

# Fitness Trumps Production

by John Maddux

**Five dollar corn, \$150 hay, diesel at \$4, explosive ethanol investments and pastures plowed up for grain are all today's reality. The price shocks we are experiencing in agriculture today are truly mind numbing and they will have a huge impact on the structure of the cattle industry. The cost of producing a calf has skyrocketed over the past year and a half. While the increase in demand for corn with government subsidized ethanol is a big change in our system in its own right, the secondary effects are now filtering out into other related areas.**



**Red Angus has an opportunity to capitalize on our changing environment by stressing these more economic relevant traits (less mature size, less milk, and better fitness) in a high cost world for the commercial sector. These fitness and convenience traits are your natural strength and are a competitive advantage to be exploited.**

Today, there is every incentive for farmers to shift their resources from forages to grain. This will affect both winter and summer costs for cow calf producers. Here are a few examples: large swaths of tillable land used for hay/pasture/CRP is certain to be farmed up to make room for more grain, increases in ingredient and transportation have caused the price of cake and other supplements to explode, wheat pasture is increasingly scarce as farmers focus on selling bushels not pounds of calf, and grazing alternatives outside your immediate area are less feasible because of elevated trucking rates. One has to think that these costs will have an impact on the type of genetics that are demanded by the beef industry in general and your Red Angus customers in particular. While my ability to prognosticate the future is shaky at best (just ask my banker or broker), I think we can lay out a scenario about how individual producers might react to the price signals that we are presented with today.

High priced feed probably won't create a change in use of our genetics per se, but its impact will be a secondary response. The first pressure producers will feel is a massive incentive to reduce the amount of stored feeds they put into their cowherd. Here is how this pressure might manifest itself. Timing of

calving to more closely mirror green up is one strategy that producers are likely to adopt to cope with expensive feed. Breeding dates will be pushed back so that calves hit the ground closer to green grass. January and February calves will feel the heat (or one might say these calves 'feel the cold!') because of the number of days when stored feed and supplement is needed to support that lactating cow.

Late spring, summer or even fall calving (coupled with early weaning) may be how many producers respond to the squeeze created by high priced feed. Most of you are probably acquainted with the research conducted at the University of Nebraska, which documented how delayed calving dates significantly reduced on winter feed costs. More grazing when the cow needs are low results in less hay being fed. As a result, calves will be weaned at a younger ages and lighter weights in the fall. There will be incentives in the marketplace to carry these calves over to yearlings. With high priced corn the value of these lightweight calves will be depressed.

Demand for calves will be reduced because calf-feds will fall by the way side. When we had \$2 corn there was every reason in the world to put a freshly weaned calf on hot feed and put on 35-40 cent costs of gains

until slaughter weights. With \$5 corn these costs of gain are now approaching 80-90 cents per pound and calf feds have prohibitively high break evens in the feed yard. Today there are enormous incentives to put on cheaper forage based gains outside the feedlot. Winter grazing on small grains and rough forages (perhaps coupled with some sort of supplementation), and summer grass will be a much more attractive alternative now that corn has more than doubled in price. Moreover, the cattle feeder and the marketplace will reward those producers willing to produce an 850-pound feeder animal. This will result in less corn and more forage in order to produce our beef supply but obviously at a slower rate.

Now if you accept these arguments, here is how the secondary impacts of high priced feed might bleed into genetics. While I don't have any hard science to back me up, my intuition tells me that super sized growth is not necessarily the type of cattle that fit this yearling production system. Cattle that are moderate in growth and have some capacity and fleshing ability best fit this system. If you're going to grow cattle slowly on forages, wouldn't you prefer lower maintenance animals to winter? After all, cattle have to satisfy their maintenance requirements before they can start to put on gain and large framed animals need more inputs just to maintain that larger body size. Also, the feed requirements to maintain that high growth dam of that high growth calves require more inputs.

On the same note, it has been shown that high milk has a similar effect. Not only do high milk cows need more nutrition, the calves out of these cows have higher maintenance needs. The biological factory built into the genetics of high milk requires more nutrition. The internal organs of high milk animals require more blood flow and metabolism and thus higher maintenance requirements. In addition, doesn't it make more sense to put the feed directly into the calf rather than inefficiently putting feed into the cow that converts it into milk, which is then converted into pounds of calf? So for these reasons, I think we can conclude that the lowered maintenance, lower input cow probably fits our present economic environment.

But beyond these cost factors, there are market reasons for moderating growth and size. If we take that high growth feeder animal, even if we are able to put on relatively cheap outside the feed yard gains in order to create that big feeder steer, we still run the very real risk of producing a heavy carcass of over 1000 pounds that is heavily discounted by the packer. With these heavy carcasses our cheap gains are all for naught if we have a \$20-30/cwt discount in the beef.

So where does this leave us? I would suggest that in today's economic environment we have probably reached and more than likely exceeded, optimum levels of growth and milk. Today our breeding programs need to be retooled to focus on the economic traits important in a high priced energy, high priced labor world. We must have a complete psychological change of attitude in our selection. After all, so much of our selection in the past has been centered on picking the biggest bulls out of the highest producing females. In the future there will be more efforts to reduce cow size and milk production and fix a level of production for your environment and production system.

Cattle breeder's focus will shift to fitness and convenience traits. Today, more than ever, growth and milk will take a back seat to traits like fertility in low input environments, grading choice without large quantities of grain, calving ease, udder structure, highly functional feet and legs, docility, longevity and fleshing ability. While some will find this philosophical divide psychologically difficult to make, I would argue the truly innovative and creative breeder will be rewarded. Going forward our selection criteria will require more creativity and art in animal breeding to capture those hard to quantify traits that are economically important in a high cost world.

I suppose that we have had such an inordinate focus on the production traits because they happen to be easy to see and measure, while the cost side of the cow calf equation is harder to get your arms around and measure. You can see this today in the dairy industry today where the single minded focus on production has resulted in lowered fertility rates and increased cow turnover to the point today where more milk cannot be justified ...especially in a high feed cost world.

Red Angus has an opportunity to capitalize on our changing environment by stressing these more economic relevant traits (less mature size, less milk, and better fitness) in a high cost world for the commercial sector. These fitness and convenience traits are your natural strength and are a competitive advantage to be exploited. If Red Angus follows this path, you will be well positioned to compete with your high growth brethren that have out-sized genetics, a relic from the long gone days of cheap energy, cheap corn and cheap feed. ■

*The conclusions drawn in this article are hardly original. They are borrowed, paraphrased or taken whole cloth from various friends, professors, articles and other sources.*