

Should I Buy Stocker Calves This Fall or a Fishing License?

Ona Report Webinar

September 15, 2016

Chris Prevatt

University of Florida

Livestock and Forage Economist

Stocker Marketing Options



We must consider:

- 1) Stocker Production Programs
- 2) Cost of Production
- 3) Value of Gain
- 4) Marketing
- 5) Risk Management

Let's Talk About Stocker Production Programs



Stocker Production Programs

**** EVERY OPERATION IS A LITTLE DIFFERENT!**

**** INDIVIDUALS MUST SEEK OUT THEIR
COMPETITIVE ADVANTAGE!**

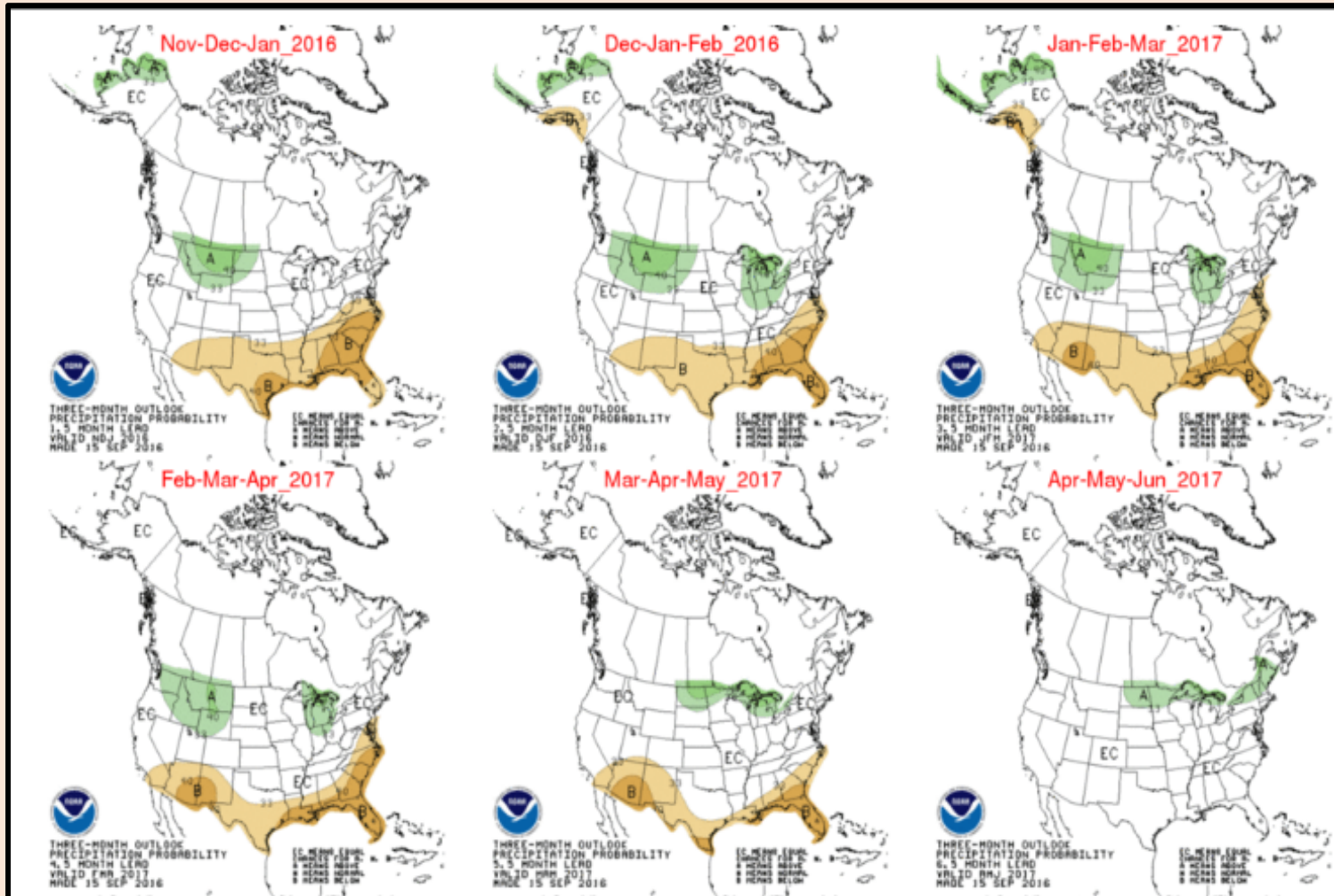
- Class of Animal (breed, age, weight, sex, quality)
- Length of Grazing Period
- Time of the Year (Fall to Spring, etc.)
- Feedstuff (Forage, Supplement, Minerals)
- Land Resource
- Labor Availability
- Market Outlook (Cattle Cycle)
- Weather
- Other Factors of Production

Stocker Production Programs

- Fall to Spring
 - Winter Annuals (Ryegrass, Rye, Oats, Clovers)
 - Winter Annuals with Supplementation
 - Stockpiled Forage with Supplementation
 - Fescue + Clover
 - Dry-lot
 - Contract Graze Elsewhere
 - Others

*These are just a few alternatives types of
Stocker Production Programs for this time period.*

Stocker Production Programs



Let's Talk About Cost of Production



Let's Talk About Cost of Production

- **Stocker Budget**
- **Cost of Gain**
- **Breakeven Price**
- **Price Objective**

60 HEAD: STOCKER-STEER BUDGET (WINTER GRAZING - MEDIUM WEIGHT CALVES);								
ESTIMATED COSTS AND RETURNS; USING RECOMMENDED MANAGEMENT PRACTICES;								
450	LBS. BEG. WT.;							
1.80	LBS. ADG.;	200	TOTAL DAYS STOCKER PROGRAM;		MAY	FUTURES CONTRACT PRICE		
675	LBS.STOCKED/AC;	45	DAYS OF BACKGROUNDING FEED REQUIRED;			\$215.35	PER CWT.	
1.50	HD. STOCKED/AC;	30	DAYS OF SUPPLEMENTAL FEED REQUIRED;		MAY	FEEDER CATTLE BASIS		
1.50	% DEATH LOSS;	794	LBS. ENDING WEIGHT W/ 2 % SHRINK			-\$12.00	PER CWT.	
ALABAMA, 2014-2015								
	ITEM	HEAD	UNIT	QUANTITY	PRICE OR COST/UNIT	TOTAL VALUE/COST	\$/HEAD SOLD	% OF TOTAL
1. GROSS RECEIPTS								
	FEEDER CATTLE	59.00	CWT.	7.94	203.35	95,261.34	1614.60	100.00%
2. VARIABLE COST								
	STOCKER CALVES	60.00	CWT.	4.50	260.00	70,200.00	1189.83	75.08%
	WINTER GRAZING		ACRE	40.00	194.81	7,792.40	132.07	8.33%
	SALT & MIN.		CWT.	22.50	30.00	675.00	11.44	0.72%
	HAY		TON	9.00	100.00	900.00	15.25	0.96%
	VET & MED		HD.	60.00	26.00	1,560.00	26.44	1.67%
	STARTER/RECEIVING FEED		TON	2.10	275.00	577.50	9.79	0.62%
	BACKGROUNDING FEED		TON	6.75	175.00	1,181.25	20.02	1.26%
	SUPPLEMENTAL FEED		TON	4.50	175.00	787.50	13.35	0.84%
	LABOR		HOUR	240.00	12.00	2,880.00	48.81	3.08%
	LAND RENTAL		ACRE	40.00	20.00	800.00	13.56	0.86%
	MARKETING EXPENSES		HD.	59.00	32.29	1,905.23	32.29	2.04%
	BEEF PROMOTION FEE		HD.	59.00	2.00	118.00	2.00	0.13%
	EQUIPMENT (REPAIR)		DOL.			127.15	2.16	0.14%
	INTEREST ON OP. CAP.		DOL.	46,635.09	0.0575	2,681.52	45.45	2.87%
	TOTAL VARIABLE COSTS					92,185.55	1562.47	98.59%
3. INCOME ABOVE VARIABLE COST						3,075.79	52.13	
4. FIXED COST								
	GENERAL OVERHEAD		HD.	60.00	2.50	150.00	2.54	0.16%
	WINTER GRAZING		ACRE	40.00	7.66	306.40	5.19	0.33%
	INT. ON BLDG. AND EQUIPMENT		DOL.	3,778.38	0.0650	245.59	4.16	0.26%
	DEPR. ON BLDG. AND EQUIP.		DOL.			567.90	9.63	0.61%
	OTHER F.C. ON BLDG. & EQUIP.		DOL.			49.34	0.84	0.05%
	TOTAL FIXED COSTS					1,319.24	22.36	1.41%
5. TOTAL COST OF ALL SPECIFIED EXPENSES						93,504.79	1584.83	100.00%
6. NET RETURN ABOVE TOTAL COSTS						1,756.55	29.77	

Cost of Gain

- **Cost of Gain, \$/lb.** – the sum of production costs (variable and fixed) plus death loss divided by the weight gain of the feeders.
- For example, in the fall of 2015 if 70 *head* of 350-*lb.* stocker steers were purchased, grazed and supplemented for 240 days, incurred production costs of \$24,500 (\$350/*head*) with a death loss of \$1,397 (2% * \$69,825) and realized a total weight gain of 27,600 *pounds* (69 *head* * 400 *pounds* of gain), the cost of gain would total \$25,897 or \$0.94/*lb.* (\$25,897/27,600 *lbs.*) for feeder steers with a sale weight of 750-*lbs.*

Cost of Gain

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on 2015-2016 Estimated Cost of Production

\$/lb.

\$1.20

\$1.10

\$1.00

\$0.90

\$0.80

\$0.70

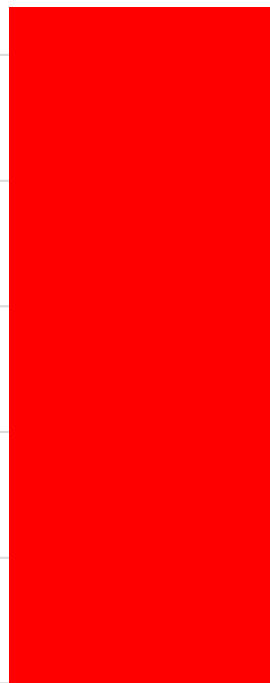
\$0.60

\$0.50

\$0.40

■ COG

\$0.94



Cost of Gain

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on 2015-2016 Estimated Cost of Production

\$/lb.

