# Race, Breed, and Myths of Origin: Chillingham Cattle as Ancient Britons

BEGINNING IN THE SECOND HALF of the eighteenth century, British public attention was intermittently captivated by a small but distinguished group of cattle. These striking animals were white (a color not usually favored by British stockbreeders); they were powerfully built; and they roamed the parks of their wealthy proprietors untroubled by the restraints that conditioned the existence of ordinary domestic beasts. At the time when widespread celebration of the breeding methods associated with Robert Bakewell emphasized the vulnerability of livestock animals to human manipulation, these cattle gloried in their wildness.1 The most famous of them lived at Chillingham, the remote Northumberland seat of the earls of Tankerville, and other herds, the number of which fluctuated constantly, were scattered across northern England and southern Scotland. Many of these herds were founded during the nineteenth century by landowners who admired the animals. So compelling was their appeal that proprietors who could not afford such a substantial investment in fancy livestock nevertheless occasionally commissioned portraits of their estates adorned by white cattle that, as far as can be determined from any corroborating historical records, never lived there.2

Imposing though it was, the physical presence of these animals accounted only in part for their appeal to the British imagination. Their figuration in a variety of discourses—from elite cultural productions to the technical literature of agriculture and natural history to mass-market journalism—suggested that they also carried a serious symbolic charge for a range of eighteenth- and nineteenth-century audiences. That they were, without question, magnificent animals did not sufficiently explain their charisma. Eighteenth- and nineteenth-century Britain was well supplied with animals who might, from one perspective or another, claim magnificence (caged lions, mountainous swine, sheep with eight legs); most of them were lucky to attract attention as simple curiosities. The qualities embodied by (or associated with) certain animals, however, linked them metaphorically or metonymically with issues of great or contentious concern in the human arena. Such connections were powerful, whether or not they were explicit or even manifest to those who made them. The interpretive process that they

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initiated ran in both directions; once a resonance had been detected or established, it tended reciprocally to determine what people said about the animals in question and even what they did with them.<sup>3</sup> Thus the emparked white cattle, as they were described, pictured, preserved, and admired in their heyday, were complex constructions that both illustrated and helped to shape British notions about such vexed topics as race, descent, and pedigree. That is to say, these bovines by their mere presence—at least as it was understood by many of their human compatriots—addressed questions of origin and identity that were of still more serious concern in the parlor and the meeting room than in the woods and the farmyard.

In 1802, the young Walter Scott edited an anthology titled *The Minstrelsy of the Scottish Border, Consisting of Historical and Romantic Ballads, Collected in the Southern Counties of Scotland; with a Few of Modern Date, Founded upon Local Tradition.* The collection was a modest commercial success, appealing to the romantic sensibility and sentimental nationalism that had been established in the previous generation by the Ossianic pastiches of James MacPherson and by Thomas Percy's *Reliques of English Poetry*; the entire first edition (only 850 volumes) sold out within a year, and an expanded version appeared in 1803.<sup>4</sup> Most of its contents consisted of ballads and other folk poetry featuring the antiquarian and regional motifs that appealed to a growing body of sophisticated readers susceptible to racial nostalgia. But as its subtitle indicated, the collection also contained poems from the editor's own pen, in which such motifs were concentrated or distilled. For example, "Cadyow Castle," which ran to a mere fifty ballad stanzas, packed in castles, hunts, minstrels, fair maidens, marauders, chieftains, English invaders, and religious conflict, as well as plenty of blood.

Most of this blood, predictably enough, was human, but some of it came from another source, manifestly also a powerful and evocative symbol of the romantic heritage of the border country. The initial scenes of "Cadyow Castle" focused on a hunt, climaxing in the following lines:

Through the huge oaks of Evandale, Whose limbs a thousand years have worn, What sullen roar comes down the gale And drowns the hunter's pealing horn?

Mightiest of all the beasts of chase That roam in woody Caledon, Crashing the forest in his race, The Mountain Bull comes thundering on.

Fierce on the hunter's quiver'd band He rolls his eyes of swarthy glow,

Spurns with black hoof and horn the sand, And tosses high his mane of snow.

Aim'd well the Chieftain's lance has flown— Struggling in blood the savage lies; His roar is sunk in hollow groan— Sound, merry huntsmen! Sound the pryse!<sup>5</sup>

The language in which Scott framed this description emphasized the qualities of physical magnificence and ferocious temperament that made the bull both a persuasive incarnation of a landscape presented as almost prehistoric, and an appropriate quarry for a noble huntsman. But it also suggested that their relationship was not circumscribed by such oppositions as victor and vanquished, or pursuer and prey. The attributes that made the bull a desirable trophy also tended to identify him with the heroic chieftain, and therefore, ultimately, with the reader: his singularity and preeminence, the fine scorn implied by "spurns" and "tosses," the anthropomorphism of his characterization as "the savage."

