

# Beef Logic

by R.A. (Bob) Long



## Capacity & volume — still meaningless

The term “capacity” is another word commonly used among cattlemen that deserves review and discussion. “Capacity” is a term that implies deep-bodied, deep-flanked, big-bellied cattle possess more feeding and breeding capacity and will, or already have, recorded superior performance. When, oh when, will cattlemen learn to look at performance records rather than at the cattle to determine growth rate and reproductive performance?

**... to say they are long-bodied with volume and capacity gives the prospective buyer little information to work with. Think about it.**

Overall depth of body includes a combination of loose hide and the fat deposited therein and is not a measure of the capacity of the digestive

tract or that of the thoracic and abdominal cavities.

A big middle or paunch is not a measure of how much feed cattle can or will consume, nor is it an indication of potential for growth rate. Big bellies can result from light muscling (as in the case of dairy cattle), which allows the paunch to sag. A parallel can be seen in the well-conditioned athlete with good muscle tone. The waist is small with a “tight belly,” yet the capacity for food is tremendous.

Big bellies can also result from excessive fat deposits around the kidneys and on the intestines and the mesenteries that support them. However, the fact that the abdominal cavity is filled with fat does not increase the capacity of the gastrointestinal (GI) tract. Further, such fat deposits reduce room for fetal growth and can extend into the pelvic canal and cause calving problems.

There is considerable variation among cattle in the amount of “residual fill” they carry. Cattle that have been treated exactly alike have been found to vary greatly in the amount of feed and water retained in the GI tract.

Cattlemen are often heard to refer to big-middled, paunchy cattle as having great capacity. Such reference implies that this trait is associated with rate of gain on post-weaning gain tests. However, this could well be an error and could be an indication of above-average residual fill. A big, paunchy yearling can easily retain 50 pounds (lb.) of fill above the average of his contemporaries. This 50 lb. amounts to 0.35 lb./day for a 140-day test period. It is not an increase in empty body weight and results in a significant error in measuring growth rate.

**The term “volume”** is another frequently used term that is not only meaningless, but also confusing. When cattlemen speak of a big-volumed bull, it’s impossible to know whether reference is to the amount of space the bull occupies or to how much the bull can hold.

Perhaps he is a noisy bull, as in “turn up the volume,” or the breeder may have other bulls like him that can be supplied in volume. Regardless, the term “volume” offers no information about cattle that has to do with beef production efficiency.

Enough sarcasm. Readers,

please be informed this writer’s attack on “meaningless terms” is not meant to offend or ridicule the users of such terms. Rather, it’s a sincere desire to improve communications in the beef industry.

The beef business in this country is tremendous in size, very complex and extremely important economically. Because of its magnitude and the extreme variation in individual animals and carcasses, there is difficulty in communication among and between breeders, feeders, packers and retailers. Considerable progress has been made. For example, describing a carcass as a 700-lb., USDA Choice, Yield Grade 1 carcass does a reasonably good job of representing that carcass to a customer. However, in the case of seedstock, feeder and slaughter cattle, to say they are long-bodied with volume and capacity gives the prospective buyer little information to work with. Think about it. There is a better way.

### 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.

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