

# End Notes

## Introduction

1. J. Frank Dobie, "The Texas Longhorn's Dying Bellow," reprinted in *Texas Longhorn Trails*, September 1994, 14. Hereafter referred to as Dobie, "Dying Bellow."
2. Dobie, "Dying Bellow," 14.
3. J. Frank Dobie to Cap Yates, January 20, 1961, Yates Files, James Frank Dobie Papers, 1923-1967, Harry Ransom Humanities Research Center, The University of Texas at Austin. Hereafter cited as Dobie Archive.

## Chapter 1: Evolution of the Longhorn Breed

1. John E. Rouse, *The Criollo, Spanish Cattle in the Americas*, (Norman: University of Oklahoma Press, 1977), 24. Hereafter cited as Rouse, *Criollo*.
2. Rouse, *Criollo*, 30.
3. Rouse, *Criollo*, 30-31.
4. Rouse, *Criollo*, 43.
5. Rouse, *Criollo*, 33.
6. Rouse, *Criollo*, 77-78.
7. Rouse, *Criollo*, 43.
8. K. K. Kidd, et al, "Immunogenetic and Population Genetic Analyses of Iberian Cattle," *Genetics*, Vol. 11, 1980, 21, 31-32.
9. John E. Rouse, *World Cattle*, three vols., (Norman: University of Oklahoma Press, 1970, I), 236-237. Hereafter cited as Rouse, *World Cattle*.
10. For information on these Portuguese breeds see Rouse, *World Cattle*, I, 236-237.
11. Rhea Marsh Smith, *Spain, A Modern History*, (Ann Arbor: The University of Michigan Press, 1965), 181.
12. Rouse, *Criollo*, 15.
13. Bailey W. Diffie and George D. Winius, *Foundations of the Portuguese Empire, 1415-1580*, (Minneapolis: University of Minnesota Press, 1977), 28.
14. A. H. de Oliveira Marques, *History of Portugal*, 2 vols., Vol. I, (New York: Columbia University Press, 1972), 148, 152.
15. John Dos Passos, *The Portugal Story: Three Centuries of Exploration and Discovery*, (New York: Doubleday & Company, Inc., 1969), 93.
16. Rouse, *Criollo*, 28.
17. Dr. Jerry Caldwell of Immgen in College Station, Texas, reports this figure. Caldwell has done most of the blood testing on Longhorn cattle.
18. Rouse, *Criollo*, 19.
19. Rouse, *Criollo*, 20.
20. Rouse, *Criollo*, 224.
21. J. Frank Dobie, *The Longhorns*, (Austin: University of Texas Press, 1990 edition), 16. Hereafter cited as Dobie, *Longhorns*.
22. Rouse, *Criollo*, 21, 217.
23. Rouse, *Criollo*, 219.
24. Rouse, *Criollo*, 217.
25. Rouse, *Criollo*, 56.
26. Mari Sandoz, *The Cattleman*, (New York: Hastings House, 1958), 33. Hereafter cited as Sandoz.
27. Dobie, *Longhorns*, 21.
28. Rouse, *Criollo*, 51.
29. Rouse, *Criollo*, 54.
30. Rouse, *Criollo*, 55.
31. Jack Jackson, "The Great Roundup of 1787," *The Journal of South Texas*, (Spring 2000), 39.
32. Dobie, *Longhorns*, 7.
33. Dobie, *Longhorns*, 8.
34. William C. Foster, *Spanish Expeditions Into Texas, 1689-1768*, (Austin: University of Texas Press, 1995), 245. Hereafter cited as Foster.
35. Dobie, *Longhorns*, 9.
36. Foster, 148.
37. J. Evetts Haley, *The XIT Ranch of Texas*, (Norman: University of Oklahoma Press, 1929), 183; Foster, 90.
38. Dobie, *Longhorns*, 8.
39. Terry Jordan, *North American Cattle-Ranching Frontiers*, (Albuquerque: University of New Mexico Press, 1993), 153.
40. Donald Worcester, *The Texas Cowboy*, (Fort Worth: Texas Christian University Press, 1986), 2. Hereafter referred to as *Texas Cowboy*.
41. "Texas Highways," (July 1991), 5-6.
42. *Texas Cowboy*, 9, 22-24.
43. Rouse, *Criollo*, 192.
44. Don Worcester, *The Texas Longhorn, Relic of the Past, Asset for the Future*, (College Station: Texas A&M University Press, 1987) 5, 9. Hereafter referred to as Worcester, *Texas Longhorn*.
45. J. M. de Cossio, L. Nieto Manjon, and others, *Pelos y Pintas del Toro de Lidia*, (Hides and Colors of de Lidia Bulls), Dibujos de Fernando Redon, no place or date.
46. Dr. Carlos Perez Santos, *Características Morfológicas Externas Del Toro De Lidia*, (Barcelona, Spain: Aritza Comunicación, 1996), (ISBN 84-605-5652-2).
47. Stuart J. Burns, D. V. M., "Genetic Purity and the Texas Longhorn," *Texas Longhorn Journal*, (September/October 1998), 49. Hereafter cited as Burns.
48. A major problem with the Worcester thesis is that he has Texas Longhorn cattle genetically developing in an unrealistic time frame, from 1836 to the start of the trail drives in 1865. (See Worcester, *Texas Longhorn*, 23-25.) He discounts longer-term environmental impacts on *Criollo* cattle and clearly presents his thesis: "Criollo cattle provided a base for the Texas Longhorn, but many of the latter's characteristics have to have another source. That source is most likely the Bakewell Longhorn—the first improved English breed—developed by Robert Bakewell in the mid-eighteenth century." (Worcester, 9.)
- I am left with the impression that