\$1.00

\$0.98

\$0.96

\$0.94

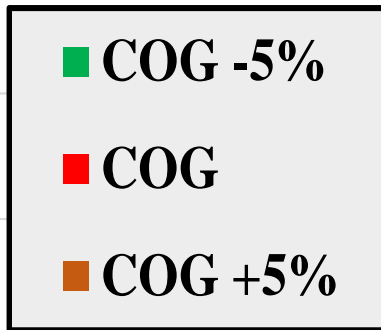
\$0.92

\$0.90

\$0.88

\$0.86

\$0.84



■ COG -5%

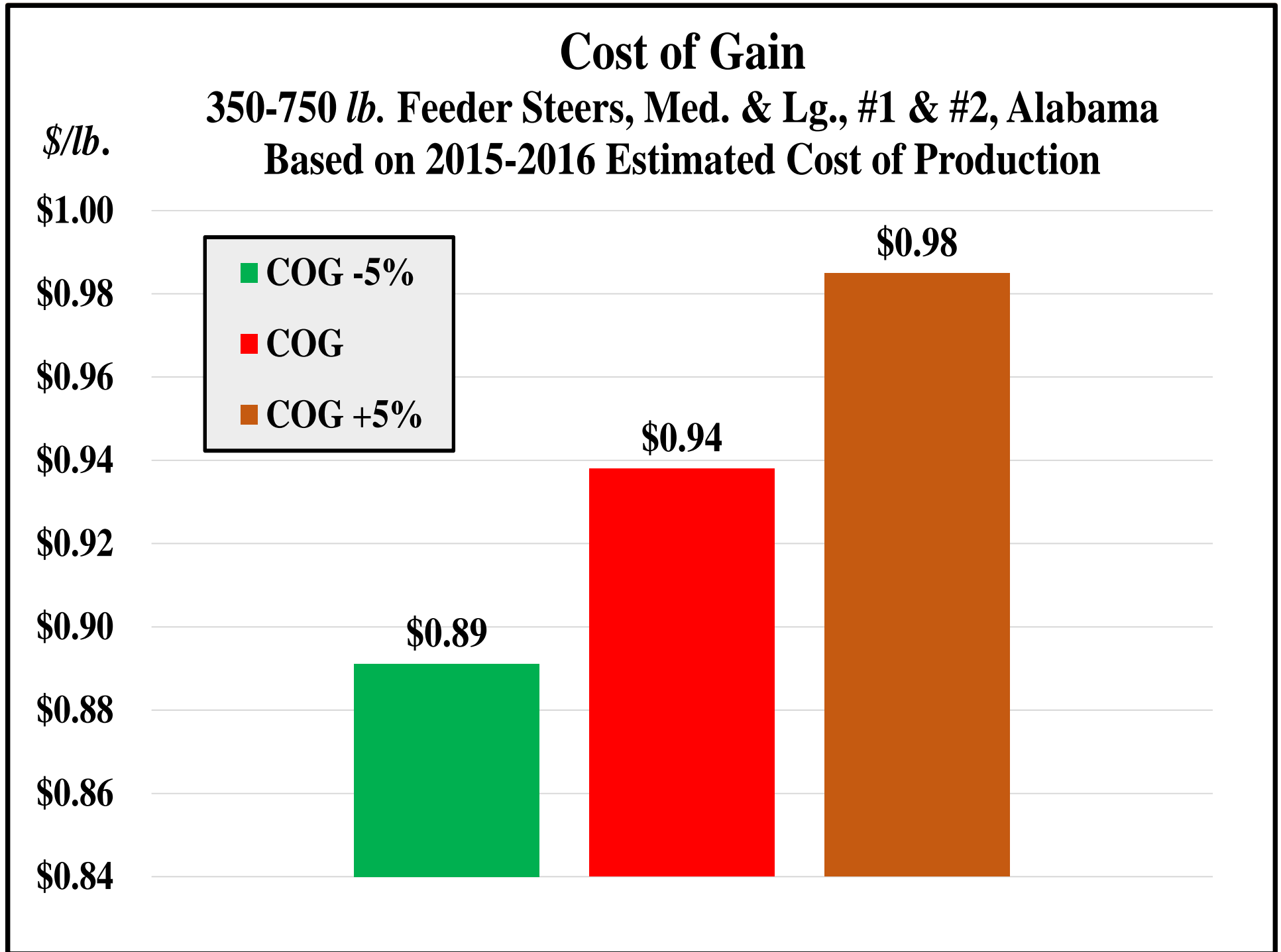
■ COG

■ COG +5%

\$0.98

\$0.94

\$0.89



Cost of Production

- **Breakeven Price** – the sum of production costs (variable and fixed) divided by the sale weight of the feeders.
- For example, in the fall of 2015 if 70 *head* of stocker steers were purchased at \$69,825 ($\$998/\text{head}$ or $\$2.85 * 350 \text{ lbs.}$), production costs were \$24,500 ($\$350/\text{head}$), the total breakeven price would be \$94,325 ($\$1,367/\text{head}$ or $\$182/\text{cwt}$) for feeder steers with a sale weight of 750-*lbs.*

Feeder Cattle Breakeven Price for August 2016

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on 2015-2016 Estimated Cost of Production

\$/cwt.

\$210
\$200
\$190
\$180
\$170
\$160
\$150
\$140
\$130
\$120

\$182/cwt. or \$1,367/head

8/28/2015 9/28/2015 10/28/2015 11/28/2015 12/28/2015 1/28/2016 2/28/2016 3/28/2016 4/28/2016 5/28/2016 6/28/2016 7/28/2016 8/28/2016

Cost of Production

- **Price Objective** – the sum of production costs (variable and fixed), family living withdrawal, and growth capital/retirement divided by the sale weight of the feeders.
- For example, in the fall of 2015 if 70 *head* of stockers were purchased with a breakeven price of \$94,325, a family living withdrawal of \$3,500 was desired, and \$3,500 for growth capital/retirement saving, the total price objective would be \$101,325 (\$1,468/*head* or \$196/*cwt.*).

Feeder Cattle Price Objective for August 2016

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on 2015-2016 Estimated Cost of Production

\$/cwt.

\$210
\$200
\$190
\$180
\$170
\$160
\$150
\$140
\$130
\$120

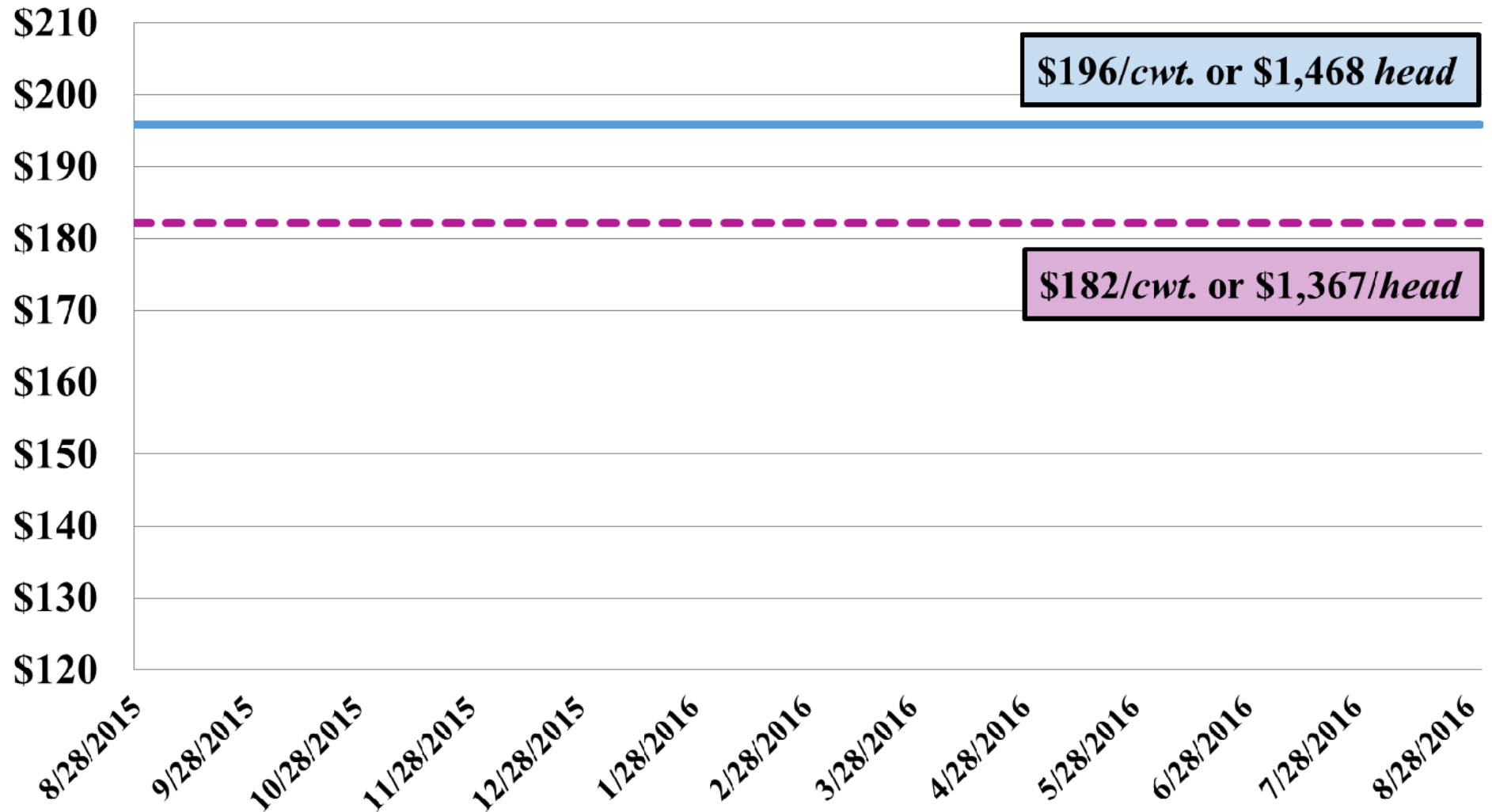
\$196/cwt. or \$1,468 head

8/28/2015 9/28/2015 10/28/2015 11/28/2015 12/28/2015 1/28/2016 2/28/2016 3/28/2016 4/28/2016 5/28/2016 6/28/2016 7/28/2016 8/28/2016

**Feeder Cattle Breakeven Price and Price Objective for August 2016
350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on 2015-2016 Estimated Cost of Production**

\$/cwt.

