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The Rise, Fall, and Rebirth of the Texas Longhorn: An Evolutionary History

Abstract

This article examines the history of the Texas Longhorn, a cattle breed that emerged in what is today the American Southwest during the nineteenth century. Using the methodologies of evolutionary history and animal studies, this article argues that the Texas Longhorn was both technology and laborer. Longhorns were ideally suited to nineteenth-century ranching, largely because the animals themselves performed much of the labor involved in beef production. Initially celebrated for its ability to endure grueling cattle drives, the breed was later abandoned in favor of more market-friendly breeds. In the twentieth century, however, the Texas Longhorn was rehabilitated as a symbol of Texas history and culture. Yet this memorialization was predicated on a false view of the longhorn as a more natural and premodern breed. By contrasting their earlier contributions to ranching with the breed's twentieth-century memorialization, this article argues that animals are not simply inputs in our agricultural system, but key agents for creating and operating this system.

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INTRODUCTION

In early 1920, the University of Texas football team ate its mascot. Three years earlier, alums had purchased a longhorn steer from a West Texas ranch and presented him to roughly fifteen thousand fans at a Thanksgiving Day homecoming game.¹ According to school legend, the university's colors, orange and white, were homage to the colors of the Texas Longhorn, which the new mascot, "Bevo," shared.²

Bevo, depicted in [figure 1](#), was a living tribute to the university and to the state's deep connections to cattle ranching. Yet he was more than a symbol; he was a live animal, which quickly became inconvenient. School officials had nowhere to keep what apparently was no "nice, tame cow." Rather, "he was a wild steer with all the pep and ginger and temper of the best of his kind."³ Bevo was the kind of "beast" that "stampeded and musses up the range."⁴ His breed, the Texas Longhorn, was famous for its "rustling qualities," meaning longhorns could take care of themselves. These were animals that, in a pinch, could eat a cactus, "thorns and all."⁵ This hardiness and independence had been invaluable to cattlemen who left their stock largely on their own, except when they needed the animals to walk themselves hundreds or as many as a thousand miles to market. Unfortunately for Bevo, those same qualities were undesirable in a university mascot.



Figure 1. Bevo I, ca. 1920, photographer unknown. The "13-0" brand was part of a student prank. Credit: Reference number 3458, Cushing Memorial Library and Archives, Texas A&M University. Used by permission under CC BY-NC-ND 2.0.

Lacking a home for Bevo, or perhaps out of a strange sense of respect, someone decided it made sense to eat him. That night, current and former football players as well as Texas University luminaries donned Indian headdresses and held a “powwow.” The appropriation of Indian culture and dress (or an imagined version of it) was common in nineteenth-century ritual but had particular significance for Texans, who fifty years earlier participated in what Gary Clayton Anderson has described as the “ethnic cleansing of Texas.”⁶

Shortly before eating Bevo, R. E. Vinson, described as “chief of the tribe,” delivered a rambling speech in which he celebrated the animal that had made the occasion possible as “a perfect specimen of his kind.”⁷ Despite Vinson’s praise, this adoring view of Bevo and his ilk was novel. Only a decade or two before, few would have considered a longhorn perfect in any way. If anything, Texas cattle had a reputation for being stringy, slow to mature, and diseased. But as Vinson’s speech attested, this view of the longhorn was changing; even as they consumed Bevo, Vinson and his fellow diners were participating in the breed’s renaissance.

This article traces the rise, fall, and rebirth of the Texas Longhorn. The first section, on cattle’s arrival in the Americas, explores how European cattle and their owners navigated a new world of animal husbandry, leading to far-reaching changes in cattle biology and behavior. It was during this early period of conquest and settlement that the longhorn emerged as a distinctive breed, although it would not be known as the Texas Longhorn until the twentieth century. The second section discusses how, following the American Civil War, the longhorn’s characteristics made it vital to a food revolution. Between 1870 and 1890, fresh beef transformed from delicacy to daily fare as prices dropped and a set of firms headquartered in Chicago created a distribution system through which chilled beef could be sold nationwide.⁸ The more than three million trail-hardy longhorns led out of Texas during this period were an important part of this system until the 1880s when ranchers turned to more market-friendly European breeds, resulting in a dramatic drop in longhorn numbers. The third section examines how twentieth-century conservationists and ranchers revived the Texas Longhorn, when the animal’s association with western history, a history reflected in the animal’s own genes, became its saving grace.

More than a narrative of the longhorn’s history, this article argues that longhorn bodies exist at the intersection of our understandings of technology and labor. Originally adapted for survival in the arid Southwest through natural selection, ranchers in Texas in the mid-nineteenth century recognized the breed was perfect for an emerging ranching system that required animals to primarily care for themselves, except for when they were taken hundreds or a thousand miles to market. The longhorn’s intelligence as well as hardiness made the

breed particularly well suited for both circumstances. Ranchers appropriated—as well as encouraged—the longhorn’s adaptations as a kind of technology (or biotechnology, in evolutionary history terms) ideally suited to transforming grass into commodity beef. Yet this also meant that longhorns performed much of the labor of ranching: whether caring for their young on the range or actually walking themselves to market—impossible for other commodities—longhorns were vital to the labor of beef production.

This dual existence as both technology and laborer also explains the breed’s decline. Able to survive and thrive in conditions as varied as prolonged summer drought and brutal winter blizzards, as well as hardy enough to walk long distances to market, the longhorn had been perfectly suited for the age of the cattle trail and open range. But as ranching grew in the 1880s and rail networks increasingly made long cattle drives unnecessary, the longhorn’s drawbacks outweighed its assets, and ranchers turned to faster maturing and heavier European breeds like the Hereford. Industrial technology replaced the biotechnology and labor of the Texas Longhorn.

Yet as the physical animal declined in importance to the ranching and meatpacking industries, the longhorn became a tool for perpetuating the myth of a simpler and more authentic West. Through frequent comparisons between the passing of the longhorn and the disappearance of the buffalo and by contrasting the open-range ranching period with so-called modern ranching, those who celebrated the breed in the twentieth century elided how and why the longhorn was abandoned just decades before. Exploring why the longhorn was first admired, then rejected, and finally mythologized, reminds us that animal bodies and behaviors are intertwined with human societies and economies.