The dedication that served as the epigraph to "Cadyow Castle" confirmed this set of layered identifications. The poem was "addressed to the Right Honourable Lady Anne Hamilton," a living member of the ancient aristocratic family that had owned Cadzow Castle (as it is more commonly spelled) during the sixteenth century, when the events celebrated in the poem had taken place, and that still owned it in the nineteenth century. Whether or not it had existed at the earlier period, by the time Scott wrote his poem an almost totemic conflation of the Hamiltons with the herd of white cattle that had roamed the Cadzow estate was well established. The power of this legendary association was emphasized by the fact that, at least at the time of Scott's effusion, it apparently persisted without any support from the physical presence of the beasts themselves. He was familiar at first hand with the Hamiltons and their domain, having spent the Christmas of 1801 at Hamilton Palace, the grounds of which contained the ancient park and the ruins of the ancient baronial residence. But he never saw the cattle he described with such admiration. As he put it in his notes to the poem, "There was long preserved in this forest a breed of the Scottish wild cattle, until their ferocity occasioned their being extirpated about forty years ago."6 That these semilegendary creatures had or came to have significance far beyond the Hamilton family circle may be indicated by the fact that this absence was soon felt to be in need of repair. At least in some versions of the story, the park was restocked with wild cattle in 1809; although according to other sources, despite the testimony of absence provided by Scott and others, the cattle had never left.

"Cadyow Castle" was only the first occasion upon which white park cattle figured conspicuously in the public culture of nineteenth-century Britain. At the annual Royal Academy show of 1836, the young Edwin Landseer exhibited a striking and much-admired painting alternatively, and perhaps equivalently,

titled *Death of the Wild Bull* and *Scene in Chillingham Park: Portrait of Lord Ossulston.* The painting recorded a somewhat unplanned occasion. Landseer had been making sketches in preparation for a portrait of the cattle already commissioned by the earl of Tankerville, and Lord Ossulston, the earl's eldest son, decided to shoot one of the bulls so that Landseer could observe his allegedly distinctive anatomy at closer range than the animal's temperament would otherwise have allowed. Although shooting was the routine method of dispatching the cattle, in this case the procedure went awry, with the result that a keeper was gored and would have been killed if not for the diversionary tactics of Ossulston's deerhound Bran. For his heroism, Landseer awarded the dog a place of honor at the left of the painting, which in most other respects was also composed to suggest the conclusion of a hunt rather than the culling of a herd.<sup>7</sup>

Landseer maintained his friendship with the Tankerville family throughout his distinguished career, and he repeatedly returned to Chillingham to sketch their white cattle. Near the end of his life, in 1867, he once again exhibited a painting of them at the Royal Academy. Titled simply *The Wild Cattle of Chillingham*, the portrait featured a dignified family group of bull, cow, and calf posed against a wild landscape and threatening sky (fig. 1). The Lord Ossulston of the earlier painting, long since become the sixth earl of Tankerville, had commissioned it, along with a companion painting of a stag, doe, and fawn, to adorn the dining hall of Chillingham Castle, where *The Death of the Wild Bull* already hung. In the catalogue of the 1867 Royal Academy exhibition, the entry for *The Wild Cattle of Chillingham* included several stanzas from "Cadyow Castle," and taken together, these paintings offered a similarly complex and layered identification of these imposing cattle with both the ancient wilderness they inhabited and the noble family that owned them.<sup>8</sup>

Landseer's selection of these paintings for display at the annual Royal Academy show, as well as the appreciative public response to them, suggested that, at least as far as symbolism was concerned, the white cattle were not the exclusive possession of the aristocratic proprietors with whom they were most closely associated. A happening staged at Chillingham in the autumn of 1872 demonstrated that other members of the aristocratic elite could easily appropriate the animals' cachet. At the invitation of Lord Tankerville (again the sixth earl), the prince of Wales himself arrived to shoot a bull. Although the confrontation seems to have been fairly well controlled—certainly no "crashing the forest" in the manner of "Cadyow Castle" was allowed, and the prince was well covered in a haycart while "the finest bull in the herd was ridden out" for him to shoot—published reports tended to evoke a wild hunt, with elements of both the medieval chase and the Victorian safari. Writing only a few years after the occasion, a clergyman named John Storer described it as "the great event which of late years has brought the Chillingham cattle prominently before the public . . . the successful pursuit by the Prince of Wales of the noblest unreclaimed animal

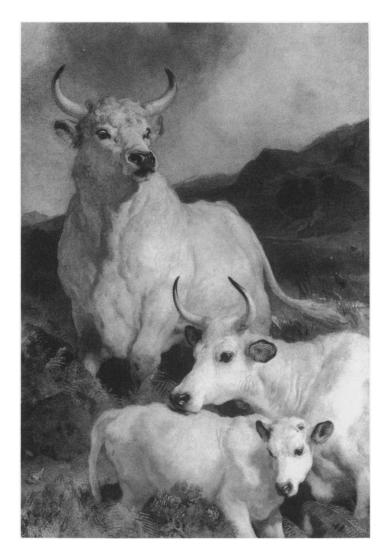


FIGURE 1. Edwin Landseer, *The Wild Cattle of Chillingham*, 1967. Photo: Laing Art Gallery, Newcastle-upon-Tyne, England.

our country still produces." His narrative of the hunt began with the "right royal welcome" extended to the future monarch, and proceeded through the difficulties of isolating "the king bull" to the inevitable "instant death" of the "noble animal" as the result of a single precisely placed shot. And if the symbolic impact of the white herds was most forceful when they were on the hoof, it did not desert them even when they shared the common fate of cattle. Before the demise of the herd at Lyme Park in Cheshire, each year "one or two animals were shot at Christmas, and some of the beef . . . was always forwarded to Her Majesty the Queen."