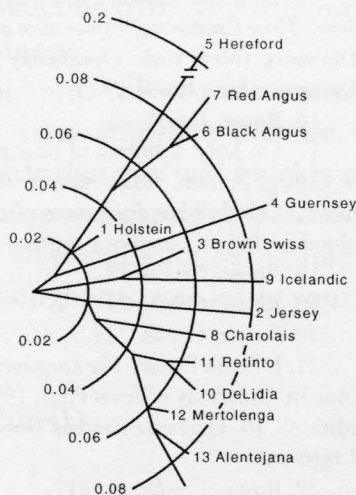
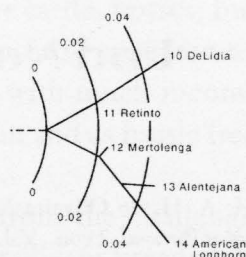
Professor Worcester thought up the thesis—Texas Longhorns are to a significant degree English Bakewell Longhorns—and then distorted the historical sources in an attempt to prove the thesis. His treatment of the work of Professor K. K. Kidd is a good example. As we have already seen, Kidd's research shows a very close genetic link between cattle from Spain and Portugal and Texas Longhorn cattle. He further explains that these cattle differ genetically the most from English cattle. Thus, Kidd presents some of the most convincing proof that the Worcester thesis is wrong. Rather than point this out and attempt to deal with it in an honest manner, Worcester states in his book:

"More concrete evidence of mixing, Rouse added, was provided by the blood-typing work of K. K. Kidd, who concluded that the best representatives of present-day Texas Longhorns show a basic Spanish development influenced to a significant degree by northern European cattle." Worcester, *Texas Longhorns*, 5.

With this misleading quotation, Worcester indicated that both Kidd and Rouse support his thesis, which they do not. Rouse misrepresented the conclusions of Prof. Kidd and rather than correct or ignore the statement, Worcester used it as strong support for his thesis. On the same page of his book, Rouse actually concluded that the "degree of mixing . . . was small." (Rouse, *Criollo*, 192).

To help clear up confusion created by Rouse and Worcester concerning the research of Kidd, let's briefly examine his 1969 dissertation. Kidd unequivocally states: "Longhorn cattle are the remnants of feral Spanish colonial cattle." Utilizing ninety-two blood samples from the W R Herd, Kidd concludes:

"These results, based on a smaller but independent sample of the same Longhorn herd used by [W. J.] Miller (1966), confirm his conclusion that the Wichita Mountains Wildlife Refuge herd of Longhorn cattle is truly representative of feral Spanish colonial cattle." (K. K. Kidd, *Phylogenetic Analysis Of Cattle Breeds*, [Madison: The University of Wisconsin, Ph. D.



