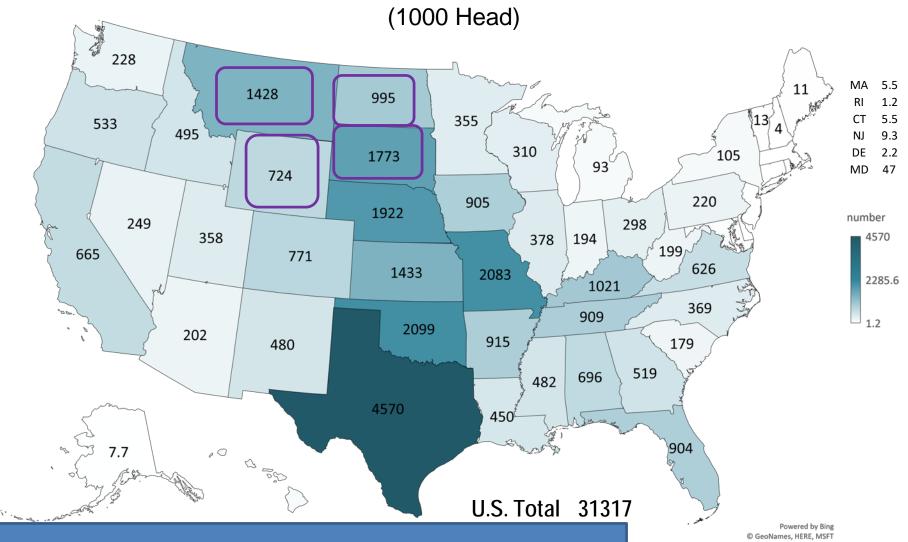
January 1, U.S.



Data Source: USDA-NASS

C-N-38 01/31/20

BEEF COWS THAT CALVED JANUARY 1, 2020



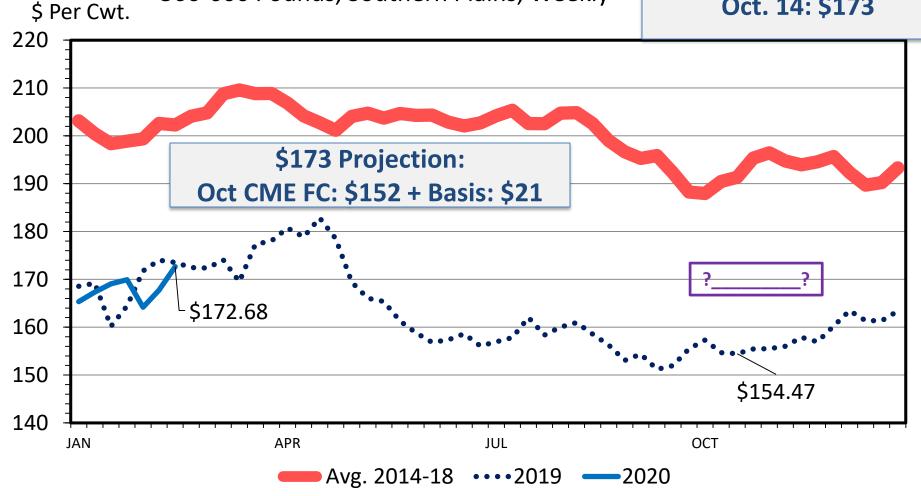
4 States have more Beef Cows than Residents: WY, ND, SD, MT (NE about even)