Nor were the upper classes alone in their response to the mystique of the white cattle. It was true that in 1848 the popularizing naturalist Philip Gosse claimed that their charisma, and consequently their public audience, had diminished, a diminution that he attributed to the questionable fact that "formerly the hunting of a Bull from these wild herds was attended with much 'pomp and circumstance'; but of late years it has been relinquished from its danger; and now the keeper shoots them as needed." Nevertheless much evidence suggested that ordinary Britons continued to find a great deal to appreciate and to identify with in these powerful, half-legendary beasts. 11 Indeed, by the last decades of the nineteenth century, the surviving herds of white park cattle had emerged as tourist attractions. One natural-history-oriented traveler enjoyed a visit to the cattle at Chillingham on the spur of the moment, after heavy seas had forced him to cancel his planned trip to the Farne Islands off the Northumberland coast.<sup>12</sup> At Cadzow, the keeper reported that the cattle had become "much less wild and dangerous ... in consequence of being visited by so many people."<sup>13</sup> And by 1896, the Earl Ferrers, the hereditary owner of the herd at Chartley in Staffordshire, realized that not only were people eager to admire his animals, but they would actually pay for white cattle memorabilia. Thus, before his annual culling of the herd, he placed an advertisement in the county paper "offering for sale the heads and skins of some Bulls and Cows which were about to be killed. . . . The applications were so numerous that all the specimens were quickly snapped up at considerable prices."14

These striking animals fascinated experts as well as artists and other members of the nonspecialist public, although these parallel attractions were not expressed in identical terms. Shadowing the explicitly symbolic general discourse of literature, art, and popular journalism were several technical discourses that scrutinized the white park cattle through the explicitly empirical lenses of natural history (or zoology) and animal husbandry. Despite their different orientations, all these discourses emerged at about the same time. Until the middle of the eighteenth century, there were relatively few written sources of information about the white cattle, but by the time that Scott composed "Cadyow Castle," no

survey of the mammalia or of British animals or of domestic livestock was complete without some account of them. And the first quarter of the nineteenth century saw the beginnings of a literature of their own, mostly composed of brief articles but ultimately including several substantial tomes.<sup>15</sup>

The incorporation of the white cattle into the canons of natural history and animal husbandry was decisively confirmed by the official attention of distinguished institutions. The history and taxonomical status of the Chillingham herd was the subject of a report and a lively discussion, both widely reported in the press, at the Newcastle meeting of the British Association for the Advancement of Science in 1838; almost half a century later the same organization appointed a special committee "for the purpose of preparing a Report on the Herds of Wild Cattle in Chartley Park, and other Parks in Great Britain."16 The British Museum (Natural History) was pleased to receive a sample Chillingham bull from the fifth earl of Tankerville in 1839 and equally pleased to receive a replacement from his son half a century later.<sup>17</sup> The anatomical collection of the University of Edinburgh contained a single skull from Cadzow, the most distinguished Scottish herd.<sup>18</sup> In the 1890s, the staff of the Cambridge University Museum of Zoology went to some pains to accumulate the skeletal remains of bulls from Chillingham, Cadzow ("the second best Bull" in the herd at that time), and Chartley ("the finest Bull in the herd"). 19 At the end of the nineteenth century, a live Chartley bull graced the Regent's Park menagerie of the Zoological Society of London.<sup>20</sup>

The orthodox description of the white cattle took form almost as soon as writers began to describe them. In his General History of Quadrupeds, first published in 1790, the engraver and zoological popularizer Thomas Bewick characterized the herds emparked at Chillingham, Chartley, and a few other ancient estates as survivors of "a very singular species of wild cattle in this country, which is now nearly extinct" (see fig. 2). Relying heavily on the account offered by the eminent agriculturalist George Culley in his Observations on Livestock of 1786, Bewick noted that the park cattle were "invariably white," with black or red points; that they sported wide curving horns; and that some of the bulls had manes. Several characteristic behavior patterns seemed to distinguish them from ordinary domestic cattle, and instead to ally them with various wild ungulates: they were apt to form a circle to menace any intruder before charging; cows hid their newborn calves in high grass, returning to nurse them only occasionally; when a member of the herd was seriously wounded or ill, the others turned on it and gored it to death. In the parks where these remnants of the ancient cattle of Britain were preserved, Bewick reported, they were also traditionally treated like wild animals, on analogy with the deer that were much more frequently preserved in this way. That is, they were left to their own devices as far as mating and food were concerned (with such occasional exceptions as the provision of supplemental hay in the hardest winter weather), and they were shot rather than slaughtered, if their continued presence in the herd was considered undesirable or even if they were destined for the table. Bewick characterized "this mode of killing them" as "perhaps, the only modern remains of the grandeur of ancient hunting."<sup>21</sup>

