



Improving Your Cattle Risk Management Skills Using BeefBasis.com

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**University of Florida
Gainesville, Florida
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Background

BeefBasis came about through a partnership between public and private entities

- Custom Ag Solutions
- Kansas State University
- USDA – Risk Management Agency
- USDA – Ag. Marketing Service

Feeder Cattle Basis

Basis = Cash price – Futures Price

Cash price = Futures price + Basis

Futures price

+ Expected basis

Expected cash price

The Problem

- **Effective price risk management requires that you be able to forecast basis**

Futures price

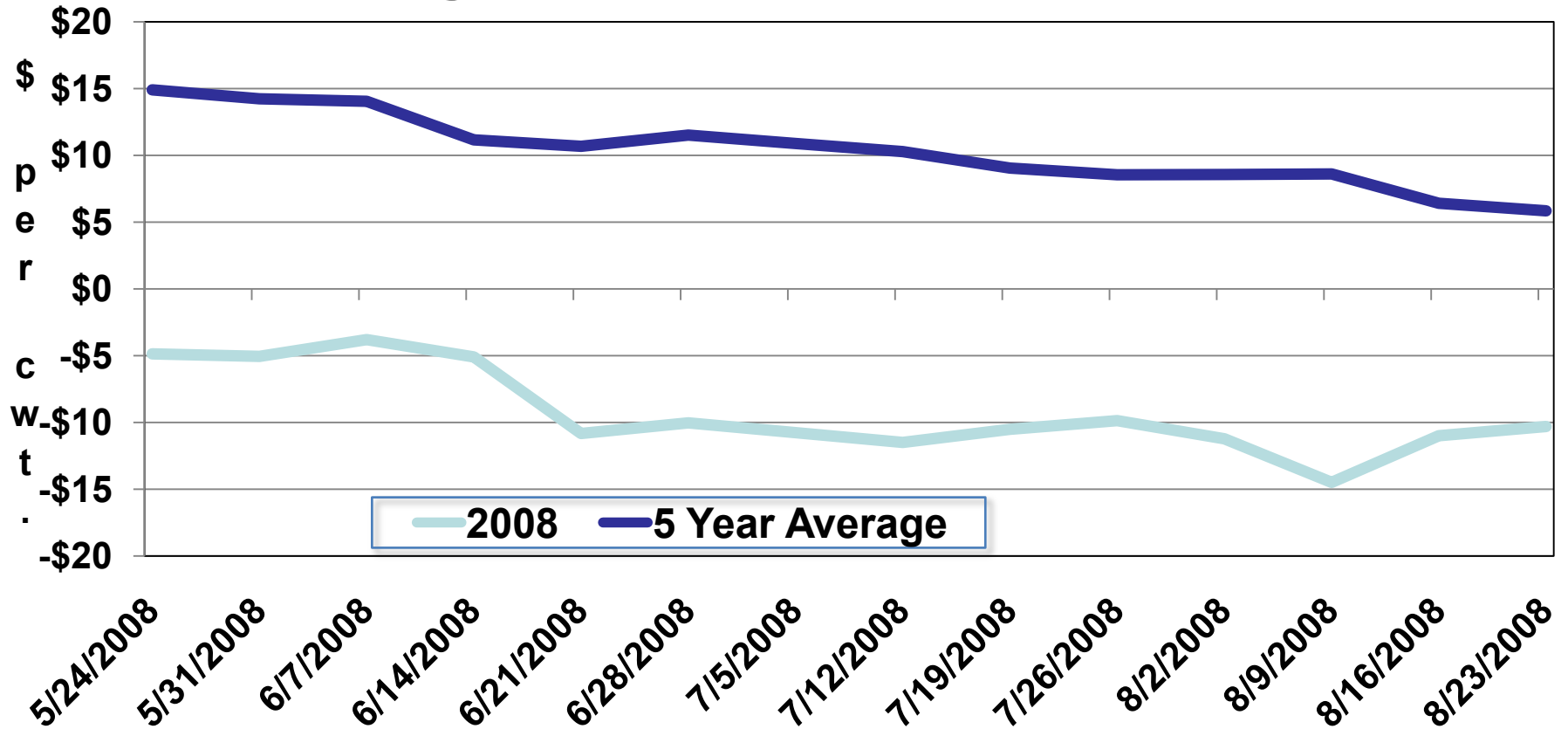
+ *Expected basis*

Expected cash price

- **But basis can vary dramatically between feeder cattle weight classes, market locations, and from year to year**

