

A Comparative Study By Michael Casey

I have, for some time, been interested in knowing whether the Texas Longhorns I raise in California today are similar to the longhorns which roamed these lands several hundred years ago. There are two parts to this question. First, were the longhorns which populated both California and Texas in the 1700s descended from the same Spanish cattle that were brought to North America by the first Spanish settlers and were they similar to one another in appearance, temperament and other characteristics? Secondly, do present-day Texas Longhorns descend directly from the early longhorns that populated Texas or did genetic changes because of crossbreeding occur during the 19th and early 20th centuries? These are questions which may never be answered with absolute certainty.

Until recently, little has been known about the California Longhorn and, unfortunately, it died out in the 1860s. I can find no photographs or accounts that compare them to the longhorns that populated Texas in the early to mid 1800s. We do know that longhorns existed in large numbers in California and, like their Texas counterparts, propagated profusely. It is also known that they were slim-bodied and had long curving horns (Cleland, *The Cattle on a Thousand Hills*, 1941, at pages 60 and 72). Finally, they were wild, capable of an even fight with grizzlies, typically worked by expert cowboys on horseback, and otherwise appear (at least in temperament) to have been very similar to the longhorns which populated Texas during the same time period.

Research into the attributes of California longhorns has been frustrating at best. For example, Richard Henry Dana, in his classic book, *Two Years Before the Mast*, described in great detail most of the scenery he saw and events he witnessed during his several years aboard a hide and tallow collecting vessel off the coast of California in the early 19th century. However, he utterly failed to describe, by size, color, or any other way, the hides he and his shipmates collected. Dana, and countless other historians and authors, also failed to describe the cattle which populated California other than in very generic terms (i.e. "cattle", "horned cattle", and the like). Even Robert Glass Cleland, a highly regarded historian who wrote prolifically about early California and its early cattle industry, never documented any primary sources that bothered to describe the cattle which constituted the major influence on this State's early economic development. Finally, Henry Miller, a butcher and the largest landowner and cattle rancher in the State during the last half of the nineteenth century, wrote volumes of notes, instructions to foremen, reports to partners, proposals for bettering water and land management systems, and other materials. Still, his voluminous collections of papers do not apparently contain any descriptions of the cattle which grazed his pasturelands. *



While I am still unable to conclusively answer the questions I raised at the outset of this article, some relatively new information uncovered by Terry Jordan, Professor of History and Ideas in the Department of Geography at the University of Texas, has led to some interesting conclusions. In his brilliantly researched 1993 book, *North American Cattle Ranching Frontiers*, Jordan describes in detail, the movement of cattle from Spain to the New World and, ultimately, into the United States, as well as the advancement of cattle ranching across the American frontier.

Genetic Similarity of Early Longhorn Populations in California and Texas.

The longhorns which populated both California and Texas beginning in the mid 1700s were most likely direct descendants of Iberian Longhorns which came predominately from the Las Marismas region of Andalusia in

southwestern Spain. Much of the Las Marismas region is described as a coastal estuarine marsh area, which is largely influenced by tidal action and is not easily traversed by man. The cattle in this region were, for the most part, left to graze free of man's influence, and were semi-feral. Although Andalusia's Iberian Longhorns are generally described as being red and/or linebacked, these animals also often had spotty and speckled color patterns typical of semi-feral animals. Indeed, examples are known to have existed which varied in color "from black to roan and even white" (Jordan, pages 29 and 67). The reason this fact is important is that the speckled coloration so often seen in "Texas Longhorns" is one of the characteristics upon which Frank Dobie lays his case for the uniqueness of the Texas version of the Longhorn. Professor Jordan appears to take issue with that hypothesis.

