

Cattle Price Outlook and Price Risk Management

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www.ndsu.edu/livestockeconomics

November 21, 2019



ANSCI 487-Nov2019.pptx

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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?

Pick Your Poison

Cash

Forward Contract/
Video Auction

LRP

Futures/Options

Easy



Difficult

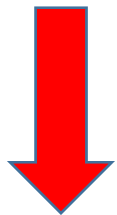


Which Is Best?

Depends on expected price trend



Uptrend: cash market



Downtrend: futures
cash forward contract
video and internet auction



?: options or LRP
(will always be 2nd best)



LM_CT153

St. Joseph, MO Mon Sep 09, 2019 USDA Market News

NATIONAL WEEKLY DIRECT SLAUGHTER CATTLE - PRIOR WEEK SLAUGHTER AND CONTRACT PURCHASES

For Week Ending Sunday, 09/08/2019

D: BASIS DISTRIBUTION

Delivery Mo./Basis Mo.

Sep '19/Oct

23 head = -12.00

14 head = 0.00

SEP 4: DEC LV CAT FUT= \$103.57

Nov '19/Dec

120 head = -1.00

-1.00

\$102.57

Dec '19/Dec

241 head = -1.00

-

Risk Management?



1350 lb. steers in Dec

20% Prem. Subsidy

X.80

LRP Coverage Prices, Rates, and Actual Ending Values - Report for 09/04/2019

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date
38 North Dakota	998 All Counties	13	0802 Fed Cattle	820 Steers & Heifers	997 No Practice Specified	2020	101.583	\$100.010	0.984500	0.038796	3.880	12/04/2019
											3.10	
38 North Dakota	998 All Counties	13	0802 Fed Cattle	820 Steers & Heifers	997 No Practice Specified	2020	101.583	\$98.010	0.964800	0.030028	2.943	12/04/2019
											2.35	
38 North Dakota	998 All Counties	13	0802 Fed Cattle	820 Steers & Heifers	997 No Practice Specified	2020	101.583	\$96.010	0.945100	0.022789	2.188	12/04/2019
											1.64	
38 North Dakota	998 All Counties	13	0802 Fed Cattle	820 Steers & Heifers	997 No Practice Specified	2020	101.583	\$94.010	0.925500	0.016902	1.589	12/04/2019
											1.19	

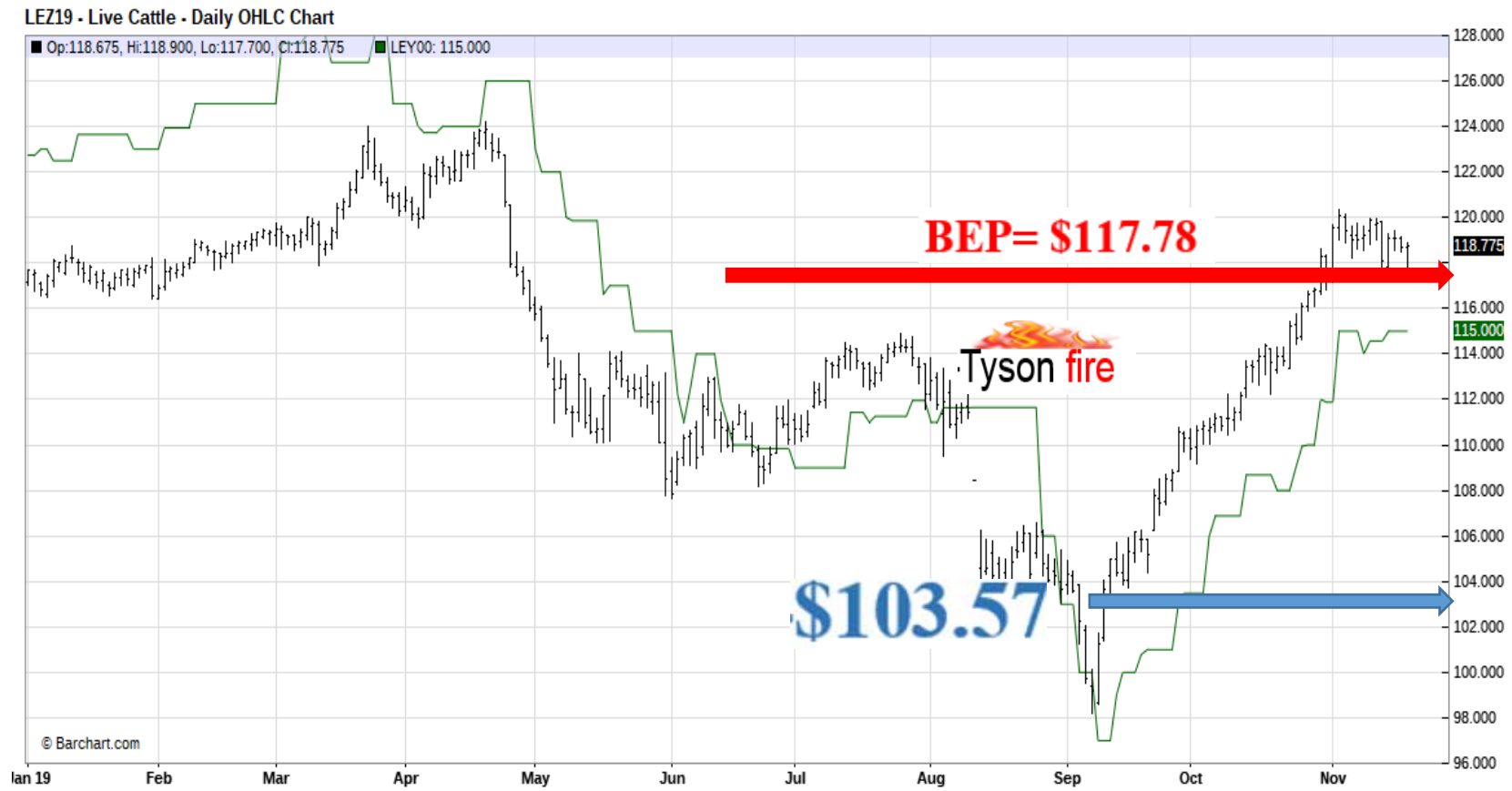
DEC LV CAT FUT-\$103.57/CURRENT CASH-\$101.73

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

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DEC LV CAT FUT/USDA 5 AREA CASH



DEC LV CAT FUT/USDA 5 AREA CASH



WHICH WAS BEST?



Uptrend:

CASH	FUT		LRP
\$115.19	\$103.57	\$115.19	\$115.19
<u>- 117.78</u>	<u>- 118.77</u>	<u>- 15.20</u>	<u>- 3.10</u>
-2.59	-15.20	\$99.99	112.09
	<u>FWD CT</u>	<u>- 117.78</u>	<u>- 117.78</u>
	\$102.57	-17.79	-5.69
	<u>-117.78</u>	- brokerage	
	-15.21	margin	
BEST	WORST		2nd

Livestock Fundamental Highlights



Record pork, chicken, total meat production in 2019

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



Prices for fed cattle above last year – beef demand strong

Feeder cattle prices lower- more supply/higher corn price 

Cow prices little higher- higher slaughter but good demand

Hog & chicken prices little lower than last year-record production and trade issues



Beef cow herd expansion rate moderating – peak 2020?