As technology, laborer, and symbol, the Texas Longhorn is an important part of American history. This story is best understood through the combined lenses of evolutionary history and animal studies. Evolutionary history, which has challenged us to integrate scientific research into our own, elucidates the longhorn’s role as a technology. The field of animal studies, which argues that animals must be taken seriously as historical actors, helps us to understand longhorns as workers and as symbols. Longhorns labored not only when trailing to market, but also far from the ranch house as they foraged for food and protected their young. In the 1880s, the longhorn was a critical piece of a highly developed and capitalized ranching system; by 1920 the longhorn was memorialized as a relic of a more traditional and in some senses, pre-capitalist, time.⁹

Examining the longhorn’s varied meanings ultimately requires holding fast to the historical relationship between human and animal.¹⁰ Even when a longhorn foraged for food on the range or an accountant studied a herd statement in a Chicago office, human and animal were never truly independent. Tracing the Texas Longhorn’s rise, fall, and

rebirth provides a better understanding of the breed's contributions to ranching and reveals the ideological work of its memorialization. This history shows that animals were not merely inputs in our agricultural system but were important agents in creating it, even if their cultural history has obscured that reality.

CATTLE AND CONQUEST

Genomic research provides insight into the origins and diffusion of domesticated cattle, helping us to understand their long "global spatial history."¹¹ Cattle's ancestor, the wild aurochs, existed throughout Eurasia and survived untamed in parts of Europe as late as 1627.¹² Its domestication roughly ten thousand years ago created two distinct lines, the Taurine in the Middle East and Europe, and the Indicine in South Asia.¹³ Whereas Taurine cattle have a smooth back and upright ears, Indicine cattle sport a hump and downturned ears. Indicine cattle are better adapted to tropical climates and harsher conditions; the less hardy Taurine line is well suited for meat and dairy production, probably due to their adaptation to a more extensive hands-on agricultural model. Such variations likely developed in response to differing patterns of domestication and to variations within the wild aurochs at the time of domestication.¹⁴ But one must not overemphasize the divergences. There were re-crossings with wild aurochs and, although scientists once thought cattle populations remained relatively distinct, recent scholarship shows significant influence of Indicine cattle (via Africa, where they spread somewhat early) on southern European and ultimately New World cattle, from which the longhorn descended.¹⁵

Domestication had far-reaching consequences for cattle bodies and human societies. Across Eurasia and Africa, cattle became important sources of food, power, and even religious significance. Because cattle no longer needed to forage as extensively for food, their horns shortened or disappeared. In Europe especially, limited feed and breeding for docility over thousands of years resulted in cattle shrinking in size relative to wild aurochs. Beginning in the medieval period, however, selective breeding and improved agricultural techniques increased average cattle sizes to the point where domesticated animals are once again comparable to their wild ancestors.¹⁶

In the Western Hemisphere, the history of cattle has been inseparable from the history of conquest.¹⁷ Cattle were some of the first voyagers to the Americas, arriving on Hispaniola with Christopher Columbus's second voyage in 1493.¹⁸ These animals had come from the Canary Islands, where Spanish explorers and conquerors had deposited them generations before.¹⁹ Largely Taurine, they showed influences from north African Indicine cattle as well, likely a consequence of another human conquest—the Moorish invasion of Spain.²⁰ These

Spanish cattle were imported to the Americas until 1512 or so, by which time their population had become self-sustaining and they had spread across Mexico, northward into Texas, and southward into Central and South America, with dramatic impacts on Native populations and ecosystems.²¹

During the sixteenth and seventeenth centuries, Spanish ranching spread throughout Mexico at the same time that feral cattle populations slowly pushed northward into parts of what is today southern and eastern Texas.²² These cattle, both wild and owned as part of massive estates belonging to the Spanish imperial leadership, were left to fend for themselves, beginning between eighty and two hundred generations of largely natural selection.²³ As a result, they went through a process of feralization, becoming what some biologists have described as semi-feral.²⁴ The word reflects an important tension: once domesticated, these animals managed the novel ecosystem on their own, despite remaining an important reservoir of human calories critical to new settler societies.²⁵ This meant that cattle functioned as a kind of technology of conquest, providing food security to European settlements encroaching on indigenous land.

Despite war and changing governments—Mexican, Texan, and American control on paper, Comanche control in practice—the animals thrived, breeding and growing more independent. They adapted so successfully to the region that, according to historian Donald Brand, a visitor in 1693 “commented that were it not for the constant robberies of the Indians, cattle would have become so numerous as to be worthless.”²⁶ Slowly, what would eventually be known as the Texas Longhorn emerged as a distinctive breed. Although there is some debate about the breed’s origin and when exactly one could say it was distinctive, many historians of the longhorn—especially Frank Dobie—argue that the longhorn emerged in the early nineteenth century when Spanish cattle mingled with Anglo-American cattle brought during the settlement of Texas, thus producing the longhorn’s distinctive coloration.²⁷ Beyond color, however, it is unclear how distinct the Texas Longhorn is in terms of behavior or hardiness from similar breeds in Mexico or elsewhere in Latin America.²⁸ Nevertheless, for historians like Dobie, much of the breed’s importance is in its emergence at the same time as Texas’s settlement and in the region’s later integration into the United States, rather than Mexico.

As cattle entered new American environments, the animals slowly adapted, and the history of exploration and conquest entered the animal’s biology. Brought by Europeans, but adapting on their own, cattle DNA reflected the interaction between historical and environmental forces. Introduced as a technology of conquest, these animals would adapt in ways that over the course of three hundred years would prove so useful to ranchers in the American West that they brought about the longhorn’s golden age.

GOLDEN AGE OF THE TEXAS LONGHORN

In 1870 there were nearly 15 million beef cattle, or 386 per 1,000 people, nationwide.²⁹ Unfortunately, the cattle and people were in different places: beef cattle in Texas and the West and hungry diners in Chicago, New York, Boston, and other major cities in the East.³⁰ Cattle certainly existed in the East, but they were relatively few and their meat was expensive. Land and feed were costly, and during the Civil War the Union Army had greatly depleted the region's agricultural resources. In contrast, Texas cattle had spent the war doing what they had done for centuries, taking care of themselves. But the war had caused cattle problems in the South, too: the federal blockade of the Mississippi River prevented ranchers from taking Texas stock to New Orleans markets. The Texas cattle population subsequently exploded.

