Comparison of Pasture and Drylot Calf Preconditioning Programs


Problem

Controlled comparisons of VAC-45 preconditioning methods are needed to: 1) guide decisions regarding the most cost-effective approach to precondition calves, and 2) discover practical methods to best prepare calves to stay healthy following shipping and commingling.

Objectives

Compare a low-input pasture preconditioning system to a high-input drylot preconditioning system of the same duration (~45 days) to evaluate calf performance and profit during the preconditioning and finishing phases.

Procedures

Over 3 years, 250 calves were used to compare preconditioning approaches. Performance and profit of calves during the preconditioning and finishing phase were evaluated.

Treatments:
- DLOT - high-input drylot approach
  - Corn/wheat midds-based pellet + 1.5-2.5 lbs of alfalfa hay/day
- PAST - low-input pasture approach
  - Native range pasture + 1.25 lb/day of a 32% CP range cube delivered 3×/week

All calves qualified as “VAC-45”, but premiums for preconditioning were not applied in the analysis. After preconditioning, all steers were fed at a commercial feedlot, then sold on an individual carcass basis.

Results and Discussion

Preconditioning Phase
- DLOT calves gained 0.32 lb/day more and were worth $6.90/hd more. The higher value was offset by $52.76 greater preconditioning costs.
- Net income during preconditioning was $44.59 greater for PAST calves, even though PAST calves gained less weight.
- A final price premium of $5.00/cwt would have been required for the DLOT approach to be profitable; however, pasture preconditioning system was profitable without a premium.

Finishing Phase
- No differences in overall performance or carcass characteristics.
- DLOT steers tended to have more sickness, and had more death loss.
- PAST steers profited $103/hd more than DLOT steers.

Calves preconditioned on pasture were better prepared to stay healthy after shipping, and were more profitable during the preconditioning ($44/hd) and finishing ($103/hd) phases.

Implications

In the current era of elevated costs for feed and other inputs, it is important to consider methods of preconditioning that minimize preconditioning cost of gain and adequately prepare the calves to stay healthy after shipping. These results indicate that a low-input pasture preconditioning approach can reduce preconditioning cost compared to drylot preconditioning, and may improve subsequent health.