

# Beef Logic

by Bob Long



## Low birth weight not a cure-all

Beef cattle producers, both purebred and commercial, tend to strive for extremes when selecting seedstock on the basis of expected progeny differences (EPDs) and/or actual performance measures. A perfect example is found in the emphasis often placed on low birth weight and negative birth weight EPDs. This unwise practice results from the assumption that small birth weights solve calving problems.

Generally speaking, small calves rarely cause difficult birth — but at what expense? Even with great accuracy a low EPD for birth weight is not a guarantee for herd or breed improvement. The rate of growth of a fetus during development is a reflection of the calf's genetic potential for growth after birth and throughout the growing phase of its life. This fact explains the positive correlation between birth weight and rate of growth or yearling weight. It also explains why selection for low birth weights usually results in reduced growth rate.

It's a rare occurrence to find a bull with a low EPD for birth weight and a high EPD for yearling weight. Unfortunately, when it does occur the offspring of such a bull exhibit undesirable composition by being light muscled and excessively fat. Why search for bulls that sire calves which any cow can have without difficulty knowing that the calves will be of little value?

Further, the fact that a bull with a low birth weight EPD sires calves which are born easily does not guarantee that his daughters will be "easy calvers." Why not use bulls whose daughters can and will have a big, strong calf that will grow rapidly and efficiently and yield a desirable carcass?

If small calves at birth is a goal, remember that EPDs are a much better predictor of the size of a bull's calves than is his actual birth weight. The EPD is calculated from birth weight data of a large number of close relatives collected in different seasons and from many different

locations. Birth weight EPD is well-established as a better measure of genetic potential than is a bull's own birth weight.

For example, a chance effect of weather or management can shorten or lengthen the gestation period of a cow by four or five days or more and can result in sizable differences in birth weight which are not due to genetics. There should be no hesitation in using a bull with an excessive birth weight if the EPD for birth weight is reasonable.

Unfortunately, the industry has tended to oversimplify the solution to calving trouble by a never-ending search for "heifer bulls." Such bulls are defined as small in size, light muscled and with small birth weights. Each of these three traits is in conflict with efficient beef production.

When the above concepts are offered to seedstock producers, many of them will agree. However, they hasten to point out that unless they offer bulls with low EPDs for birth weight and actual low birth weights, commercial breeders will not buy and the customer is always right. Perhaps the seedstock producer should strive to educate customers as to their needs for improved efficiency and profits rather than give them what they think they need.

There are many factors other than size of

calf (birth weight) which contribute to calving problems. Among these are shape of calf, age at first calving, breed effects, plane of nutrition, gestation length, pelvic size and/or shape, calving season, geographic location and the will to calve. These many contributing factors make for a complex problem and attention to any single item is not a solution.

Purebred breeders should treat cattle uniformly and under a nutritional and management program typical of the commercial herds in their respective areas. The replacement heifers should be required to calve as two-year-olds without assistance when bred to herd mates. The steer calves resulting should have the genetic potential to weigh 1,200 pounds at 13 or 14 months of age and produce a USDA Choice, Yield Grade 2.0 carcass.

Cattle not meeting these standards should be culled. The birth weight will take care of itself. The very best of the cattle that meet these requirements should be retained for herd improvement and the rest offered for sale along with complete performance records.

Commercial cow-calf producers should buy bulls from the breeders who follow the above program.



### WE WELCOME YOUR INPUT!

*Our Beef improvement section has been expanded to include more information for today's performance-minded breeder. Both "Beef Logic" by Bob Long and the "What's Your Beef?" columns serve as a forum for Angus breeders and industry experts to express their opinions on current issues and topics of breed improvement and performance programs.*

*Send or fax your comments to:*

*Editor, Angus Journal  
3201 Frederick Blvd.  
St. Joseph, MO 64506  
Fax (816) 233-6575  
E-mail: journal@angus.org*

