Food, Fuel or Feed?



corn food, fuel or feed? Competition for the most prolific U.S. grain commodity has everyone begging the question. The most recent escalation in ethanol production is putting an increasing burden on the demand for corn.

This rang true to me at the National Association of Farm **Broadcasters Convention in Kansas** City, Mo., in November. I was scheduled for several radio interviews with broadcasters from across the country to discuss the growing demand for Hereford genetics, breed trends, and the feed efficiency and heterosis research the American Hereford Association (AHA) is pursuing. In more than half of my interviews, the broadcaster turned the questioning around by asking what I thought of the growing ethanol production in the country and its effect on beef cattle production.

My immediate response sounded great for the farmer, but tough on the rancher, and so far that has been the case. I'm certainly not anti-renewable fuels. I think it's novel that we're trying to reduce our reliance on

foreign oil; however, we're all going to have to get ready for a major adjustment.

If you're a corn farmer, this old, but enhanced, technology could mean the greatest opportunity to increase farm profits in many decades. For cattlemen, though, it will undoubtedly mean higher feed costs and increased competition for feed resources with an economic engine that could double the demand for distillers' corn two-fold by 2009.

This year the U.S. Department of Agriculture (USDA) reported the third largest corn crop on record in

the U.S.; however, corn prices still reached a multiyear high, breaking \$3.50 per bushel. The effect of corn prices put negative pressure on the feeder calf market as 500-lb. calves lost upward of \$140 per head. The days of \$2-2.50 bushel corn may be gone for good as the ethanol industry ramps up to meet the new demand.

History of the ethanol industry

Ethanol production for fuel use is an old technology dating back to 1908. Henry Ford was the first big supporter of home-grown renewable fuels, and his Model T could be modified to run on both gasoline and pure alcohol. Ethanol was used to fuel automobiles well into the 1920s and 1930s, but by the 1940s the war effort sparked an enormous effort to mass produce petroleum-based fuel. The efficiency, mass volume and low cost of petroleum cooled any interest in producing liquid fuels from agriculture crops.

In 1978 Congress increased interest in ethanol production by passing the National Energy Act, which contained a federal tax exemption for gasoline

containing 10% alcohol. By 1989 tax incentives made ethanol economically attractive in the Midwest, but the lack of infrastructure in handling alcoholblended gasoline made the product difficult to distribute. Therefore, mass marketing was not pursued until recent years.

Growth of corn-based ethanol production

Today the demand for ethanol is escalating at an exponential pace. The chaotic uncertainty in the Middle East has cost us dearly at the pump According to the Renewable Fuels Association, there are at least 106 ethanol plants in production and there are a reported 56 plants under construction.

Ethanol production has doubled in the last five years and is expected to double again between now and 2009. The new plants going in have five times the capacity of the previous generation of distillery plants. Cattle-Fax analysts predict corn usage for ethanol production will increase from more than 2 billion bushels this year to 4.5-5 billion bushels by 2009. Some believe that the state of Iowa could become a net importer of corn by the end of the decade. High corn prices and aggressive planting could drive prices of other feed grains higher as grains compete for planting.

How big can this renewable fuel movement be?

The U.S. Department of Energy reported the U.S. imported \$320 billion dollars of petroleum from other countries in 2005. That figure is larger than the U.S.' entire agriculture production. The U.S. is heavily reliant on foreign sources of oil.

Despite the debate over the questionable efficiency of ethanol-

producing technology, it is a boondoggle for the politicians. Alcohol-treated fuel burns cleaner, satisfying the environmentalists. High corn prices benefit the American farmer and thus the reduction in subsidies might be easier to address. Finally, anything done to reduce foreign reliance on petroleum, particularly from those countries that don't like us very much, is a campaign manager's dream. In other words, this technology is not about to go away, but only become more efficient.

Potential effect on cattle industry

Undoubtedly, we have felt the onset of ramifications of the growing ethanol industry. High corn prices always affect feeder calf prices negatively. We can expect more of that, and as we all know, bull prices mirror feeder prices. This year's bull sale season has remained strong. Continued profitability in the cow-calf sector will help maintain strong bull demand for at least another year, at which time we might see an adjustment.

The feeding industry is becoming more familiar with how feedlot cattle perform on byproduct distillers grain from plants, but there is still a lot to learn.

Furthermore, it is unknown whether or not the distillers' byproduct will be used as an energy source to fire up the plants, creating a higher and better use for the feed resource.

One thing is for sure, the beef industry's reliance on corn as the major source for efficient, quality cattle feeding may change.

Efficient cattle that can finish earlier will definitely be in demand as feed costs escalate and days on feed shorten up. That certainly plays into the Hereford breed's hand. HW

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