The end of the war terminated the blockade, but hundreds, even thousands, of miles still separated meat from market. For western ranchers, this meant opportunity. According to historian and cattleman Joseph McCoy, in 1865 "a select, matured animal, worth five or six dollars in Texas—was worth in the northern markets more than ten times that amount."³¹ The quickest way to get cattle to market was by rail, but the nation's lines largely ran east to west through Chicago. Lacking a more obviously technological solution—railroads—ranchers employed a biotechnological one: cattle, unlike most commodities, could walk. Men who had gone to southern markets for years turned north, taking their herds to places like Abilene, Kansas, where they would board trains headed to cattle markets in Chicago and elsewhere. What started as a few herds totaling roughly three thousand animals in 1866 swelled into a migration of more than five million animals over the next twenty years.³²

Equally important to their immediate use as beef, Texas cattle seeded the western ranching industry. Ranching in Colorado, Montana, Wyoming, and elsewhere in the West grew rapidly after the Civil War, and ranchers turned to Texas cattle as a foundation for their own herds. In 1884 alone, for example, 625,000 longhorns were driven to markets in Chicago, St. Louis, and elsewhere while another 300,000 animals were driven directly to northern ranchers for fattening.³³ This required moving the animals over long distances, and the longhorn's trail toughness presented a distinct advantage, especially when compared to highly graded animals, the contemporary term for "better bred." Many breeds could trail slowly, but according to an article in the St. Louis *Post-Dispatch*, "if put on the road with the active, wiry Texas steers, and compelled to travel the same distance, they almost invariably break down, and those that got through arrived at their destination weak in body, and low in flesh."³⁴ A similar account in the San Jose *Mercury News* cited the longhorn as famous "for speed

and endurance” and that “beside him the fat, sleek shorthorn would have died by the wayside the first few hours of the journey.”³⁵ All cattle could walk, but trailing a herd as much as a thousand miles was a relatively new proposition, and few breeds had bodies adapted to the rigors of long-distance travel.

At the peak of the trade, Texas ranchers made few mentions of their cattle’s specific attributes, perhaps because they took them for granted. But boosters celebrated the longhorn. In his get-rich-quick guide to cattle ranching, James Brisbin described the feeling of fear and excitement when, in Wyoming, he saw some of the “finest cattle” of his tour. He celebrated the thick, sturdy bodies of the Texas-bred animals, and even as he feared one would charge, he admired “the fire in the beast’s eyes.”³⁶

Ranchers across the West desired Texas cattle for their tremendous potential. For meat, they were a bit too lean, meaning animals headed directly to market were destined for the canneries, where the lowest grade meat went. But, if wintered farther north in Colorado or Wyoming for a season or two, opportunities expanded. One cattleman explained, “Texas generally only makes the skeleton, which is driven North and fattened for the various markets.”³⁷ Places like Colorado and Montana had more nutritious grasses, and the cold weather encouraged rapid weight gain.³⁸ A four-year-old animal raised entirely in Texas might weigh 800 pounds, but if driven north at one or two years of age, might weigh closer to 1,000 pounds at age four.³⁹

Because of the hands-off nature of the early ranching industry, the longhorn’s independence was especially desirable. Land was abundant, so it was cheaper to find hardy cattle that could fend for themselves. Cattle had to survive snow, droughts, fire, and wolves. As one breeder explained, “the longhorn was survival of the fittest, being indeed one breed of cattle which could withstand the countless difficulties to be met with in pioneer days.”⁴⁰ Famed Texas rancher Charles Goodnight observed that “no animal of the cow kind will shift and take care of itself under all conditions as will the longhorns. . . they can go farther without water and endure more suffering than others.”⁴¹ Ranchers today invest a great deal of money and labor in protecting their herds and keeping them fed. In the 1870s, the animals did much of this work.

This underscores that the longhorn functioned as both technology and laborer. It was not simply a body suited for a particular task; it also possessed an intelligence suited to range survival. Longhorns needed the intelligence to perform tasks for which other breeds depended on humans. As one journalist explained, “the habits of the half-wild cattle of Texas differ greatly from those of domestic cattle. The latter are stupid. They are accustomed to depend upon men for protection and food.” The author’s discussion of the longhorn’s “remarkable intelligence” included improbable tales of starving cattle

committing suicide as well as the more plausible tricks new mothers used to conceal their calves from wolves.⁴²

Despite (or perhaps because of) their independence and intelligence, Texas cattle were ornery, took longer to mature, and produced tougher meat—as juicy as “a boiled grand piano” by one account.⁴³ As long as cattle trailing was important, these drawbacks mattered little. By the mid-1880s, ranchers turned against the longhorn for three reasons: First, there were ongoing concerns about the cattle disease Texas fever. Texas cattle had adapted to the lethal disease, endemic to the Southwest, but in the new age of cattle mobility, they spread the disease to previously unexposed populations.⁴⁴ Second, ranchers outside of Texas who had once needed year-old longhorns to start their operations now had self-sustaining herds and were busy improving them through breeding. Third, growing rail networks meant that trailing was less lucrative and hardier cattle less important.⁴⁵ No single one of these factors was disastrous (there was too much money to be made to worry about a cattle disease, for example), but taken in aggregate, they spelled the end of the longhorn.

In the new climate, what had once been the breed’s advantages became liabilities. Their celebrated scimitar-like horns, valuable tools for fighting wolves or digging through tough soil, soon became painful symbols of the Texas Longhorn’s unsuitability to new ranching practices. As an article on grading Texas cattle explained, “the long horn, which was perhaps an advantage a generation or two ago, is now nothing but a nuisance. . . . [Longhorns] are also exceedingly objectionable when cattle are being stall fed; a large amount of space being wasted and a great tendency toward injury being the only consequences of their being retained.”⁴⁶ This risk of injury was equally true of rail transit. The horns, useful when cattle walked to market, were dangerous when the animals crowded into train cars. Some ranchers embraced de-horning, but this was painful for the animal and difficult for the rancher, so many introduced “the blood of hornless varieties, and thus gradually removing the objectionable articles by a more costly but much more merciful, and, of course, permanent process.”⁴⁷ The longhorn’s hardiness also lost much of its appeal. The cattle became known as the cheapest, poorest animals, and many ranchers desperately sold their stock at any price. Following a broader ranching depression in the late 1880s, Texas ranchers flooded Chicago markets with low-quality longhorns destined for canneries.

The business was changing, and Texas ranchers did not want to miss out. It appears that no one seriously suggested sticking with the longhorn or spent much time lamenting its passing.⁴⁸ Instead, ranchers immediately began trying to improve their herds through breeding. They imported European breeds and began crossing them with their stock. But this came with risks. Grading cattle too highly risked

making the new animals too fragile. As one rancher explained to investors, “our bulls have been selected this year with great care, our object being to secure well bred animals of good individual merit without losing sight of that most important quality, hardiness, or what is known on the range as ‘rustling qualities.’”⁴⁹ This same rancher found that grading up led to declining cattle fertility and concluded that their newer cattle “have been too highly bred.”⁵⁰ In their approaches to cattle breeding, we see ranchers treating the animals explicitly as a technology: they have a set of production problems and they are trying to create or find an animal that can solve them.