01/31/20

MED. & LRG. #1 STEER CALF PRICES

500-600 Pounds, Southern Plains, Weekly

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

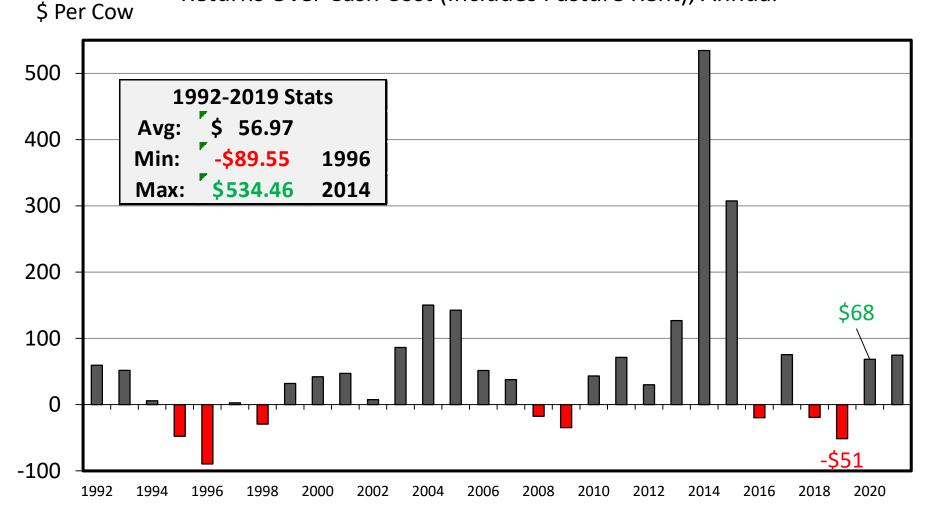


Data Source: USDA-AMS

C-P-54 02/17/20

ESTIMATED AVERAGE COW CALF RETURNS

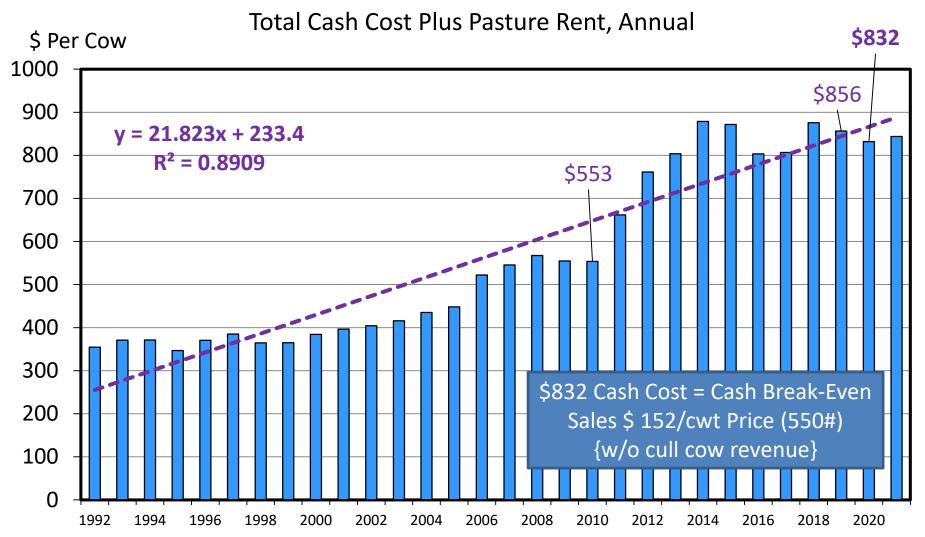
Returns Over Cash Cost (Includes Pasture Rent), Annual



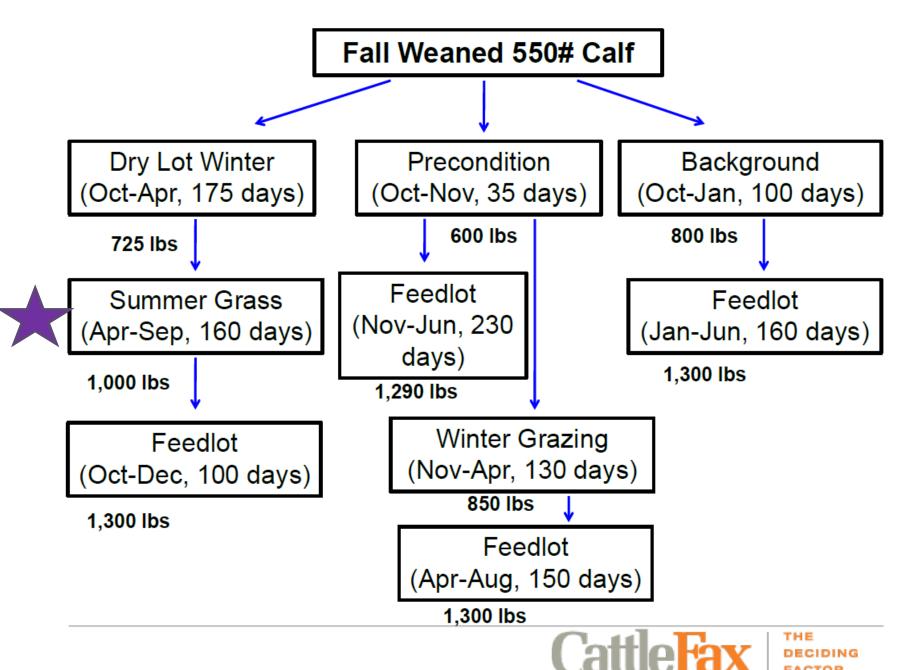
Data Source: USDA & LMIC, Compiled by LMIC

C-P-66 02/19/20

ESTIMATED AVERAGE COW CALF COSTS



Data Source: USDA & LMIC, Compiled by LMIC



VOG Projections: http://www.beefbasis.com/VOG.aspx

Production Chart: http://www.beefusa.org/CMDocs/BeefUSA/resources/CC2011-Cattle-Fax-All-Slides.pdf