Light Weight Steer Basis Is Variable

Georgia 400-500 Lb. Steer Basis August Feeder Cattle Futures



The Solution

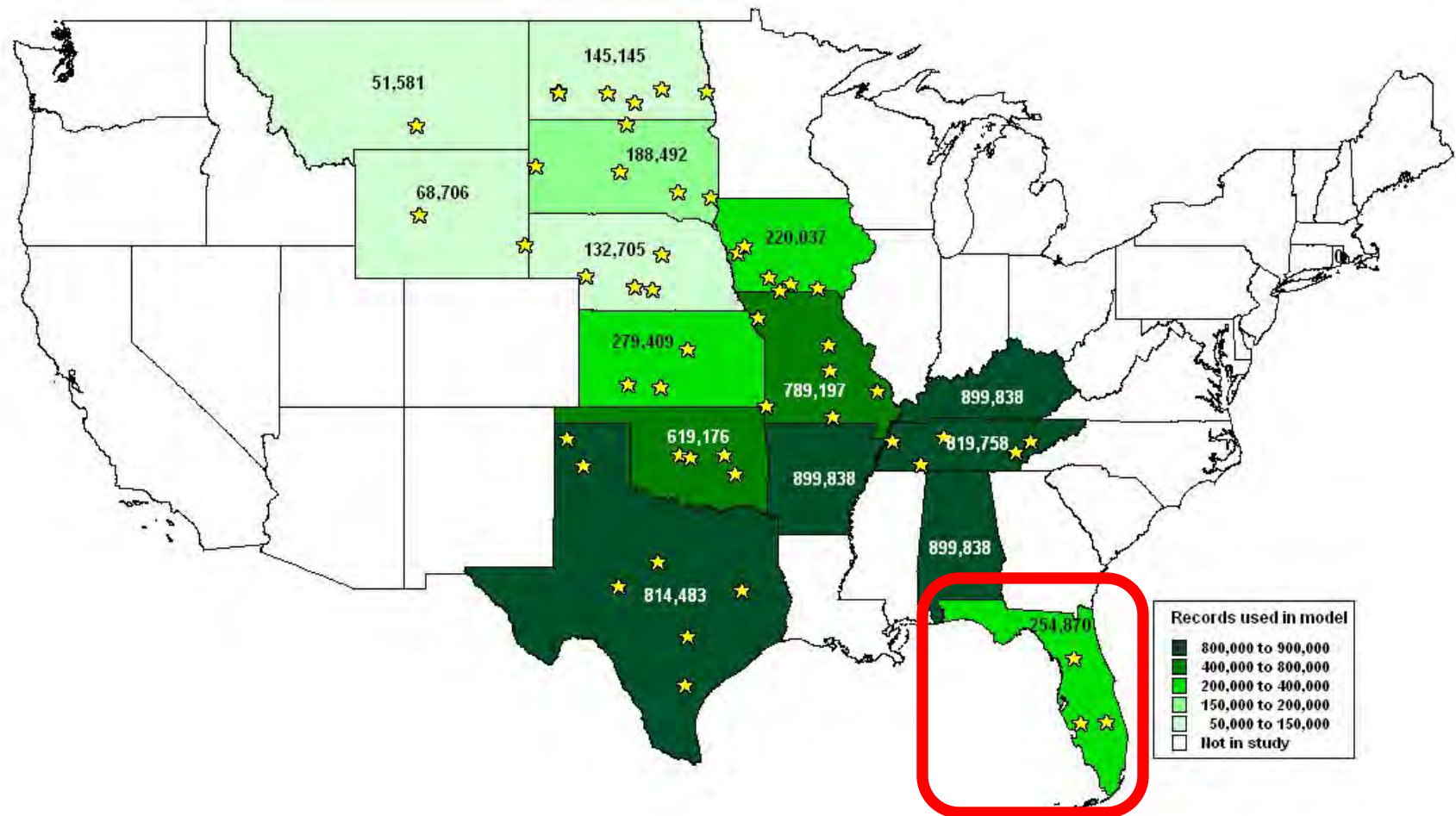
- **Research on feeder cattle prices suggests many factors affect cash prices**
 - **Key Variables: sex, weight, lot size, frame size, corn prices, fed cattle prices, market location**
- **Factors that affect cash feeder cattle prices also impact basis**
- **Use USDA-AMS transaction level sales data for multiple years and market locations to quantify these variables' impact on basis**