Similar to concerns over breeding, Texas ranchers expressed widespread consternation over raising market-friendly breeds within the prevailing open-range system. In 1887 a rancher named Sommerville complained that “cattle graded too highly will not be as prolific with the present system . . . but in talking about our stock, I do not look forward to the continuance of this system of working on open range.” He believed that improving the grade of cattle required modifications to Texas ranching: “I believe . . . that our system must be changed; and I think that the change must and will be wrought out gradually with a very few years.”⁵¹ The change, which came in the form of barbed-wire fences, did not come as gradually as Sommerville expected. There were few fences in 1879, but by the mid-1880s, they were everywhere. From 1879 to 1883, for example, Bee County, Texas, went from 25 miles of barbed wire to being almost entirely fenced. According to Texas historian Roy Holt, barbed-wire fences were ubiquitous by the mid-1880s.⁵²

Despite efforts to grade up Texas cattle and with the end of the open range, longhorns quickly fell into disfavor. By the late 1880s, the animals symbolized little more than a bad investment. As an upstart cattleman asked a Texas rancher in a story in the pages of *Munsey’s Magazine*, “why not raise butchers’ meat instead of horns?”⁵³

Nevertheless, the longhorn had been crucial to the early ranching and meatpacking industries. What in the mid-nineteenth century had been a system of regional meat economies was by 1885 a national system in which cattle circulated around the West and Midwest before making their way to the Chicago packinghouses, which slaughtered the animals and distributed their chilled beef nationwide.⁵⁴ In 1880 dressed beef shipments were a little over 10,000 tons but by 1884 would top 170,000.⁵⁵ It was a rapid and revolutionary change that outpaced the crawl of western railroads, meaning that the system depended at least in part on cattle trailing and the technology as well as labor of the longhorn.

National cattle and beef markets were not simply a consequence of industrial and technological changes like the spread of railroads and the telegraph. During the early stages of the transition to a national economy, the deployment of a biotechnology (the longhorn’s body) and the reliance on nonhuman labor (the longhorn’s grazing) were

essential to the system. The golden age of the longhorn thus should not be relegated to a premodern, pre-capitalist ranching past. The animal's heyday was a reflection of the emergence of national markets (as well as a driver of this process), rather than a vestigial story. When the business changed, cattle labor and independence became less important. As one commenter explained about the new breeds of cattle, "their very sluggishness, inaptitude for storms or hard treatment, their love of luxury and tenderness acquired thereby, qualities diametrically opposite to those possessed by the creatures they displace, are precisely the ones that entitle them to precedence in an age seeking for the best beef-producers."⁵⁶

TEXAS LONGHORN AS CURIOSITY AND SYMBOL

The cowboys and the longhorns
 Who partnered in Eighty-four
 Have gone to their last round-up
 Over on the other shore;
 They answered well their purpose,
 But their glory must fade and go,
 Because men say there's better things
 In the modern cattle show.
 —"The Last Longhorn"

In the traditional cattle song "The Last Longhorn," a cowboy meets "an ancient long-horned bovine . . . the last of a noble race." The surprisingly talkative longhorn compares himself to the imported cattle breeds that have supplanted him, observing that "these Jerseys and these Holsteins, they are no friends of mine; they belong to the nobility, who live across the brine." The longhorn and the cowboy are soon eclipsed, for the farmer has come "with his wife, his kids, his dogs, and his barbed-wire fence," ushering in the "modern cattle show."⁵⁷

Eulogizing the last longhorn rose in popularity in the early twentieth century. A 1920 article, which conceded that longhorns were indeed a "curiosity," observed that "Southwest Texas has read the obituary of the Texas Longhorn many times . . . there are so many pictures of the 'last one' and the pictures are not always of the same steer."⁵⁸ Often the Hereford, an increasingly common breed, was the villain in these obituaries. In an anecdote from the Trenton *Evening Times*, cowboys trailing a herd of Herefords encounter "a giant longhorn, such as the younger of the cowboys had never seen." The proud animal was "thin in flesh" but had horns "six feet each way from his head." The wild animal soon begins to duel with a member of the herd. The cowboys watched in shock as the wild bull's horns became

his undoing when he takes a short tumble and “the point of one of his long horns was caught in the earth. . . and his weight falling on his head broke his neck.”⁵⁹ Passage presumably was now safe for the better bred animals.

Because of their centrality to human societies, animals have been potent cultural symbols, helping human beings understand the present and past. In the twentieth century, the longhorn was reborn as a symbol of the history of Texas and early ranching, though for a history radically different from the previous section’s account. The longhorn’s passing was told as tragedy rather than business decision. The animal is presented as a vestige of a simpler historical time, rather than a key part of the emergence and operation of a national beef market. The memorialization of the longhorn not only creates an understanding of the history of ranching and Texas, but also elides important parts of that story.

Like writers, artists placed the longhorn at the center of western myth. Through their depictions of cowboys, American Indians, and cattle, the generation of artists working in the late nineteenth and early twentieth centuries proved key to producing a national vision of western life.⁶⁰ Frank Reaugh, the “dean of Texas artists,” was the most important painter of longhorns.⁶¹ Born in Illinois, he moved as a child to Texas in time to see the end of large-scale open-range ranching in the 1880s. He was perfectly suited to memorialize the longhorn: he had enough exposure to the beast to admire it but never had to worry about taking his own herd of stringy longhorns to market. *Driving the Herd (24 Hours #1)*, pictured here (figure 2), focuses on the romance of trail life using an enormous rural landscape, far from the cattle towns and railroads to which the animals were headed. The work of “cowboy artist” Charlie Russell, which also often featured



Figure 2. Frank Reaugh, *Driving the Herd (24 Hours #1)*, 1933. Credit: Harry Ransom Center, The University of Texas at Austin.

longhorns, was similarly known for a focus on frontier and range scenes.⁶² Missing from both artists' work were the markets, technologies, and infrastructure that made ranching possible.

In reality, the distance drawn between open-range ranching with longhorns and the "modern cattle show" was not nearly as far as popular culture suggested. The 1890s brought fences and hands-on cattle care and ranchers of the period sold to major urban markets, where their cattle's beef could be consumed a continent or even an ocean away. But the open-range ranchers of the 1870s also sold in major urban markets and made careful profit calculations about where to take their animals. In fact, 1870s ranches, frequently owned by investors in Britain or the eastern United States, were dramatically larger than their later counterparts.⁶³ In this light, the longhorn could be seen as the first great exemplar of the modern cattle show, though its myth conceals this reality.