In his History of Quadrupeds, published a few years later, Thomas Pennant, a distinguished naturalist and member of the Linnean Society, praised the description offered in what he termed "that little elegant work," and compounded the compliment by reproducing Bewick's entry almost word for word.<sup>22</sup> Once established, this formulation survived into the Victorian period with relatively little modification. In his introduction to an entire book entitled The Wild White Cattle of Great Britain and published in 1879, John Storer asserted that "There . . . have existed in this country from the earliest historic times, herds of White Cattle, perfectly distinct, and of a different breed from its ordinary domestic races. Some of these herds seem to have been always wild."23 His contemporary James Harting, who deployed paleontological as well as historical evidence, claimed that "the few scattered herds of so-called Wild White Cattle which still exist in parks in England and Scotland may be said to form a connecting link . . . between the wild animals which have become extinct in this country within historic times, and those which may still be classed amongst our ferae naturae."24 When the Earl Ferrers offered the Chartley cattle for sale in 1904, the advertising circular described them as "the lineal descendants of the original British Wild Ox."25 A few years later a guidebook to Northumberland recommended that tourists visit Chillingham to "see the direct and unmixed descendants of its original wild cattle." 26 Indeed, essentially the same formulation has continued to appear in the—admit-

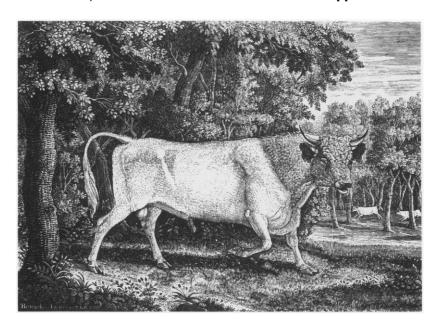


FIGURE 2. Thomas Bewick, The Chillingham Bull, 1789.

tedly infrequent—modern discussions of these herds. For example, two recent scholarly interpretations of Landseer's Chillingham paintings identified their subjects as "descended from native breeds of wild cattle and ow[ing their] survival to the remoteness of the border country," and as having "roamed the Caledonian forests since pre-Roman times."<sup>27</sup> Nor are such views confined to those (such as art historians) who might be presumed to have no grounds for independent judgment. The secretary of the White Park Cattle Society has recently written that "the White Park can claim with confidence to be a truly ancient breed," which is "very distinctive" and "genetically distinct from other British breeds."<sup>28</sup>

Constant as these reiterated assertions have been, they have not gone unchallenged. Indeed what makes the stability of this formulation over two centuries of technical discussion noteworthy is the fact that every element of it has been repeatedly and persuasively contested. To begin with the most obvious evidences of the singularity of the white cattle, even superficial investigation into the history of the herds suggested that both their color and their horns had always been subject to significant variation, and that their apparent uniformity was more likely the result of sustained human intervention than of long and uninterrupted descent. For example, in his mid-century zoological *Monograph of the Genus Bos*, George Vasey revealed that "it is pretty well known to the farmers about Chillingham (although pains are taken to conceal the fact), that the wild cows in the park not unfrequently drop calves variously spotted."<sup>29</sup> More matter-of-factly, the British Association Committee of 1887 noted that "a tendency to throw black calves . . . still exists in most of the herds."<sup>30</sup>

Where nature thus failed to maintain the mystique, artificial selection might step in. Deviations (although, as both Vasey's exposé and the committee's "Report" suggested, they were rather standard deviations) were summarily dealt with; calves not conforming to the prescribed color pattern were immediately killed. (In most herds, aberrant color provided sufficient justification for this postnatal culling, but sometimes the practice was reinforced by weightier considerations. At Chartley, for example, the slaughter of black calves was attributed to an ancient legend that every such birth portended a death in the proprietary Ferrers family.)31 Further, it turned out that the ostensibly ancient or primitive standard which determined the fate of newborns was so far from inviolably traditional that it was subject to significant redefinition at the whim of the noble proprietors. Similarly ferocious artificial selection pressures resulted in the elimination of the black points that Bewick recorded in the Chillingham herd; by the late nineteenth century, all the Chillingham cattle had red ears.<sup>32</sup> Even the magnificent lyrate horns of the park cattle turned out to be negotiable. So large a proportion of the minor nineteenth-century herds lacked them completely that Storer divided white cattle into "two pretty distinct varieties," one with horns and one without.33 But this turned out to be a rather volatile characteristic to use as the basis of varietal distinction. The British Association Committee reported on what its

members took to be good evidence that the entire Chartley herd had probably been polled a mere forty-five years previously, since "the present duke's grandfather caused all showing the least appearance of being horned to be killed."<sup>34</sup>