The Solution

Develop a web-based feeder cattle basis forecasting tool where forecasts are region-specific and account for cattle type and current market conditions

www.BeefBasis.com

States, locations, and number of observations used in BeefBasis models



Modeling

Model inputs/variables

- **Lot characteristics (supplied by producer)**
 - **Location**
 - **Frame and Grade**
 - **Expected Weight**
 - **Sex**
 - **Expected Sale Date**
 - **Lot Size**
- **Market Inputs**
 - **Corn & Feeder Cattle Prices**



Welcome to BeefBasis

Credits

BeefBasis.Com - Decision Support for America's Beef Producers

The Cattle Basis Risk Analysis Tools at BeefBasis.com give producers the information and analytics they need to improve marketing decisions influenced by cattle basis risk. This site is completely free of charge to producers.

Basis, defined simply as the difference between the local cash markets and futures contract prices, can be complex and can vary dramatically between weight classes and market locations from year to year. Understanding the risk related to basis uncertainty, or "basis risk," is essential to making effective use of price risk management tools such as Chicago Mercantile Exchange (CME) futures and options and forward contracts.

The BeefBasis website was developed by Custom Ag Solutions, Inc. (CAS) and Kansas State University (K-State) in partnership with the USDA's Risk Management Agency (RMA).

BeefBasis gives you relevant information and analytics you need to evaluate marketing decisions and manage your price risk.

Data for BeefBasis.com provided by USDA's Agricultural Marketing Service (AMS).



Events

We Want Your Feedback!

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Feeder Cattle Basis Forecast

Hedge Analysis

State: Florida

Location: Ocala

Expected Sale Date: 8/10/2009

Sex: Steer

Frame: Lg & Med/Lg

Grade: 1-2

Weight:
415 lbs/head

Head:
1

August 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Feeder Cattle Futures Price:
99.05 \$/cwt

Live Cattle Futures Price:
89.5 \$/cwt

Corn Futures Price:
3.93 \$/bu

Reference Contract: Aug 2009
Transaction Date: Apr 28, 2009

Reference Contract: Feb 2010
Transaction Date: Apr 28, 2009

Reference Contract: Sep 2009
Transaction Date: Apr 28, 2009

RUN

Feeder Cattle Basis Forecast

[Hedge Analysis](#)

State: Florida	Location: Ocala	Expected Sale Date: 8/10/2009																																																									
Sex: Steer	Frame: Lg & Med/Lg	Grade: 1-2																																																									
Weight: 415 lbs/head	Head: 1	<table border="1"> <thead> <tr> <th colspan="7">August 2009</th> </tr> <tr> <th>Sun</th> <th>Mon</th> <th>Tue</th> <th>Wed</th> <th>Thu</th> <th>Fri</th> <th>Sat</th> </tr> </thead> <tbody> <tr> <td>26</td> <td>27</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> <td>1</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> </tr> <tr> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> </tr> <tr> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> </tr> <tr> <td>23</td> <td>24</td> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> </tr> <tr> <td>30</td> <td>31</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </tbody> </table>		August 2009							Sun	Mon	Tue	Wed	Thu	Fri	Sat	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
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Display Horizontal	Display Vertical	PDF	RUN																																																								

