Can Ethanol and Cattle Coexist?

Economists say yes — with a sharp pencil and some ingenuity.

by ***Barb Baylor Anderson***

Ethanol is the new sheriff in town, and beef producers are rightfully nervous the exploding industry could take up more of a ready feed market. Corn prices have already jumped to near-record highs on the prospect of continued ethanol industry growth.

Livestock economists, however, say a peaceful coexistence is possible for the future. While more corn may be in demand by the ethanol industry, a sharp pencil and some feed ration ingenuity can keep beef producers in the game for years to come.

"When you look at the big picture from a livestock economist's viewpoint, you see the impact ethanol has on a number

of agricultural industries," says David Anderson, Extension livestock economist and associate professor with Texas A&M University.

"We are better off to recognize up front that ethanol is a positive for corn producers. But those who rely on the feed market are negatively affected. There are costs," he says. "When you take a 56-pound bushel of corn, and extract 17 pounds of dried distillers' grains (DDGs), you are essentially giving up 56 pounds of feed for 17. That's not a good tradeoff. But cattle producers can make some adjustments and still be profitable."

Cost vs. performance

Anderson says the primary, obvious challenge for cattle producers is the cost of feed. "Calves are going to move through feedlots, including seedstock offspring, so virtually everyone in the industry is affected by higher prices," he says. "When corn started to rise last year, the response was immediate. We saw lower prices for calves."

If there is good news, he adds, it is that the shock in the market came at a favorable time in the cattle cycle. Calf supplies were tight, and calf prices were high. "We were at record prices and came off those highs to a pretty good level still," he says. "But we will have high feed costs for the next few years, and need to adjust for that."

Anderson and his associates put together a simulation model to determine what the best options might be for cattle feeders in the new ethanol world. The model used a base ration of corn, hay, soybean meal and minerals. The researchers then considered various ration alternatives, including 15% and 30% dried and wet distillers' grains (WDG), reduced corn in rations, and both steamed-flaked corn and dry-rolled corn. Distillers' grain offers more energy and protein than corn and has fiber that is usable by ruminants.

The average daily gain (ADG) with the base ration was 3.18 pounds (lb.) per day. Other ration performance ranged from 3.0 lb. to 4.07 lb. per day. The latter, a 15% wet distillers' grain and dry-rolled corn combination, represented a 30% gain.

"In each case, 15% wet distillers' grains were the least cost and increased cattle performance. The cattle gained enough to offset transportation distance," Anderson explains. "The cost of gain was a 3% to 8% reduction in the average cost of gain. The costs were adjusted for product, additional capital costs, transportation and corn basis."

Anderson also notes that when corn prices rise, so do prices of distillers' grains, although incrementally not as much. While distillers' may be cheaper relative to corn for some producers, the overall feed ration may not, he explains, cautioning that every operation is different. He says producers must individually determine what is best.

"The economic advantages are there for beef operations located near ethanol plants, especially in places like South Dakota and Nebraska," he says. "Research shows that the cost of gain is the main variable. Our results show that you can improve cost of gain, and the increased performance and higher daily gains can pay off."

Consider your options

If you do choose to try wet or dried distillers' grains, Anderson advises having a feed content test conducted. "The variability of nutrient content is a major issue with these grains. You need to confirm you are getting what you think you are getting," he says.

Cow-calf producers might also evaluate purchasing in tubs feed products that contain DDGs. "I know several producers who are pleased with the results of these products used as supplemental feed in the winter or in pastures," he says.

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But again, Anderson advises that producers must weigh the pros and cons. If you feed wet distillers' grains, the product can spoil quickly. Wet distillers' must be fed within a certain window, he says, so purchasing smaller loads or using it in colder months may be best.

"Transportation and unloading the product can be tough," he says. "The closer you are to a source of wet distillers' grains, the more likely you can make it work. Otherwise, you are paying to haul water. If you buy dried distillers' grains, transportation may be less, but the product itself could be more expensive because natural gas is used to dry it."

Anderson says, in most situations, relocating feedlots is not a feasible solution. "Feedlots are not going to move, but we see some ethanol plants co-locating near cattle-raising areas," he says. "Environmental regulations are another big factor that could prevent moving feedlots. Beef producers also need to consider their current location in relation to the packing industry before making any dramatic changes."

As time passes, Anderson anticipates new research will reveal additional options for beef producers in maintaining profitability. Work is under way to determine whether wet distillers' can be stored in silo bags or mixed with straw, hay or corn stover to extend its shelf life. Other research is exploring ways to remove oil from the corn prior to ethanol production to create a distillers' grain with more protein and less energy.

"Producers need to consider their options. Determine what works best in your feed ration and your bunk space," he says. "As more ethanol is produced, we may see prices for distillers' grains get cheaper. You need to do what is most feasible for you."

For more information, Anderson suggests producers visit the Livestock Marketing Information Center web site at *www.lmic.info.*