

2006

Cost of Gain Comparison Between Cattle Finished at Opportunities Farm in South Dakota and Cattle Finished in Kansas

Erik Loe

South Dakota State University

Robbi Pritchard

South Dakota State University

Matt Loewe

South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/sd_beefreport_2006

 Part of the [Animal Sciences Commons](#)

Recommended Citation

Loe, Erik; Pritchard, Robbi; and Loewe, Matt, "Cost of Gain Comparison Between Cattle Finished at Opportunities Farm in South Dakota and Cattle Finished in Kansas" (2006). *South Dakota Beef Report, 2006*. Paper 5.
http://openprairie.sdstate.edu/sd_beefreport_2006/5

This Report is brought to you for free and open access by the Animal Science Reports at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in South Dakota Beef Report, 2006 by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Cost of Gain Comparison Between Cattle Finished at Opportunities Farm in South Dakota and Cattle Finished in Kansas¹

Erik Loe², Robbi Pritchard³, and Matt Loewe⁴
Department of Animal and Range Sciences

BEEF 2006 - 04

Summary

Cost of gain is an important factor in determining the profit or loss of feeder cattle. For comparison of cost of gain between cattle finished in Southeast South Dakota and cattle finished in Southwest Kansas closeouts of cattle fed at the Opportunities Farm near Lennox, SD were compared with information published by Kansas State University in the monthly Focus on Feedlots. Cattle feeders in the Midwest, including South Dakota, are competitive with cattle feeders in other regions of the United States due to this regions lower ration costs and cost of gain.

Introduction

The predominant cattle feeding regions in the United States are located in the states of Texas, Kansas, Nebraska, Colorado, and Iowa. The Midwest and Northern Great Plains have a competitive advantage to the primary cattle feeding regions because of the price of commodities. There can be a \$0.60 advantage for buying a bushel of corn in South Dakota compared to Texas or Kansas. Though feed conversions are generally better in the Southern cattle feeding regions compared with South Dakota, the cost of commodities and cattle type can result in lower costs of gain for cattle finished in South Dakota.

Opportunities Farm was developed as a production-scale teaching classroom and outreach laboratory. There are three unique cattle feeding facilities located at Opportunities Farm, all of which are common to cattle feeding operations in South Dakota. The facilities were designed to allow comparisons of feedlot performance among facilities. We used the closeout information generated from cattle

finished in the facilities at Opportunities Farm with closeout information reported by Hale (2006) from Kansas feedyards to demonstrate differences in cost of gain between southeastern SD and west Kansas.

Materials and Methods

There have been 2,068 head of cattle finished as matched sets at Opportunities Farm. A matched set was considered as a group of approximately 240 head of cattle that were sorted three ways. Each sorted group of cattle was allocated to one pen in each of the three facilities. Cattle have been marketed from Opportunities Farm since June 2004; however, there have not been any cattle marketed during the third quarter (July to September) of 2004 or 2005. All cattle information from Opportunities Farm has been entered into a feedlot tracking computer program to generate cost of gain for each matched set of cattle. Cost of gain includes a feed markup (\$8/ton) and yardage (\$0.25/head/day). The body weights (BW) used were pay weights (BW at purchase and at the slaughter facility).

Using the information available in Focus on Feedlots (Hale, 2006), closeouts from Opportunities Farm were compared with closeouts from nine Kansas feedyards. Closeout data from Opportunities Farm were the pooled closeouts from the three facilities. Only closeouts from steers reported by Hale (2006) were used in this comparison. The closeouts were summarized by quarter.

Results and Discussion

Closeout information from Opportunities Farm and Hale (2006) are listed in Table 1. From this simple comparison there are a few noticeable differences in the values presented. As expected, the number of cattle represented in the means in Table 1 is vastly greater from the Kansas reports. Final BW were heavier, ADG

¹ This project funded by the Beef Nutrition Program and the SD Opportunities Farm.

² Extension Beef Feedlot Specialist

³ Distinguished Professor

⁴ Manager, Opportunities Farm

was greater, F/G was poorer, and death loss was lower for cattle finished at Opportunities Farm compared to cattle fed in five Kansas feedyards reported by Hale (2006). Though F/G were poorer for cattle finished in South Dakota, cost of gain was lower for every quarter where closeout information was available.

Implications

Though this was only a comparison of closeout information from a limited number of cattle fed at Opportunities Farm, it demonstrates that due to the cost of feedstuffs, cattle feeders in South Dakota can compete with cattle feeders located in the primary cattle feeding regions of the United States.

Literature Cited

Hale, R. 2006. Kansas Feedlot Performance and Feed Cost Summary: Focus on Feedlots. Available: <http://www.asi.k-state.edu/DesktopDefault.aspx?tabindex=53&tabid=302>. Accessed July 3, 2006.

| Table 1. Comparison costs of gain from cattle finished in South Dakota ^a and Kansas ^b from April 2004 to June 2006 | | | | | | | | |
|--|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| Item | Quarter 1 | | Quarter 2 | | Quarter 3 | | Quarter 4 | |
| | Opps Farm in | | Opps Farm in | | Opps Farm in | | Opps Farm in | |
| | SD | KS | SD | KS | SD | KS | SD | KS |
| Number of Cattle finished | 218 | 21,799 | 1,362 | 56,377 | — | 34,144 | 488 | 22,765 |
| Days on feed | 146 | 153 | 138 | 165 | — | 148 | 138 | 141 |
| Final BW, lb | 1,486 | 1,265 | 1,331 | 1,244 | — | 1,312 | 1,339 | 1,320 |
| ADG, lb | 3.43 | 3.21 | 3.76 | 3.11 | — | 3.55 | 3.42 | 3.63 |
| Feed:Gain | 8.50 | 6.30 | 6.46 | 5.98 | — | 5.87 | 7.26 | 5.99 |
| Death loss, % | 0.91 | 1.30 | 0.51 | 2.28 | — | 0.95 | 0.63 | 0.79 |
| Cost of gain, \$/cwt | | | | | — | | | |
| Mean | 49.24 | 54.58 | 41.88 | 54.80 | — | 53.91 | 50.86 | 53.92 |
| Minimum | — | 51.98 | — | 51.08 | — | 50.15 | — | 52.16 |
| Maximum | — | 57.23 | — | 59.77 | — | 57.31 | — | 56.10 |

^a Opportunities Farm near Lennox, SD.

^b Summary of nine feedyards in west Kansas (Hale, 2006).