

Confinement cow economics: Cornstalk grazing improves returns

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Confinement systems for cow-calf production can offer advantages in terms of intensity of management and better control of nutrition and feed intake. On the downside though, confinement systems sacrifice the advantages gained by grazing low-cost forages for much of the year.

For several years, University of Nebraska researchers have conducted trials comparing cow-calf production systems incorporating variables such as early weaning, confinement feeding and winter cornstalk grazing. Results indicate that while intensive, year-around confinement systems can improve cow body condition, calving rates and weaning weights, higher production costs tend to challenge profitability in those systems, particularly in years when feed prices increase and/or calf values decline.

However, according to lead researcher Rick Rasby, PhD, an intermediate system using drylot confinement for much of the year coupled with cornstalk grazing through the winter could improve cow-calf profitability compared with other systems.

Similar systems could provide opportunities for cow-calf producers, particularly in the Midwest where:

- Higher land values coincide with more land shifting from grazing to crop production.
- Crop production creates large volumes of residue for potential winter grazing.
- Ethanol production provides quantities of distillers' grains for cost-effective feed.

Over the past three years, Rasby and a team of Nebraska researchers have run several tests to compare cow-calf production systems, and conducted sensitivity analyses to measure the effects of changes in feed prices, replacement-heifer costs and calf values on the profitability of systems such as confinement feeding.

In one of those experiments, the researchers compared a year-around confinement system with a semi-confinement system that incorporated winter cornstalk grazing. In this trial, cows managed year-around in the drylot had heavier ending weights and body condition scores (BCS) compared with the cows grazed on cornstalks. Cows wintered on cornstalks lost weight and experienced a 0.7-point decline in BCS, while cows in the drylot gained BW and had a 0.5 unit increase in BCS. Calves in the drylot had higher average daily gains and heavier ending weights compared to calves grazing cornstalks.

However, winter cornstalk grazing reduced costs considerably. The researchers calculated the winter production inputs for grazing cornstalks at about \$0.87 per pair per day, resulting in a total of \$144 per pair for a 165-day winter grazing season. In contrast, they estimated the cost of the drylot wintering system at \$2.16 per pair day or \$356 per pair per grazing season. Overall, and accounting for the lighter weights of calves from the cornstalk group, the researchers found that incorporating winter cornstalk grazing into the system was \$137 more profitable compared to cows wintered in the drylot, and the semi-confinement system can be economically competitive with conventional systems.