2018 US calf crop up 645,000, 2019 up?

Beef demand robust

US economy strong



Record beef exports in 2017,18, but 2019?



Top 4 US beef customers (Japan, S. Korea, Mexico, Canada) in trade negotiations causing price volatility

DO YOU HAVE 2020 VISION?



Exports



Record Meat
Production



Trade Agreements

Drought/Blizzards/Floods



TYSON FIRE

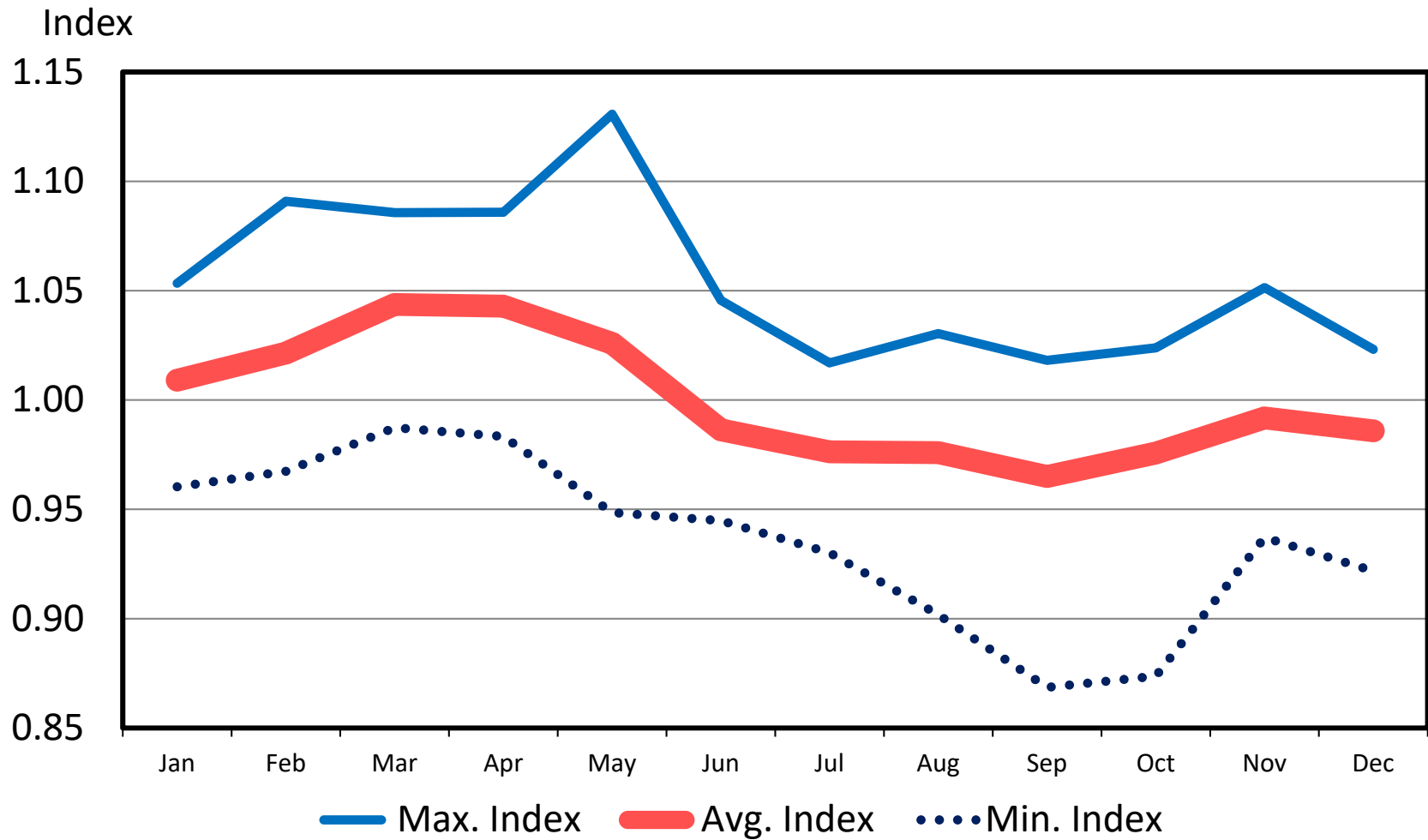