— Estimated Breakeven Price¹ — Estimated Price Objective²



Let's Talk About Marketing



Let's Talk About Marketing

- **Market Outlook**
- **Cattle Cycles**
- **Seasonal Price Trends**
- **Expected Cash Price**

Figure 1. U.S. Cattle and Calves Inventory, January 1, 1949-2016

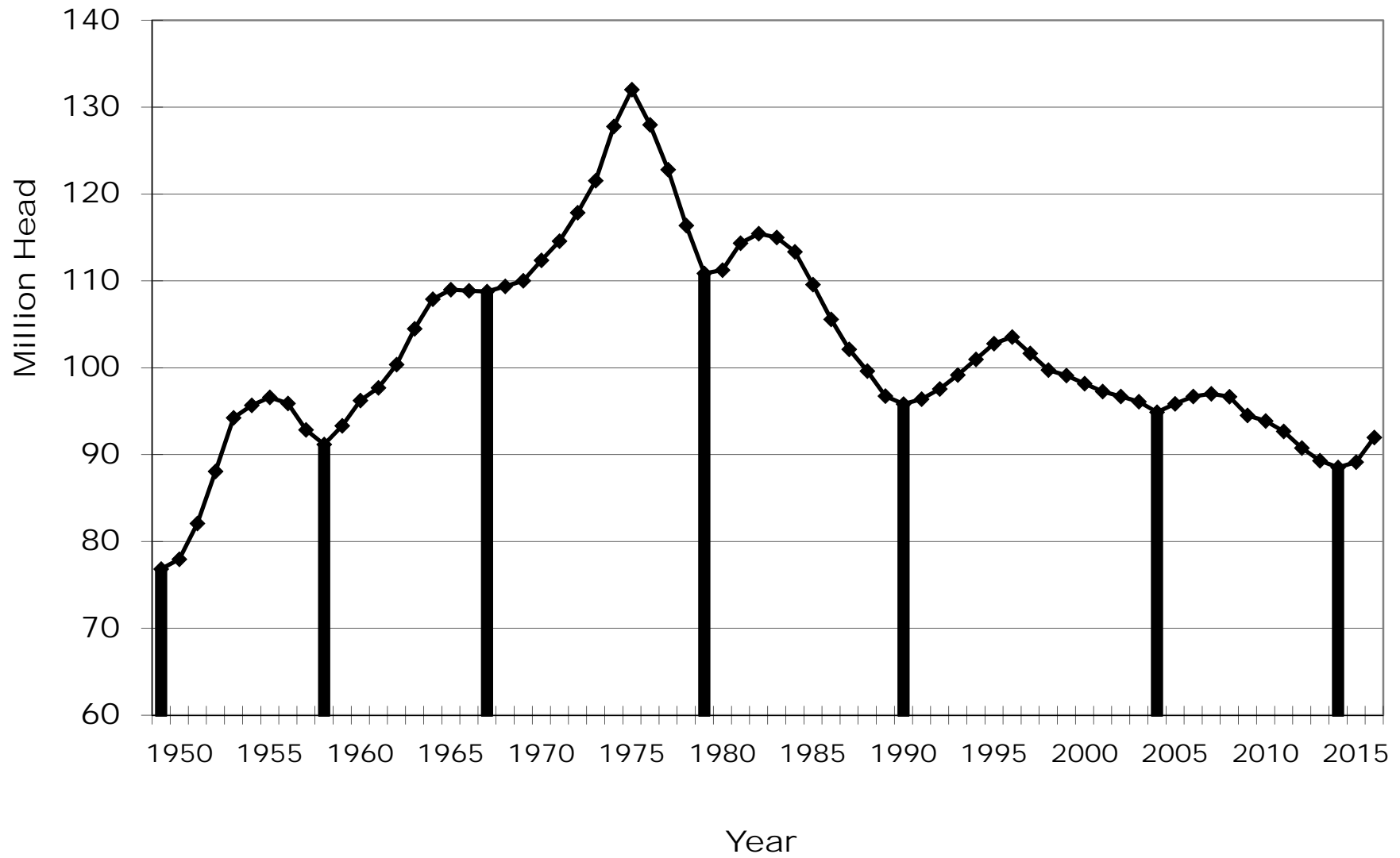
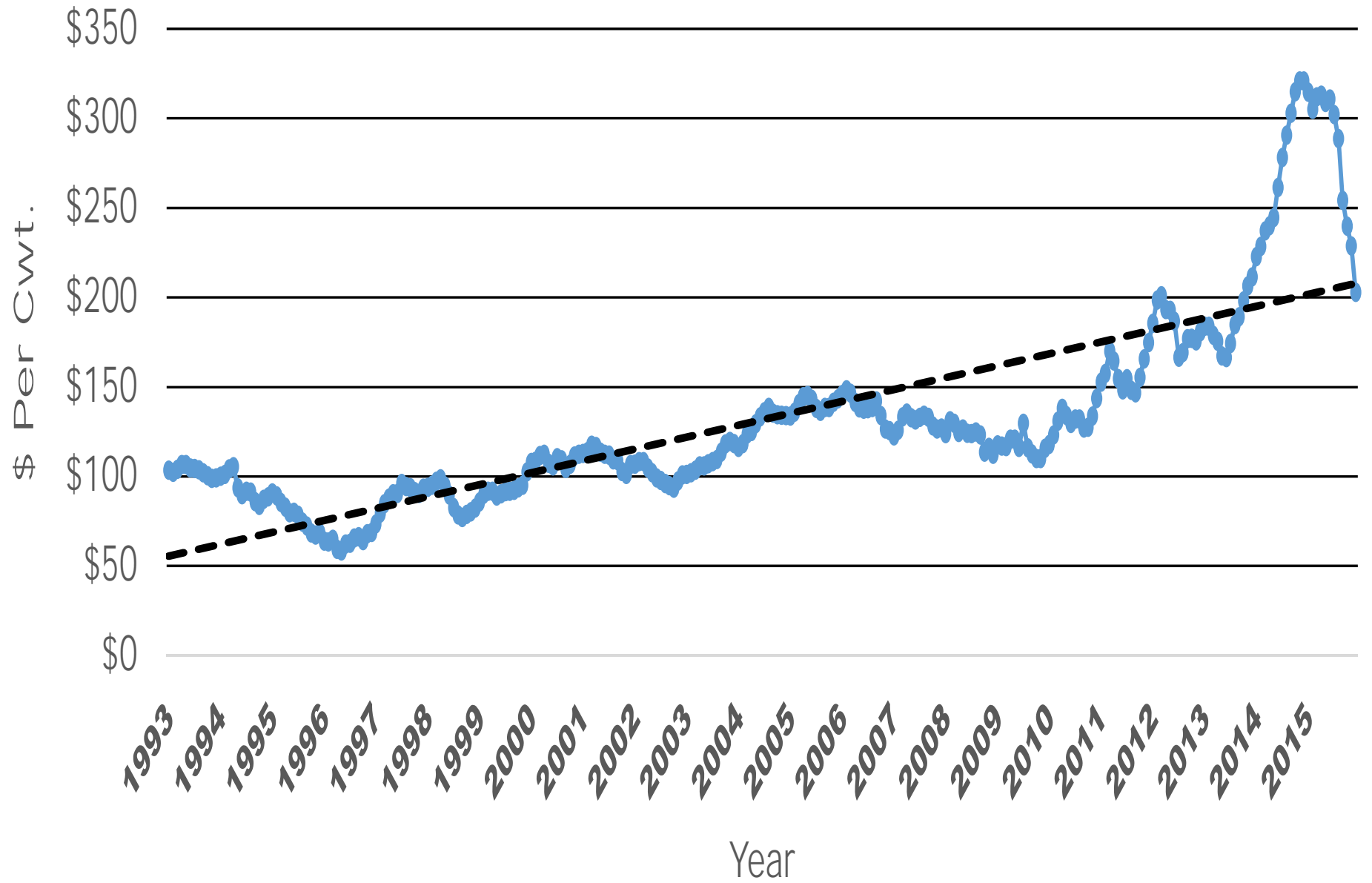
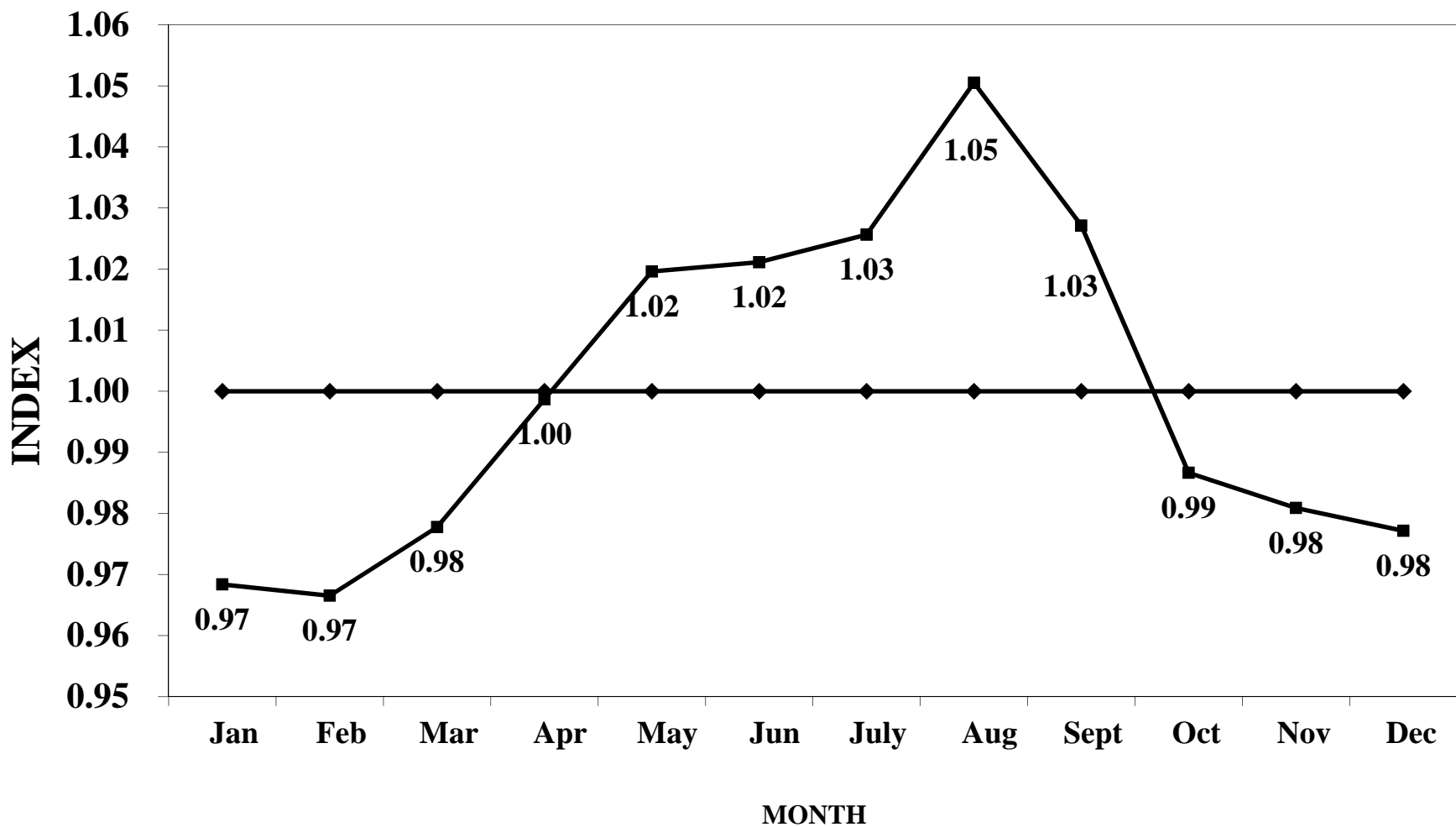


Figure 2. U.S. Average 450-Pound Steer Prices By Month, 1993-2015



**Appendix Figure 18A.
Feeder Steer Price Indices, 700-800 lbs.,
Med. & Lg., #1, 2001-2010, Alabama**



■ Monthly Avg. ◆ 10 Year Avg.

