

Research Summaries 1

Moderators: Jenks Britt, Scott Smith

Profitability of Producers Who Purchase Beef Cows vs. Those Who Raise Replacements

S. Robbe-Austerman, DVM, MS¹; D.R. Strohbehn, PhD²

¹*Veterinary Diagnostic and Production Animal Medicine, Iowa State University, Ames, IA 50011*

²*Department of Animal Sciences, Iowa State University, Ames, IA 50011*

Introduction

Because the cow-calf sector of the beef industry is mature, average sale price (including high profit and low profit years) hovers around the average cost of production. For cow-calf operations to maintain profitability, producers must either command a higher price or produce calves at below average cost. With the exception of the seed stock sector, calves are usually considered a commodity product; consequently, focusing on producing calves at below average cost is generally more profitable. Comments are often made that it is cheaper to purchase replacements rather than raise heifers. Our objective was to evaluate the profitability and overall production cost of producers who purchase cows compared to producers raising replacement females.

Materials and Methods

Fifty-two herds had completed a Standardized Performance Analysis from 1999-2004 in the Iowa State University Beef Records Analysis Class. Of these, nine herds had routinely purchased more than 50% of their replacement females as cows and 22 herds solely raised replacements; the other 31 herds had both purchased and raised cows in the herd and were not considered in this analysis. The ISU-IRM-Beef Cow Business Record was used to collect the data. Financial (cost basis) rather than economic (cost + opportunity costs) calculations were used. For herds with multiple year observations, the most recent year was used in the analysis. Summary statistics were calculated and T-tests were used to calculate p values.

Results

No significant differences between producers who purchase cows vs. those who raise replacements were seen in herd size (272 [SEM 95] vs. 206 [SEM 32]), pregnancy rates (94% [1.4] vs. 92% [1.6]), weaning rates (87% [1.7] vs. 89% [1.4]), pounds (lb) weaned per cow exposed (452 [21] vs. 470 [23]), feed costs (\$242 [24] vs. \$205 [14]), operating costs (\$87 [11] vs. \$67 [8]), dry matter intake (4565 lb [978] vs. 4978 lb [437]) and sale price of calves (\$102 cwt [5] vs. \$101 cwt [3]) or cull cows \$50 cwt [3] vs. \$50 cwt [6]. There were significant ($p < .05$) differences in depreciation costs (\$109 [17] vs. \$29 [6]), annual cow costs (\$473 [38] vs. \$330 [24]), return to capital, labor and management (\$1,749 [15,541] vs. \$33,784 [8,801]) and return to management (\$-5,905 [12,575] vs. \$33,163 [8,632]).

Significance

These data suggest that herds that routinely purchase the majority of their female replacements as cows had higher annual cow costs and decreased return to labor and management than producers who raise their own replacement females. Veterinarians who serve clients should be aware that routinely purchasing cows may threaten not only producers' biosecurity, but profitability. Producers who choose to purchase replacements should carefully monitor the financial health of their operation.