

Genetic Advantages of Texas Longhorn Cattle

By Michael Casey

As longhorns migrated throughout the North American continent during the four hundred years between the 16th and mid 19th centuries, they evolved through a process of natural selection. Only the strongest of those cattle, (the ones which could travel very long distances, often with little feed or water, and could efficiently utilize scant grazing resources while still breeding and raising healthy calves each year), could survive and contribute to the gene pool. The strengths of the breed reflect the rugged natural survival requirements they faced. Coincidentally, many of these traits are what make them very special and highly desirable cattle in today's environment.

1. Longevity:

Longhorns typically live well into their late teens and often into their twenties. Indeed, there are recorded instances of longhorns living into their thirties. As an example, we have a cow, Day's Bobbie Sue, who is still going strong at 23 and walks up and down the rather steep hills of our California ranch with relative ease, albeit somewhat slower than her herdmates. Longhorn cows are capable of producing as many as twenty or more calves. Thus, the female Longhorn "factory"; has as much as twice the production capacity of the "factories" of other breeds. And it is not just as purebreds that they are desirable for their long and productive lives, but in cross breeding programs as well they offer those same benefits to the commercial rancher. Similarly, they make excellent embryo recipients both because they can perform that task time and again and also because nature imbued them with excellent milk producing udders. Finally, as mothers and milk producers they are unsurpassed. With a twenty percent larger pelvic area than most breeds, they have little, if any, trouble calving no matter what sort of bull is used. Since calves, whether they be purebred or crossbreeds, are a cattleman's primary (if not sole) product, it is obvious that the more calves that can be turned out by a mother cow, the lower is the rancher's cost for replacement inventory.

Longhorn bulls can also introduce traits of longevity into a commercial herd through their crossbred offspring. Using another of our animals as an example (in this case one we no longer own), we had a bull a few years ago named LL Wrangler. His maternal great grandsire, Texas Star was the 26th AI certified Texas Longhorn bull and was still siring calves into his twenty-first year of life.

Although Fairlea Longhorn Ranch is in the purebred Texas Longhorn business, we recognize that many sales of Longhorns (including some of our cattle) will be to commercial cattlemen. Therefore, it is important to note that when one crosses a longhorn with a polled breed, the gene for polling is dominant, which means that the resultant calf will likely be polled and, therefore, not subject to concern about horn by buyers in the sale yard. Hence, the characteristic of longevity is not only important to the purebred producer but is also very important for commercial ranchers to consider.

2. Fertility:

Texas Longhorns are known for their high fertility and live birth percentages. It is common for herds of longhorn cows to achieve live calving percentages of 99% or more, a trait which is obviously highly valued by all cattlemen (commercial and otherwise). On the male side, Longhorn bulls are known to have higher live semen counts than bulls of other breeds, a fact which not only makes them more prone to successfully service their entire herd but is also directly linked to younger breeding ages in female offspring.

Most animal scientists agree that high fertility rates are the single most important economic trait in the cattle industry. Indeed, the surest way to a death sentence for a cow is to fail to breed back. In the case of Longhorns, the process of natural selection over the past few hundred years assured that only the most fertile bulls and cows

would contribute to the gene pool. Modern day Texas Longhorns retain this influence from their recent ancestors, and it is a trait which, when introduced into a crossbreed program, can provide an almost immediate reversal of the problem of lower percentage of live births which plague many other breeds.

3. Calving Ease:

It is common knowledge among sophisticated ranchers that Texas Longhorn bulls produce low birthweight calves which result, in almost all cases, in easy, live, and unassisted births of vigorous calves. This is particularly important for first time heifers. The U.S. Meat Animal Research Center at Clay Center, Nebraska, has evaluated 1,905 births among 11 different breeds and found that the Texas Longhorn proved superior by far, having an average of 99.7% live unassisted births as well as the lowest average birthweight of 71.3 lbs. These low stress birth traits in Texas Longhorn sired calves not only dramatically increase the chances of a live calf being born but also enable the mother cow to quickly re-breed after an easy birth.