If whiteness presented a problem for the owners of the emparked herds, the issue of their wildness turned out to be even more vexed. Enthusiasts loyally echoed the assertion of the fifth earl of Tankerville that his "wild cattle" were "the ancient breed of the island, inclosed long since within the boundary of the park." For example, Sir Jacob Wilson, writing in a somewhat nostalgic vein at the end of the nineteenth century, noted that "only Chillingham, Hamilton Park and Chartley can truly claim an unbroken pedigree, or that their cattle are still a wild undomesticated race."35 But increasingly, as time went by and data accumulated, a chorus of demurrals emerged. The underlying question, in the view of skeptics, was whether, even assuming that the nineteenth-century emparked herds lived in a state of nature, an assumption that was at least called into question by the continual pressure of artificial selection, that state represented a historical constant or a relatively modern restoration. Many who investigated the background of the herds concluded that they were feral at best (at wildest, in other words); that is, that however their Victorian life style might be characterized, they were the descendants of animals that had once been completely domesticated.

Some of these demurrals were couched in tentative terms, as was the British Association's diplomatic statement that "whether these animals were genuine Uri [aboriginal wild cattle], or [merely] feral cattle, admits of some doubt."36 But many experts asserted with confidence that, wild as the cattle might appear in the nineteenth century, their history must have included, as Richard Lydekker, a late Victorian curator at the British Museum (Natural History) put it, "the intervention of a period of domestication."37 Different authorities located this domestication at different epochs. For the eminent anatomist Richard Owen it was the Roman occupation of Britain (he claimed to trace the white park cattle to animals imported at this time), while for W. Boyd Dawkins, the paleontologically oriented professor of geology at Owens College, Manchester, it was the medieval period, when, he claimed, all domestic cattle lived under the unenclosed conditions that made the emparked white cattle seem wild to Victorian eyes.<sup>38</sup> So confident of their essential tameness was Francis Goodacre, a Norfolk clergyman who had dedicated himself to a lonely campaign for the recognition of a discipline that he called "hemerozoology," or the study of domestic animals, that he used the Chillingham cattle to mark one end of the scale of domestication, the other terminus of which was the dog.39

Queries about the wildness of the white cattle inevitably cast doubt on their claims to indigenousness or aboriginality, since all such claims were ultimately based on a narrative that identified the emparked herds of the nineteenth century with animals that had roamed the prehistoric forests of Britain. It was widely known and occasionally regretted that the pressure of human settlement and

human hostility had contributed to the extinction of several species of mammals in medieval and even postmedieval times—the wolf, the wild boar, the bear, and the beaver—and those who subscribed to this account viewed the white cattle as an analogous remnant of the aurochs or wild ox.<sup>40</sup> They had survived, it was argued, as a result of a fortunate conjunction of circumstances: first, their location in remote, relatively unpopulated areas, and second, their protective enclosure by medieval, or at least long-dead, magnates. The element of protection was especially important because, even after emparkment, according to many chroniclers, the continued existence of the white cattle was threatened repeatedly and from varied directions. For example, in the first known written record of the Chillingham herd, which dates from the upheavals of the 1640s, one of the estate servants complained that occupying Scots troops were slaughtering the cattle.<sup>41</sup>

Nor did the public attention the cattle enjoyed in the nineteenth century necessarily signal the end of their perils. During the 1860s, the Cadzow herd, along with all other British bovines, was endangered both by rinderpest or cattle plague and by the policy of quarantine and slaughter promulgated by authorities to contain it. Nature determined that only about half the animals succumbed to the disease; the keepers protected the survivors from the law by hiding them in abandoned mine pits until the epizootic had passed. And indeed, although keepers saved the cattle in this instance, especially for many of the smaller emparked herds, preservation turned out to be a double-edged sword, especially when it was accompanied by a zealous interest in genealogical purity. In the course of the nineteenth century, according to a definitive twentieth-century estimate, over a dozen of them disappeared as the result of the breeding and husbandry policies pursued by their owners. As

In the view of many investigators, however, it was far from clear exactly what was being preserved by these noble efforts. The claim that the ancestors of the white cattle were quintessentially British was countered by a range of alternatives. Most dissenting authorities supported Richard Owen's suggestion that the ancestral white cattle had been introduced to Great Britain by the Romans. R. Hedger Wallace offered a concise and forthright version of this position when he disparaged "a commonly accepted view regarding white cattle . . . that they are the true descendants, in an unbroken line, of the aboriginal cattle that existed in Britain"; instead, he asserted, "these cattle are simply the descendants of Roman cattle." But virtually every human migration into Britain might be regarded as a possible source of the white cattle. Thus the anonymous author of an article on the "Origin and Early Progress of our Breeds of Polled Cattle" derived them from the cattle of the Celts, while Boyd Dawkins identified the herds that accompanied the Germanic invaders as their ancestors. 45