Corn Prices

Consumer Demand

COMPETING MEATS

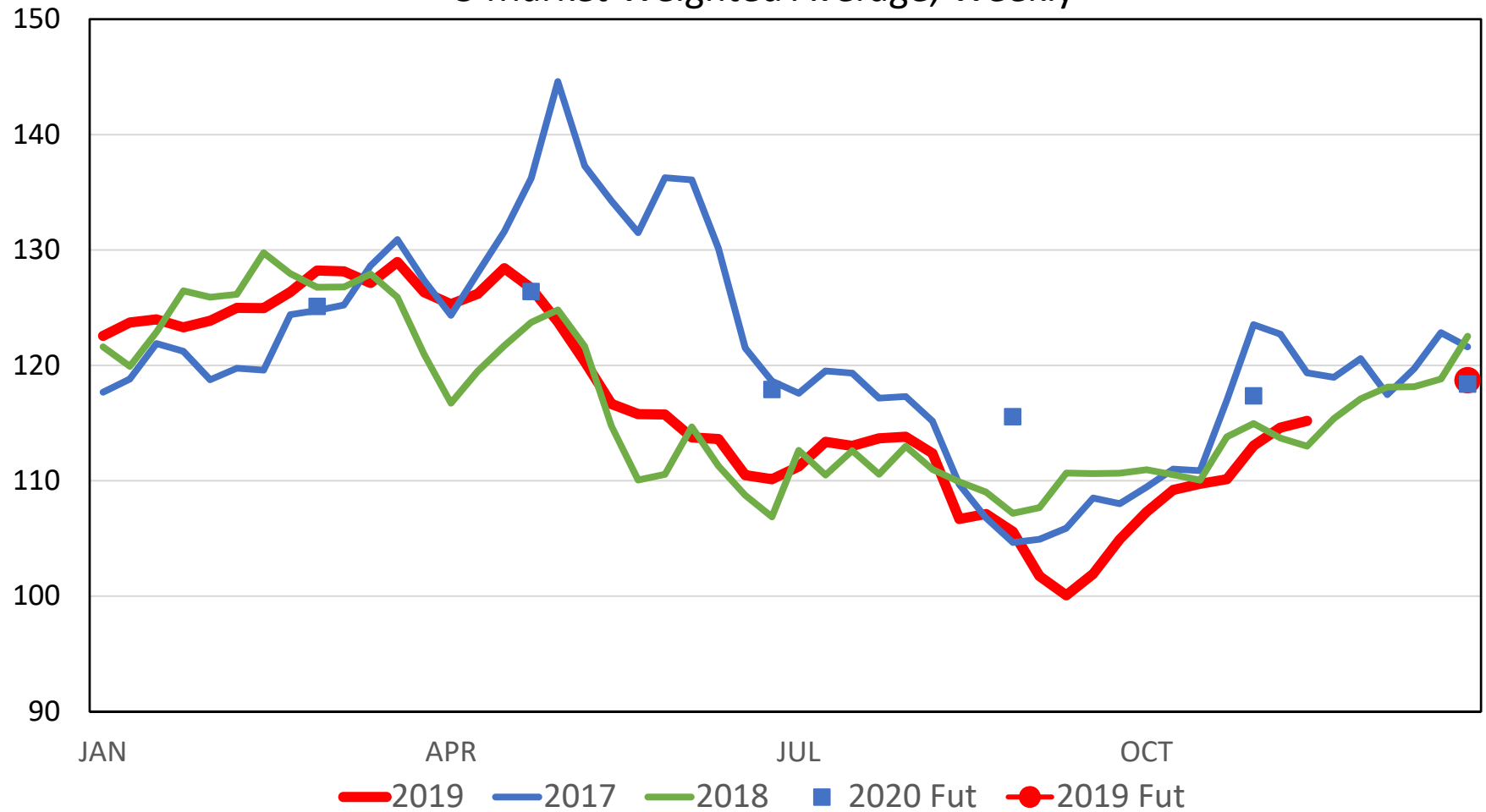
SEASONAL PRICE INDEX – FED STEERS

2009-2018



SLAUGHTER STEER PRICES

5 Market Weighted Average, Weekly

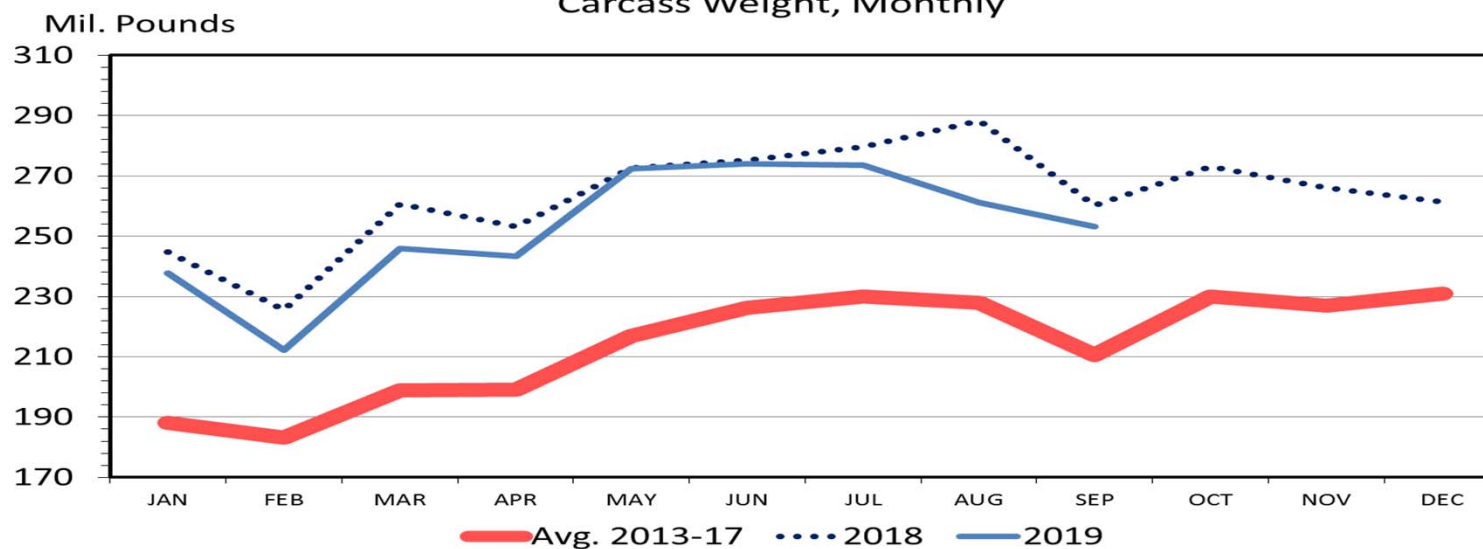


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US BEEF AND VEAL EXPORTS

Carcass Weight, Monthly

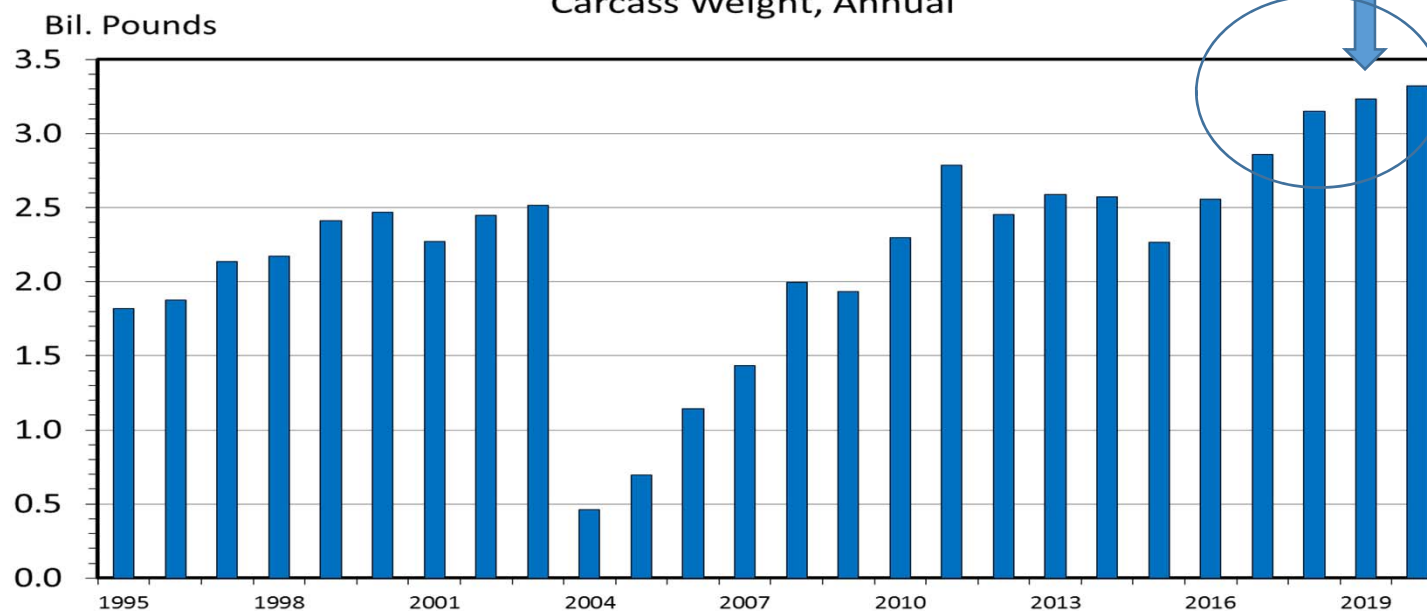


