Beef Logic

by R.A. "Bob" Long

Fat rebuttal

As the author of "Beef Logic," I have tried to avoid debates and arguments by simply presenting ideas and the support for them. However, the "What's Your Beef" column in the March issue of the *Angus Journal* (pages 167-168) presented two items that sharply criticized my suggestion that breeding-stock-selection criteria should emphasize less fat. Because of the great importance of carcass composition to the beef industry, I feel obliged to respond.

I certainly agree with the idea that the evaluation of beef carcasses should include ribeye area (REA) per unit of weight. However, both items state that fat is a management issue, not a genetic issue. They suggest managing fat with nutrition or by slaughtering the cattle when they reach a desired yield grade. This I cannot accept for the following reasons.

Identification of genetic potential is the goal of all performance-testing programs.

Fat deposition *can* be reduced nutritionally. Either decreasing daily feed intake or reducing caloric density of the diet will reduce fat deposition. However, neither plan works in the cattle business. Either method results in reduced rate of gain, increased feed per pound of gain and a longer feeding period to reach slaughter weight. A large portion of an animal's feed consumption is used for body maintenance and is not available for production.

Allowing only a small amount of energy above maintenance reduces rate of gain and increases feed per unit of gain. This reduced efficiency, plus the interest on feed and cattle for an extended period, destroys any chance for profit. Try to convince an experienced cattle feeder that you can starve a profit from a set of cattle.

The idea that it is feasible to control the yield grade on a set of cattle by deciding time of slaughter is ridiculous. True, a steer can be slaughtered at any fat thickness desired. However, steers genetically programmed to carry an inch of fat at 1,200 pounds (lb.) should not be killed at 0.3 inch (in.). The carcass would be too small, there would be too little marbling to grade and no packer would want to buy him for slaughter.

Fat-deposition patterns are hereditary and, therefore, a genetic issue. This is an established fact supported by reams of research data and years of experience and observation by breeders, feeders, packers and animal scientists.

Assume a group of feeder steers with variation in genetic background but of the same age and condition were fed together on a high plane of nutrition for a normal feeding period. When slaughtered, there would be wide variation in both muscling and fatness. Particularly fatness would vary with large differences in the percentage of total fat in marbling, seam fat, subcutaneous fat and internal fats. Almost everyone in the beef industry knows this.

It is a problem, and it is due to differences in genetic potential. Identification of genetic potential is the goal of all performance-testing programs.

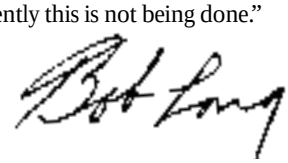
Note that both items devote considerable attention to whether the carcass fat thickness should be adjusted to 0.3 or 0.4 in. This, after pointing out that carcasses in the database average 0.55 in. or more? Adjusting excessively fat carcasses downward will not solve the problem. **The carcasses are too fat.**

In the real world, packers and retailers know that 750-lb. carcasses with 0.25 in. of fat, 14.5-15.0 sq. in. of REA and sufficient marbling to grade high-Choice are more desirable than others. They have no way to "adjust" overfat, light-muscled carcasses — they just lose money on them.

Why go through the mathematical gymnastics of adjusting fat thickness and REA? Why not harvest the steers when they weigh 1,200 lb. and use the ancestors of those that have less fat, more REA per unit of weight and more marbling? There will be improvement in body composition, and it will be many generations before the cattle are too lean and too heavily muscled.

Or better still: Ultrasound all the breeding stock as they come off postweaning gain test at 12-14 months of age, and establish independent levels of culling for reproductive efficiency, growth rate and carcass characteristics.

I stand by the summary statement in the October "Beef Logic" column: "Excess fat is a problem in the beef industry. Excess fat production is inefficient. Fat carcasses yield a lower percentage of retail product and are worth less money. Fat thickness is a heritable trait. Fat thickness can be reduced only by genetic change. Therefore, breeders should emphasize fat in selection criteria. Currently this is not being done."



We welcome your input

Our Beef Improvement section includes information for today's performance-minded breeder. Both "Beef Logic" by Bob Long and "What's Your Beef?" serve as forums for Angus breeders and industry experts to express their opinions on current issues and topics of breed improvement and performance programs.

Send, fax or e-mail your comments to:
Angus Journal, Editor
3201 Frederick Ave.
Saint Joseph, MO 64506-2997
fax: (816) 233-6575
e-mail: shermel@angusjournal.com