Feeder Cattle Expected Cash Price for August 2016

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama

Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/cwt.

\$210
\$200
\$190
\$180
\$170
\$160
\$150
\$140
\$130
\$120

Expected Cash Price – FC Futures Price = Basis

August 2016 FC Futures Price + Basis = Expected Cash Price

\$132/cwt. or \$992/head

8/28/2015

9/28/2015

10/28/2015

11/28/2015

12/28/2015

1/28/2016

2/28/2016

3/28/2016

4/28/2016

5/28/2016

6/28/2016

7/28/2016

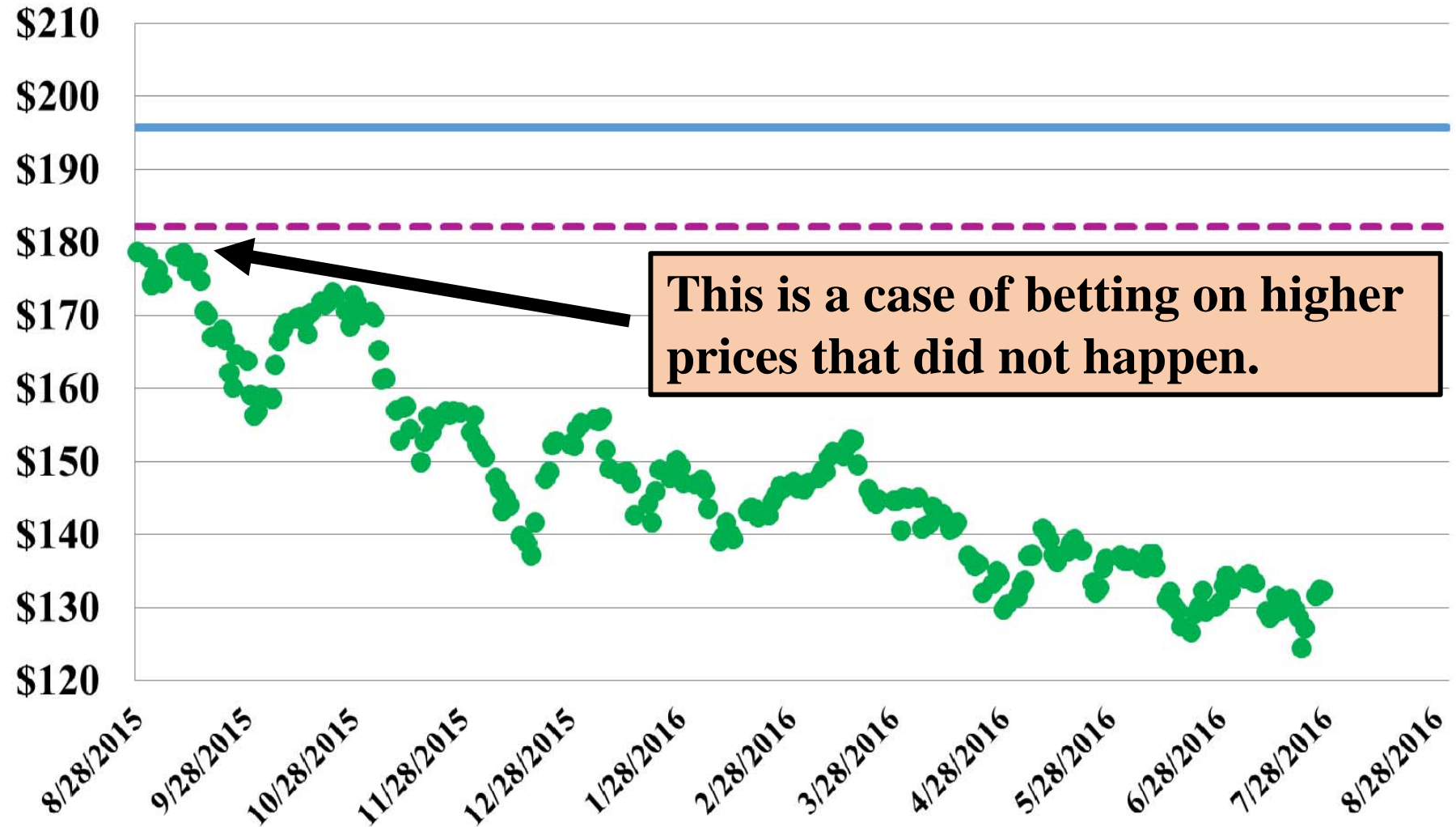
8/28/2016

Feeder Cattle Price Watch for August 2016

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/cwt.

--- Breakeven Price¹ — Price Objective² ● Expected Cash Price³



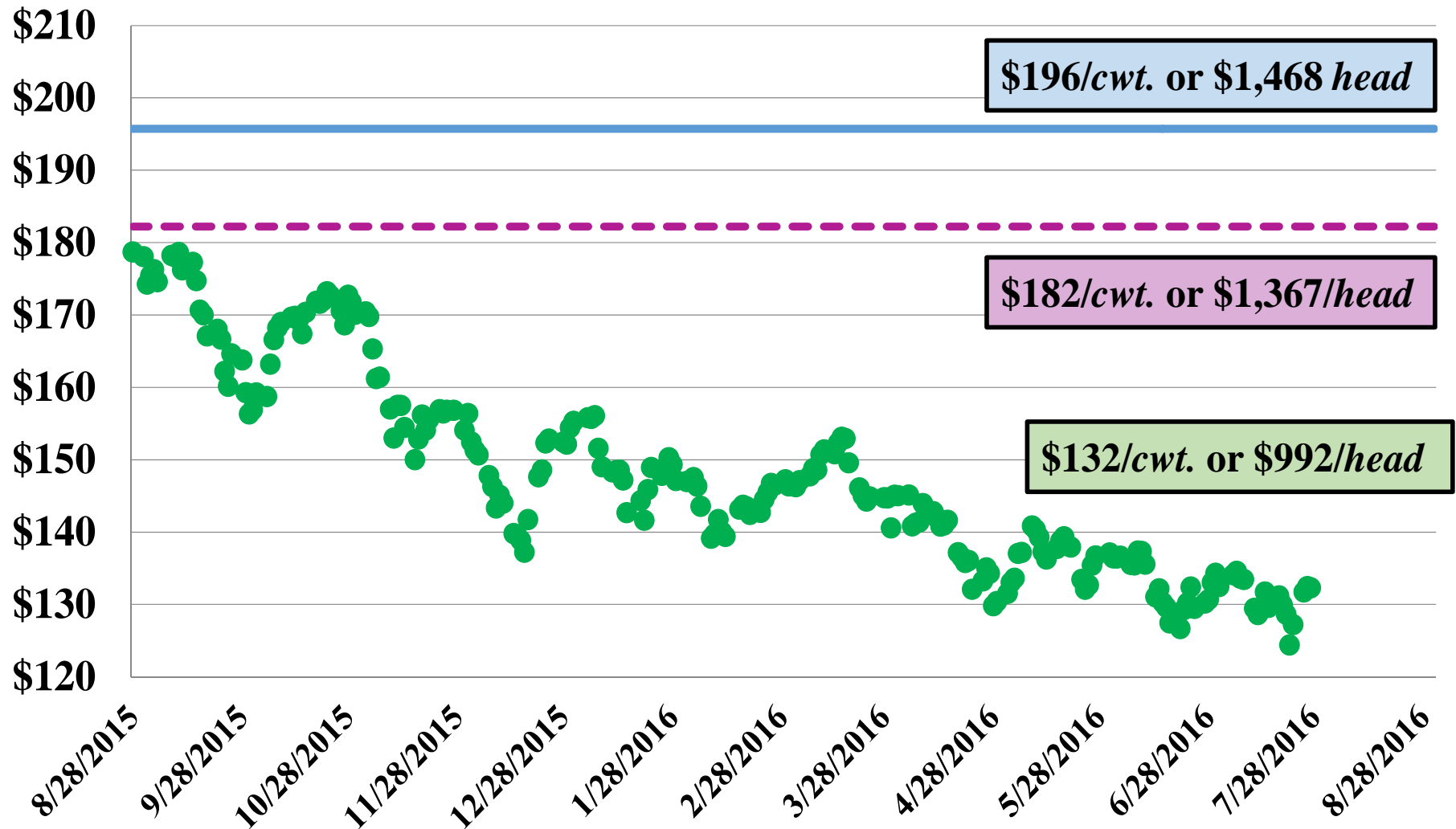
This is a case of betting on higher prices that did not happen.

Feeder Cattle Price Watch for August 2016

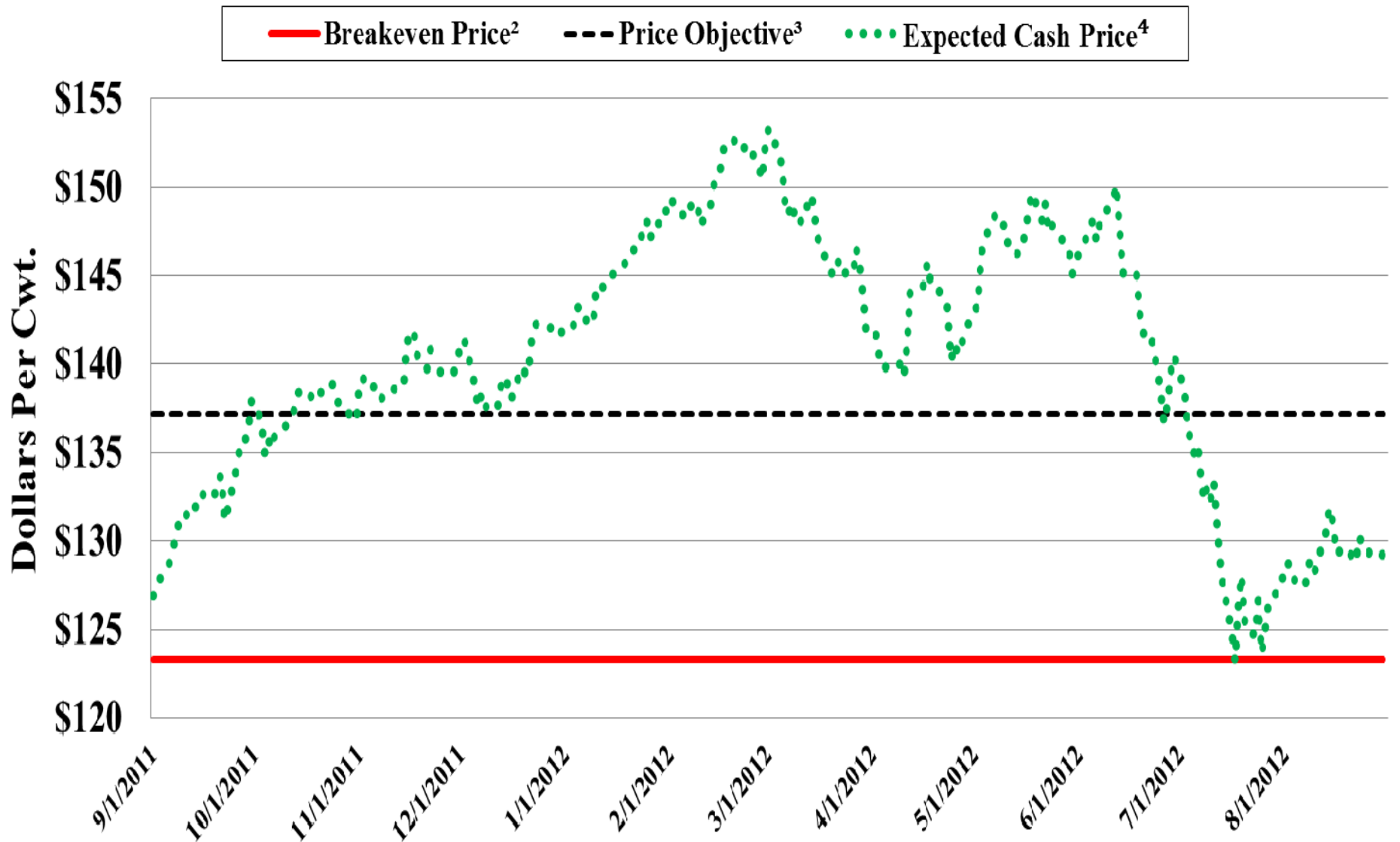
350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/cwt.