Model-estimated feeder cattle basis values ¹	Results
Model-estimated feeder cattle basis, \$/cwt ²	7.57
Confidence interval for basis, \$/cwt ³	1.64 to 13.49
Expected cash price, \$/cwt	106.62
Confidence interval for expected cash price, \$/cwt ³	100.69 to 112.54
Optimal hedge ratio ⁴	0.8188
Number of calves hedged per contract ⁵	147

		Feeder Cattle Model									
C O R N		3.13	11.93	11.56	11.20	10.84	10.48	10.11	9.75	9.39	9.03
		3.33	11.20	10.84	10.47	10.11	9.75	9.39	9.02	8.66	8.30
		3.53	10.47	10.11	9.75	9.38	9.02	8.66	8.30	7.93	7.57
		3.73	9.74	9.38	9.02	8.66	8.29	7.93	7.57	7.21	6.84
		3.93	9.01	8.65	8.29	7.93	7.57	7.20	6.84	6.48	6.12
		4.13	8.29	7.92	7.56	7.20	6.84	6.47	6.11	5.75	5.39
		4.33	7.56	7.20	6.83	6.47	6.11	5.75	5.38	5.02	4.66
		4.53	6.83	6.47	6.11	5.74	5.38	5.02	4.66	4.29	3.93
		4.73	6.10	5.74	5.38	5.02	4.65	4.29	3.93	3.57	3.20
		91.05	93.05	95.05	97.05	99.05	101.05	103.05	105.05	107.05	
		Feeder Cattle \$/Cwt									

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Feeder Cattle Basis Forecast

Hedge Analysis

State: Florida

Location: Ocala

Expected Sale Date: 8/10/2009

Sex: Heifer

Frame: Lg & Med/Lg

Grade: 1-2

Weight:

Head:

415 lbs/head

1

Feeder Cattle Futures Price:

Live Cattle Futures Price:

Corn Futures Price:

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Feeder Cattle Basis Forecast

[Hedge Analysis](#)

State: Florida	Location: Ocala	Expected Sale Date: 8/10/2009	
Sex: Heifer	Frame: Lg & Med/Lg	Grade: 1-2	
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Model-estimated feeder cattle basis values ¹	Results
Model-estimated feeder cattle basis, \$/cwt ²	-4.75
Confidence interval for basis, \$/cwt ³	-10.99 to 1.50
Expected cash price, \$/cwt	94.30
Confidence interval for expected cash price, \$/cwt ³	88.06 to 100.55
Optimal hedge ratio ⁴	0.8188
Number of calves hedged per contract ⁵	147

Historical Market Data Available on BeefBasis.com

Market Data

Sex: Steers

Frame: Medium and Large

Class: 1-2

Weight: 400-450

From: 2008 To: 2009

Roll To: Month

State: FL

Location: Ocala (945)