These historical speculations were buttressed by evidence provided by the cattle themselves. That is, the surviving white herds of nineteenth-century England and Scotland did not resemble one another as closely as might have been

predicted on the basis of their postulated common and exclusive descent. Simple observation revealed that some had impressive and terrifying horns, while others were polled. Some had black points, while others had red. The tendency to depart from the white-with-colored-points pattern was widespread, but different herds were apt to depart in different directions. And proprietors were prone to exaggerate the differences between the herds they owned and their alleged relatives, ordinarily with the implication that not all those who claimed white cattle status really deserved it. Thus every historian of the small herd at Lyme Park, which died out late in the nineteenth century due to increasing infertility, at least in part as the result of successive proprietors' vigilance in maintaining the unsullied purity of their animals' lineage, repeated the monitory tale of the black calf born as the result of an attempt to reinvigorate the herd by introducing a bull from Chartley. Previously, it was said, there was "no record of any departure from the legitimate white ground-colour."46 Nor were such inimical comparisons confined to superficial characteristics. In the course of describing his own noble animals, the fifth earl of Tankerville offered a sweeping disparagement of the Cadzow herd: "They in no degree resemble those at Chillingham. They have no beauty, no marks of high breeding, no wild habits, being kept . . . in a sort of paddock." (It must be said that Tankerville was not uniformly ungenerous. He did think that "those at Chartley Park . . . closely resemble ours in every particular . . . except some small difference in the colour of their ears." In any case, such aficionados of the Cadzow herd as the local clergyman immediately leapt to its defense, castigating Tankerville's account as "full of blunders.")47

And if the emparked herds did not resemble each other, they were often perceived to resemble other cattle with no high claims to ancient and distinct ancestry. As David Low, the professor of agriculture at the University of Edinburgh, asserted, "no real distinction exists between the Wild Oxen of the parks, and those which have for ages been subjected to domestication." In particular, emparked herds might seem like white versions of one or another of the ordinary domestic breeds, usually a strain common in or near their locality. Thus the Chillinghams were likened to the Ayrshires and Kyloes of Scotland, the Chartleys to the long-horns once plentiful in the Midlands, and the "half-wild" white cattle of Dynevor Castle in Carmarthenshire to the old Castlemartin breed of South Wales.

In addition, despite the claims of the keepers and proprietors of the white cattle that each herd comprised an isolated breeding unit, local rumors often fueled the suspicions that had been sparked by the cattle's appearance. One or two Highland bulls were reported to have bred in the Cadzow herd "some years ago," according to the British Association Committee of 1887.<sup>50</sup> Even at Chillingham, before the nineteenth century, barriers between the wild herd and neighboring domesticates were not so strictly defended as they subsequently became. It was well known that local cows had been admitted freely to profit from the attentions of the reigning white bull. Of course, such donations would not

have altered the inheritance of the park cattle, but it was also considered likely that in less punctilious times alien bulls had repeatedly been allowed, or even encouraged, to make reciprocal donations to the cows of the white herd.<sup>51</sup>

Nineteenth-century discourses about British white cattle, both popular and technical, were thus structured by a series of internal contradictions. Every assertion was made with great confidence, and was as energetically countered and denied. The ever-increasing documentation (at least when counted in terms of pages or pounds of published material) derived from a body of evidence that was small to begin with and did not grow quickly. Before their late eighteenth-century emergence into the public eye, not much had been written about the cattle. Writers looking for ancient authority had to be satisfied with the brief description of Caledonian wild cattle offered by Hector Boece or Boethius in his early sixteenth-century Scoticorum Historiae, or with occasional (and usually ambiguous) passing references to wild cattle in manorial records and other medieval accounts. For example, in 1839 a contributor to the Annals and Magazine of Natural History proudly reported that he had discovered a reference to "tauri sylvestres" in a Latin history of the monastery of St. Albans, which proved that, at least at the time of Edward the Confessor, wild cattle existed "not only in the forests of Caledonia and the north of England, but in the midlands."52

Even where the eighteenth- and nineteenth-century existence of white herds seemed to guarantee their historical presence, and their traditional association with noble proprietors might have been supposed conducive to record keeping, details were difficult to come by. Although, as Charles Darwin noted when discussing the cattle in The Variation of Animals and Plants Under Domestication, a thirteenth-century document testified to the existence of the park at Chillingham, no written evidence about its renowned bovine inhabitants surfaced until almost half a millennium later.<sup>53</sup> As the fifth earl of Tankerville noted in 1839, "all that we know and believe . . . rests in great measure on conjecture, supported, however, by certain facts and reasonings, which lead us to believe in their ancient origin, not so much from any direct evidence, as from the improbability of any hypothesis ascribing to them a more recent date. I remember an old gardener of the name of Moscrop, who died about thirty years ago, at the age of perhaps eighty, who used to tell of what his father had told him as happening to him, when a boy, relative to these wild cattle; which were then spoken of as wild cattle, and with the same sort of curiosity as exists with regard to them at the present day."54

The chronicles of other Victorian herds reiterated this reliance on the oral testimony of retainers, frequently aged or even deceased. Writing about the Lyme Park herd in 1891, Charles Oldham regretted being unable to speak to "John Sigley, the old keeper, who would perhaps have been able to give me more information than anyone else" but who had unfortunately been dead an imprecise