K.K. Kidd. "Immunogenetics . . . of Iberian Cattle." *Genetics*, 11 (1980),

Dissertation, 1969], 23, 55, and 60.)

Professor Kidd continued his blood typing of Texas Longhorn cattle and presented his most detailed analysis of their genetic origin in 1980—eleven years after his dissertation. The graphs above are from the 1980 study:

Worcester quotes not only from Rouse's book *The Criollo: Cattle in the Americas* but also from Rouse's earlier three volume study—*World Cattle*. (See Worcester, page 14). What does Rouse in *World Cattle* actually tell us about these English Longhorns? His only lengthy statement on English Bakewell Longhorns in America is as follows:

"The English Longhorn was declining in popularity in England in the opening years of the nineteenth century, when the first Shorthorn representatives were arriving in the

United States. The Shorthorn had only recently gained ascendancy over the Longhorn in England, and some loyal Longhorn breeders managed to get representatives of their breed into the United States as early as 1817. There were a few other importations later in the century. The numbers were small, and there are only minor references to their presence in writings of the time. The Longhorns were soon absorbed in the Native American cattle." (Rouse, *World Cattle*, III, 480-81.)

So what Rouse is actually telling us is that the influence of English Bakewell Longhorns on all American cattle breeds, including Texas Longhorns, was virtually nil!

Worcester's thesis faces several additional problems, with the chief one being that he simply didn't locate many English Bakewell Longhorns in America and the blood of those was almost immediately diluted by the lack of significant numbers of purebred bulls. He is unable to prove that a single Bakewell bull was brought to Texas, and any improved bulls brought in after the late 1830s would almost certainly have been the preferred Durham or Shorthorn. In addition, very few colonists came to Texas from the states where the Bakewell Longhorns were located: Kentucky and Ohio.

As indicated earlier, my greatest single problem with Worcester's historical approach is that he read and utilized the studies of John E. Rouse but did terrible violence to them by selectively choosing passages from Rouse's studies that seem to support his theory. For example, Professor Worcester obviously read Rouse's book *The Criollo: Spanish Cattle in the Americas*, as he quotes it in his study (Worcester, 8-9), and yet he cites only one type of Spanish or *Criollo* cattle—the *Retinto*. We have seen that Rouse clearly argues that four or five different types and colors of *Criollo* cattle were imported into New Spain. This distortion of Rouse's study enables Worcester to indirectly argue that *Retintos* were a solid color, and consequently we can best explain the multicolored Longhorns as a direct



infusion of blood from English Bakewell Longhorns:

"The colors of the English Longhorns and some of their other characteristics were almost identical to those of many of the later Texas Longhorns. They were red and blue roan, brindle, yellow, and fawn color; some had white on back and belly" (Worcester, 13).

It seems convincing, especially when Worcester quotes Rouse on the color of *Criollo* cattle:

"The many colors of the Texas Longhorn are an important factor in determining their origin. 'A common misconception as to color must be corrected,' Rouse states. 'Modern writers sometime refer to the old Spanish cattle, or their progeny, as "extremely varied in color," or as being "all colors of the rainbow." Barring blacks and whites, which were probably only a small minority of the foundation herd on Hispaniola, the Spanish cattle appear to have been predominantly of a solid color. This varied in intensity from Jersey—tan to cherry red and occasionally brown.' This conclusion, he adds, 'is supported by authoritative writers who occasionally mention the color of early Spanish cattle.' *Criollo* cattle that have undergone a period of artificial selection in widely separated areas all show significant similarity in color as well as other characteristics. Jersey tan predominates, with occasional solid black or black and white. 'Brindles are rarely seen,' Rouse notes" (Worcester, 8-9).