- - - Breakeven Price¹
 — Price Objective²
 ● Expected Cash Price³



Expected Cash Price for August 2012, 725# Steers, Med. & Lg., #1 & #2, Alabama, Based on August 2012 Feeder Cattle Futures Prices¹



Let's Talk About Value of Gain



Let's Talk About Value of Gain

- **Historical Value of Gain**
- **Value of Gain by Cattle Price Cycle Segment**
- **Monitor Value of Gain During Production Period**
- **Example Net Value of Gain Analysis**

Average Value of Gain, U.S. Steer Prices, 450-lbs. to 750-lbs.

October to April, 2000 to 2016

\$/lb.

\$1.80

\$1.60

\$1.40

\$1.20

\$1.00

\$0.80

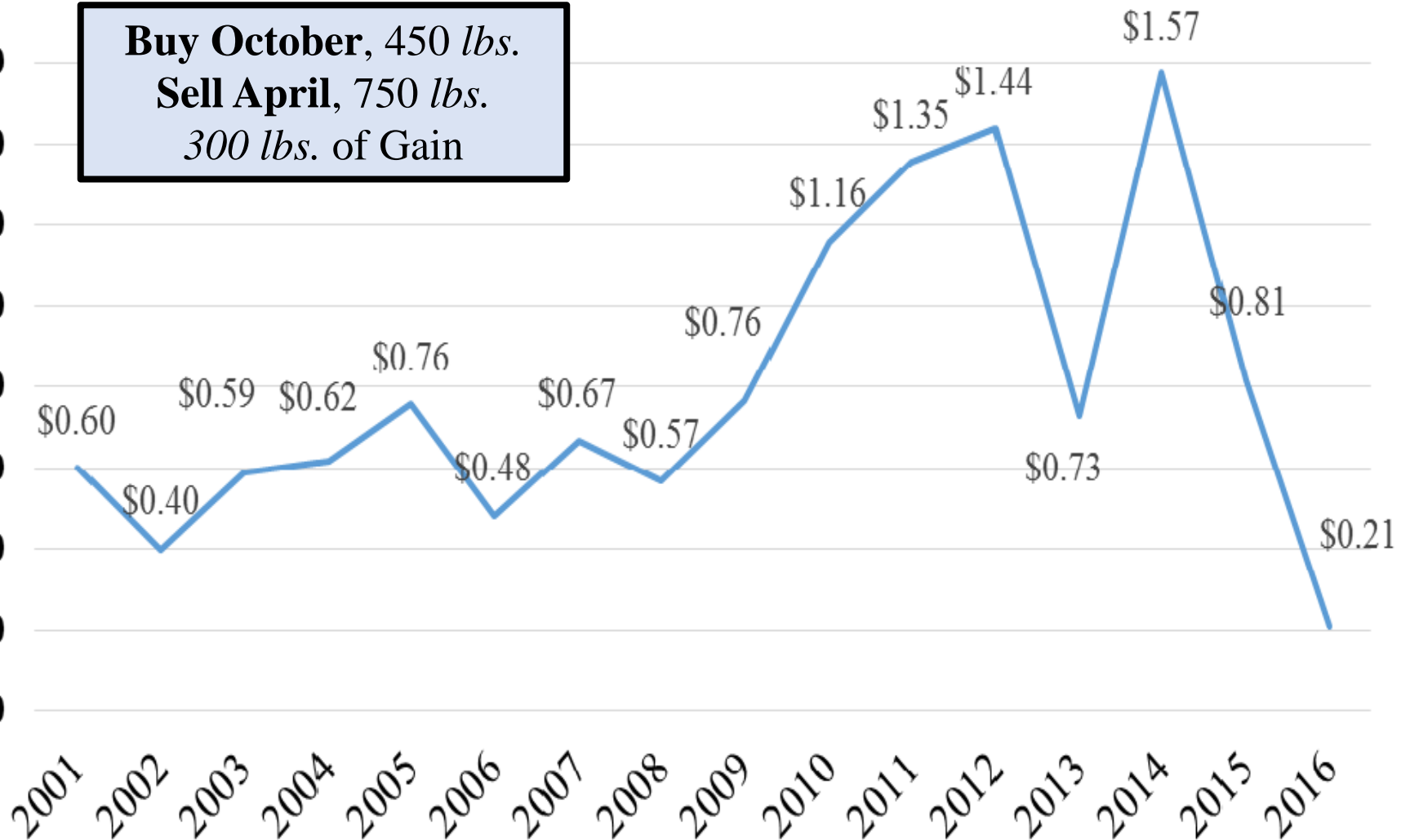
\$0.60

\$0.40

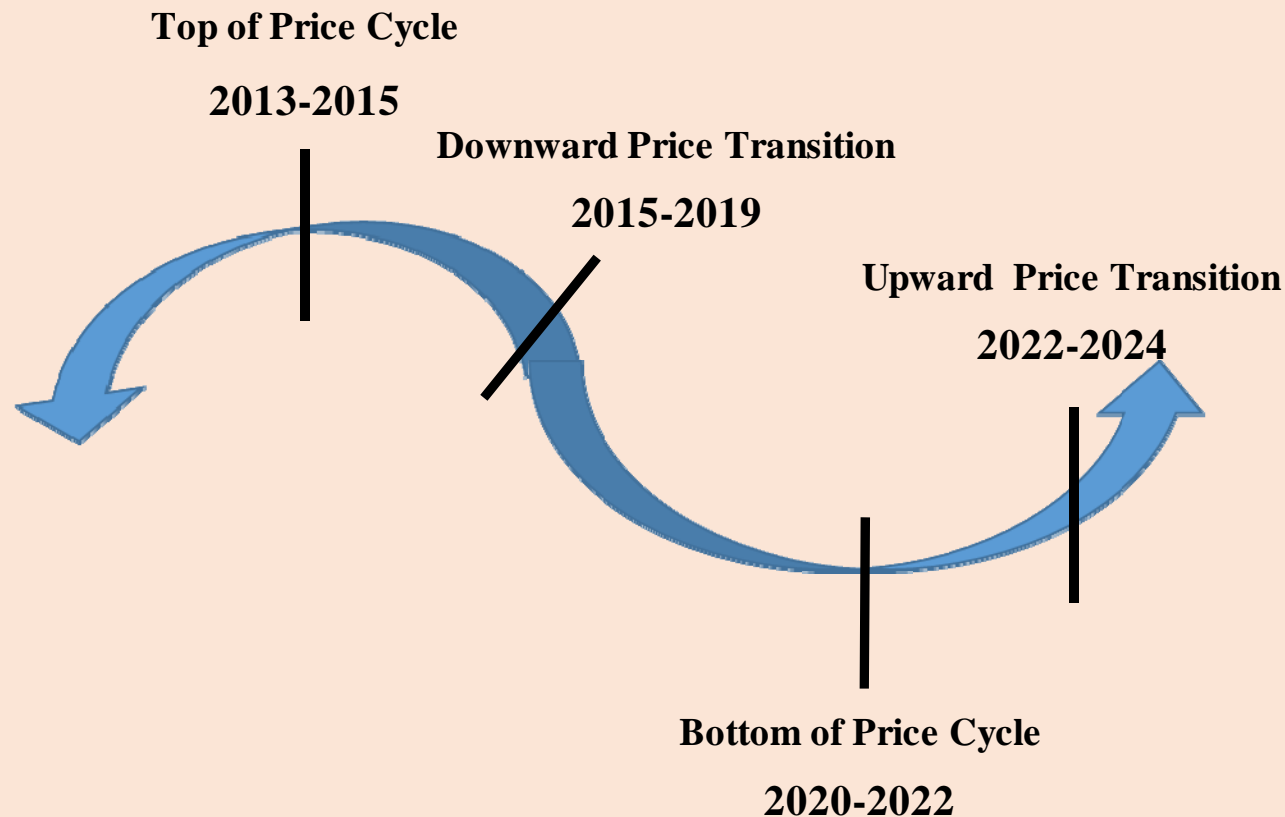
\$0.20

\$0.00

**Buy October, 450 lbs.
Sell April, 750 lbs.
300 lbs. of Gain**



Feeder Cattle Expected Value of Gain and Profitability by Segment of the Cattle Price Cycle, 2013-2024*



Feeder Cattle Expected Value of Gain and Profitability by Segment of the Cattle Price Cycle, 2013-2024*

Segment of Cattle Price Cycle	Expected Value of Gain	Expected Profitability
Top of Price Cycle (2013-2015)	Moderate VOG	Profits/Losses
Downward Price Transition (2015-2019)	Low VOG	Significant Losses
Bottom of Price Cycle (2020-2022)	Moderate VOG	Profits/Losses
Upward Price Transition (2022-2024)	High VOG	Significant Profits

*These are projections by the author as of June xx, 2016. The author reserves the right to revise these projections as new economic information becomes available.

Value of Gain

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/lb.