Data Source: USDA-ERS & USDA-FAS

Livestock Marketing Information Center

US BEEF AND VEAL EXPORTS

Carcass Weight, Annual



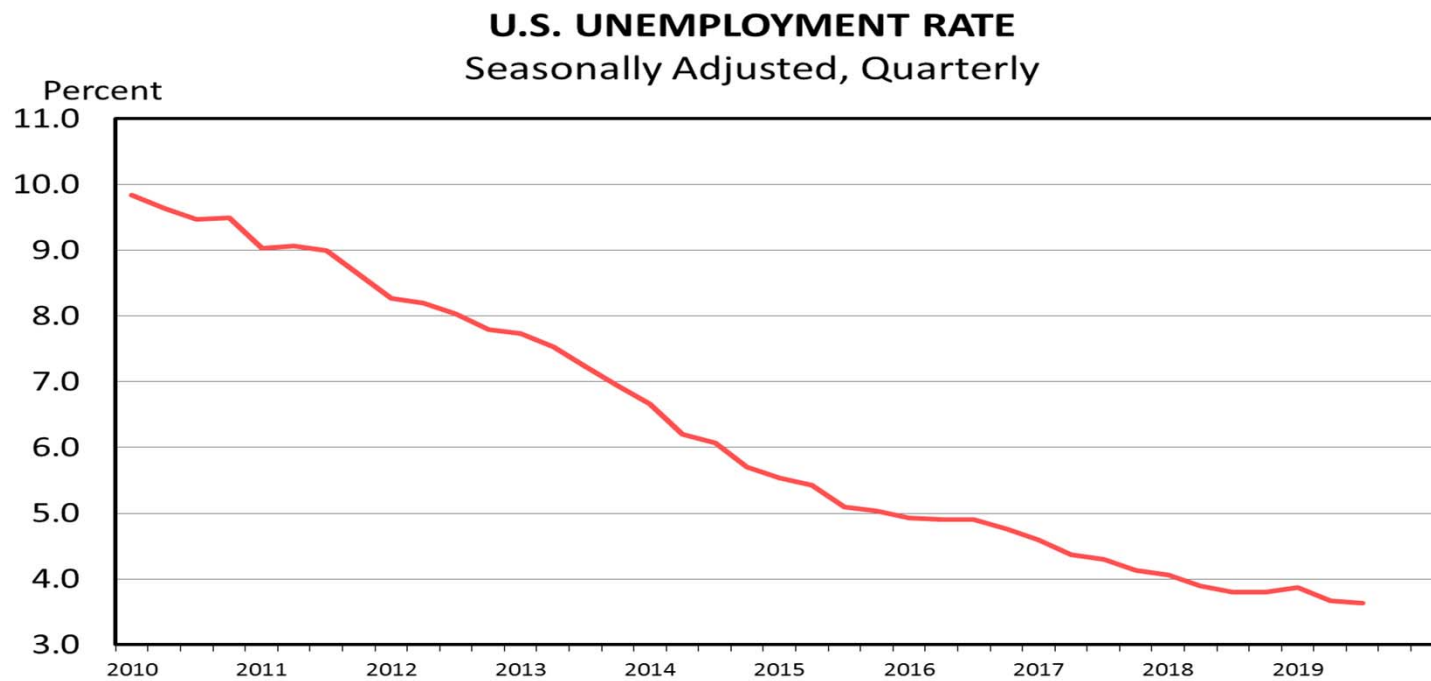
U.S. Ranking in World



Major U.S. Meat Export Customers

BEEF	PORK	CHICKEN
Japan	Mexico	Mexico
Mexico	Japan	Canada
Korea	Canada	Cuba
Canada	China	Hong Kong
Hong Kong	Korea	Taiwan
China?	Australia	China Ø