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

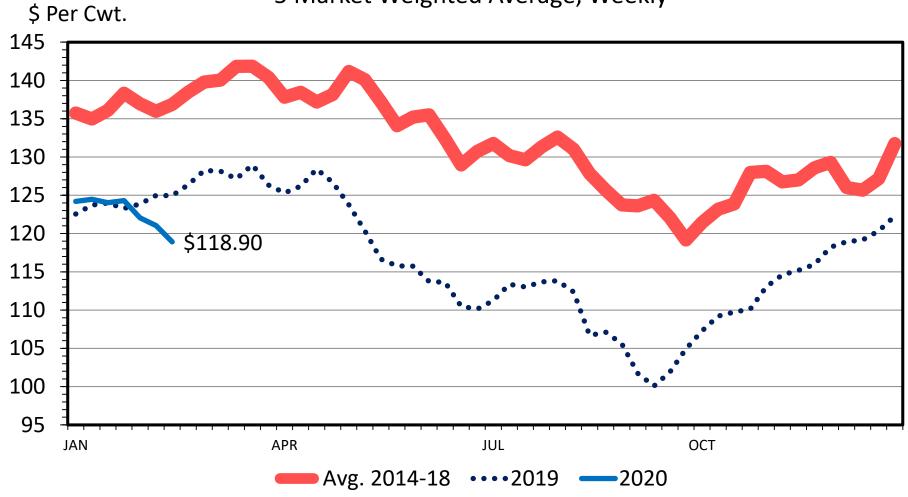
Table 1. Projected Values for Finishing Steers in Kansas Feedyards*

Closeout	Net Return	FCOG**	Fed Price	Fad Futures	Fad Rasis	Feeder Price	Breakeven	Breakeven	Breakeven
Mo-Yr	Nethetum	1000	Teurnice	reurutuies	i eu basis	reederrice	FCOG**	Fed Price	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



Data Source: USDA-AMS

02/17/20

Quarterly Forecasts (LMIC: 1/7/20)

		% Chg.	Average	% Chg.	Comm'l	% Chg.
Year	Comm'l	from	Dressed	from	Beef	from
Quarter	Slaughter	Year Ago	Weight	Year Ago	Production	Year Ago
2019						
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
Year	33,556	1.7	809.6	-0.6	27,167	1.1
2020						
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
Year	33,433	-0.4	819.6	1.2	27,403	0.9
2021						
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
Year	32,735	-2.1	824.2	0.6	26,982	-1.5

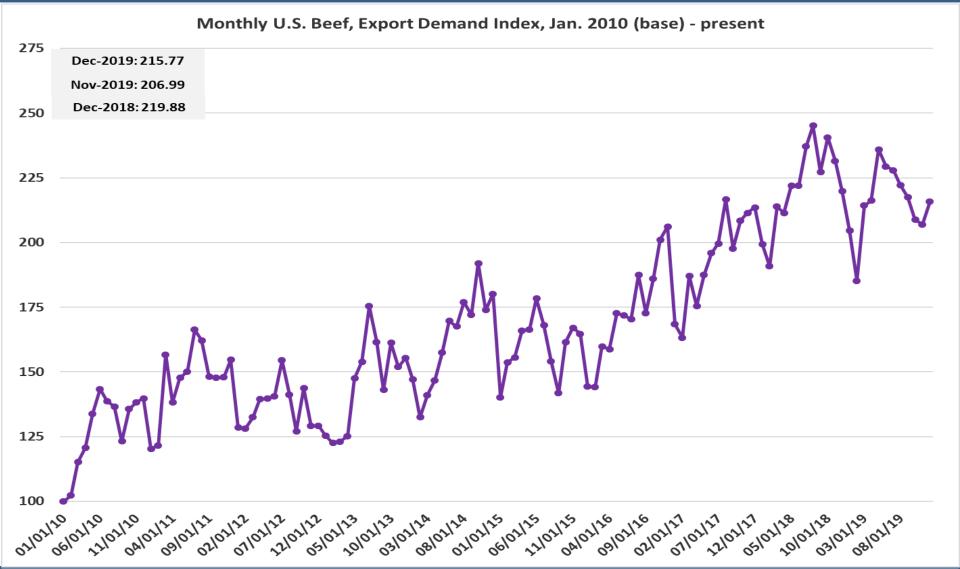
Quarterly Forecasts (LMIC: 1/7/20)

	Live Sltr.	% Chg.	Feeder Ste	er 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
Year	117	-0.3	145	163
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
Year	118-120	1.9	146-150	167-172
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
Year	119-123	1.7	150-154	171-177