During the late 1400s, Spain was in a recession. As a result, Christopher Columbus and other explorers sailing under the Spanish flag were able to find, from among the residents of Andalusia, people who were willing to pull up stakes and travel to the risky "New World" in search of a better life. They made up the largest block of settlers who came to the four islands comprising the Antilles chain (Hispaniola, Jamaica, Cuba, and Puerto Rico) between 1493 and 1512. Many of these Andalusian settlers brought with them their Iberian longhorn cattle, which appear to have been the first and only cattle to populate the Antilles during at least the initial century of occupation. Just as in Spain, the Spanish settlers of the Antilles allowed their cattle to roam free on the fertile grasslands of those islands and again become semi-feral. Indeed, when the British took over Jamaica in the 17th century, it appears that, rather than bringing in their own cattle, their initial influence on cattle ranching consisted of taming the Spanish longhorns and applying their more intensive management techniques in the raising and harvesting of them. Thus, Professor Jordan's research suggests that the cattle which populated the Antilles during the 16th and 17th centuries were direct and undiluted descendants of Iberian Longhorns.

Beginning in 1519, many of the colonists of the Antilles left for the Mexican mainland in search of gold and other rumored treasures. Many took their cattle with them. Those Antillean cattle, and other Iberian longhorns that arrived directly from Spain with Spanish colonists during the same time period, began populating Mexico, initially on the coastal plains and ultimately in the highlands to the west as well. It is well documented that Antillean cattle were landed all along the eastern coast of Mexico during the 16th and 17th centuries. The most popular port of entry was Vera Cruz, but they also came ashore as far north as Tampico (less than 200 miles south of the Texas border). From Vera Cruz, ranches were established quickly, and soon large populations of Iberian longhorns were seen throughout the Panuco Delta as well as south and west of the port of Vera Cruz. Hence, it is clear that Iberian longhorn cattle reached Mexico and began moving outward in both northerly and westerly directions well over 200 years before they are known to have entered either California or Texas.

Once having reached Mexico, the Iberian Longhorns made their way along both coasts with the northward progress of Spanish settlement. The first known cattle in Texas arrived in the early 1700s with Franciscan missionaries as they began to build a chain of Missions extending through the San Antonio River valley and out to the present city of Goliad. As noted by Professor Jordan, the mission system in Texas emphasized cattle, both because no indigenous Indian agriculture stood to be displaced by them and also because wolf packs took a heavy toll among sheep and goats (Jordan, page 148). By the 1780s, however, the influence of the missions had declined greatly in Texas, and cattle raising largely passed into the hands of private ranchers, many of whom had acquired large land grants from local governors. Cattle ranching quickly spread throughout south Texas and particularly in the region sometimes referred to as the Nueces Strip (a strip of land in south Texas lying between the Nueces River and the Rio Grande). The area between Tampico and Matamoros (just south of the present day Texas border) is cited by Professor Jordan as today's remaining primary source area for feral "Texas Longhorns" (Jordan, pages 124 and 153).

Whereas the progress of cattle movement up the eastern gulf coast was relatively slow, the opposite was true of progress along the Pacific coastal region. This was due to several factors, including the relative isolation of the area, the absence of serious resistance by natives, and its relatively inhospitable climactic conditions (including desert and thorn thickets) which deterred alternative uses. After the 1590s, the northward progress of Spanish influence and cattle raising along the western seaboard of Mexico came under the dominance of the Jesuit

missionaries. Although even Professor Jordan has had to concede that knowledge is very sparse regarding "the early Pacific Coast ranching frontier in Mexico" (Jordan, page 140), it is clear that it had its roots in Guadalajara and El Bajio (Jordan, page 145). The ranchers in those two areas have been described as having "a very pronounced Iberian cultural imprint", and the region "[became] the Spanish heartland of Mexico" (Jordan, page 126).

The cattle that first populated Alta California (present-day California) came from Sonora in northwestern Mexico. That is where the initial missionary and military expeditions of 1769 and 1770 obtained the cattle with which they provisioned their expedition, and it is also where Portola and Anza recruited the settlers who traveled north with them into California in 1775. Although Sonoran cattle have not been described in sufficient detail to prove breed purity, the system used to manage cattle in Sonora has been described as being Andalusian (Jordan, page 142). Furthermore, in describing the provisions that those settlers brought with them to California, Professor Jordan stated:

"Due to California's remoteness, these outposts of Christendom needed to become largely self sufficient, prompting the early introductions of the whole array of Iberian crops and livestock, including cattle." (Page 162)

He went on to say, "two hundred longhorns went north from Velicita in Baja California to San Diego in 1769" and that "300 more arrived from the lower peninsula the following year." (Page 162). The vast herds of longhorn cattle which later populated California ultimately derived from these small herds, several hundred more of which came from Sonora with the civilian expedition in 1775 and another 350 of which were driven overland to California from the Santa Cruz Valley of Arizona in 1776.