As Professor Worcester could not prove that a single Bakewell Longhorn was actually brought into Texas by American colonists, the long quotation of Rouse on cattle colors seems to be the best argument for the influence of Bakewell Longhorns on Texas Longhorns. In actual fact, this long quotation of Rouse provides little support for the Worcester thesis. Rouse is simply saying that *Criollo* cattle were "predominantly of a solid color." So were Texas Longhorn cattle. Consequently, one can equally well argue that this quotation in fact supports the conclusion that Texas

Longhorns are the direct descendants of *Criollo* cattle.

One of the best sources on the colors of 19th century Texas Longhorns is Fayette Yates, who as a young man frequently socialized with Ab Blocker and other members of the Old Time Trail Drivers Association at his grandfather's ranch outside San Antonio. Yates said, "Old timers, daddy included, said there weren't as many colored [cattle]. Probably 80 percent of them were reds, duns, browns, brindles—very few blacks, a few whites, but most of them maybe had a little white underneath. There weren't as many loud colors. . . a much smaller percentage of colored, speckled cattle." (Frank Sharp, "An Afternoon with Fayette Yates," *Texas Longhorn Journal*, (January/February 2000), 48.

For those readers who have a serious interest in the genetics that determine cattle color, I am including a short, excellent article on the subject that was published in the 1997 TLBAA Membership Directory:

"Each animal has two genes for basic color, one received from the dam in the egg and one received from the sire in sperm. If you know what genes the sire and dam have, you can predict what genes the calf will have.

"All cattle basically possess one of three basic colors: black, red or white. The two genes each animal has for color can result in six possible genetic combinations. The gene for black is dominant to the gene for red; therefore, cattle with one gene for black and one gene for red (heterozygous) will be black. There is an incomplete dominance between the gene for black and the gene for white, resulting in cattle with one gene for black and one gene for white being a black-roan color. There is also an incomplete dominance between the gene for red and the gene for white, resulting in cattle with one gene for red and one gene for white, being a red-roan color. The gene for white is recessive, resulting in only cattle with two white genes (homozygous) being a true white color.

Another pair of genes determines if the color is diluted or not diluted. The

gene for dilution is dominant to the gene for non-dilution. Cattle that have one gene for dilution and one gene for non-dilution or two genes for dilution will have a diluted color. Cattle with two genes for non-dilution will not have a diluted color. The dilution gene causes black to be diluted to gray and red to be diluted to yellow. Diluted white will still be white."

In 1993 Lawrence Alderson, who was the Executive Director of the Rare Breeds Survival Trust in England, which includes English Bakewell Longhorns, clearly expressed his opinion on their influence on Texas Longhorn genetics:

"I think that it has been demonstrated quite conclusively that the English Longhorn played no part in the foundation of the Texas Longhorn breed and cannot be considered an ancestor in any sense. The Texas Longhorn is a direct descendant of Spanish cattle, and I had the opportunity of inspecting closely several of the breeds in Andalusia which probably were the real ancestors of the Texas Longhorn. . . ." (Carolyn Hunter, "The Texas Longhorn and its English Cousin," *Texas Longhorn Trails*, (November 2000), 29).

Worcester is wrong! There was not a significant amount of northern European genetic influence in Texas Longhorn cattle during the 19th century. Dobie and Rouse are much closer to the truth in asserting only very limited and temporary outside influence on the *Criollo* stock. Of the four people involved, only Dobie had the advantage of growing up in the presence of the old Longhorn cattle.

I have devoted so much time to the Worcester thesis because it has been so popular and has misled so many people.