Trade & Total Meat Context Update

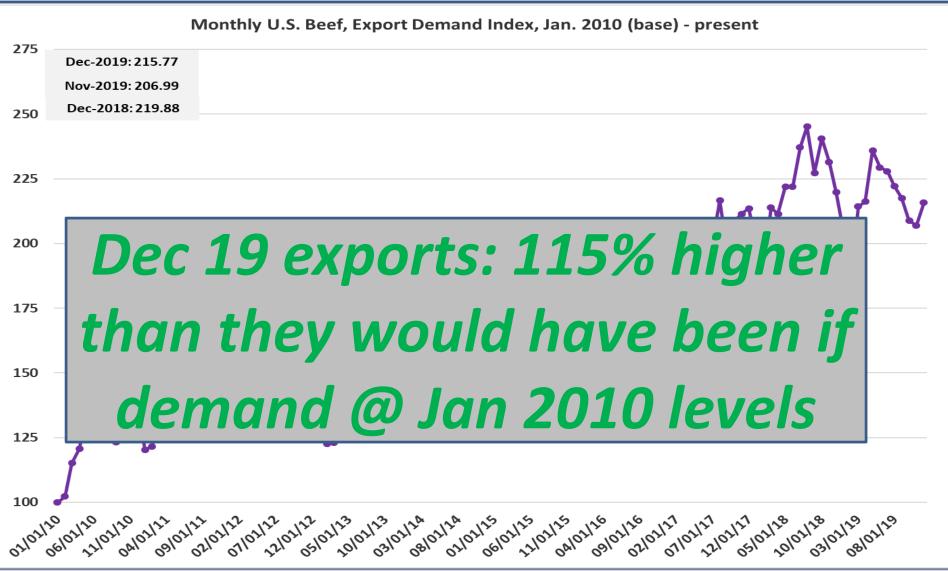
U.S. Beef Export Demand Index

(Monthly, Jan 2010=100)



U.S. Beef Export Demand Index

(Monthly, Jan 2010=100)



USDA Long-Term projections

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

Per capita meat consumption, retail weight			
ltem	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

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

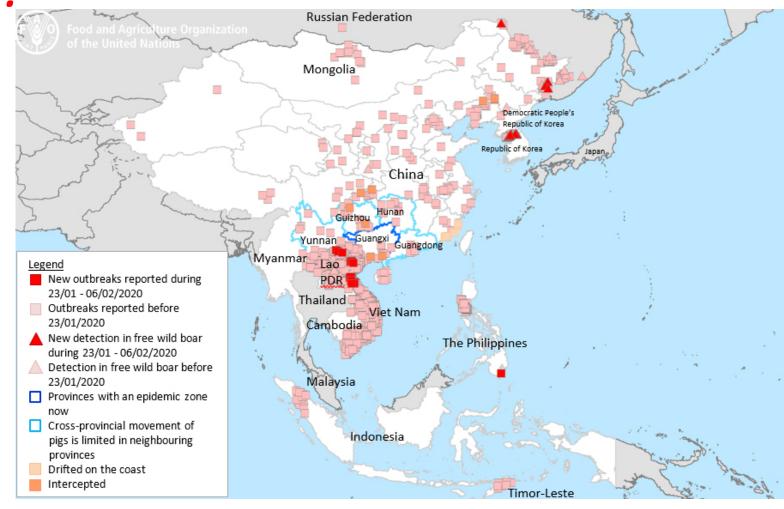
Per capita meat consumption, retail weight			
ltem	2019	2020	2029
Beef	57.2	57.7	57.6
Veal	0.2	0.2	0.2
Pork	51.7	52.1	49.4
Lamb & mutton	1.1	1.1	1.0
Total red meat	110.1	111.1	108.2
Broilers	94.3	95.4	96.4
Other chicken	1.3	1.4	1.5
Turkeys	16.0	15.8	15.0
Total poultry	111.6	112.7	112.9
Red meat & poultry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

Projections INCLUDE export maintenance & growth

Additional Fodder for Thought...

❖ What will be realized ASF-Asia "export boost"?

occur?



Additional Fodder for Thought...

What will be realized coronavirus impact?

International Feb 15th 2020 edition



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

Nutrition Facts Servings:1 AmountPerServing Calories 290 Calones from Fat 160 % Daily Value Total Fat 17g 27% Saturated Fat 13g 67% Trans Fat Og Cholesterol 0mg 24% Sodium 570mg Potassium 350mg 10% Total Carbohydrate 7g 2% Dietary Fiber 0g 0% Sugars 0g Protein 27g Vitamin A 0% Vitamin C 0% Iron 20% Calcium 2% *Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorieneeds. 2,500 Less than 259 Sat Fat Less than 20g Cholesterol Less than 300ma 300mg 2400mg 2400mg Sodum Less than Total Carbohydrate 375q Dietary Fiber

Ingredients:Textured Wheat Protein, Coconut Oil, Potato Protein, Natural Flavors, Leghemoglobin (soy), Yeast Extract, Sat, Soy Protein Isolate, Konjac Gum, Xanthan Gum, Vitamin C, Thiamin (Vitamin B1), Zine, Nison, Vitamin B6, Riboffavin (Vitamin B2), Vitamin B12.

VS.

Beyond Burger

AmountPerS	erving		
Calones 27	70	Calories f	rom Fat 180
		9	% Daily Value
Total Fat	20a		31%
Saturated			25%
Trans Fa	- 19		201
Cholestero			0%
Sodium 3			16%
Potassium			10%
	ohydrate 5	0	2%
Dietary F		-	12%
Sugars (12.0
Protein 20			
riotem 20	ઝ		
Vitamin A 0	or -	16	tamin C 6%
Calcium 2%			n 30%
		part on a 2.0	56 esterio del
-	Makuon are he		An elastic to mer
*Percent Daily	Values are be lues may be his		r depending on
*Percent Daily	lues may be hig		r depending on
*Percent Daily Your Daily Va	lues may be hig		depending on 2,500
*Percent Daily Your Daily Va your calonient Total Fat	lues may be hig eds. Calories Leas than	2,000 65g	2,500 80g
*Percent Daily Your Daily Va your calonement Total Fat Sal Fat	lues may be hig eads. Calones Leas than Leas than	2,000 85g 20g	2.500 80g 25g
Percent Daily Your Daily Va your calonene Total Fat Sat Fat Cholesterol	Less than Less than Less than Less than Less than	2,000 859 209 300mg	2,500 80g 25g 300mg
*Percent Daily Va Your Daily Va your calorient Total Fat Sal Fat Cholesterol Sodium	Less than Less than Less than Less than Less than Less than	2,000 85g 20g 300mg 2400mg	2.500 80g 25g 310mg 2400mg
Percent Daily Your Daily Va your calonene Total Fat Sat Fat Cholesterol	Less than Less than Less than Less than Less than Less than drate	2,000 859 209 300mg	2.500 80g 25g 310mg