"five or six years"; instead he had to be satisfied with "old Jim Arden, who has been at Lyme, man and boy, for seventy years or more." Investigating a recently extinguished herd in Kirkcudbrightshire at about the same time, Robert Service cited as authority for its size "some of the old people" (their estimates apparently varied by a factor of two); for additional local evidence he relied on a pseudonymous and retrospective letter about a different herd formerly at Ardrossan in Ayrshire, that had been published in a local newspaper in 1817. And as the Victorian inclination to doubt Sir Walter Scott's eyewitness assertion that the Cadzow herd was absent from its traditional haunts in 1801 indicated, the very existence of one of the most important and allegedly ancient herds for a fifty-year period beginning in the middle of the eighteenth century, was the subject of repeated disagreement among a later generation of experts.

Indeed, the information explosion that transformed so many fields during the nineteenth century left the white park cattle relatively untouched. And despite great curiosity, their present condition often seemed as mysterious as their history and origins. Expert observation of the living herds was not much more productive than scholarly scrutiny of the sparse documentary record. The fact that they were allowed to roam freely over their wild domains made it difficult to study their behavior; one data-starved naturalist suggested in 1865 that, by way of repairing this gap, "some valuable information might be collected were any readers of the 'Zoologist' who live near such cattle to favour us with notes on their habits."57 Their reclusive and independent life style also precluded any systematic (or at least completely reliable) attention to their reproductive behavior, and therefore to their pedigrees, although, inspired by Darwin, the sixth earl of Tankerville did keep nongenealogical demographic records of births, deaths, numbers, and "remarkable occurrences" in the Chillingham herd from 1862 to 1899. 58 But in general, credible information was hard to come by; as the founding volume of The Park Cattle Society's Herd Book lamented somewhat paradoxically in 1919, "although the different herds have been from time immemorial jealously guarded from any outcross, the names, ages, and pedigree of individuals have often been insufficiently kept or not kept at all."59

Thus, at the center of the garrulous public discussion of the emparked herds was a virtual vacuum, even a black hole. And although the absence of reliable data was regretted by some experts, the implicit testimony of others suggested that even this dark cloud had a silver lining. The dearth of information could license the subordination of evidence to the less concrete considerations that in any case characterized the interpretation of these animals. If most of what seemed to be known about them was ambiguous and insubstantial, then the flamboyant white cattle could function as a kind of tabula rasa, upon which people could inscribe their own concerns. For the most part, these concerns derived from the identification of these allegedly primordial cattle with the modern human inhabitants of their island; they were, as one nostalgic writer put it, "ancient Britons."

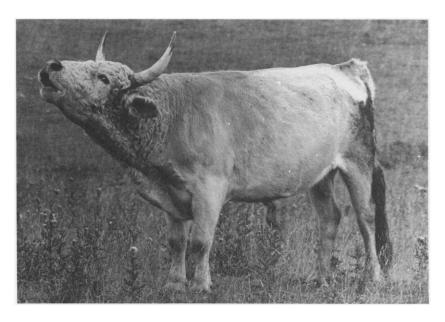


FIGURE 3. S. J. G. Hall, A Four-Year-Old Chillingham Bull, 1989.

Not only were the surviving herds the totems of distinguished and powerful families, but they inspired considerable local pride. Thus much humbler neighbors of the Tankervilles could state in the *Transactions of the Tyneside Naturalists Field Club* that "our local mammalian fauna is honorably distinguished from that of nearly every other part of the kingdom by the possession of this noble animal in a state of wildness." And as the qualities represented by the white cattle were attractive to all Britons, the metonymic chain could easily be extended further, to the nation as a whole.

The most obvious of these qualities was commanding physical magnificence, emphasized both in visual representations (which in celebrating the animals' physiques seldom hinted—what was also true—that they tended to be smaller than ordinary domestic cattle; see fig. 3) and in the almost obsessively reiterated accounts of the difficulty of hunting them.<sup>62</sup> (The iconoclastic Vasey recognized the mythopoeic tendency of these accounts, commenting that the stereotypical scene—for example, the one depicted in Landseer's picture—"does not appear to have much relation to the history of the *Genus Bos*: it however exhibits the brutal and ferocious habits of two varieties of *Genus Homo*, namely *Nob*ility and *Mob*ility.")<sup>63</sup> The males, and especially the alleged leaders of herds, often referred to as the "monarch" or the "king bull," were the most frequent objects of artists, anatomists, and museum curators, and the exclusive objects of hunters. The internal organization ascribed to the herds reinforced the sense of power and

domination symbolized by the mere presence of such impressive chiefs. Each herd was conceived as the harem of a single bull, who had to defend his position against continual challenges from other males eager to replace him. (In order to reduce the damage alleged to result from such challenges, in many herds keepers castrated a large percentage of male calves soon after birth, thus also producing another significant, if undirected artificial influence on the animals' pedigrees.) And these exemplary cattle were also perceived to display the gender stereotypes consistent with their paternalistic polity. According to one admiring observer of the Chillingham herd, "grand, masculine, and majestic is the bull; peculiarly sweet, feminine, and elegant is the cow."<sup>64</sup>