For other specific information about California Longhorns, we are left with a number of descriptions which Professor Jordan has given regarding diffusion of California cattle into other states. For example, he speaks of the exportation, during the 1790s, of "small numbers of Iberian longhorn cattle" to Spain's outpost settlements at Neah Bay on the Olympic Peninsula and Nootka Sound on Vancouver Island (page 243). He also mentions the exportation, in 1824, of a small number of California cattle to the Hudson Bay Company and of the latter's careful management of that "Iberian herd". He also describes the trail drive organized by Ewing Young in 1837 during which "over 800 Iberian longhorns?" were herded overland to Oregon. Another statement made by Professor Jordan

is that, as late as the 1840s, "Spanish cattle of Californian origin remained the dominant breed in the Pacific Northwest." (Page 245). Finally, he states that, in 1848, "California Spanish cattle helped stock the newly founded Mormon settlements in the Great Basin" (page 245).

Although much research remains to be done, based on Professor Jordan's exhaustive research, it seems clear that the California Longhorn was very likely a direct descendent of the Iberian Longhorn and that the longhorn which entered Texas from Mexico has the same ancestry.

Ancestry of Present Day Texas Longhorns

The British breeds of cattle began making their presence felt in this country in the early 1700s. Early on, South Carolina became the main cattle ranching region of the British colonies and numerous breeds of British cattle, Durham, Kerry (Ireland), Hereford, and Devon, came in with the settlers. Interestingly, even in South Carolina's early cattle population there appears to have been significant Iberian influence. That influence traces back to 1704 when British troops and their Creek Indian allies raided Spanish strongholds in Florida in an effort to displace Spanish influence. They captured a number of the Antillean cattle, which had come north to Florida with Spanish settlers from the Antilles in the early 1600s, and they took them to South Carolina where they were crossed with the British cattle which already existed in that colony (Jordan, page 108).

By the end of the 18th century, the "British" cattle had migrated with their owners as far west as Mississippi. While the "cracker cattle herders" (i.e. Carolinian settlers) did reach Texas in the early 1800s, they seem to have initially limited their expansion to the Piney Woods area of western Louisiana and eastern Texas and to the westernmost portions of the longleaf belt in the lower Trinity River valley (Jordan, pages 178-179). More importantly, it would seem that by then the stock they were raising were largely comprised of Iberian longhorn blood, including longhorns from Florida and also longhorns which had earlier flowed eastward into Louisiana from Texas during the 1780s after a permissive trade edict issued by the Spanish Government. That edict had enabled Texas ranchers to round up and drive a "huge export of cattle and horses to Louisiana ... sufficient to cause herd depletion in the lower San Antonio Valley." (Jordan, page 157). Those cattle, which were driven east from Texas into Louisiana, must have been Iberian Longhorns since the influx of Carolinian settlers and their cattle into Texas did not commence until the first decade of the 19th century (Jordan, pages 178 and 179). Furthermore, as those Carolinian "cowpenners" continued their progress west along the coastal plains of Texas, it appears that they changed their management styles as well as the makeup of their cattle, adopting the Spanish/Mexican styles of loose management and also Iberian bloodlines in their herds (Jordan, pages 184-188).