Ingredients:Pea Protein Isolate, Expeter-Pressed Canols Oil, Refined Coconul Oil, Calubas from Bemboo, Methylcelulose, Potato Stanch, Natural Flavor, Natodextin, Yeast Extract, Sat, Sunflower Oil, Vegetable Glycerin, Oried Yeast, Oum Arabic, Citrus Extract (to protect quality), Ascorbic Acid (to maintain color), Beet Juice Extract (for color), Acetic Acid, Succinic Acid, Modified Food Stanch, Annatio (for color).

What is role of "alternative proteins" in future of U.S. livestock?

Livestock Risk Management Considerations



Glynn Tonsor
Dept. of Agricultural Economics Kansas State University

United States Department of Agriculture

https://www.fsa.usda.gov/programs-andservices/disaster-assistance-program/livestockindemnity/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.

https://www.fsa.usda.gov/programs-andservices/disaster-assistance-program/livestockindemnity/index

Farm Service Agency LIP

Livestock Indemnity Program

FACT SHEET July 2019

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



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

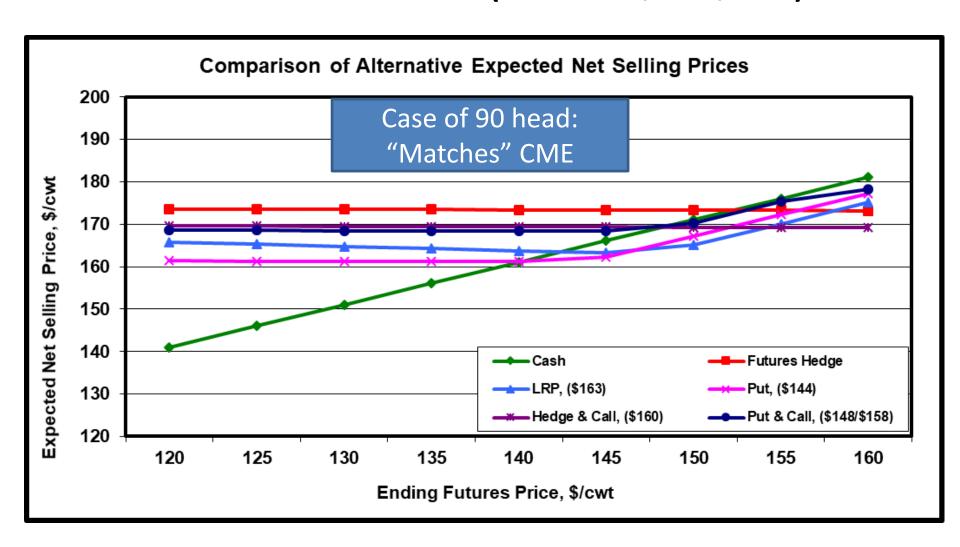
Considering price protection on Oct sale

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)



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					Hedge			
price	Cash	Hedge	LRP	Put	&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 prid	ce increment	Signi	fies 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

Glynn T. Tonsor

Professor

Dept. of Agricultural Economics

Kansas State University

Email: gtonsor@ksu.edu

Twitter: @TonsorGlynn

Utilize a Wealth of Information Available at AgManager.info

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.



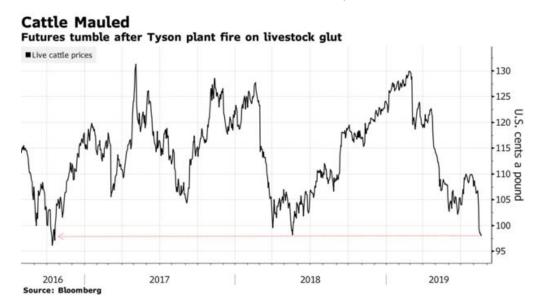
Receive Weekly Email Updates for AgManager.Info:

http://www.agmanager.info/about/contact-agmanagerinfo



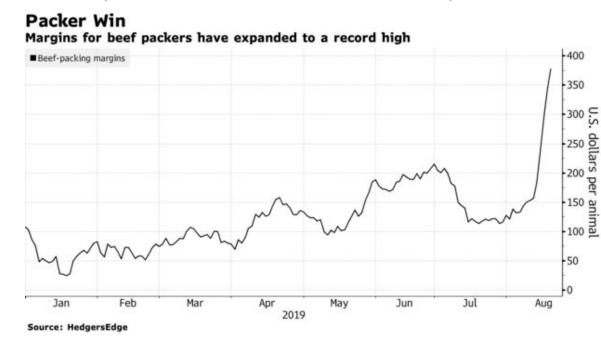
Holcomb-Tyson Plant Fire

- Price Impact on Cattle
 - Expected:
 - Derived Demand Decline = Cattle Price Decline
 - Realized:
 - CME limit down 1st two days
 - LC Cash down \$5-\$7 1st week; FC Cash down ~\$10

