



Outside the Box

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High-priced corn and the cow herd

We live in a time filled with uncertainty, new rules and evidence that many of our previously valid assumptions may prove to be unworthy in the future. For nearly the past half century the cattle business has operated on two chief assumptions — cheap corn and relatively low-priced fuels.

Thing of the past

These two economic realities of the past underpinned the development of the modern feedyard industry, allowed the beef industry to produce greater volumes of beef with smaller cow inventories, made it possible for the industry to efficiently transport calves from the major beef cow production regions to the feeding region, and ultimately facilitated cost-effective distribution of beef products to consumers.

However, these assumptions appear to be incorrect in light of the current feedgrain and fuels markets. Corn prices have risen dramatically in the past several months, stimulated by the rapid growth of ethanol production. By 2008, many analysts expect nearly 4 billion bushels (bu.) of corn, about one-third of U.S. production, to be utilized by the ethanol industry. Certainly, the ethanol tax credit has had an effect on the price distillers have been willing to pay.

Dermot Hayes, Iowa State University agricultural economist, estimates the tax credit allows the ethanol industry to pay up to \$4.05 per bu. for corn with \$60-a-barrel crude oil prices, and a whopping breakeven of \$5.43 per bu. of corn when crude prices reach \$80 per barrel.

Without the tax credit and under the same crude oil prices as previously described, the breakeven for corn falls to \$2.52 and \$3.90, respectively, he says. Even without the federal tax credit for ethanol, the price of corn settles higher.

Crude oil prices topped out in the low- to mid-\$70s last year and appear to be headed for an average in 2007 between \$55 and \$60. Cattle-Fax and other analysts suggest these price shifts are fundamental long-term changes in the marketplace.

Changes ahead

What do these changes mean to the

industry? In the short run, without fairly dramatic increases in beef demand, the rising cost of inputs will almost certainly translate to lower feeder- and fed-cattle prices following the historic highs enjoyed by the industry in the last few years. In the longer term, it would seem the industry will have to more precisely determine which cattle should enter the feeding phase as calves and which should be grown out through the use of lower-cost roughages as stocker cattle. At the same time, the industry needs to strategically assess the appropriate genotypes to generate profit under these new rules.

With cheap inputs, it was rational for the industry to largely focus on making cattle gain more rapidly to heavier finished weights. Cheap feedgrains also made it feasible for natural and organic production systems to forego utilization of growth-promoting technologies such as implants.

Today, cost of gain exceeds 70¢ per pound (lb.) in many cases. As cost of gain increases, feeders will find themselves trying to optimize time on feed. The end result — lighter carcass weights with higher demand for cattle that gain rapidly for shorter finishing periods while yielding carcasses that have a high potential for marbling without creating Yield Grade (YG) 4 and 5 problems.

Improving quality

The industry has steadily increased carcass weight as the result of both intentional management strategies and steady selection pressure for increased growth rates. Average carcass weights today exceed 775 lb., an increase of approximately 75-80 lb. during the past decade.

Simultaneously, the industry has struggled to maintain production of Choice and higher carcasses at the levels demanded by the retail and foodservice sectors. Furthermore, as carcass weights have risen,

average cut size has also grown to the point many purveyors and foodservice operators have voiced their displeasure with excessive size. To be honest, the trend to lower carcass weights may eventually improve the percent of cattle reaching the Choice grade as well as better meeting the needs of customers for portion size.

However, these projections are based on the assumption the cow-calf sector will make the following changes as the result of increasing input costs:

- Reduce selection pressure on growth rate in an effort to create calves better-suited to shorter time on feed while reducing mature size of the cow herd.
- Create heifers that can become functional replacement females without having to be developed on expensive, grain-based diets.
- Increase focus on the development and better management of forages both to meet the nutritional needs of the cow herd and as a means to retain ownership of calves through a stocker/grass yearling program.

Challenge ahead

Forecasting the future is a challenge, but given the scenario playing out in the industry, seedstock producers are advised to critically evaluate their selection strategies in light of the changes previously described. In short, considering the following questions seems prudent:

- Is it time to turn our attention to tasks far more challenging than making cattle bigger?
- Have we made our cows too big?
- Are feeder cattle too late maturing?
- Can we afford the genetics we've created in the past 20 years?

As difficult as this seems, great seedstock producers aren't afraid of the answers. In fact, they welcome the challenges brought on by change and are confident the selection tools available today help make it possible to create profitable cattle that fit emerging economic scenarios.

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