Data sorted by Sale Date

Create Excel (CSV) File

<- PREV NEXT ->

Sale Date	State	Location	Sex	Frame	Class	Wt Range	Head	Avg Wt	\$ Cwt	Comment
200801	FL	Ocala	Steers	Medium and Large	1-2	400-450	14	426	107.54	
200801	FL	Ocala	Steers	Medium and Large	1-2	400-450	14	426	107.54	
200802	FL	Ocala	Steers	Medium and Large	1-2	400-450	22	423	114.57	
200802	FL	Ocala	Steers	Medium and Large	1-2	400-450	22	423	114.57	
200803	FL	Ocala	Steers	Medium and Large	1-2	400-450	6	418	119.92	
200804	FL	Ocala	Steers	Medium and Large	1-2	400-450	9	421	109.21	
200805	FL	Ocala	Steers	Medium and Large	1-2	400-450	17	416	104.80	
200805	FL	Ocala	Steers	Medium and Large	1-2	400-450	17	416	104.80	
200806	FL	Ocala	Steers	Medium and Large	1-2	400-450	30	416	104.07	
200806	FL	Ocala	Steers	Medium and Large	1-2	400-450	30	416	104.07	
200807	FL	Ocala	Steers	Medium and Large	1-2	400-450	16	425	101.78	
200807	FL	Ocala	Steers	Medium and Large	1-2	400-450	16	425	101.78	
200808	FL	Ocala	Steers	Medium and Large	1-2	400-450	46	415	107.01	
200808	FL	Ocala	Steers	Medium and Large	1-2	400-450	46	415	107.01	
200809	FL	Ocala	Steers	Medium and Large	1-2	400-450	25	415	102.03	
200809	FL	Ocala	Steers	Medium and Large	1-2	400-450	25	415	102.03	
200810	FL	Ocala	Steers	Medium and Large	1-2	400-450	58	422	95.55	
200810	FL	Ocala	Steers	Medium and Large	1-2	400-450	58	422	95.55	
200811	FL	Ocala	Steers	Medium and Large	1-2	400-450	24	417	95.34	
200811	FL	Ocala	Steers	Medium and Large	1-2	400-450	24	417	95.34	
200812	FL	Ocala	Steers	Medium and Large	1-2	400-450	24	420	90.37	
200812	FL	Ocala	Steers	Medium and Large	1-2	400-450	24	420	90.37	
200901	FL	Ocala	Steers	Medium and Large	1-2	400-450	32	416	96.44	
200901	FL	Ocala	Steers	Medium and Large	1-2	400-450	32	416	96.44	
200902	FL	Ocala	Steers	Medium and Large	1-2	400-450	26	426	102.02	
200902	FL	Ocala	Steers	Medium and Large	1-2	400-450	26	426	102.02	
200903	FL	Ocala	Steers	Medium and Large	1-2	400-450	30	425	104.70	

BeefBasis.com

✓ Provides feeder cattle basis forecasts

- Better forecasts than historical averages
- Incorporate current market conditions
- Forecasts for 15 states are available

AL, AR, FL, IA, KS, KY, MO, MT, NE, ND, OK, SD, TN, TX, WY

✓ USDA-AMS data available

- View on screen or download into Excel

✓ Provides Hedge Analysis

BeefBasis.com

✓ Future?

- Dynamic website
- Additional 10 states by early 2010
- Fed cattle

✓ Provide input/comments on web

Cattle Risk Management Information Web Site



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The Cattle Risk Management Information Library is a collaborative effort between the Kansas State University Department of Agricultural Economics and the USDA Risk Management Agency (RMA) to provide cattle risk management information in an easy-to-use, centralized location.

RECENT ADDITIONS

ACES Publications : BOVINE TRICHOMONIASIS : ANR-1333

... influencing the reproductive performance and economic profitability of a cow-calf operation. ... Risk Factors Associated With Trichomoniasis Some factors that put a herd at risk for ...

[By Alabama Cooperative Extension Service | Published in March, 2009 | Cows - Production Risk](#)

Publications List

Strategic Management and Scenario Planning in Ranching: Managing Risk in Dynamic Times ... Definitions and Descriptions: Conventional, Natural, and Organic Beef Production and ...

[By South Dakota State University | Published in March, 2009 | Cows - Feeder Cattle - Market Risk - Slaughter Cattle](#)





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NDSU Extension Service Livestock Economics

New Livestock Price Risk Prote

By North Dakota State University | Published in January, 2009 | [Feeder Cattle](#) - [Market Risk](#) - [Price Risk](#) - [Production Risk](#)

Lecture Notes in Financial Economics and Risk Management

Lecture Notes in Financial Eco

By Dr. Mario J. Miranda | Published in December, 2008 | [Price Risk](#)



Thank You!

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