The longhorn's romanticization echoed that of another celebrated American grazer, the bison. Newspapers made clear comparisons. In 1889 the St. Louis *Post-Dispatch* reported that the longhorn was disappearing from Texas and in the northern part of the state was "almost as extinct as the buffalo."⁶⁴ In 1907 the Kansas City *Star* noted that the longhorn had become a "curiosity" and that most "have gone the way of the buffalos."⁶⁵ The Grand Forks, North Dakota, *Daily Herald* emphasized in 1909 that the longhorn not only was out of place next to ranching's "modern breed[s]," but it was also, like the bison, out of time.⁶⁶ Such associations continued well into the twentieth century. A 1967 *New York Times* article put longhorns alongside bison as "national treasures that helped build the country."⁶⁷ The comparison with the buffalo helped legitimize the longhorn as a kind of native species, which allowed ranchers to identify cattle raising as quintessentially American despite cattle's importation to the Americas.

As important as the longhorn was to American history in general, it was especially connected to the history and culture of Texas. For example, longhorns played a small but emblematic role in the 1910 article "Texas Transformed," a rambling critique of the "new industrial days" that is as much an indictment of the greed and irreligiousness of the East as a celebration of Texas's embodiment of "simple honesty and plain Americanism."⁶⁸ The author contrasted modernization in Texas with the process back east, arguing, "in Texas it still remains possible to be an individual, although living in the Twentieth Century." Praising the longhorn as "famous in Texas simile" and as a "fixture in Texas history," the author acknowledged the breed's passing in rhetoric common to the piece—modernity meant replacing longhorns with blooded breeds and cow country with industrial society. Ultimately, the author suggested that what made Texas special was how it kept its identity despite these shifts.⁶⁹

Perhaps the clearest way in which the longhorn increasingly represented Texas history and memory is evident in the life and work of J. Frank Dobie, one of the first great historians of Texas. Dobie was perhaps the greatest promoter of the longhorn's revival. In *The Longhorns*, he referred to the animals as "the bedrock on which the history of the cow country of America is founded."⁷⁰ The book is a lengthy tribute to the animals' historical contributions and the ways in which their decline signaled an end of one period and the rise of another, when the West was "populated and machine modernized."⁷¹ Most notably, he painstakingly traced the breed's origins to the mixing of Spanish and Anglo-American cattle in order to emphasize the breed's distinctively American character.

Dobie's work reached a wide public, reflected in the 1927 *New York Times* article "The Longhorn Strikes His Last Trail." The lengthy article explicitly linked the longhorn to Texans; describing the breed's decline and the settlement of rural Texas, the article observed that "like the human Texans who have within the past fifty or sixty years wrested from him the control of the plains country, he is tall, rangy, hard-headed, and as full of fight as a bobcat." The article claimed that, although he celebrated the longhorn, Dobie did not "exaggerate in the slightest degree," and quoted him as stating, "somebody has said that civilization has followed the plow. West of the Mississippi the plow has followed the cowboy, and the cowboy followed a longhorn from Texas." The article then traced the decline of the breed and mourned that "the longhorn had to yield to the demands of commercialism and allow his blood to become mixed with that of the foreigner." The article closed on a note of optimism with a discussion of Dobie's and others' recent efforts to preserve the breed.⁷²

In the 1920s, not long before the *Times* article ran, several members of the US Forest Service, Will Barnes, John Hatton, and William Drummond, made it their mission to preserve the breed.⁷³ With a few thousand dollars, they assembled a small herd in the Wichita Mountains Wildlife Refuge in Oklahoma. Despite initial challenges, the herd survived and grew. The longhorn was safe (a herd remain there today), but Texans lamented that the only protected preserve was in Oklahoma. Dobie spoke with Barnes about the Oklahoma herd and later played a decisive role in bringing longhorns to a preserve outside Dallas, Texas.

In the decades after Dobie's preservation efforts, attempts to revive the longhorn as a source of profit arose. When land and fertilizer prices rose in the 1970s and 1980s, Texas ranchers hoped the longhorn's "unique survival and breeding qualities" could revitalize their business.⁷⁴ Even the beast's notoriously tough beef held possibility; by the 1980s, fat-conscious Americans were suspicious of fatty red meat and breeders hoped the longhorn's "tough and lean qualities" were the solution.⁷⁵ Ranchers cross-bred their cattle with longhorns in the

late twentieth century in an inversion of efforts to grade up longhorn herds a century earlier. Even today, cattle continue to act as technologies for addressing consumer or producer needs.

All the while, the longhorn's symbolic importance was never far out of view. In 1955 one rancher conceded that he and his neighbors "keep 'em around for show purposes for people who visit out here and want to see a Texas Longhorn Steer," while another explained they were kept "as a hobby."⁷⁶ They were not alone. Founded in 1964, the Texas Longhorn Breeder's Association quickly grew to thousands of members who agreed with its stated purpose "to recognize Texas Longhorn cattle as a distinct breed in order to protect the unique heritage of the Texas Longhorn and its link with the history of America."⁷⁷

The breed remains a staple in Texas popular culture. "Hook 'em horns" is the University of Texas slogan. Texas TV commercials feature car dealers posing alongside longhorns, and at least one Austin lawyer awkwardly rides one in an advertisement. Massive cattle horns adorn bars, oilmen's desks, and Texas history museums, although many of these relics, ironically, have to be imported from Nigeria.⁷⁸

A LONGHORN THEORY OF VALUE

From the Texas Longhorn's emergence as a distinctive breed through its heyday during the age of the long cattle drive, ranchers relied on the animals for labor even as they used them as a technology ideally suited to open-range ranching. It was this dual existence—as technology and as laborer—that has made the longhorn, as well as domesticated animals more generally, so vital to agriculture. In *Industrializing Organisms*, Edmund Russell challenged historians to "think of biotechnologies as workers," an approach that when applied to the longhorn provides a new perspective on the history of industrial animal husbandry.⁷⁹

Ranchers prized the longhorn's "independence," code for the animals themselves doing much of ranching's work. In an age when ranching depended on leaving animals on their own, animals' foraging, finding shelter, and protecting calves, among other types of labor, were key sources of profit. Identifying such acts as labor only makes sense, however, within a social and economic context: on a ranch, a cow protecting her calves is arguably labor, but a wild animal protecting its young is not. Suggesting that animals engage in labor does not necessarily devalue human labor. Instead, such a perspective gives us a broader conception of where we derive value and what labor is.⁸⁰

Domestic animals are not just laborers, but they are also technologies. In *Industrializing Organisms*, several historians explored how conceiving of organisms as technologies can help us rethink

industrialization and the relationship between nature and culture. The Texas Longhorn, like other domesticated farm animals, was selected and bred to fit particular economic and social functions, fitting the broad definition of a technology. Not all agricultural products fit this formulation. Commodities like wheat required additional technologies—grain elevators for storage and railroads for transportation—and external labor—farmers to plant and sow the seed and conductors to run the trains. Cattle, in contrast, provided both the means for transport and the actual labor—they could walk themselves to market—bringing into sharp relief the framework of animals as technology and laborer.