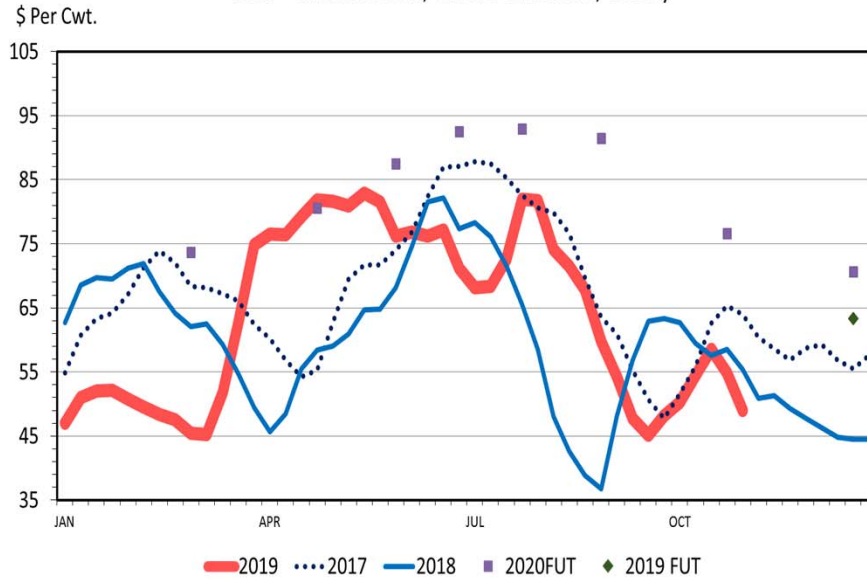




Other Livestock

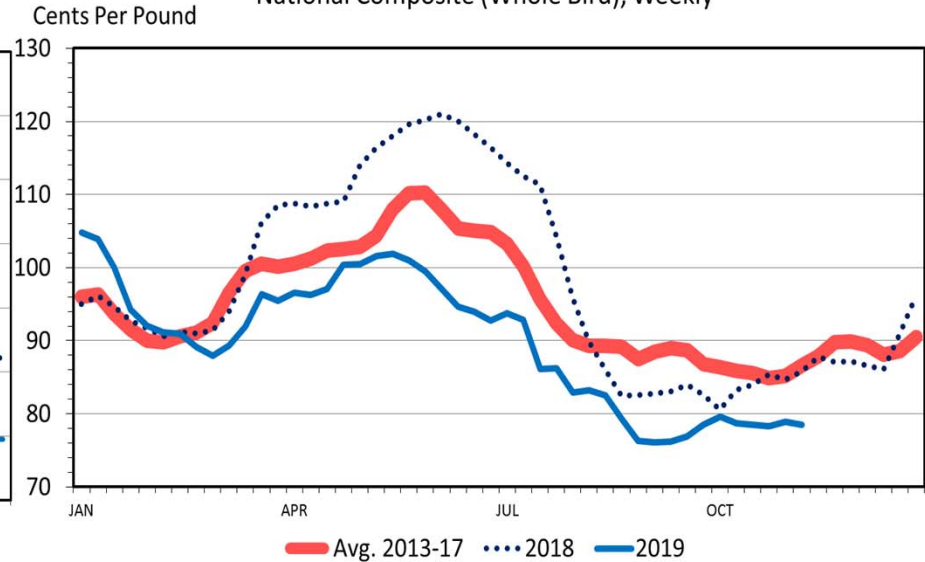
BARROW AND GILT PRICES

Iowa – So. Minnesota, Carcass Base Price, Weekly



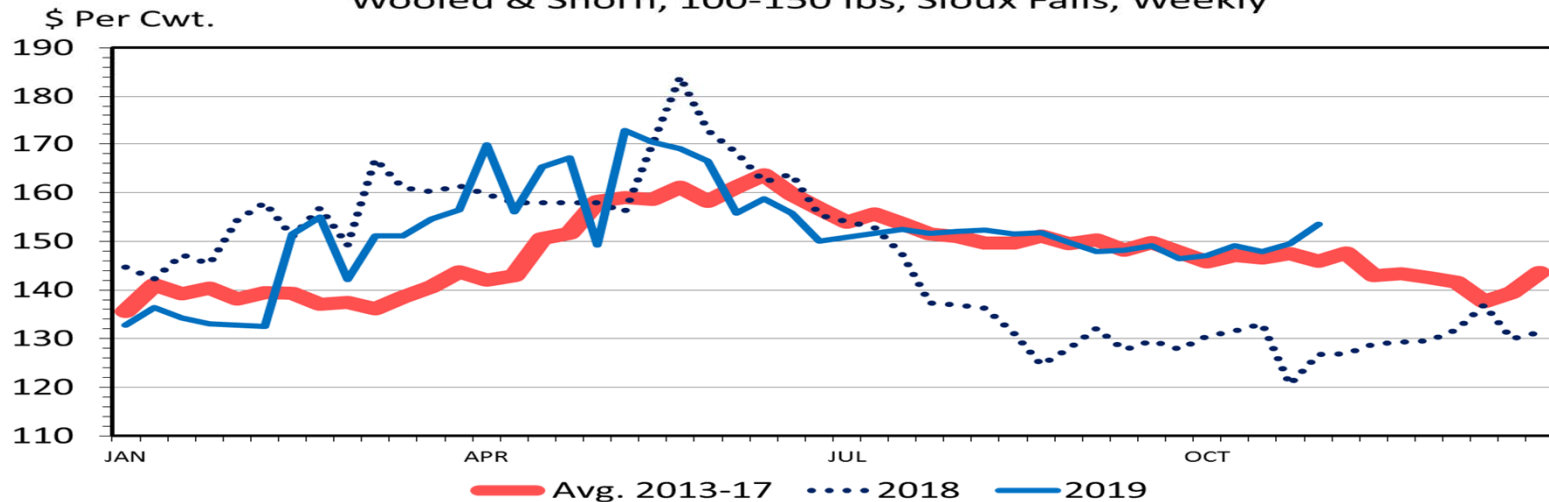
BROILER PRICES

National Composite (Whole Bird), Weekly



SLAUGHTER LAMB PRICES

Wooled & Shorn, 100-150 lbs, Sioux Falls, Weekly



Data Source: USDA-AMS; Livestock Marketing Information Center

APR LIVE CATTLE FUTURES



When should I pull the trigger?



Most difficult part of using Futures and Options

Is there something easier?

Some Packers Offer Futures-based Forward Contracts

- No need for broker, margins, etc.
- Price is + or – futures contract price
- Other specifications

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St. Joseph, MO Mon Nov 18, 2019 USDA Market News

NATIONAL WEEKLY DIRECT SLAUGHTER CATTLE - PRIOR WEEK SLAUGHTER AND CONTRACT PURCHASES

For Week Ending Sunday, 11/17/2019

D: BASIS DISTRIBUTION

Delivery Mo./Basis Mo.

Apr '20/Apr

102 head =	-20.00
500 head =	-17.00
35 head =	-16.00
175 head =	-13.00
111 head =	-3.50
37 head =	-3.25
247 head =	-2.50
428 head =	-1.00
328 head =	-0.50
2,098 head =	0.00
5,233 head =	+0.50
344 head =	+1.00
2,000 head =	+8.50

LRP – revenue insurance program that is reinsured and subsidized by the Federal Crop Insurance Corporation (FCIC)

- 2001: pilot program for swine
- 2003: feeder and fed cattle in selected states
- 2004: all 3 available in North Dakota
- 2007: lamb LRP available in North Dakota and selected states

LRP

- Insures against price declines
- Similar to put options
- Premium is subsidized
- Sold by livestock (crop) insurance agents who do not have to offer
- List of approved agents at:

www.rma.usda.gov/en/Information-Tools/Agent-Locator-Page

Beginning Farmer

- 10% additional premium subsidy
- 5 yr. or less actively raising livestock
- Does not include years when
 - under 18
 - full time military
 - post-secondary education

New Premium Subsidy Rates

<u>Coverage Level %</u>	<u>Subsidy Rate %</u>
95-100	20
90-94.9	25
80-89	30
70-79	35

Previous rate was 13%

LRP CONTRACTS

- Feeder Cattle (beef, dairy, Brahman)
 - Under 600 lbs
 - Beef steers or heifers
 - 600 to 900 lbs.
 - Beef steers or heifers
- Fed cattle
- Hogs
- Lambs

Fed Cattle (Steers or Heifers)

- 1000 – 1400 lb., Select or higher, YG 1-3
- Based on 5-area weighted average 35 to 65 percent choice steer price
www.ams.usda.gov/mnreports/lm_150.txt
- Released each Monday morning
- Any # up to 3000 head per SCE
6000 maximum per year

LM_CT150

St. Joseph, MO Mon Nov 18, 2019 USDA Market News Service

5 AREA WEEKLY WEIGHTED AVERAGE DIRECT SLAUGHTER CATTLE

Texas/Oklahoma/New Mexico; Kansas; Nebraska; Colorado; Iowa/Minnesota feedlots

(Includes all transactions regardless of delivery day)

For: Week Ending Sunday, 11/17/2019

Confirmed: 74,003

Week Ago: 99,098

Year Ago: 87,409

Negotiated Cash Sales

	Head count	Weight Range	Price Range	Avg Weight	Wtd Avg Price
STEERS: LIVE FOB					
Over 80% Choice	17,060	1,300-1,635	110.00-117.50	1,512	115.32
65 - 80% Choice	5,213	1,300-1,550	114.00-115.00	1,428	114.89
35 - 65% Choice	2,884	1,150-1,545	114.00-115.00	1,310	114.98
0 - 35% Choice		-	-		
Total all grades	25,157	1,150-1,635	110.00-117.50	1,472	115.19

Insurance Period

Policies may be available for the following weekly lengths:

13, 17, 21, 26, 30, 34, 39, 43, 47, 52

Coverage Prices and Rates

Change daily and are posted on the USDA Risk Management Agency (RMA) web site

www3.rma.usda.gov/apps/livestock_reports/main.aspx

Coverage levels will range from 70-100% of expected price

LRP – Fed Cattle

11/19/19

	Price	Cost/cwt	End Date	Current LRPCash Price
	123.68	3.98	4/14	114.98
	121.68	3.16		
	113.68	1.01		
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Indemnity

