

Introduction: This article was written sixteen years ago but in my opinion it still rings true today. These are some very thought provoking questions and statements that we as breeders should be giving a lot of thought to. Our breed association could also benefit from thinking about the answers to these questions. Our market appears to be extremely strong but in my opinion the reality is that it is only good with room for improvement to help insure that it stays good. I have been in the Longhorn industry for over thirty years and I have

seen our cattle prices rise to these extreme highs before to only have the bubble burst and prices plunge to below commercial cattle prices. It took many years before we saw the market recover and prices climb to a sustainable level. It is my opinion that all true Longhorn Breeders should be focusing on the long-term success and promotion of the breed rather than blindly chasing the longest tip-to-tip horn measurements. Our breed has more than one marketable-saleable trait and it is time that we start to focus on those traits to insure the success of the Texas Longhorn Breed.

## What Makes a Breed Succeed?

By Stewart H. Fowler June 1987

Did you ever wonder how or what makes a breed like the Texas Longhorn succeed? I certainly have; in fact, I have given a lot of thought to that intriguing question. We have seen a tremendous array of beef cattle breeds in the United States during my lifetime. Some breeds succeed and earn a permanent niche in our beef industry; others seem to merely hang on; while others falter, fail and practically disappear from the American livestock scene. This has fascinated me over my forty years of active work in the livestock field. No doubt, each of us could compile an impressive list of items related to the success of a breed. I would like to share my list of thirteen considerations with you.

First, if a breed is to truly succeed on a **long-term economic basis**, it must possess one or more unique traits that are needed by the commercial beef industry. It must be more than just a "me too" breed! It must differ some in economically important traits than the rest of the breeds. Otherwise, why bother to consider it if there are a dozen other breeds that can do the same thing? At Berry College in northwest Georgia, we maintain registered herds of seven beef breeds: Angus, Brahman, Brangus, Chianina, Devon, Simmental and Texas Longhorn. Visitors to the campus sometimes voice the opinion that some of these varied breeds must have been selected because of fad or fancy! Each of the breeds, however, was selected specifically because our crystal ball tells me that they possess certain traits that will be needed to meet the demands and emerging changes in our beef industry. For example, the Texas Longhorn was selected for its high fertility, browsing ability and lean meat production. Doesn't it make good sense that private breeders should place considerable emphasis on unique economically important traits also?

Secondly, to fully succeed a breed should be loaded with traits needed by the commercial beef industry. In my inventory of such economically important traits are: fertility, calving ease, calf survivability, milking ability, temperament, conformation (beef where beef counts), maximum lean meat, carcass quality, hardiness (including heat and parasite resistance for the South), disease resistance, longevity, rustling ability, fast rate of gain and efficiency of feed conversion. This list reads almost like an inventory of traits of the Texas Longhorn breed! How does your "breed of choice" rate on these traits? How many of these traits can it contribute as complementary traits in a crossbreeding program?

An important *third* factor would be for the breed to have a genetic make-up pure enough (genetic stability) to pass the desired traits to their offspring. If a breeder wants to help his breed succeed, he must make sure that the performance of the cattle that he offers for sale as seed stock is due to additive genes and not to heterosis or hybrid vigor. In other words, the cattle must possess purity (homozygosity) in their desired genes. Breed purity will help maximize the returns from crossbreeding.

As a *fourth* criteria for success, a breed must meet trends (present and anticipated) in the beef industry. In other words, it will be essential that the breed can be used to produce cattle that will have the greatest advantage throughout the production, feeding, processing and merchandising system. Admittedly, it is difficult to plan today's production for tomorrow's markets! However, I strongly believe that there are two "demands" that a breed must be ready to meet. First, my personal crystal ball tells me that the stress will be on cattle that will utilize pastures, rangeland, forage, crop residues and byproducts most effectively and efficiently. Texas Longhorns score high on this point! Second, most everyone's crystal ball should now tell them that our cattle must produce a maximum of low calorie lean meat, preferably with quality bred in for juiciness and palatability. This would mean a breed must transmit lots of lean muscle with a minimum of subcutaneous and intermuscular fat but with a modest amount of intramuscular fat (marbling) for flavor and juiciness. This second trend is readily apparent with the increased merchandising of lower calorie beef under such labels as "Longhorn Lean" and "Keylite". For the foreseeable future, our breeds must fill the role of efficiently producing the maximum muscle with a minimum of marbling included to assure quality.

As a *fifth* consideration, it is important that breeders not get "hung up" on a single trait selection — like for size alone. Granted, such selection will give the most rapid rate of genetic change in that one trait. However, it is important that a balance be kept among economically important traits if a breed is to make the greatest genetic contributions to the profitability of our total beef industry. Unfortunately, some breeds have glorified frame size to the extent that such economically important traits as reproductive efficiency and mothering ability have been almost completely overlooked.