If traditional historical analyses have overlooked these points, myth making and memorialization have made it easy to do so. Celebrating the longhorn as a bygone relic of a premodern ranching era elides the animal's active role in helping to create the system in which it worked. Similarly, characterizing the decline of the longhorn as tragedy, rather than acknowledging it as an intentional business decision, perpetuates the myths surrounding early ranching and Texas history more broadly. Such myths are predicated on a sharp divide between older ranching practices and modern industrial ones. Recasting the longhorn as technology and laborer helps us appreciate the full range of the animal's contributions, even if it requires abandoning some of its myths.

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Notes

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- 1 "Pinckney's Famous Steer Mascot of Longhorn Team to Serve Barbecue Feast," *Fort Worth Star-Telegram*, December 14, 1919.
- 2 "Texas University Football Team to Eat Its Mascot," *Jonesboro Evening Sun*, December 22, 1919. Bevo remains the mascot, and they are now on their fourteenth animal. It is unclear how many Bevos have been eaten.
- 3 "Pinckney's Famous Steer Mascot of Longhorn Team to Serve Barbecue Feast," *Fort Worth Star-Telegram*, December 14, 1919.

- 4 "Texas University Football Team to Eat Its Mascot," *Jonesboro Evening Sun*, December 22, 1919.
- 5 Walter Barlow Stevens, *Through Texas: A Series of Interesting Letters* (General Passenger Department of the Missouri Pacific Railway Company, 1892), 42.
- 6 The appropriation of American Indian clothes and symbols has a long ugly history in Texas and the United States more broadly. See Philip J. Deloria, *Playing Indian* (New Haven: Yale University Press, 1999). On "ethnic cleansing," see Gary Clayton Anderson, *The Conquest of Texas: Ethnic Cleansing in the Promised Land, 1820–1875* (Norman: University of Oklahoma Press, 2005), and Gary Clayton Anderson, *Ethnic Cleansing and the Indian: The Crime That Should Haunt America* (Norman: University of Oklahoma Press, 2014).
- 7 "'Bevo' Is Eaten," *Forth Worth Star-Telegram*, January 21, 1920.
- 8 See William Cronon, *Nature's Metropolis: Chicago and the Great West* (repr., New York: Norton, 1992); Roger Horowitz, *Putting Meat on the American Table: Taste, Technology, Transformation* (Baltimore: Johns Hopkins University Press, 2005); Maureen Ogle, *In Meat We Trust: An Unexpected History of Carnivore America* (Boston: Houghton Mifflin Harcourt, 2013); and Joshua Specht, "Red Meat Republic: The Rise of the Cattle-Beef Complex, 1865–1906" (PhD diss., Harvard University, 2014).
- 9 On the goals and possibilities of evolutionary history, see Susan Schrepfer and Philip Scranton, *Industrializing Organisms: Introducing Evolutionary History* (New York: Routledge, 2003), and Edmund Russell, *Evolutionary History: Uniting History and Biology to Understand Life on Earth* (New York: Cambridge University Press, 2011). Specific examples of evolutionary histories include Roger Horowitz, "Making the Chicken of Tomorrow: Reworking Poultry as Commodities and as Creatures, 1945–1990," in Schrepfer and Scranton, *Industrializing Organisms*, 215–36; and Sam White, "From Globalized Pig Breeds to Capitalist Pigs: A Study in Animal Cultures and Evolutionary History," *Environmental History* 16, no. 1 (January 1, 2011): 94–120. Some pertinent examples of animal studies are Etienne Benson, "The Urbanization of the Eastern Gray Squirrel in the United States," *Journal of American History* 100, no. 3 (December 1, 2013): 691–710; Jon T. Coleman, *Vicious: Wolves and Men in America* (New Haven: Yale University Press, 2006); Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Cambridge: Harvard University Press, 2009); Alan Mikhail, "Unleashing the Beast: Animals, Energy, and the Economy of Labor in Ottoman Egypt," *The American Historical Review* 118, no. 2 (2013): 317–48; Brett L. Walker, *The Lost Wolves of Japan* (Seattle: University of Washington Press, 2008); and Brett L. Walker, "Animals and the Intimacy of History," *History and Theory* 52, no. 4 (2013): 45–67.
- 10 Models for examining animals' diverse roles and cultural meanings are Richard W. Bulliet, *The Camel and the Wheel* (New York: Columbia University Press, 1990), and Bulliet, *Hunters, Herders, and Hamburgers: The Past and Future of Human-Animal Relationships* (New York: Columbia University Press, 2007).
- 11 Emily Jane McTavish, Jared E. Decker, Robert D. Schnabel, Jeremy F. Taylor, and David M. Hillis, "New World Cattle Show Ancestry from Multiple Independent Domestication Events," *Proceedings of the National Academy of Sciences* 110, no. 15 (April 9, 2013): 1398. For an overview of the domestication of the Aurochs, see Paolo Ajmone-Marsan, José Fernando Garcia, and Johannes A. Lenstra, "On the Origin of Cattle: How Aurochs Became Cattle and Colonized the World," *Evolutionary Anthropology: Issues, News, and Reviews* 19, no. 4 (July 1, 2010): 148–57. On domestication more broadly, see Juliet Clutton-Brock, "The Process of Domestication," *Mammal Review* 22, no. 2 (June 1, 1992): 79–85.