- Payment based on difference between **COVERAGE PRICE (CP)** & actual **USDA-AMS price (AP)**

CP = \$120/cwt

AP = \$115

\$5/cwt payment

- Producers must submit 04-LRP-Claim Form within 60 days of end of contract

Steps to LRP

1. Submit eligibility application form with insurance agent
2. Select a SCE (coverage prices and premiums are available **after 3 PM** (CST) except holidays)
 1. Number of head
 2. Policy length closest to marketing date
 3. Estimated average market weight
 4. Choose coverage price
3. Pay premium to agent
4. Agent submits SCE form electronically (hours are between **4 PM and 9 AM** (CST), Tues-Sat only)

FALL CALF PRICE FUNDAMENTALS

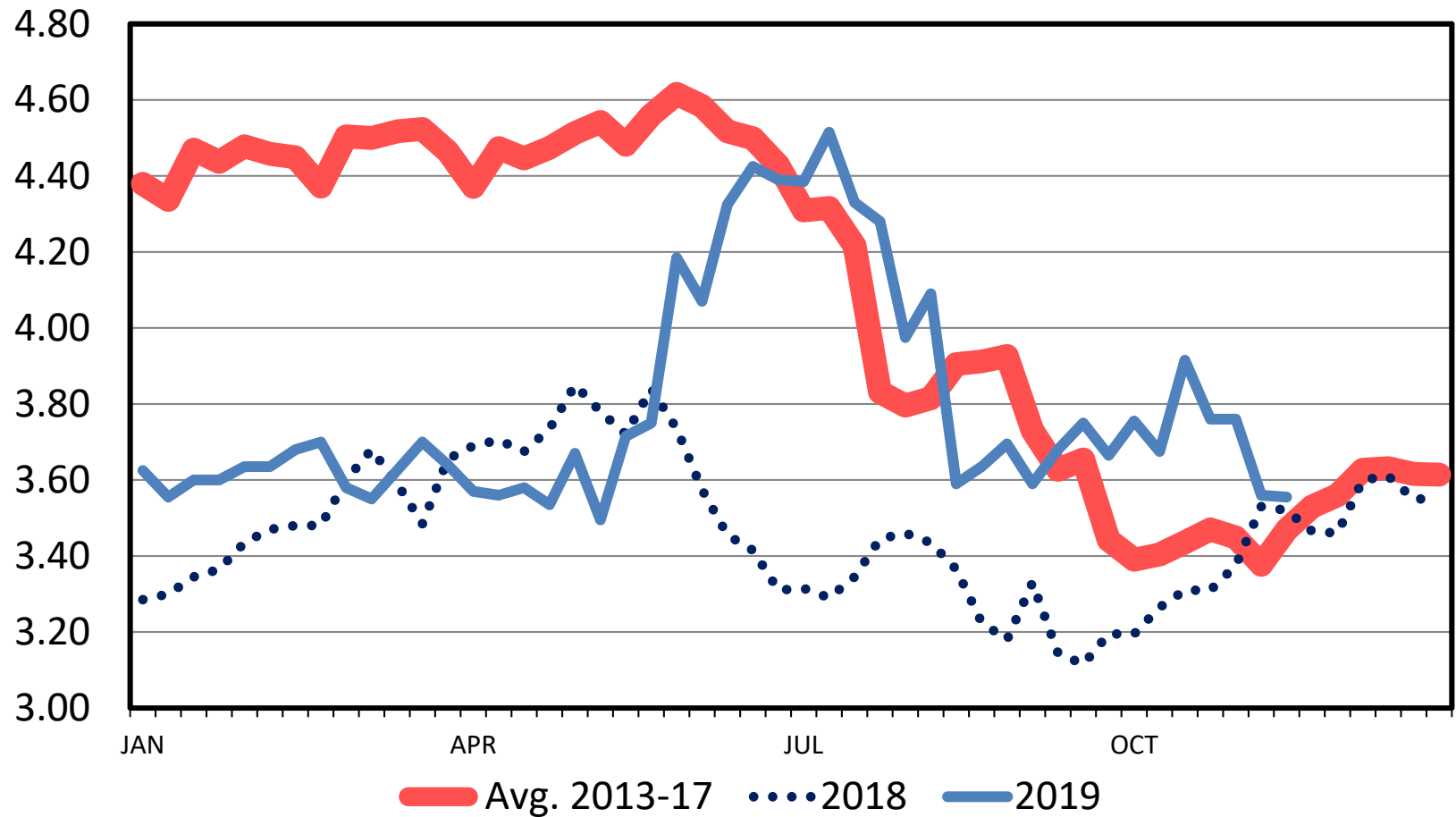
- Normal fall run seasonal decline tendency
- Corn prices 60 cents higher in Omaha and ? 
- SE US drought causing forced calf sales
- Dryness in winter wheat-planting behind
- Extremely wet in Corn Belt
- Snow in Northern Plains
- Farmer feeders busy with harvest/wet lots/ no buying interest
- APR LV CAT -\$126.25 = very good demand for over 700 lbs.
- JUN LV CAT -\$117.85, AUG -\$115.60 = negatively impacts calf prices
- BIG discounts for un-weaned/short ears or tails/muddy



OMAHA CORN PRICES

Weekly

\$ Per Bu.

