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D.D. Simms

T.T. Marston

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Abstract

Cost/return analyses of 56 Kansas cow/calf operations were summarized to determine the major factors influencing 1987 and 1988 cow herd profitability. Gross returns and costs on a per cow unit basis were extremely variable. with the bottom 1/3 of these operations essentially breaking even. whereas the high 1/3 profitability group averaged $228.40 per head in net cash returns. Both operating and fixed costs were major determinants of profitability. Reproductive rate (calves weaned per cow exposed) was the major production variable affecting profitability.

Keywords

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COW/CALF PROFITABILITY: CASE STUDIES OF KANSAS CATTLE PRODUCERS

D. D. Simms and T. T. Marston

Summary

Cost/return analyses of 56 Kansas cow/calf operations were summarized to determine the major factors influencing 1987 and 1988 cow herd profitability. Gross returns and costs on a per cow unit basis were extremely variable, with the bottom 1/3 of these operations essentially breaking even, whereas the high 1/3 profitability group averaged $228.40 per head in net cash returns. Both operating and fixed costs were major determinants of profitability. Reproductive rate (calves weaned per cow exposed) was the major production variable affecting profitability.

(Key Words: Cows, Profitability, Economics, BEEFpro.)

Introduction

During 1987 and 1988, Extension personnel conducted numerous economic analyses of cow herds using the BEEFpro cattle management computer program, with emphasis on developing a thorough cost/return analysis. This paper summarizes these analyses and illustrates the key factors that influence cow herd profitability.

Experimental Procedures

The information summarized here was collected in individual consultation sessions, with every effort made to obtain accurate cost and return information. It represents the records from 56 Kansas cow herds in 1987 and 1988—relatively profitable years in the cow/calf business. As an aid in identifying the factors distinguishing the least profitable from the most profitable, the herds were divided into three profitability groups based on net cash returns per cow unit.

Results and Discussion

Table 22.1 shows the financial and production characteristics of the cow herds, separated by profitability group. Surprisingly, there was no difference in gross returns between the bottom and middle 1/3 profitability groups. The high 1/3 profitability group had higher gross returns because they had higher reproductive rates and heavier calves at weaning. These factors combined to yield more pounds of calf weaned per cow exposed.

Table 22.1. Characteristics of 56 Kansas Cow/Calf Operations in 1987 and 1988 on a Per Cow Unit Basis

Item	Profitability group		
	Bottom 1/3	Middle 1/3	Upper 1/3
Gross returns, $	369.99	369.19	408.60
Operating costs, $[1]	236.48	208.53	148.24
Fixed costs, $[2]	134.25	44.19	31.96
Net returns, $	−.74	116.47	228.40
No. cows/herd	96	102	146
Average weaning wt, lb	521	503	550
Calf crop (weaned/exposed), %	84.9	86.9	91.9
Pounds of calf/cow exposed	442	437	505
Principal and interest payments/cow, $	111.84	37.73	22.01
Operator investment/cow, $	1,497.00	1,465.00	1,817.00
Total investment/cow, $	2,677.00	2,379.00	2,007.00
Investment in building and equipment/cow, $	107.29	97.81	87.63
Feed costs (cash), $[3]	161.98	163.58	104.00

[1]Includes all cash costs plus fair market value of all home-raised feedstuffs.
[2]Includes all principal and interest payments as well as other cash fixed costs.
[3]Includes a fair market value for home-grown feedstuffs, but does not include any value for owned pasture land.

A review of the management practices employed by the high profitability operations indicates that they were:

1. utilizing cows matched to their resources,
2. utilizing a systematic crossbreeding system,
3. providing adequate nutrition during crucial reproductive periods,
4. using performance information in bull selection,
5. minimizing calving difficulty,
6. making maximum use of low-quality roughages and aftermath feeds, and
7. optimizing the use of protein and mineral supplements.

Although there were some differences in gross returns among profitability groups, the major differences were in operating and fixed costs. The greater operating costs of the bottom 1/3 profitability group were largely because of higher feed costs, which resulted from more pasture rental or less usage of inexpensive, low quality roughages. The higher fixed costs resulted mainly from higher principal and interest payments.

The upper 1/3 group had a higher operator investment per cow but lower total investment than the other groups. The bottom 1/3 typically utilized more pasture per cow unit than the upper 1/3. The exact reason for this difference is unclear.

An interesting aspect of this analysis is the range in returns and costs. For example, gross returns varied from $251.29 to $582.71 on a per cow unit basis. Obviously, this means that reproductive rates and weaning weights varied tremendously. Operating costs varied from $34.84 to $373.50 per cow unit, whereas fixed costs varied from $0.00 to $348.03 per cow unit. Since the cost side of the profit equation had the greatest impact on profitability, these data indicate that producers must analyze their input costs and reduce them where possible. Net returns varied from $−197.46 to $248.48 per cow unit. This indicates that there is tremendous potential to improve profitability in most Kansas cattle operations.

It is also worth noting that 1/3 of the cow herds included in this study were not profitable in 1987 and 1988, which were considered highly profitable years for the cow/calf segment of the industry. This is particularly ominous when one considers how unprofitable these operations will be when calf prices decline as a function of the cattle cycle.