I basically agree with the observations of Dr. D. Phillip Sponenberg of Virginia Tech University. He wrote the following in 1991:

"We need look no further than southern Spain for the entire array of Texas Longhorn traits. Don Worcester uses color variation to assert the early and widespread use of English Longhorn and other northern European breeding in the Texas Longhorn. However, this

line of reasoning ignores the fact that yet today you can easily spot the entire array of Texas Longhorn color variation in the cattle herds of Las Marismas in the Guadalquivir delta—near San Lucar where the cattle were embarked to the New World 500 years ago. A pure or nearly pure Spanish genetic heritage for the breed likewise explains the similarity of traditional type among all breeds derived from this same base—those in southern Spain, Central and South America, and our own Texas Longhorn, Florida Cracker, and Piney Woods cattle. I have always been struck by the fact that a traditional looking Spanish cow is very similar in all these places, to the extent that a cow from any of them could be put into a traditional Texas Longhorn herd and could not be picked out of the crowd as being different” (Dr. Phillip Sponenberg, D.V.M., Ph. D., “Two Paths to the Same Goal?” *Texas Longhorn Journal*, [January/February 1999], 14).

I include the two Portuguese breeds in the genetic mix.

The answer to the genetic origins of Texas Longhorn cattle is most easily understood through careful examinations of the photographs.

49. Dobie, *Longhorns*, 33.

50. Rouse, 253-54.

51. Worcester, 24, 5, 8.

52. Darrell Arnold, “From the 1820s to the 1980s—The Famous Phillips Bloodline,” *Texas Longhorn Journal*, (November/December 1984), 66. Hereafter cited as Arnold.

53. The brush country that covers 20.5 million acres in South Texas, extends south into the Mexican province of Tamaulipas. Several centuries ago it was primarily covered with grass, but trees and shrubs grew on the ridges and in creek and river bottoms. The average growing season in South Texas is 340 to 360 days, and during most winters the grass in the southern portion of the *brasada* escapes killing freezes. In addition, the brush is much less affected than the grass by freeze or drought. Under Spanish and Mexican rule, beef cattle were not fed during periods of drought or freeze. Consequently, cattle residing in the

more than twenty million acres of high protein and carbohydrate woody plants and cacti of the *brasada* grew more massive bodies and horns than their *Criollo* cousins to the south.

More than three hundred woody plants and cacti flourish in the South Texas brush country. Over a dozen are heavily foraged by cattle, but I will limit my discussion to several of the most important. Nutritionally, the prickly pear is the most helpful during times of stress because it is virtually impervious to freeze and drought. Consisting of 80 percent liquids, it provides moisture in times of drought. The tunas, or pear apples, which ripen from midsummer into fall, are heavily browsed by cattle because of their flavor. The tunas provide 6–8 percent protein. The real value lies in the green pads and massive cactus bases. During the critical winter months they consist of 6 percent protein and 70 percent carbohydrates, which are actually absorbed into the bovine’s system. While cattle at times eat the thorny pads, Longhorn cattle also utilize their long horns to slash away these pads and expose the thornless inner support structure of the prickly pear. To put this nutritional value in perspective, the rich unfertilized spring grass of improved pastures is about 16 percent protein, while hay is 6 percent to 8 percent.

During the harsher winter months, the Longhorns browse on the fern-like leaves of the Guajillo, which are about 20 percent crude protein and 40 percent carbohydrates and are resistant to freezing weather. While this plant is low in digestibility for other bovines, Longhorns thrive on it and even on plants that are toxic to other cattle. During the winter months Blackbrush is 16 percent protein and 27 percent carbohydrates, while Granjeno is 19 percent digestible protein and 65 percent carbohydrates. (Richard B. Taylor, Jimmy Rutledge, and Joe G. Herrera, *A Field Guide to Common South Texas Shrubs*, [Georg Zappler, 1999]. See especially the nutritional tables at the back of the book.)

It is this superior nutrition and mineralization that explains the larger body and horns of the Longhorns.

54. Rouse, *Criollo*, 215, 218, 243, 246, 250.

55. Dobie, *Longhorns*, 23.

56. Rouse, *Criollo*, 252.

57. Rouse, *Criollo*, 192.

58. Dobie, *Longhorns*, 34.

59. Rouse, *World Cattle*, 3, *Cattle of North America*.

60. See Rouse, *Criollo*, 4-5.

61. Andy Adams, *The Log of a Cowboy*, 32. Hereafter cited as Adams, *Log*.

62. Wilson M. Hudson, *Andy Adams, His Life and Writings*, (Dallas: Southern Methodist University Press, 1964), 40. Hereafter referred to as Hudson.