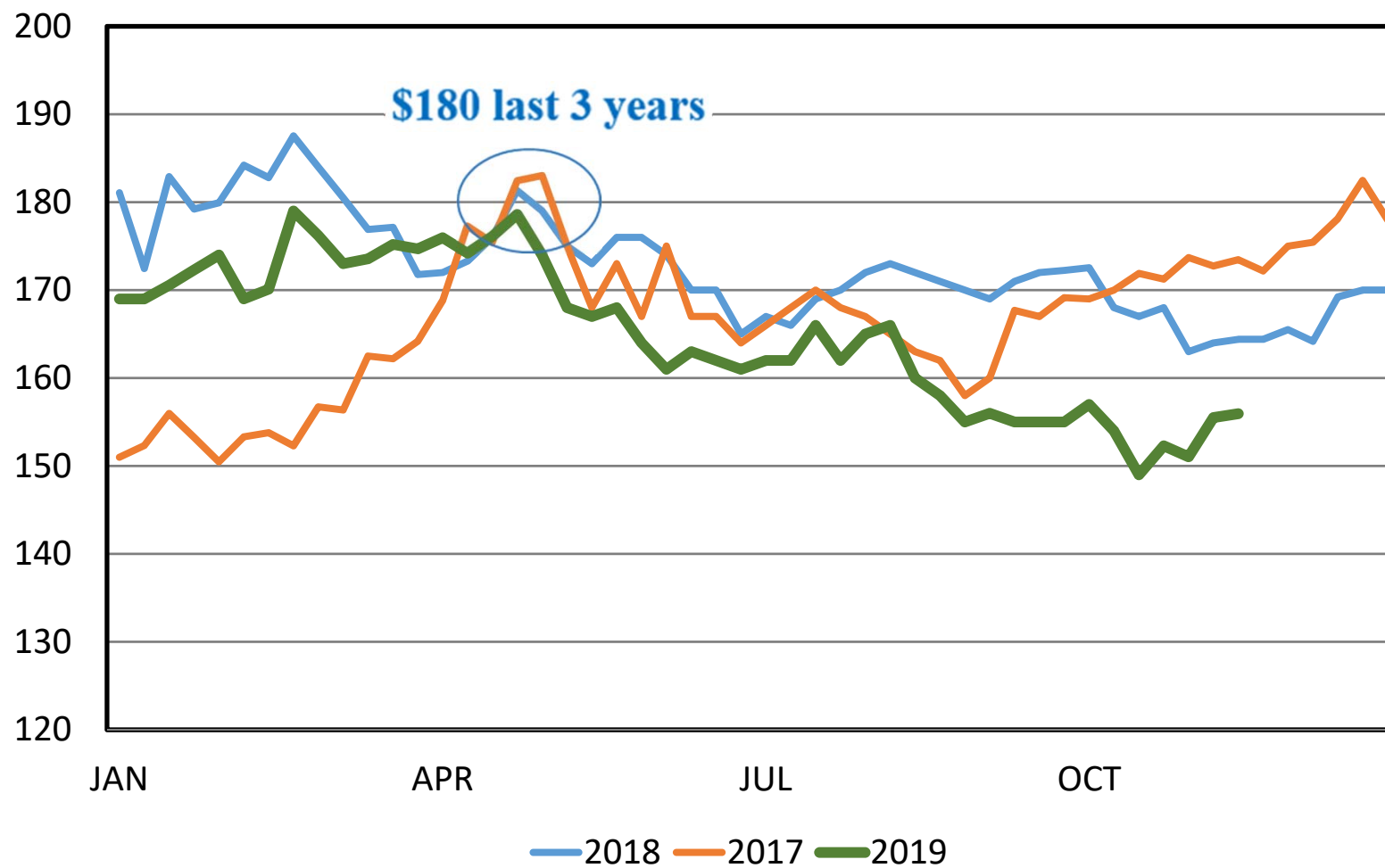


Data Source: USDA-AMS

Livestock Marketing Information Center

MED. FRAME #1 STEER CALF PRICES

550-600 Pounds, N.D., Weekly



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Kist Livestock Auction - Mandan, ND
AMS Livestock, Poultry, & Grain Market News
North Dakota Dept of Ag Mrkt News

Sat Nov 16, 2019

Email us with accessibility issues with this report.

Livestock Weighted Average Report for 11/16/2019 - Final

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

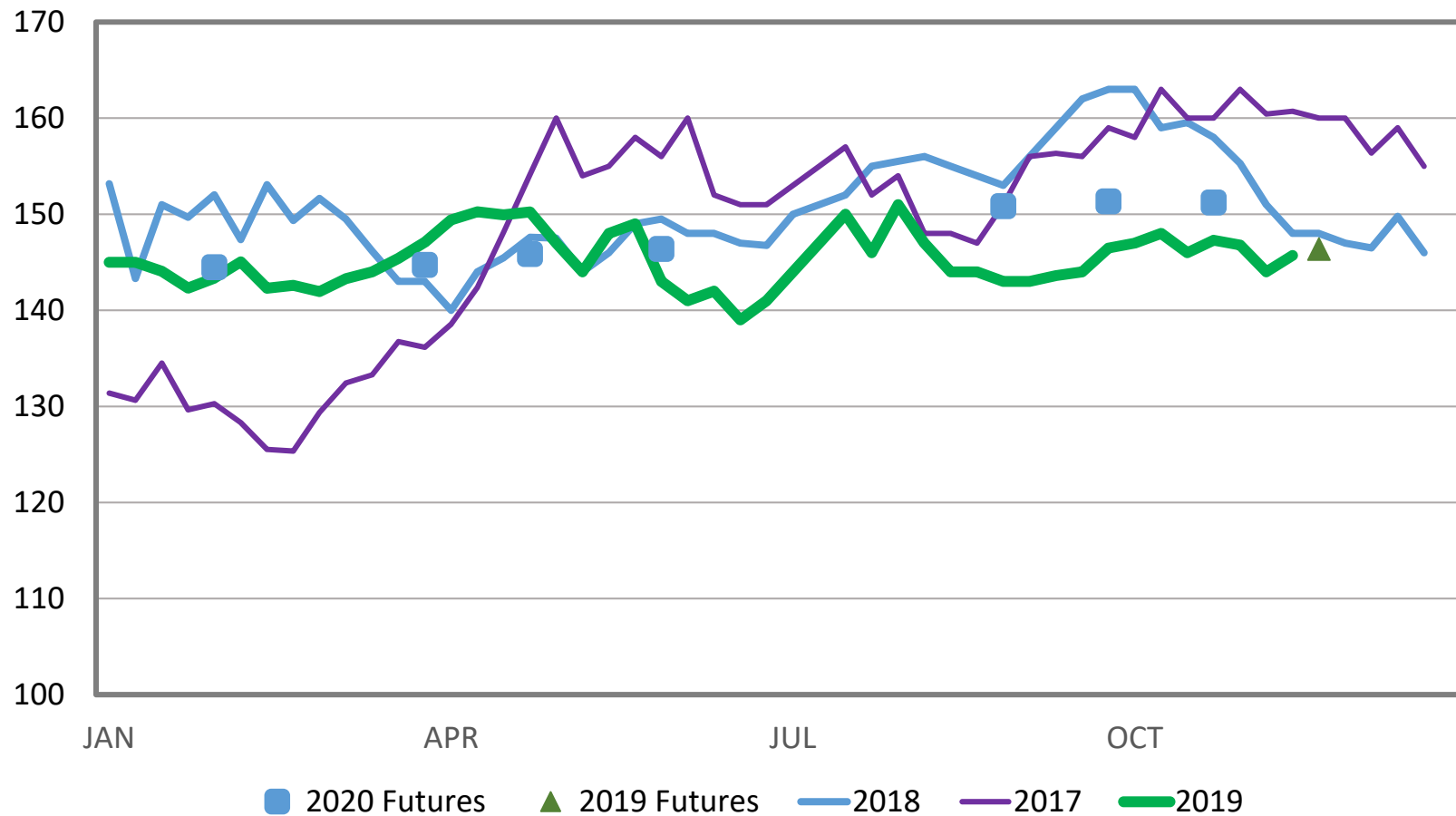
<u>Head</u>	<u>Wt Range</u>	<u>Avg Wt</u>	<u>Price Range</u>	<u>Avg Price</u>
69	451-498	484	156.00-176.00	168.38
130	506-546	525	147.50-164.50	157.13
167	550-595	573	149.60-161.00	155.59
293	606-649	619	144.00-157.00	150.24
307	655-693	685	143.50-152.75	148.37
75	714-731	718	140.00-149.00	146.09
98	754-777	773	139.00-147.00	145.71

NOV FDR CAT/DEC CORN



MED. & LRG. #1 FEEDER STEER PRICES

750-800 Pounds, N.D., Weekly



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Projected Calf Backgrounding Profit