- 12 Ajmone-Marsan et al., "On the Origin of Cattle," 148.
- 13 There is some debate over whether a third domestication happened in Africa. See Emily Jane McTavish et al., "New World Cattle," E1399. The argument for two independent domestications is relatively new, displacing an older orthodoxy. On this point, see R. T. Loftus, David Machugh, D. G. Bradley, Paul M. Sharp, and P. Cunningham, "Evidence for Two Independent Domestications of Cattle," *Proceedings of the National Academy of Sciences* 91, no. 7 (March 29, 1994): 2757–61, and David Caramelli, "The Origins of Domesticated Cattle," *Human Evolution* 21, no. 2 (September 16, 2006): 107–22.
- 14 McTavish et al., "New World Cattle," 1399.
- 15 *Ibid.*, 1398–1406. Interestingly, this research has used the investigation of New World breeds, particularly the Texas Longhorn. See also Anders Götherström, Cecilia Anderung, Linda Hellborg, Rengert Elburg, Colin Smith, Dan G. Bradley, and Hans Ellegren, "Cattle Domestication in the Near East Was Followed by Hybridization with Aurochs Bulls in Europe," *Proceedings of the Royal Society of London B: Biological Sciences* 272, no. 1579 (November 22, 2005): 2345–51.
- 16 For an overview, see Ajmone-Marsan et al., "On the Origin of Cattle."
- 17 For the best overview of this idea and argument, see Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (Oxford and New York: Oxford University Press, 2004).
- 18 Some cattle may also have come to the New World from West Africa as a consequence of the slave trade, but this is debated. Catarina Ginja, Cecilia Penedo, L. Melucci, J. Quiroz, O. R. Martínez López, and M. A. Revidatti, "Origins and Genetic Diversity of New World Creole Cattle: Inferences from Mitochondrial and Y Chromosome Polymorphisms," *Animal Genetics* 41, no. 2 (April 1, 2010): 138–39. McTavish et al. believe there is little solid evidence for this ("New World Cattle," 1399).
- 19 McTavish et al., "New World Cattle," 1399.
- 20 For genetic research on the origins of New World cattle, see McTavish et al., "New World Cattle," and C. Ginja et al., "Origins and Genetic Diversity." There is some evidence of an earlier movement as well. McTavish et al., "New World Cattle," 1402.
- 21 See Terry G. Jordan, *North American Cattle-Ranching Frontiers: Origins, Diffusion, and Differentiation* (Albuquerque: University of New Mexico Press, 2000).
- 22 Donald D. Brand, "The Early History of the Range Cattle Industry in Northern Mexico," *Agricultural History* 35, no. 3 (July 1, 1961): 132–39.
- 23 This is a rough estimate, based on beliefs about cattle reproduction rates for the original population compared with the observation that longhorns today can breed by two years of age. McTavish et al., "New World Cattle," 1399.
- 24 *Ibid.*, 1398.
- 25 The best source on early ranching is Jordan, *North American Cattle-Ranching Frontiers*. Regarding cattle as a food source, one might wonder why these wild cattle were not widely hunted and eaten by American Indians. The Comanche, for example, raided and sold cattle, but they did not enjoy their meat to the same extent as European peoples, meaning that wild cattle were often simply ignored. Discussed in Brand, "The Early History of the Range Cattle Industry in Northern Mexico," 135–36.
- 26 Brand, "The Early History of the Range Cattle Industry," 134.
- 27 See J. Frank Dobie, *The Longhorns* (Austin: University of Texas Press, n.d.).
- 28 Understanding differences between the Texas cattle and long-horned cattle in Mexico (such as the Corriente) or elsewhere is complicated by historical variability in animals and poor records. Perhaps one useful piece of evidence for

- the great similarity between varieties of long-horned New World cattle is that when USFS agents created a longhorn refuge in Oklahoma they bolstered their herd with some imported Mexican cattle. See Arthur Halloran, "Additional Longhorn Cattle Management Records from Wichita Mountains Wildlife Refuge," *Proceedings of the Oklahoma Academy of Sciences* 42 (1961): 269.
- 29 This was down slightly from before the war but would increase for the next two decades.
 - 30 For a detailed overview of cattle statistics in the late nineteenth century, see D. E. Salmon, *Report on the Beef Supply of the United States and the Export Trade in Animal and Meat Products* (Washington, DC: US Government Printing Office, 1890).
 - 31 Joseph G. McCoy, *Historic Sketches of the Cattle Trade of the West and Southwest*, (Glendale: Arthur H. Clark, 1940), 20.
 - 32 These statistics should only be taken as a rough estimate. These numbers taken from David Galenson, "The End of the Chisholm Trail," *Journal of Economic History* 34, no. 2 (June 1974): 350. See also Joseph Nimmo, *Report in Regard to Range and Ranch Cattle Business of U.S.* (Washington, DC: US Government Printing Office, 1885).
 - 33 Nimmo, *Range and Ranch Cattle Business*, 5.
 - 34 "The Texas Cattle Trade," *St. Louis Post-Dispatch*, September 6, 1889.
 - 35 "Longhorn vs. Shorthorn," *San Jose Mercury News*, February 2, 1908.
 - 36 James S. Brisbin, *The Beef Bonanza, Or, How to Get Rich on the Plains* (Philadelphia: J.B. Lippincott, 1885), 29.
 - 37 Frank Stillman letter, dated September 16, year unclear. Box 24, Matador Collection (Dundee), Southwest Collection, Texas Tech, Lubbock. Ernest Osgood makes a similar point in his work on the cattle raising industry, *The Day of the Cattleman* (Chicago: University of Chicago Press, 1957), 90.
 - 38 See The Prairie Cattle Company Limited; Report of Proceedings at Fifth Annual General Meeting, February 13, 1886 [Edinburgh, Frank Murray, Printer, 1886], page 8. Box 26, Matador Collection (Dundee), Southwest Collection, Texas Tech, Lubbock.
 - 39 Frank Stillman, letter, dated September 8, 1886. Box 24, Matador Collection (Dundee), Southwest Collection, Texas Tech, Lubbock.
 - 40 James Cox, *Historical and Biographical Record of the Cattle Industry and the Cattlemen of Texas and Adjacent Territory* (New York: Antiquarian Press, 1959), 211.
 - 41 Charles Goodnight, quoted in Donald E. Worcester, *The Texas Longhorn, Relic of the Past, Asset for the Future* (College Station: Texas A & M University Press, 1987), 60.
 - 42 "Texas Cattle: Peculiarities," *San Francisco Chronicle*, July 7, 1885.
 - 43 "The Longhorn Strikes His Last Trail," *New York Times*, March 27, 1927.
 - 44 The most thorough work on the importance of Texas fever is Claire Strom, *Making Catfish Bait out of Government Boys: The Fight against Cattle Ticks and the Transformation of the Yeoman South* (Athens: University of Georgia Press, 2010). See also Alan L. Olmstead and Paul W. Rhode, *Arresting Contagion: Science, Policy, and Conflicts over Animal Disease Control* (Cambridge: Harvard University Press, 2015).
 - 45 See Jimmy M. Skaggs, *The Cattle-Trailing Industry: Between Supply and Demand, 1866–1890* (Lawrence: University Press of Kansas, 1973); Wayne Gard, *The Chisholm Trail* (Norman: University of Oklahoma Press, 1954); and Donald E. Worcester, *The Chisholm Trail: High Road of the Cattle Kingdom* (Lincoln: University of Nebraska Press, 1980). For an intense debate about the decline of