63. J. Frank Dobie wrote: “If all other books on trail driving were destroyed a reader could still get a just and authentic conception of trail men, trail work, range cattle, cow horses, and the cow country in general from *The Log of a Cowboy*.” (Hudson, 10-11.)

Walter Prescott Webb stated: “If I can show that Andy Adams has produced a peculiar kind of fiction, which is fiction and so much like fact as to be disconcerting, then I have rendered a service to a man who seems not to have received justice.” (Hudson, 202.)

J. Evetts Haley was also a great admirer of Adams. (Hudson, 197.)

64. Adams, *Log*.

65. Dobie, “Dying Bellow,” 14.

66. Dobie, “Dying Bellow,” 14.

67. Hudson, 25-27, 31-32.

68. Hudson, 30.

69. Dobie, *Longhorns*, 34.

## Chapter 2: Early Preservation Efforts

1. “Longhorns and Land,” 22-23.

2. “Longhorns and Land,” 23.

3. “Longhorns and Land,” 23.

4. “Longhorns and Land,” 23.

5. Author’s September 18, 2000, interview of Russell Stanger, Jr.

6. Worcester, 74.

7. “Longhorns and Land,” 23

8. Author’s September 18, 2000, interview of Russell Stanger, Jr.

9. “Longhorns and Land,” 23.

10. Maudeen Marks, “TLBA Annual Convention,” *Texas Longhorn*



# Gathering Texas Gold

J. Frank Dobie

and

The Men Who Saved The Longhorns



By

T. J. Barragy

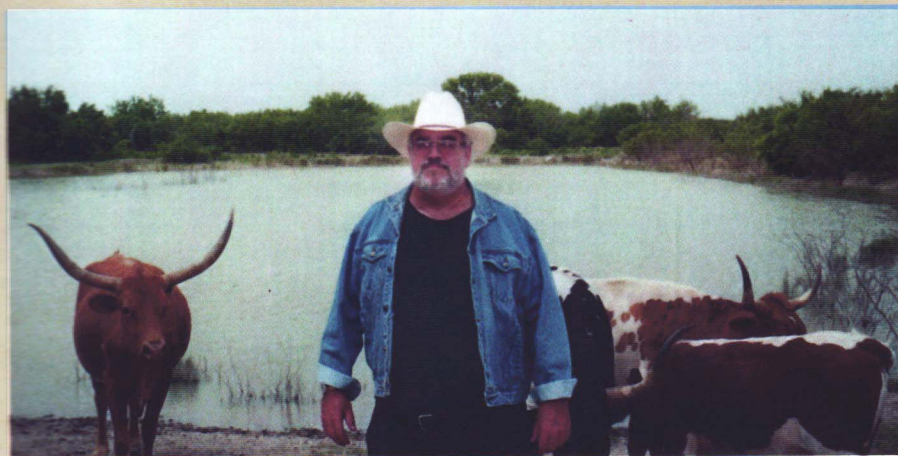


**H**aving sixty-five years experience with Longhorn cattle, I respect the great honesty and integrity of *Gathering Texas Gold*. This is the most factual and interesting book I have ever read about these pioneer Longhorn breeders and their cattle.

The book traces the historic origins of Texas Longhorn cattle from the Iberian cattle of Spain and Portugal through the Canary Islands and West Indies and into Mexico and South Texas. The book then focuses on the lives and cattle of a dozen different Texas ranchers, including J. Frank Dobie, during the late 19th century and 20th century.

Dr. Barragy's years of effort, no doubt inspired by his close association with his own herd of Longhorn cattle, should be greatly appreciated by all who have an interest in ranching.

Russell Stanger, Jr. D. V. M.  
Brazoria County, Texas

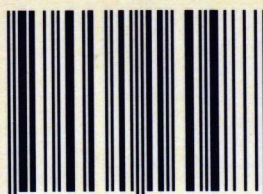


*Author T. J. Barragy at his ranch in McMullen County, Texas*

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