As a sixth point, if breeders want to help their breeds succeed, they must void chasing fads! Some breeds have been seriously handicapped by breeders placing too much emphasis on a fancy or non-economically important trait. Let me draw upon the sheep industry to illustrate this point. At one time Shropshire breeders were breeding for maximum wool coverage on their animals. They like to advertise "wooled from their nose to their toes!" They were so successful in putting wool over the entire face that many animals became practically wool blind. It took quite a while for progressive breeders to undo this mistake. This delay in genetic progress permitted other sheep breeds to surge to the front. Cattle breeds are not immune to such an error by their breeders. Too rigid color restrictions for registration are one example. Texas Longhorn breeders can do the same thing also as they blindly chase the longest tip-to-tip horn measurements. One should pause and ask, "What does this contribute to the profitable production of beef?" The larger the number of traits selected for, the slower will be the progress in any one of them. Thus, the traits under selection should be the ones that are of greatest economic value which have high enough heritabilities to respond to selection pressure.

As a *seventh* consideration, it helps to have a breed represented at Land-Grant universities and other agricultural colleges, especially where the faculty understand and are thoroughly familiar with the breed. The Brahman herd at Louisiana State University and the Barzona herd at Mississippi State University are good examples. Hopefully, Texas Longhorns at Berry will become another! Among the

advantages that this offers the breed are: (1) Breed research becomes more meaningful; (2) Students become familiar with the breed, and they will be our next generation of cattlemen; and (3) When used in field days, short courses, and judging contests, a college herd becomes a good "display window" for the breed. The presence of a breed on a college campus is especially important in a relatively new marketing area for that breed. As indicated previously, Berry College has breeding herds of seven breeds of beef cattle and, in addition, is establishing small demonstration units of two additional breed – Barzona and Senepol. These breeds have created considerable interest on the part of many cattlemen throughout the Southeast, and many visitors come from outside the region. Granted, it is difficult to get a breed accepted into a Land-Grant university due to the political implications involved related to federal and state funding. It is a bit easier to get a breed accepted into a private college, such as Berry, since those colleges do not have to "play politics." The main handicap with a private college is finding one that has adequate land, facilities, and funds to take on an additional breed.

An *eighth* item of great importance is the expertise of the breeders in producing "quality control" animals for the commercial industry. *Remember, the purebred breeder is the "tool maker" for our multibillion dollar cattle industry.* Accordingly, purebred breeders must intensify their efforts to produce superior breeding stock to continue meeting the exacting specifications demanded by our beef industry. For a breed to succeed, its breeders must recognize and be the first to use new selection and breeding techniques that show merit for advancing efficiency and economy of beef production.

Although I have listed it as *ninth*, the integrity of the breeders plays a more important role in the success of a breed than this late listing might indicate! A high standard of ethics and integrity on the part of its major breeders proves to be one of a breed's very best advertisements. Remember, the purebred breeder is the guardian of the genetic material needed to advance the progress of the commercial beef producer. Every effort should be made to rid the breed of undesirable genes and to pass such genetic material on in an improved status through the use of sire summaries and by strict performance in progeny testing, judicious selection, and carefully planned corrective matings. *It has been rightfully said that purebred breeders should exercise every effort "to sell cattle that won't come back to breeders who will!" That's a major ingredient of success for the breed as well as the breeder.* 

A *tenth* consideration of great importance is to have the breed represented by a sound, progressive registry association. Most of the positive work done toward improving a breed's merit will be accomplished by able, energetic, and persevering individual breeders. However, a registry association can help hold the existing merit of the breed and can help acquaint "beginners" with what is considered ideal by the majority of the breeders of that breed. Many registry associations are now giving their breeders a strong helping hand toward genetic improvement through the annual release of sire summaries, which publish the results of national sire evaluation programs.

An *eleventh* aid to help a breed succeed is to have a number of the top sires of the breed represented in the beef sire directories of artificial insemination companies like American Breeders Service; Select Sires, Inc.; and Elgin Breeding Service. The availability of semen gives added "recognition" of the breed; and if truly genetically superior bulls are included, it will accelerate genetic progress for the breed.

A *twelfth* consideration is to see that the breed is accurately represented in the USDA Farmer's Bulletin *Beef Cattle Breeds*. If the breed is not included and a registry association exists for the breed, strong effort should be made to get it into the next revision. This publication is widely read by prospective cattlemen and by 4-H and F.F.A. members who should know about your breed as they consider the choice of a breed or breeds.

My thirteenth factor for success of a breed is sound merchandising – not just mere selling. For if a breed is to avoid the "boom and burst" syndrome, its breeders must exercise care about extreme ballyhoo, rigged bids, and "trading off" among themselves. Such practices tend to create a false image of the breed being a "plaything for the wealthy" in the minds of sound commercial cattlemen to the point that they feel that they cannot compete for the good bulls of the breed. The day is rapidly

approaching when production records and carcass cutout values will replace showing winnings and sale prices as measures of a breed's accomplishments and success. Commercial producers will insist on seeing official performance records before purchasing purebreds of a given breed for use in their production programs whether it be grading-up or, more likely, crossbreeding.

How do these points compare with what you see in your crystal ball? I am sure that I have overlooked some that you feel are important and perhaps have included some that you feel are not significant. On some, you may totally disagree. However, if I were to single out one of the thirteen as most important, it would be my very first one: If a breed is to truly succeed on a long-term economic basis, it must possess one or more unique traits that are needed by the commercial beef industry. If I am partially correct, the Texas Longhorn has a long and promising economic future that will eclipse the breed's historical claim to fame!

Source: The Longhorn Scene, June 1987.