Longhorn cows also possess a naturally larger birth canal than other breeds. Thus, it is not only the fact of low birthweights which provides for calving ease, but longhorn cows themselves are graced by nature with a body which enables them to mate with bulls of other breeds and safely deliver healthy and vigorous calves from those pairings.

This trait of easy and uncomplicated calving is of enormous benefit not only to the purebred Texas Longhorn breeder but also to people considering using Longhorns in a crossbreeding program.

4. Adaptability and Browse Utilization:

Texas Longhorn cattle can efficiently process many grassland products which go untouched by other breeds. Examples include huisache, huajillo brush, willows, mesquite, yucca, and many other esoteric strains of substandard fare. Indeed, Longhorns have been known to safely consume the Tansy Ragwort, a weed found mainly in the Northwest which is highly toxic to other bovines. This ability to browse efficiently on whatever pasturage is available enables ranchers to achieve a higher than normal land carrying capacity with resultant revenue enhancement (ie. extra calves on a given plot of land) as well as reduced per animal costs on land leases.

This browse efficiency trait of Longhorn cattle is also important in terms of adaptability. They thrive in the tropics, they thrive in the icy winters of northern Canada, and they thrive everywhere in between. An example of this adaptability is the fact that in 1876 1,000 Longhorns were introduced from Texas into Alberta, Canada. Twelve years later that herd had grown naturally to 40,000 head. There are breeders of Texas Longhorns in virtually every state of the Union as well as every Canadian province.

5. Disease and Parasitic Resistance:

Longhorn cattle are known for their excellent immune systems and natural abilities to ward off diseases which are common and debilitating to most other breeds. Hair and extra wax in their ears and hair on their udders help to repel flies, ticks, gnats, and lice. They have been known to resist screwworm and blowfly worms by simply standing in water for hours and drowning the critters. They are also highly resistant to footrot and to stress related diseases such as pinkeye and shipping fever, and where they do contract such a disease it is usually a far milder and more easily controllable matter. Finally, they have been found in studies to be highly resistant to ordinary bovine bloat.

Although on our ranches, we adhere to a strict health program which includes deworming pour-ons and vaccinations twice a year, we know of several Longhorn producers whose cattle have never, during their entire lives, had a needle stuck in them (other than bangs shots on heifers.) Indeed, some Longhorn breeders are fiercely opposed to vaccinations, claiming that over time those vaccines will overcome the breed's natural

immunities and resistances.

6. Docile Nature:

Longhorns are typically docile by nature. Whether this is a reflection of the fact that they are so well endowed with natural weapons that they don't need to posture or feign aggression is not known, but it is a fact that (with certain exceptions which do not apply to our herd) so long as a longhorn is well treated it will respond by being friendly, inquisitive and gentle. An example of this is Zhivago, now deceased but during his lifetime a 2,200 pound bull who was saddle broken and actually used as a "cutting horse" in rodeos. Zhivago was the star attraction at many political gatherings, and there are a lot of young children who, rather than getting the proverbial kiss from the politician, instead got a once in a lifetime chance to ride a longhorn bull. Another example is Chisholm, another well known saddle broken bull who, during his lifetime was said to have been ridden by over 10,000 children. Several nationally known longhorn breeders make it a point to saddle break their steers, and young bulls and heifers are frequently halter broken for 4-H projects and so that they can be shown by children. At our own ranch we approach and pet our male animals whenever we are near them. Just as we used to measure Wrangler's horn, we can today measure Lakota Chex any day of the week in the field by putting the end of the tape measure against one horn tip and simply extending it out to the other tip while he sits quietly eating hay.

Our cows are a bit more standoffish. That is something we encourage because of their need to always be alert to something which might put their calves in danger. Thus, if we halter broke them or made them too dependent on us, that could well place them at a disadvantage if a serious predator approached. By the same token they are friendly and inquisitive, and they happily mingle with us in the field even in the presence of their newborn calves. Essentially, then, the only difference between males and females in our herd is that we do not expect the females to come up to us and extend their muzzles to be petted (as our bulls do).