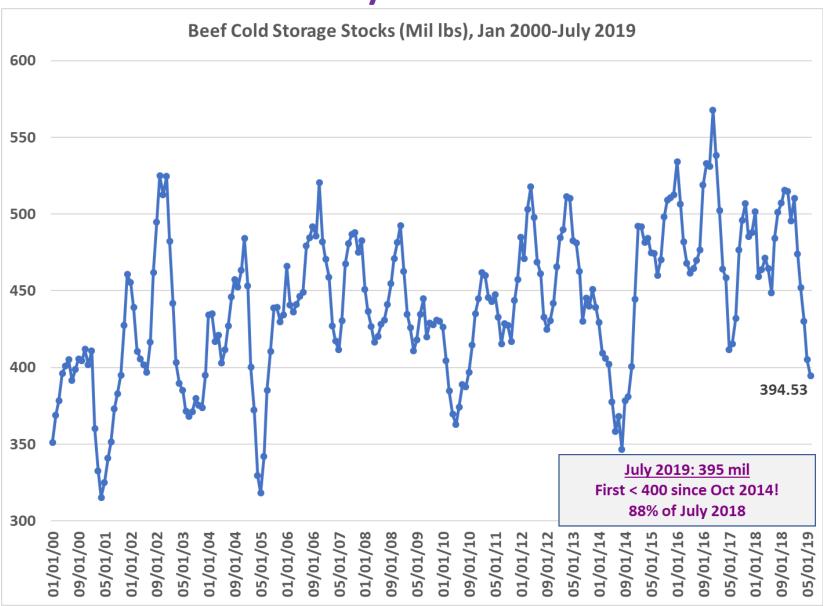


Holcomb-Tyson Plant Fire

- Price Impact on Beef
 - Expected:
 - Processing Cost Up = Beef Price Increase
 - Realized:
 - Two largest daily cutout price increases on-record (post-MPR)

