

PERFORMANCE REPORT

BEEF LOGIC

by Bob Long

Avoiding the Financial Disaster of Calving Problems

Dystocia or calving difficulty is a serious problem. Caesareans are expensive. Herdsman assistance at calving involves time, labor and inconvenience. Calves which survive a difficult birth are much more likely to die during the critical two or three weeks after birth. Cows and/or heifers that experience problems at calving are slow to rebreed.



Bob Long

It is small wonder that cattle producers are concerned with this problem.

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

Size of calf as measured by weight is always listed as the most important item contributing to a difficult birth. However, birth weights are the result of the total impact of genetics and environment. Therefore, selection on the basis of individual birth weight is not indicated.

A frequently heard remark from a present day cattle producer is, "I would never use a bull whose own birth weight was more than 80 pounds." This is quite a simplistic statement and certainly not a solution to the problem.

A far better predictor of the birth weight of a bull's calves would be the expected progeny difference (EPD) for the birth weight of the bull. The EPD is calculated from birth weight data of a large number of close relatives. 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. It can also result in sizeable 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.

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 is 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 often exhibit undesirable composition by being lightly muscled and excessively fat. 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.

Another factor affecting ease of calving is the shape of the calf. Baby calves, as are all cattle, are composed of three major tissues — bone, muscle and fat. Calves are born with little fat.

Therefore, the only variables are bone and muscle. Bone makes up the frame or skeleton. Sizeable differences exist among newborn calves in both length and thickness of bones. However, because of the softness of the cartilage which holds the skeleton together and the angle of the bones in a normal birth position, the size of the skeleton is not usually a problem. However, muscle development can be a major cause of trouble.

For example, two calves of identical frame size but with a different degree of muscling can easily vary 20 or 30 pounds in weight. Obviously, the heavily muscled calf is not only heavier but is thicker bodied and can cause trouble at the pelvic canal.

The heavily muscled calf is very desirable from the standpoint of carcass potential, but the danger at birth is a conflict of interest. Therefore, selection must be for an optimum degree of muscling.

Degree of muscling is a highly heritable trait, and this trait must be considered in herd bull selection — particularly if the bull is to be used on first-calf heifers.

WHAT'S YOUR BEEF?

Editor's note: Our Performance Report column has been expanded to include more information for today's performance minded breeder. Starting this month we are featuring a column called "What's Your Beef?" It will 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.

Serving on our panel this month are Howard Hillman, manager of Bon View Farms, Canova, S.D.; and Brian McCulloh, manager of Woodhill Farms, Viroqua, Wis.

The question we asked panel members to address this month is, "What is breed improvement in the 1990s?" Here are their thoughtful answers:

What is breed improvement in the 1990s?

Howard Hillman:

Improvement is giving direction or movement toward strengthening the breed. It is a change or addition that adds value. To do this, we need to address industry and consumer wants and needs.

Breed improvement must be based on those things that are both economically beneficial and feasible. That may mean different things to different breeders. We must approach it with a purpose or a goal and never be satisfied.

It means more than just ownership or the glory of a champion; it involves an in-depth breeding program that moves your herd and, in turn, the breed in a positive direction. This would mean using all the available breed tools and using them with confidence. You must be a believer in your breed, your product and your program. Have a plan and implement it appropriately.

We must be positive enough in direction to meet or beat the competition, and know where we need to be in the next decade. There is no such thing as a safe lead. We will also need to be able to cope with the negative influences of outside forces and do it professionally.

We need to have strong, open-minded leaders who are aware

Continued on page 126

PERFORMANCE REPORT

Continued from page 124

of any and all ideas, suggestions, thoughts or programs that may contribute to our future.

Integrity of breeders and accuracy of reporting would be one of the most important issues contributing toward breed improvement. A breed has to be built on and make advances on the strength of its membership.

As a breed or breeder, we never stand still. We are either moving forward or backward. If we stick with basic fundamentals and use all available technology, there is no reason to go backward. However, we have to produce a product that is consistent and competitive.

Breed improvement will come naturally if our thought process will always keep

in mind we have to earn it. If we do, we will thrive.

Brian McCulloh:

Breed improvement in the '90s will demand more than just taking weights. Generally, the Angus breed has spent the last 30 years recording weights at birth, weaning, and a year of age. We have managed to select for these traits and have definitely increased growth rate (pounds), added milk in some cases, and attempted to keep birth weight in line.

The commercial industry has appreciated these changes which have allowed our breed to grow and prosper. We should continue the process of recording weights, yet emphasize the importance of the "con-

temporary group" concept, as we continue in the '90s.

In the next decade, breeders will need to refine the process of selecting the "right" kind of Angus cattle. Angus breeders should monitor and hopefully intensify our selection process for the traits that have made Angus cattle so valuable in ALL crossbreeding systems. These traits are: 1.) maternal and 2.) carcass quality.

Breed improvement for maternal traits in the '90s will demand that we select for fertile, easy fleshing, efficient females that breed and settle easily, calve unassisted at 24 months, and wean a heavy calf while breeding back in the first, 45 days of the breeding season. Simple We've heard and read it before, yet those

are the most basic and important characteristics that will keep Angus cattle as an integral part of all crossbreeding systems now and in the future.

We can't lose track of the growth traits we have bred into Angus cattle today. However, we are inclined to select for extremes in these categories and may have lost some of the maternal traits that appear to be inversely correlated to the growth traits. We need to honestly evaluate our cow herds, and pay closer attention to traits like longevity, and the low maintenance cattle which are often the result of selecting for a balance of birth weight, milk and growth, rather than extremes in either direction.

The ability of Angus cattle to marble

and produce a palatable end product should also be emphasized in the next decade. Technological advancements in the area of feeding and management will allow us to decrease the amount of external fat and will result in even more demand for genetics that will assure consumer satisfaction.

However, we cannot ignore traits like growth and maternal ability as we identify superior marbling sires. Rather, let us emphasize the cattle that are above average for marbling and perpetuate the lines that also perform above average in categories of low birth weight, maternal calving ease, milk and growth.

In conclusion, even more information will be made available to us in the '90s.

Maternal calving ease will be a factor to consider in our selection process. Our carcass data bank will grow and become more important with the age of value based marketing. The packing industry will be buying on actuals rather than averages.

For Angus breed improvement to continue, we need to use all the information that is available, learn from our mistakes of single trait selection (in any category), honestly evaluate our cattle, and pay closer attention to NET PROFIT in our respective operations.

We welcome your input! *If you have a topic or question you'd like to suggest for our "Beef Logic" column, please contact the editorial office at (800) 821-5478; fax (816) 233-6575.*