Interestingly, Texas seems to have become a melting pot of migrating cattle and settlers. As noted above, settlers arriving by way of the gulf coast came with stock heavily influenced by Iberian longhorn bloodlines. Northern and northeastern Texas, on the other hand, were initially populated in the first several decades of the 19th century by settlers who came through the Cumberland gap into the Heartland of the Country, bringing with them their herds of Devon, Durham, Hereford, and other British breeds. These settlers managed their cattle quite differently than did the southern Texans and Mexicans, who emphasized free range grazing, no winter feeding, no castration, and very little oversight. Rather, the "northern" settlers were known for penning their cattle, feeding supplements in the wintertime, castrating lesser males, and otherwise rather intensively managing their herds. They considered the longhorns to be wild animals and pests to be gotten rid of in order to prevent the spread of Texas Fever into their herds. Hence, there was little, if any, crossbreeding, and it appears that the cattle in northern and northeastern Texas are probably free of longhorn genetic influence. It is also likely true that the genetics of Iberian longhorns were never compromised, at least in that part of Texas, by blood from other breeds.

While the cattle drives of the 1870s and 1880s have become romanticized and legendary, the greater influence of these drives was in the exportation of the "Texas Longhorn system". This system embodied not only the longhorn animal but also the management technique used in Southern Texas (Jordan, pages 236 through 240) that was characterized by "allowing cattle to care for themselves year-round in stationary pastures on the free range, without supplementary feeding or protection." (Jordan, page 210) While it worked well in the tropical climates of Mexico and south Texas, it was inadequate in the more hostile climates further north. The failure of this system in northern climates, plus the influence of "Cattle Tick Fever" (see below), resulted in the near demise of Spanish longhorns in this country. According to Professor Jordan, only 40% of the longhorn population in Kansas and Nebraska survived the freezing winter of 1871/72 (page 237), and the huge winter storms of 1886/87 took an even greater toll (up to 90% mortality). Northern ranchers, who were enjoying relative success during those hard times by utilizing the British system of close penning and winter supplement feeding, lost faith in the longhorn. While it was probably unfair to blame the longhorns for the bad management practices of their owners, the fact remains that the animals known as the "Texas Longhorns" were rapidly seen as scrub cattle that should be eliminated rather than propagated.

That downhill slide for the breed was exacerbated by one of the strengths of the longhorns - their immune system - which now worked against them. Their immune system enabled longhorns to survive while carrying a tick on their hides which, in turn, carried the disease, Cattle Tick Fever. Cattle Tick Fever was devastating to the British and other cattle that were not immune to it. When populations of those other breeds (whose management techniques were enabling them to survive better under harsh winter conditions) began to decline because of this disease carried by the longhorns, that was the last straw and the result was large scale

destruction of the nation's longhorn population.

In a fascinating article appearing in the February, 1999 edition of the *Western Horseman*, Dwight G. Bennett, DVM, recounts the role of "Cattle Tick Fever" in the history of the demise of longhorn cattle. He attributes that phenomenon largely to pressures from other cattle ranchers intent on protecting their herds from the "Texas cattle" which were "poisoning their [pasturelands]" and killing their cattle. It turns out that the disease-laden ticks, carried by the longhorns (*Boophilus annulatus* and *Boophilus microplus*) engorged themselves with the blood of their host longhorn, then dropped from the cow, laid eggs on the ground, and died. The disease is carried on through the eggs to the next generation of ticks, which, after hatching, attach themselves to passing cattle. That description of their life cycle explains why ranchers complained that the longhorns had poisoned their pasturelands.

Furthermore, as noted by Dr. Bennett, the disease carried by those parasitic ticks was not just identified locally where longhorns were passing through. Indeed, it was recognized as early as 1868 among cattle breeders as far east as New York State who noticed their purebred British stock dying when Texas Longhorns were shipped into the state by railroad from the stockyards in Abilene and other railheads. As a result of public outcry throughout the country the market for longhorn cattle toppled, and, various states passed laws attempting to prevent the passage of longhorn cattle across their borders. Although the tick was later found to be controllable and Cattle Tick Fever has since been eradicated in the United States, those scientific advances came too late to restore the reputation of what had, by the mid 1870s, become, essentially, outlaw cattle.

