

9-16-2009

Price Discovery in Nebraska Cash Cattle Markets

Matthew Stockton

University of Nebraska - Lincoln, mstockton2@unl.edu

Roger Wilson

University of Nebraska - Lincoln, rwilson6@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/agecon_cornhusker



Part of the [Agricultural and Resource Economics Commons](#)

Stockton, Matthew and Wilson, Roger, "Price Discovery in Nebraska Cash Cattle Markets" (2009). *Cornhusker Economics*. 476.
http://digitalcommons.unl.edu/agecon_cornhusker/476

This Article is brought to you for free and open access by the Agricultural Economics Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Cornhusker Economics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

CORNHUSKER ECONOMICS

UNIVERSITY OF
Nebraska
Lincoln

September 16, 2009

University of Nebraska–Lincoln Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
<http://www.agecon.unl.edu/Cornhuskereconomics.html>

Price Discovery in Nebraska Cash Cattle Markets¹

Market Report	Yr Ago	4 Wks Ago	9/11/09
<u>Livestock and Products,</u>			
<u>Weekly Average</u>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.....	\$97.59	\$81.00	\$83.81
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	117.24	114.63	107.41
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	111.66	105.99	102.80
Choice Boxed Beef, 600-750 lb. Carcass.	159.90	141.22	142.12
Western Corn Belt Base Hog Price Carcass, Negotiated.	67.82	46.51	49.76
Feeder Pigs, National Direct 50 lbs, FOB.	47.29	*	40.00
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean.	75.46	54.27	54.51
Slaughter Lambs, Ch. & Pr., Heavy, Wooled, South Dakota, Direct.	97.50	91.25	91.87
National Carcass Lamb Cutout, FOB.	273.41	248.72	246.97
<u>Crops,</u>			
<u>Daily Spot Prices</u>			
Wheat, No. 1, H.W. Imperial, bu.	6.43	4.08	3.51
Corn, No. 2, Yellow Omaha, bu.	5.40	3.03	3.10
Soybeans, No. 1, Yellow Omaha, bu.	12.09	10.71	9.68
Grain Sorghum, No. 2, Yellow Dorchester, cwt.	8.27	5.07	4.88
Oats, No. 2, Heavy Minneapolis, MN, bu.	*	2.08	1.95
<u>Feed</u>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	190.00	*	*
Alfalfa, Large Rounds, Good Platte Valley, ton.	77.50	*	82.50
Grass Hay, Large Rounds, Premium Nebraska, ton.	85.00	*	*
Dried Distillers Grains, 10% Moisture, Nebraska Average.	162.50	83.00	81.00
Wet Distillers Grains, 65-70% Moisture, Nebraska Average.	59.25	34.00	33.00
*No Market			

Over three quarters of a million head of cattle were sold in livestock auction markets in or near the Nebraska Sandhills during the 2008 market year. These markets range from as far south as McCook, as far north as Valentine, as far west as Ogallala and as far east as Columbus. Each sale is associated with many different expectations by both buyers and sellers. Those expectations engage these stakeholders in a study of the markets. One of the most important questions that many of these market participants want to know the answer to is, "What are the key factors driving these markets?" Economists at both the University of Nebraska Lincoln and Texas A&M University have sought answers to this question.

Beef feeder cattle price data for two genders with five different weight classes each, 400-500 pounds, 500-600 pounds, 600-700 pounds, 700-800 pounds, and finished weights of 1000 pounds or more were used in the study. Conventional thinking would lead one to believe that fat cattle prices would be a primary determinant and have a major role influencing all other weight and gender class prices. This study finds evidence that this is not the case in Nebraska, and that the price for 400-500 pound steers appears to be the causal force in the long-run, and is a main factor in the price discovery process for Nebraska.

These results differ from those found in a previous study using price data from Texas. The Texas study finds the 600-700 pound heifer class to be the center of the price discovery process. The Texas researchers, David Bessler and Ernie Davis,



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the U.S. Department of Agriculture.

University of Nebraska Extension educational programs abide with the non-discrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

explain their results by hypothesizing that 600-700 pound heifers represent a decision point where animals can either be sent to the feedlot and finished for slaughter, or returned to the cow herd and serve as replacements. Since heifer retention decisions determine both current and future production, their explanation seems plausible.

Given the Texas result and hypothesis, why are the Nebraska results so different, with the 400-500 pound steer prices at the center of price discovery?

Differences between the cattle industries in Texas and Nebraska may hold the key in explaining the price discovery dilemma. While both these states rank as leaders in beef cattle production, they have very different climate and institutional structures.

Most of the beef cattle breeds used in Texas have some portion of *Bos Indicus* genetics, cattle originating in the Indian subcontinent, while practically all breeds used in Nebraska are *Bos Taurus*, cattle of English and European origin. The *Bos Indicus* breeds generally reach sexual maturity at an older age and heavier weight than do the *Bos Taurus* breeds.

Texas has a milder climate in the winter with rangeland available nearly year around, making it possible to have many different calving seasons and feedlot placements. In Nebraska, the majority of calves are born in the early spring, weaned in the fall when grazing resources become limited, and placed in the feedlot immediately, or backgrounded for a period and then placed in the feedlot. These differences make Nebraska more of a batch system verses the continuous flow found in Texas.

However, the most likely cause of the difference in the price discovery process is the structural difference of the beef industry between these two states. About 78 to 80 percent of beef producers in Texas have 50 cows or fewer. In comparison, Nebraska has only 56 to 57 percent of producers with 50 cows or fewer. At the same time, 91 percent of the feedlots in Texas have a capacity of 1,000 or more head, while in Nebraska only 16 percent of the feedlots have a capacity of 1,000 head or more. In Texas, we expect fewer buyers of feeder cattle relative to breeding cattle, with Nebraska being the opposite. Given these differences it is not

surprising that the weight/gender class where price discovery occurs is different between the two states.

The other part of the puzzle of why light-weight steers lead the price discovery process in Nebraska may be related to their position in the physical supply chain. The lighter weight the calf, the longer it will be in the feedlot. Buyers purchasing cattle for the feedlot are purchasing them based on some expected price and cost in the future, which may vary from the current price and cost. Future price expectations would be expressed strongest with those cattle farthest from the market.

The important thing for Nebraska stakeholders to recognize is where price is discovered in their state. Historically, the light weight class of steers is where new price trends or the impacts of new market information may first become evident. It is important to recognize that both buyers and sellers likely benefit from information available to them in the light-weight steer class.

Matt Stockton, (308) 696-6713
Assistant Professor and Extension Economist
West Central Research & Extension Center
University of Nebraska-Lincoln
mstockton2@unl.edu

Roger Wilson, (402) 472-1771
Farm Management/Enterprise Budget Analyst
Department of Agricultural Economics
University of Nebraska-Lincoln
rwilson6@unl.edu

¹ To be published in the *Journal of Applied Agricultural Economics*.