- trailing and its relationship to Texas cattle, see Galenson, "The End of the Chisholm Trail;" R. Taylor Dennen, "Cattle Trailing in the Nineteenth Century," *Journal of Economic History* 35, no. 2 (1975): 458–60; and Galenson, "Cattle Trailing in the Nineteenth Century: A Reply," *Journal of Economic History* 35, no. 2 (1975): 461–66.
- 46 James Cox and J. Frank Dobie, *Historical and Biographical Record of the Cattle Industry and the Cattlemen of Texas and Adjacent Territory* (New York: Antiquarian Press, 1959), 200.
- 47 *Ibid.*, 211.
- 48 See "An Essay on the Shortening of the Horn and the Improving of the Breed," in Cox, *Historical and Biographical Record*, 195, and *Proceedings of the Third Annual Convention of the National Live Stock Association* (Denver: Smith-Brooks, 1900), 181.
- 49 Letter to John Farwell, November 1, 1886. XIT ranch records, Panhandle-Plains Historical Museum, Canyon, Texas.
- 50 *Ibid.*
- 51 Letter, Sommerville to Mackay, June 24, 1887. Matador records, Southwest Collection, Texas Tech, Lubbock.
- 52 Roy D. Holt, "The Introduction of Barbed Wire into Texas and the Fence Cutting War," *West Texas Historical Association Year Book* 6 (1930): 65–79.
- 53 Forrest Crissey, "Princes of the Earth: America's Untitled Aristocracy of Great Landowners," *Munsey's Magazine* (1912) 46(1911–1912): 177.
- 54 See Horowitz, *Putting Meat on the American Table*; Cronon, *Nature's Metropolis*; and US Bureau of Corporations, *Report of the Commissioner of Corporations on the Beef Industry* (Washington, DC: US Government Printing Office, 1905).
- 55 Nimmo, *Range and Ranch Cattle Business*, 5.
- 56 "Longhorn vs. Shorthorn," *San Jose Mercury News*, February 2, 1908.
- 57 "The Last Longhorn," in *Cowboy Songs and Other Frontier Ballads*, ed. John A. Lomax, Alan Lomax, and Edward N. Waters (New York: Macmillan, 1938), 197. The original publication date of "The Last Longhorn" is unclear, although Lomax first published the lyrics in 1910.
- 58 "Texas Longhorn in the Movies," *American Hereford Journal* 11 (September 1, 1920): 125.
- 59 "Hereford Slays Last 'Longhorn,'" *Trenton Evening Times*, June 21, 1907.
- 60 For an account of the relationship between art and understandings of cattle in an earlier time period, see Emily Pawley, "The Point of Perfection: Cattle Portraiture, Bloodlines, and the Meaning of Breeding 1760–1860," *Journal of the Early Republic*, forthcoming.
- 61 Roy C. Ledbetter, "Frank Reaugh: Painter of Longhorn Cattle," *Southwestern Historical Quarterly* 54, no. 1 (July 1, 1950): 13–26.
- 62 J. Frank Dobie, "The Conservatism of Charles M. Russell," *Montana Magazine of History* 2, no. 2 (April 1, 1952): 27–31.
- 63 Herbert O. Brayer, "The Influence of British Capital on the Western Range-Cattle Industry," *Journal of Economic History* 9, Supplement S1 (January 1949): 85–98.
- 64 "The Texas Cattle Trade," *St. Louis Post-Dispatch*, September 6, 1889.
- 65 "To Save the Longhorns," *Kansas City Star*, December 1, 1907.
- 66 "Longhorns Now Curiosity," *Grand Forks Daily Herald*, June 30, 1909.
- 67 "Out Where the Buffalo Roams, Texas Longhorn Makes a Comeback," *New York Times*, September 23, 1967.
- 68 "Texas Transformed," *Putnam's Magazine* 7 (October 1909–April 1910), 207.
- 69 *Ibid.*, 203.

- 70 Dobie, *Longhorns*, vii.
- 71 *Ibid.*, 344.
- 72 "The Longhorn Strikes His Last Trail," *New York Times*, March 27, 1927.
- 73 According to historian Don Worcester, it is unclear whose idea it was originally, although Barnes took the initiative to chronicle the process in *The Cattleman* and apparently put himself in charge of the story. See Donald E. Worcester, *The Texas Longhorn*. There was also a bison herd in the Wichita refuge, part of a similar project to protect the nearly extinct species. On the bison herd, see Andrew C. Isenberg, *The Destruction of the Bison: An Environmental History, 1750–1920* (Cambridge and New York: Cambridge University Press, 2001), 165.
- 74 "Longhorn Herds May Graze Again," *New York Times*, December 26, 1974.
- 75 "Tough and Lean Qualities Bring Longhorn Cattle Back to the Texas Range," *New York Times*, July 10, 1983. Worcester makes a similar claim in *The Texas Longhorn, Relic of the Past*, 92.
- 76 "Longhorn Tale Too Tall for Texas," *New York Times*, January 9, 1955.
- 77 Texas Longhorn Breeder's Association of America, Official Handbook. http://www.tlbaa.org/tlbaa/TLBAAHandbook2013updated10_13.pdf.
- 78 On imports from Nigeria, see "The Family Business: Pettys Transform Steer Horns into Furniture, Art," *Brownwood Bulletin*, January 4, 2013.
- 79 Russell, *Industrializing Organisms*, 6–10.
- 80 On the first two points, see Greene, *Horses at Work*, and Mikhail, "Unleashing the Beast." On the more provocative point of animals as workers, see Jason Hribal, "'Animals Are Part of the Working Class': A Challenge to Labor History," *Labor History* 44, no. 4 (2003): 435–53; Jason C. Hribal, "Animals, Agency, and Class: Writing the History of Animals from Below," *Human Ecology Review* 14, no. 1 (2007); and Robert Wilcox, "Ganado de la 'clase obrera' en Mato Grosso, Brasil (siglos 19 y 20)," presentation for panel entitled *Animales de trabajo, animales políticos y medioambiente*, VII Simpósio de SOLCHA, Quilmes, Argentina, October 2014.