By the early 20th century, Texas Longhorn cattle were nearly extinct. In 1927 Congress (at the behest of conservationists and historians) appropriated money to establish a Federal herd of purebred Texas Longhorn cattle. Over the next several years, two U.S. Forest Service rangers inspected over 30,000 head of cattle and found only 20 purebred Texas Longhorn cows, 3 purebred bulls, and four purebred calves. The Longhorns were taken to the Wichita Mountains Wildlife Refuge near Cache, Oklahoma, as seed stock for what has become the "W.R." herd, one of the seven foundation herds of purebred Texas Longhorns. Those original seed stock animals were found in South Texas and Mexico. In an article appearing in the Fall, 1977 edition of the *Texas Longhorn Journal*, it was reported that ongoing efforts by the managers of the WR herd to collect purebred specimens of longhorn cattle were centered in the Nueces Strip. In 1931 and again in 1935 they had to go down into Mexico to find purebred bulls. (See also the May/June, 1984 edition).



An article which appeared in the same Fall, 1977 edition of the *Texas Longhorn Journal* describes M.P. Wright's "Bow and Arrow" Ranch. In that article, it is noted that the Bow and Arrow ranch, which borders the Nueces River on both sides, was founded in the 1870s and is one of the oldest ranches in the Country. The article emphasizes the foresight of Mr. Wright to resist the temptation to "upbreed the scrub cattle" and to preserve for posterity a herd of purebred longhorn cattle. The article went on to say that Wright's perseverance in the face of "anti-longhorn propaganda" must have created some trying times for him - indeed forcing him to inbreed in order to preserve the purebred strain.

Finally, the Yates Ranch (which was founded and owned by Cap Yates until his death in 1959) had another of the original seven herds. The ranch is located in Marathon, Texas, an area of southwestern Texas below Fort Stockton. Cap Yates was well known for his unyielding commitment to breed purity and for his many trips across the border into Mexico (seventy miles away) to buy his cattle.

So, it seems clear that British breeds came into Texas in the 19th century and may have influenced Iberian cattle in parts of the state. However, the "Texas Longhorn" we know today traces back to the original Spanish cattle

that entered south Texas in the 1700s and survived in the tropical area known as the Nueces Strip and in northern Mexico.

Conclusions

Final answers to my questions will have to await further research; however, I have reached the following conclusions, which I thought might be of interest to others:

Professor Jordan's well researched book appears to justify a strong argument that today's Texas Longhorn cattle are direct descendents of animals which flourished in the 1700s in the missions in the San Antonio Valley and in the Nueces strip of southwest Texas. They, in turn, are probably direct descendents of Iberian longhorns, which had migrated northward along the eastern seaboard of Mexico during the sixteenth and seventeenth centuries.

It also seems clear that California's longhorns bore the same genetic imprint and were, descended from those same Iberian (i.e. Andalusian/Antillean) cattle which came to the New World with Christopher Columbus and other Spanish settlers, beginning in 1493.

It is indeed fortuitous that in 1927 Congress allocated money to establish a purebred herd of longhorn cattle and also that in Texas there existed, in the late 1800s and early 1900s, several forward thinking ranchers who cared enough to maintain herds of purebred longhorn cattle. It is equally unfortunate that circumstances in California (primarily killer droughts in the 1850s and in 1864 and also the breakup of large ranches due to homestead pressures and the Land Act of 1851) prevented any of these magnificent beasts surviving in this State.

In the final analysis, it would appear, despite the absence of conclusive evidence on the subject, that the California Longhorn of yesteryear and the present day Texas Longhorn were likely very closely related. If that is indeed the case, then thanks to the efforts of others, California is now able, by displaying these magnificent beasts on its pasturelands, to regain an extremely important part of its heritage.

* My source for the statement about the absence, in Henry Miller's records, of any descriptive information about longhorn cattle is David Iglar, a Ph.D. candidate from Cal Tech University, who spent four years pouring through Miller's records at both the Bancroft and Huntington libraries. He has told me that he had not come across any writings, which might be relevant to my quest. I have also spoken with several of Miller's direct descendents who still own and operate the remaining Miller/Lux land holdings. They too have been unable to point me to any information in this regard.

I want to give credit to Candy Judd for her editorial insight and valued input into this article.