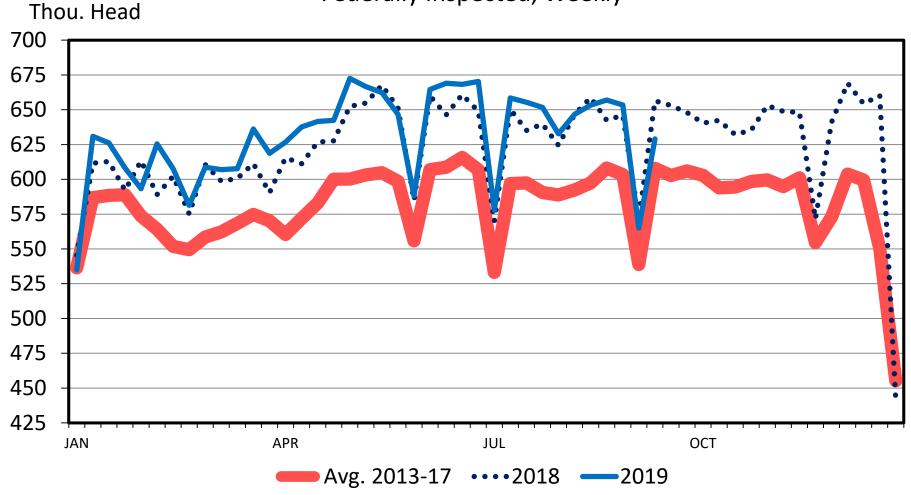


Holcomb-Tyson Plant Fire



CATTLE SLAUGHTER

Federally Inspected, Weekly

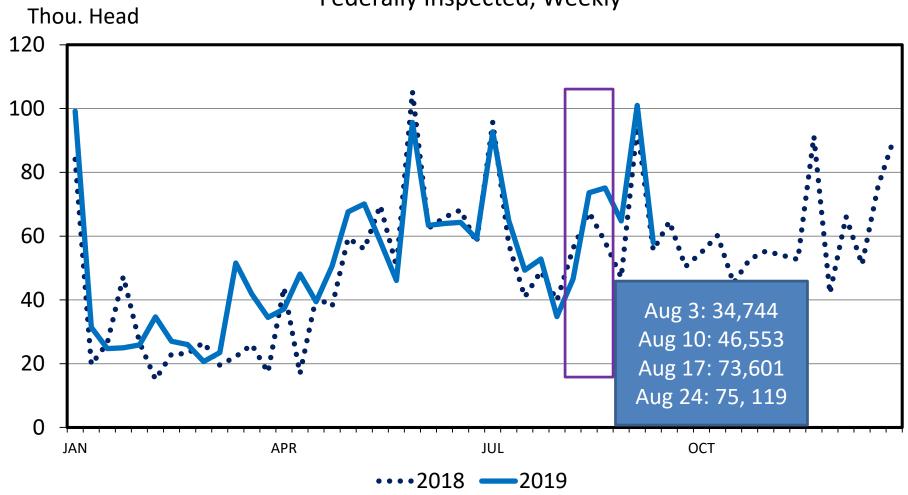


Data Source: USDA-AMS & USDA-NASS

C-S-08 09/13/19

SATURDAY CATTLE SLAUGHTER

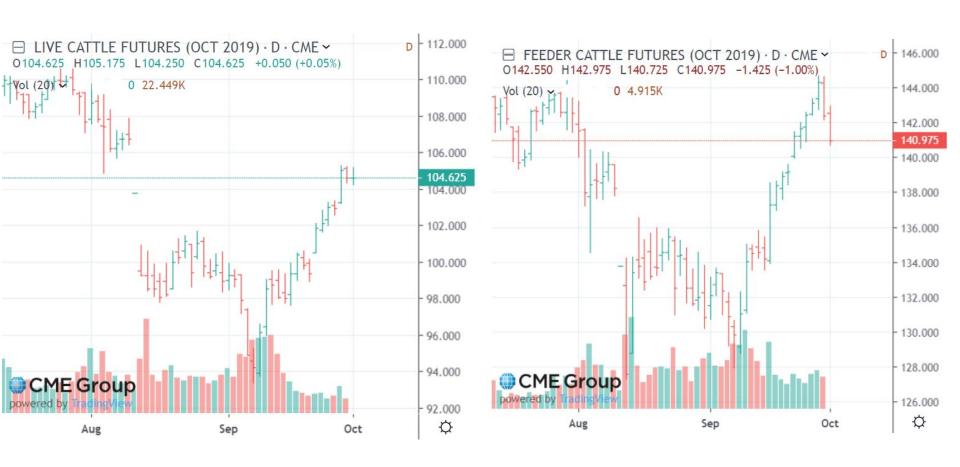
Federally Inspected, Weekly

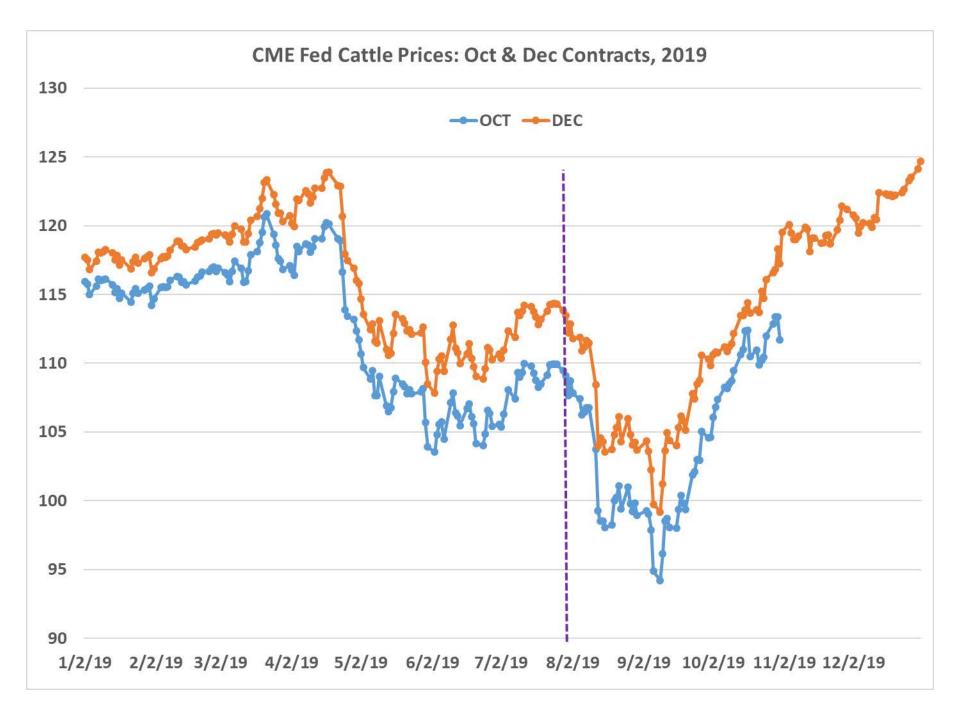


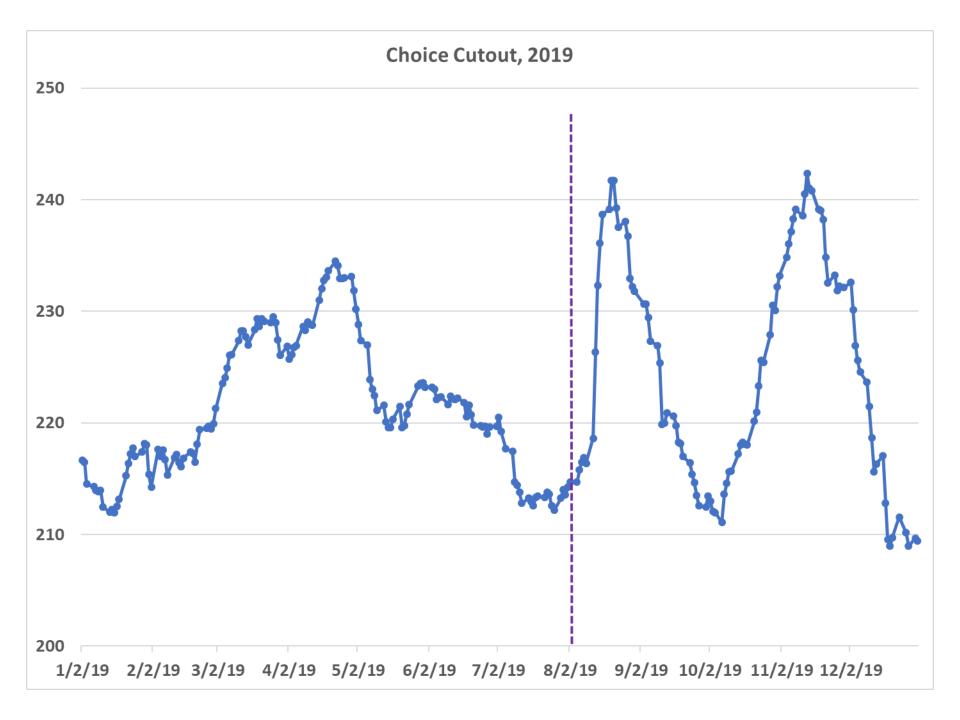
Data Source: USDA-AMS & USDA-NASS