550 lb. to 750 lb.
\$3.09 corn, \$90 hay

www.ag.ndsu.edu/livestockeconomics/documents/backgrounding-steers-nov19

750 lb. Sales Price	550 lb. Steer Purchase Price (\$/cwt)					
	140	145	150	155	160	165
125	21	-6	-33	-59	-86	-113
130	57	30	3	-24	-50	-77
135	93	66	39	12	-14	-41
140	129	102	75	48	22	-5
145	165	138	111	84	58	31
150	201	174	147	120	93	67

JAN FC - \$144.07

MAR FC - \$144.15

CME CS - \$146.69

LRP – Feeder Cattle

- Based on Chicago Mercantile Exchange (CME) feeder cattle price index which is available at www.cmegroup.com
- 700-899 lb, M & L # 1, feeder steers at markets reported by USDA-AMS
- Current Index - \$147.09

CME FC Cash Index SPREADSHEET

11/18/19

DATE	LOCATION	TTL HEAD	TTL WEIGHT	WTD AVG	TTL PRICE	WTD AVG PRICE
11/18/2019	AMARILLO	5	3870	774	445050	115
11/18/2019	BILLINGS LIVESTOCK	11	9316	846.9091	1308360	140.4422
11/18/2019	CARTHAGE-JOPLIN	1064	822676	773.1917	120120365.8	146.0118
11/18/2019	CAR-JOP VIDEO (SC)	0	0	0	0	0
11/16/2019	ERICSON (SAT)	24	19728	822	3003588	152.25
11/18/2019	KINGDOM CITY	198	148873	751.8838	22035726.79	148.017
11/18/2019	la junata	272	199173	732.2537	28244138.99	141.8071
11/16/2019	mandan	173	129604	749.1561	18905061.84	145.8679
11/18/2019	MCCOOK	300	237300	791	39095175	164.75
11/18/2019	OKLAHOMA CITY	1539	1179588	766.464	170369411.2	144.4313
11/18/2019	PALMYRA	239	182699	764.431	28225918.14	154.4941
11/18/2019	PATTON JUNCTION	13	9721	747.7692	1233297.24	126.8694
11/18/2019	ROSWELL	42	30640	729.5238	3939985.384	128.5896
11/18/2019	RUSSELL	606	468279	772.7376	71045355.19	151.7159
11/18/2019	SEDALIA	28	20676	738.4286	2978866.68	144.0736
11/18/2019	SIGOURNEY	107	80849	755.5981	11444488.22	141.5539
11/18/2019	TAMA	88	67535	767.4432	9238505.56	136.7958
11/18/2019	TULSA	85	62535	735.7059	8569176	137.0301
11/18/2019	WORTHING	363	309695	853.1543	45472814.3	146.831
11/18/2019	DAILY TOTALS	5157	3982757	772.3012	585675284.3	147.0527
11/18/2019	SEVEN-DAY TOTALS	24231	19102612	788.3543	2799284958	146.5394

Risk Management?

MAR FDR CAT and CME Cash Index

GFH20 - Feeder Cattle - Daily OHLC Chart



CME Index and LRP

	Beef Steers	Beef Heifers	Brahman	Dairy
Under 600 lbs	110%	100%	100%	50%
600-900 lbs	100%	90%	90%	50%

Current CME Index- \$146.69

Risk Management?



750 lb. Steers in Feb.

20% Prem. Subsidy

X.80

LRP Coverage Prices, Rates, and Actual Ending Values - Report for 11/18/2019

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	997 No Practice Specified	2020	144.610	\$143.890	0.995000	0.034394	4.949 3.96	02/17/2020
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	997 No Practice Specified	2020	144.610	\$141.890	0.981200	0.027585	3.914 3.13	02/17/2020
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	997 No Practice Specified	2020	144.610	\$139.890	0.967400	0.021810	3.051 2.44	02/17/2020
38 North Dakota	998 All Counties	13	0801 Feeder Cattle	810 Steers Weight 2	997 No Practice Specified	2020	144.610	\$137.890	0.953500	0.016883	2.328 1.86	02/17/2020

MAR FDR CAT FUT-\$144.72/CME CASH INDEX-\$146.69

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

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Fall Steer Calf LRP Results

July 15 to Nov 15 (17 wk)

Year	Coverage Price	Premium	Actual Price	LRP Payment	LRP Profit
2005	105.78	1.67	127.75	--	-1.67
2006	114.42	1.49	107.55	6.87	5.38
2007	123.20	2.58	119.27	3.93	1.35
2008	127.38	5.46	107.37	20.01	14.55
2009	112.18	3.73	102.94	9.24	5.51
2010	121.02	2.88	122.61	--	-2.88
2011	149.57	5.00	156.92	--	-5.00
2012	155.75	4.00	158.33	--	-4.00
2013	171.29	3.13	181.97	--	-3.13
2014	231.16	7.25	264.95	--	-7.25
2015	229	7.17	199.41	29.59	22.42
2016	145.46	4.97	137.92	7.54	2.57
2017	165.04	8.20	175.42		-8.20
2018	165.03	6.21	165.65	.62	-5.59
2019	156.22	5.58	161.35		-5.58
Total		69.32		77.80	8.48

Backgrounding Steer LRP Results

Aug 25 to Jan 20 (21 week)

Year	Coverage Price	Premium	Actual Price	LRP Payment	LRP Profit
2007-08	116.05	3.70	97.16	18.89	15.19
2008-09	106.01	3.23	95.14	10.87	7.64
2009-10	99.98	2.82	97.46	2.52	-.30
2010-11	116.01	3.56	127.27	0	-3.56
2011-12	129.91	3.72	150.39	--	-3.72
2012-13	143.89	2.96	146.88	--	-2.96
2013-14	154.02	3.09	170.49	--	-3.09
2014-15	204.10	7.17	221.87	--	-7.17
2015-16	188.09	7.29	159.40	28.69	21.40
2016-17	130.04	5.89	133.28		-5.89
2017-18	140.02	8.04	147.54		-8.04
2018-19	146.06	4.74	142.05	4.01	-.73
2019-20	132.04	5.37	146.54 now		
Total		61.58		64.98	3.40

Cattle LRP Timetable

MARKET CLASS	MARKET DATE	LRP CONTRACT			
		13	17	21	26
Under 600	Nov 15	AUG	JUL	JUN	MAY
Over 600	Feb 15	NOV	OCT	SEP	AUG
Fed	May 15	FEB	JAN	DEC	NOV

LRP

Advantages

- Small numbers can be hedged
- $\uparrow 600$, $\downarrow 600$, heifers, dairy
- Premium subsidized 20-35%
- No brokerage or margin
- Receive higher prices in bull market
- Available in months where no futures/options
- All coverage prices available daily

Disadvantages

- Not “flexible” like futures and options
- Must own the livestock

2020: Corn Prices, Demand and Trade Issues?
Causing **Volatility** and **Risk** , especially on
seasonal basis. Flexible marketing plans
should include risk management tools