\$1.20

\$1.00

\$0.80

\$0.60

\$0.40

\$0.20

\$0.00

(\$0.20)

(\$0.40)

8/28/2015

9/28/2015

10/28/2015

11/28/2015

12/28/2015

1/28/2016

2/28/2016

3/28/2016

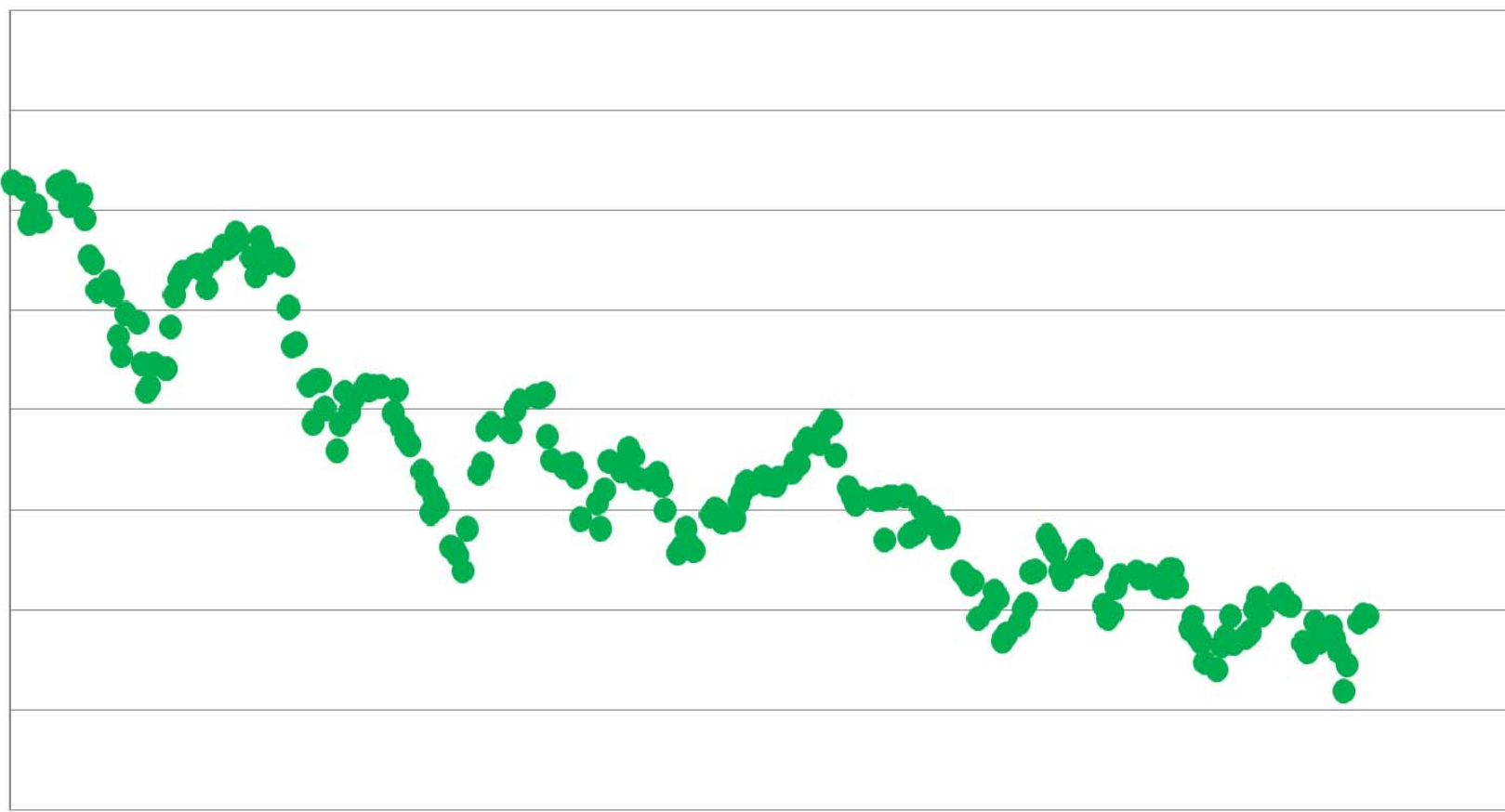
4/28/2016

5/28/2016

6/28/2016

7/28/2016

8/28/2016



Value of Gain vs. Cost of Gain

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/lb.

\$1.20

\$1.00

\$0.80

\$0.60

\$0.40

\$0.20

\$0.00

(\$0.20)

(\$0.40)

8/28/2015

9/28/2015

10/28/2015

11/28/2015

12/28/2015

1/28/2016

2/28/2016

3/28/2016

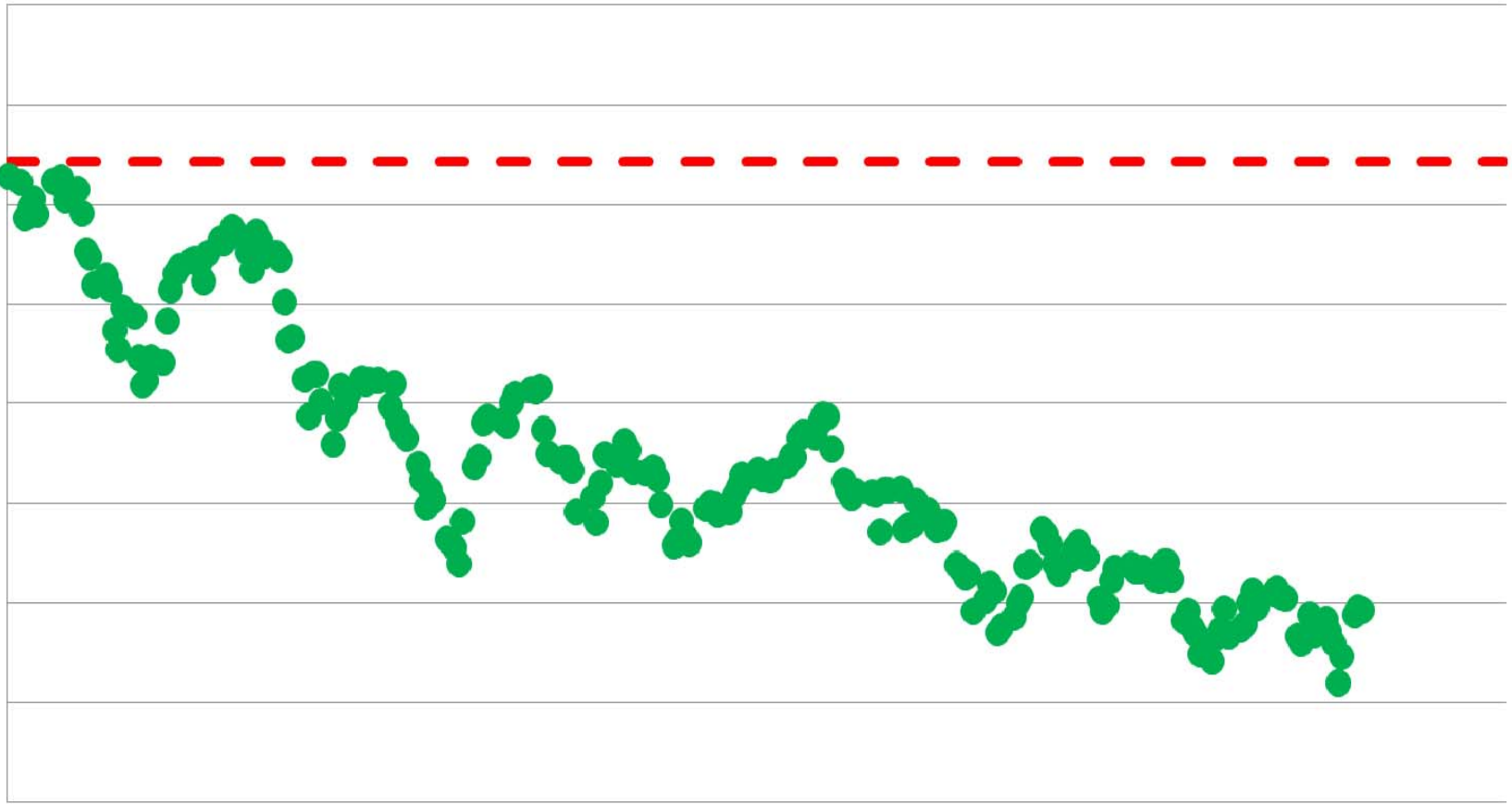
4/28/2016

5/28/2016

6/28/2016

7/28/2016

8/28/2016



Net Value of Gain

350-750 lb. Feeder Steers, Med. & Lg., #1 & #2, Alabama
Based on August 2016 Feeder Cattle Futures Prices (CME)

\$/lb.

\$0.00

(\$0.20)

(\$0.40)

(\$0.60)

(\$0.80)

(\$1.00)

(\$1.20)

8/28/2015

9/28/2015

10/28/2015

11/28/2015

12/28/2015

1/28/2016

2/28/2016

3/28/2016

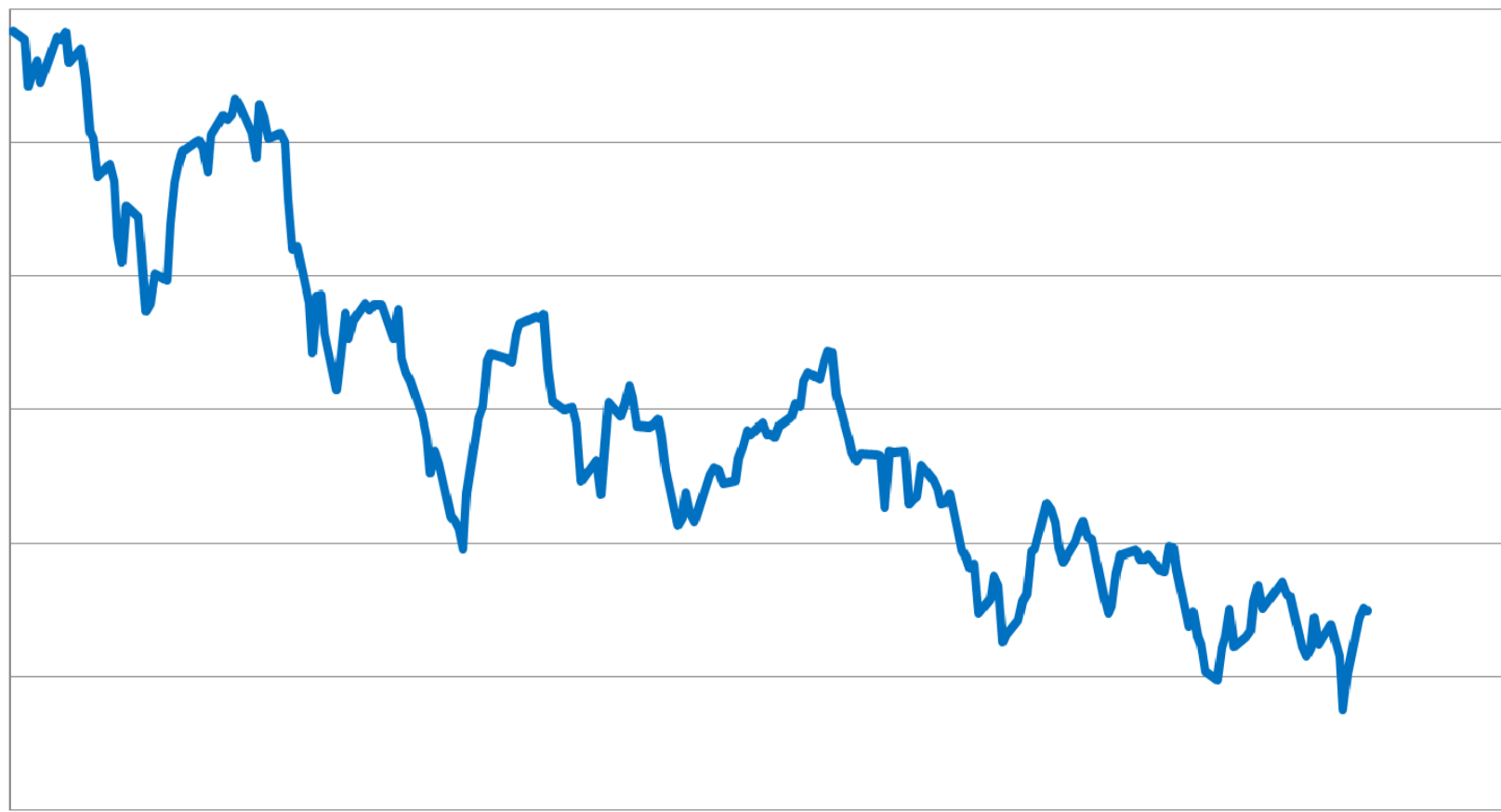
4/28/2016

5/28/2016

6/28/2016

7/28/2016

8/28/2016



Example Net Value of Gain Analysis:

Should I Buy Stockers This Fall or A Fishing License?

Table 1. Fall to Spring Stocker Cattle Economic Evaluation, 2016-2017.

Assumptions:

Steers Sex of Stocker Calves
9/15/2016 Expected Purchase Date
350 Expected Purchase Weight, *lbs.*
\$1.45 Expected Purchase Price, *\$/lb.*
150 Number of Head
100 Number of Grazing Acres
5/15/2017 Expected Sale Date
750 Expected Sale Weight, Shrunk *lbs.*
4.00% Expected Death Loss & Chronics, %
\$0.85 Expected Total Cost of Gain, *\$/lb. **
\$0.10 Potential Change in Cost of Gain, *\$/lb.*

1.50	<i>head/acre</i>
242	<i>Days</i>
1.65	<i>ADG</i>

8/1/2016 Today's Date
May 2017 Feeder Cattle Futures Contract Month & Year
\$133.80 Feeder Cattle Futures Contract Price
-\$10.00 May 2017 Estimated Feeder Cattle Basis, *\$/cwt.*

Steers	750 lbs.
---------------	-----------------

\$123.80 May 2017 Expected Feeder Cattle Cash Price, *\$/cwt.*

Example Net Value of Gain Analysis:

Should I Buy Stockers This Fall or A Fishing License?

Summary of Basic Stocker Data

	Number of Head	Weight /Head	Total Weight	Market Price	Total Dollars	Dollars /Head	Dollars /Acre
Stocker Calves	150	350	52,500	\$1.45	\$76,125	\$507.50	\$761
Feeder Cattle	144	750	108,000	\$1.24	\$133,704	\$928.50	\$1,337
Difference	-6.0	400	55,500	-\$0.21	\$57,579	\$421	\$576

Example Net Value of Gain Analysis:

Should I Buy Stockers This Fall or A Fishing License?

Value of Gain Analysis

Value of Gain Per Pound	$\frac{\$133,704 - \$76,125}{55,500}$	=	\$1.04
Value of Gain Per Head	$\frac{\$133,704 - \$76,125}{144}$	=	\$400
Value of Gain Per Acre	$\frac{\$133,704 - \$76,125}{100}$	=	\$576
Value of Gain	$\$133,704 - \$76,125$	=	\$57,579

Example Net Value of Gain Analysis:

Should I Buy Stockers This Fall or A Fishing License?

Net Value of Gain Analysis

		\$0.85			\$0.95		
	Value of Gain	Cost of Gain	Net Value of Gain		Value of Gain	Cost of Gain	Net Value of Gain
\$ Per Pound	\$1.04	\$0.85	\$0.19		\$1.04	\$0.95	\$0.09
\$ Per Head	\$400	\$328	\$72		\$400	\$366	\$34
\$ Per Acre	\$576	\$472	\$104		\$576	\$527	\$49
Total \$	\$57,579	\$47,175	\$10,404		\$57,579	\$52,725	\$4,854

*Total cost of gain is total variable and fixed costs (not including stocker value) divided by total pounds of gain.

Let's Talk About Risk Management



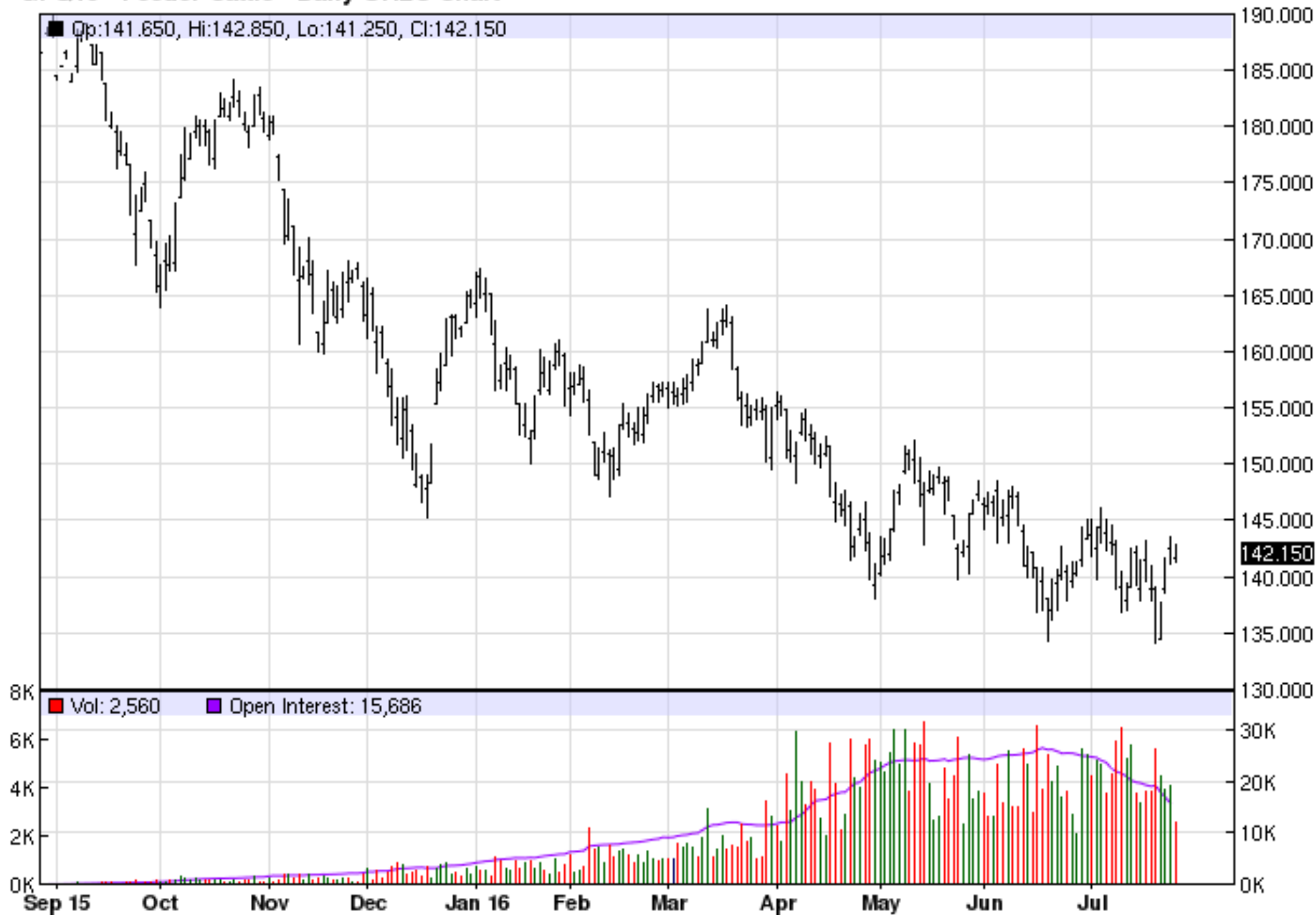
Let's Talk About Risk Management

- **Be A Low-Cost Producer**
- **Diversify Your Enterprises**
- **Have An Off-Farm Job**
- **Use Seasonal Price Trends**
- **Use Some Form of Market Price Protection**
- **Monitor Price Opportunities (BE, PO, VOG)**
- **Average Market Price Over Time**
- **Others...**

Feeder Cattle Risk Management

- **Be a low-cost producer**
 - **Lowers Breakeven Price and Price Objective**
 - **Lowers Potential Financial Loss**
 - **Improves the Opportunity to use Price Protection**
 - **Improves Profitability**
 - **Others....**

GFQ16 - Feeder Cattle - Daily OHLC Chart



FC Q9 [10] - FEEDER CATTLE

LAST:

CHANGE:

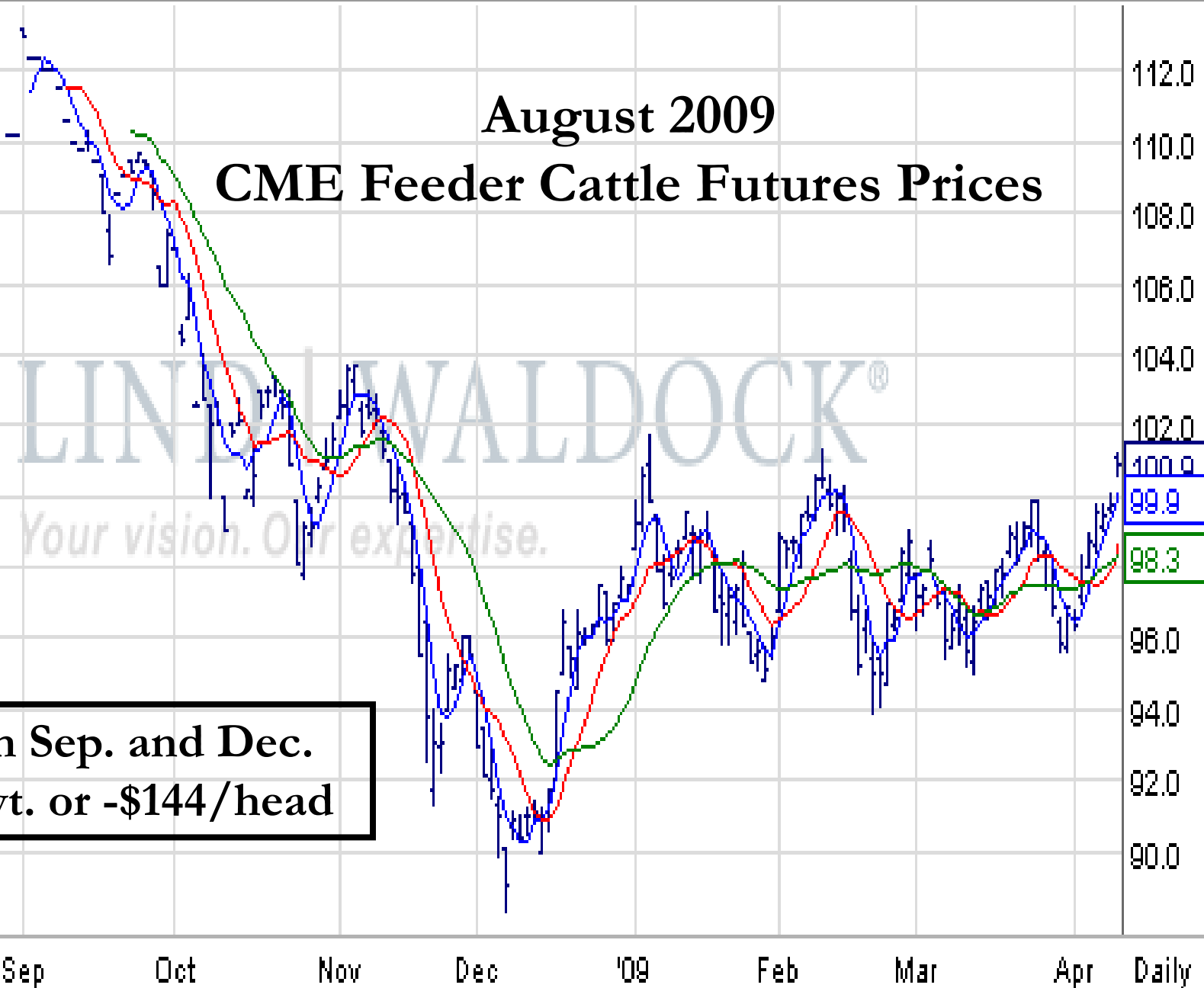
HIGH:

LOW:

4/11/2009

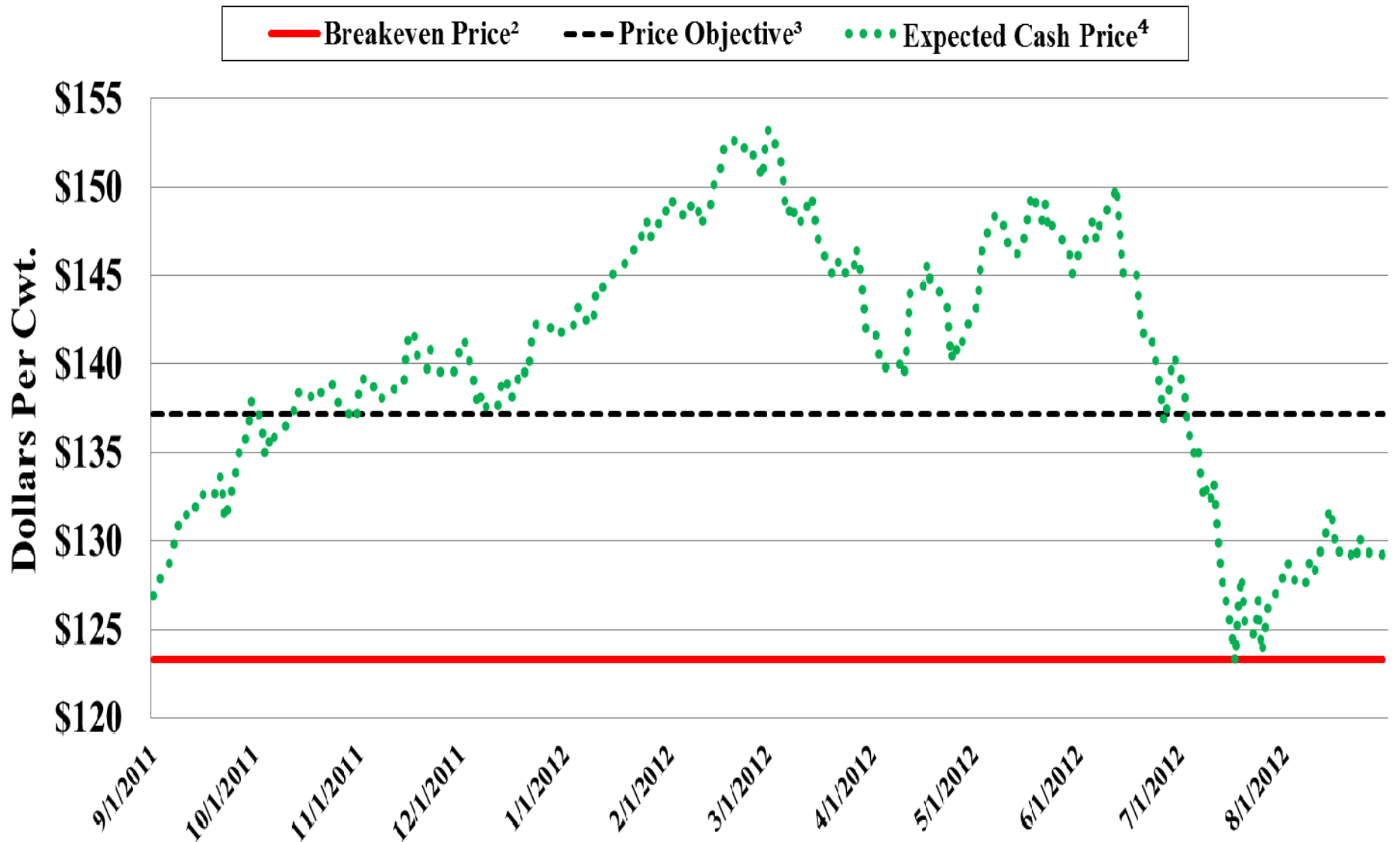
MA (FC Q9,4) = 100.0 MA (FC Q9,9) = 98.6 MA (FC Q9,18) = 98.3

August 2009 CME Feeder Cattle Futures Prices



Between Sep. and Dec.
-\$22/cwt. or -\$144/head

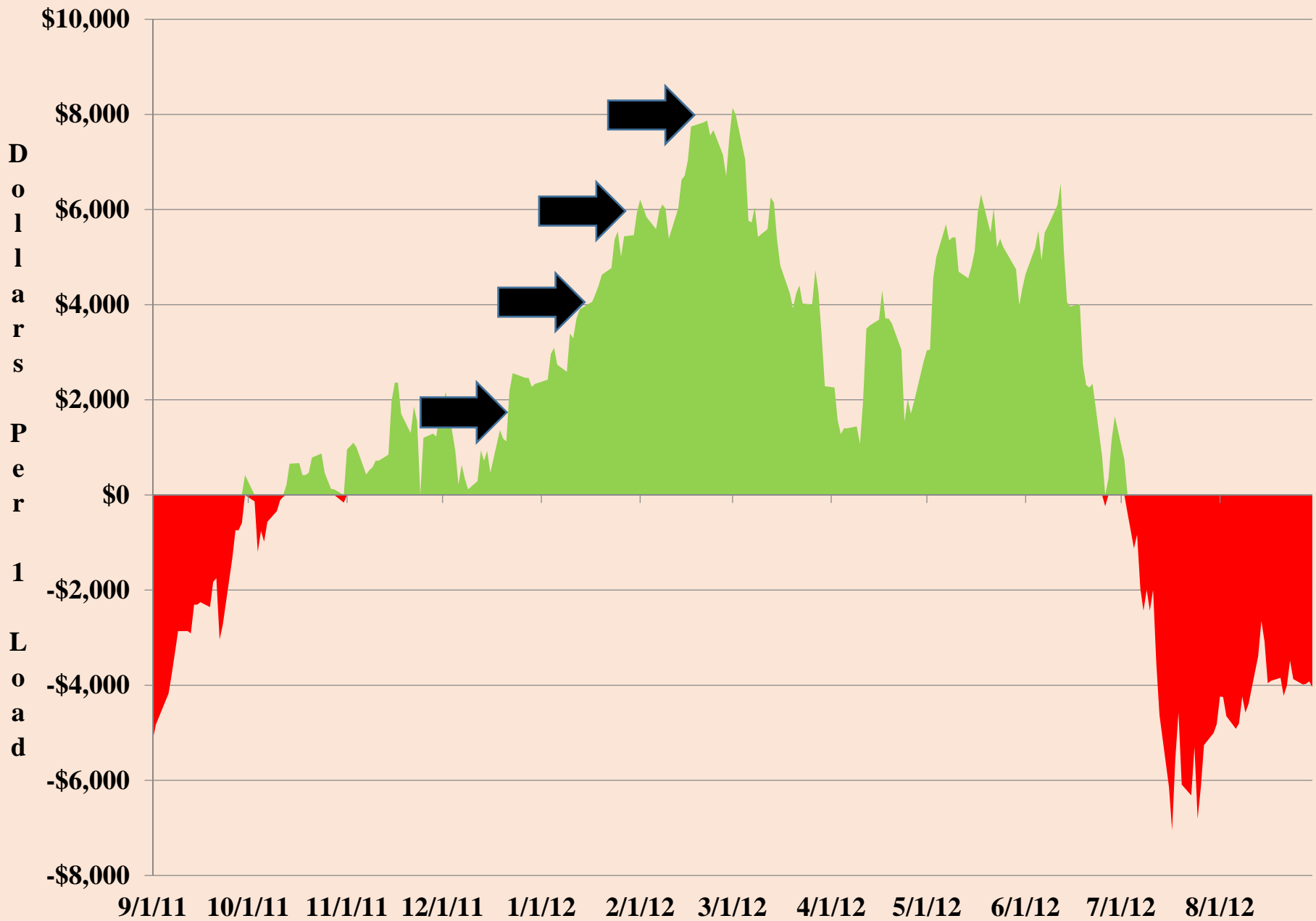
Expected Cash Price for August 2012, 725# Steers, Med. & Lg., #1 & #2, Alabama, Based on August 2012 Feeder Cattle Futures Prices¹



Feeder Cattle Futures Contracts To Protect Against Falling Prices

- **Short Hedge** – is to sell a feeder cattle futures contract and then buy it back at the time you sell the feeder cattle in the cash market.
- **Put Option** – is to buy a put option on a feeder cattle futures contract. The put option entitles you the right, but not the obligation, to short hedge the feeder cattle at a selected strike price.

Total Dollars Above or Below Price Objective, Based on Daily Close of August 2012 Feeder Cattle Futures



Thank you for your Attention!



Please feel free to share your:

- Comments**
- Questions**
- Suggestions**

Should I Buy Stocker Calves This Fall or a Fishing License?

Ona Report Webinar

September 15, 2016

Chris Prevatt

University of Florida

Livestock and Forage Economist