C-S-03 09/13/19

Markets Often Operate Like A Pendulum

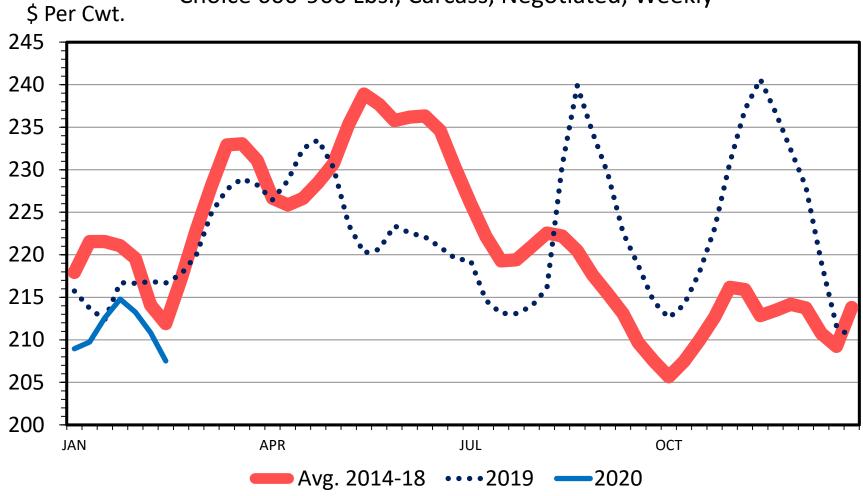






BOXED BEEF CUTOUT VALUE

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

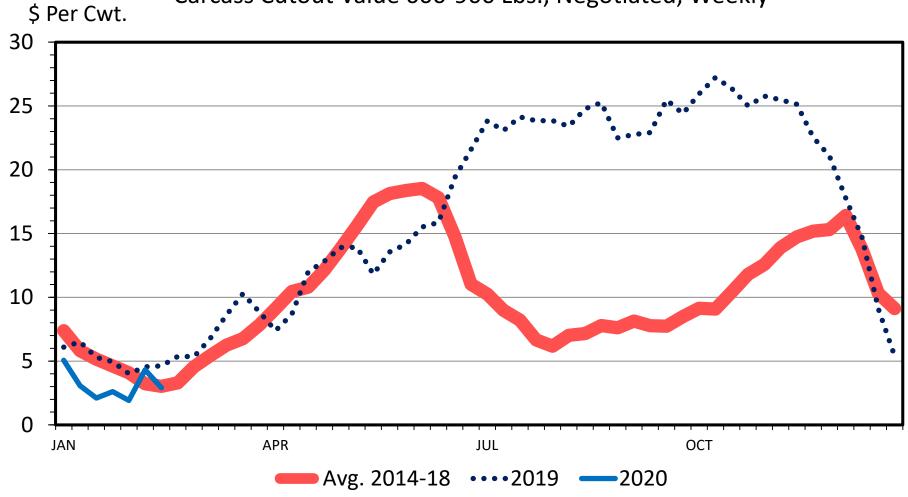


Data Source: USDA-AMS

C-P-62 02/17/20

CHOICE MINUS SELECT BEEF PRICES

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



Data Source: USDA-AMS, Compiled by LMIC

C-P-68 02/17/20