The metaphoric appeal of ancient genetic isolation may have been still more appealing to citizens of the island nation than that of brute strength and firm fatherly guidance. Not every enthusiastic account of the white cattle mentioned their macho social organization, but all celebrated the noble and exclusive descent that justified their separation from the inferior circumambient strains of domestic cattle. So important was this component of the white herds' reputation that the rumors of miscegenation occasionally attaching to one herd or another tended not to be disdainfully ignored but rather energetically denied. Thus it was claimed that at Chillingham, "the introduction of alien blood has been rigidly prohibited"; a defender of the Vaynol Park herd in Caernaryonshire earnestly explained that "it was stated a short time ago that these had been crossed with the Pembroke White Cattle. This is a mistake. Some were purchased a few years ago, but none were ever put near the main herd, Mr. Assheton-Smith being most particular in this respect."65 Indeed, because centuries-long breeding within very small reproductive communities—the largest of the white herds contained fewer than one hundred individuals, and most were much smaller—seemed to contradict a great deal of evidence accumulated by breeders of ordinary livestock illustrating the dangers of extended inbreeding, it was occasionally asserted by dissenters from the general wisdom that the continued vigor of, for example, the Chillingham herd provided "one of the most conclusive arguments that crossing with different stock is not necessary."66

If the special status of the white park cattle was thus explained and guaranteed by their unsullied descent, it was reified through their classification. In the second half of the nineteenth century, some strains of human racial theory came to focus on increasingly subtle differences as a means of demonstrating increasingly slippery superiorities. Thus Robert Knox, an influential exponent of such racially based analysis, criticized his predecessors Johann Blumenbach and J. C. Prichard for concentrating too much on the large differences between, for example, Europeans and Asiatics, and too little on the gaps that separated what he referred to as "the European races." To differentiate the Saxons from their nearest neighbors, the Celts, he invoked a variety of criteria. He praised the Saxons physically—they were, in his account, "powerful and athletic . . . the only

absolutely fair race [in color]." But the most telling comparison was on the intellectual level. For example, he attributed the orderly distinction of the Musée d'histoire naturelle in Paris when it was headed by Georges Cuvier to his essential Germanness, and claimed that after Cuvier's death "fanaticism and prudery had been at work" in the collection, resulting in its relapse into its previous condition of Celtic chaos. <sup>67</sup> Insistence on similarly elusive distinctions could be the means of achieving for their metonymic cattle the same glorification through taxonomy enjoyed by human Britons. Thus, although there were wide differences of opinion about exactly how these animals should be classified, their enthusiastic admirers agreed that it was essential to place them in a separate category from ordinary domestic cattle, with their mixed origin and low destiny. <sup>68</sup>

In describing a discourse that, though laden with symbolic meaning and fraught with emotion, concerned zoological objects manifestly similar, if not necessarily identical to animals about which a great deal was positively known and had been known for a long time, one might be tempted to differentiate a sentimental lay position from a more rational expert position. But reading the technical and popular discourses side by side does not encourage such a distinction. In the first place, the dichotomy between the technical and the popular is often difficult to maintain, especially with regard to writers whose expertise lay in animal husbandry or natural history, rather than explicitly in zoology. And in any case—recurring to this problematical dichotomy—the entire range of opinion was represented within both discourses. It was not, of course, represented in the same terms; the specialist literature invariably deployed its characteristic vocabulary and often recast the issues so that they dovetailed with or contributed to other contemporary debates. Thus, when popular authors discussed whether or not the white cattle were primeval or aboriginal, the experts focused on whether they had descended from Bos longifrons, then considered to be the ancestor of all other British domestic strains, or from the more exciting Bos primigenius or aurochs.<sup>69</sup> When popular authors wondered about the purity of their lineage, the experts asked whether a modern type might be descended from more than one specific ancestor. And when popular authors argued about the relationship (or lack thereof) between the park cattle and various domestic breeds, the experts debated their taxonomic status: Were they merely a variety of Bos taurus, a separate species (often denominated Bos scoticus), or perhaps even an independent genus (usually designated *Urus*)?<sup>70</sup>

Nevertheless it was also true that as time went by an increasing proportion of those who seemed to know best inclined to what has become the modern scientific consensus about these cattle. Buttressed by the results of recent research, it tends toward skepticism about the more romantic claims of the eighteenth and nineteenth centuries. Thus osteological analysis has established that the skeletons of

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modern Chillingham cattle strongly resemble those of medieval domestic cattle. Blood grouping studies have shown that the herd is genetically uniform, which might confirm traditional claims about its reproductive isolation or might simply reflect the genetic bottleneck that occurred after the severe winter of 1947, when its population crashed from approximately 40 to 13 animals. Ethological observation has suggested that dominance relations among the cattle are far more complex than the clear-cut patriarchy evoked by the term "king bull." Recognizing the interpretive limits of such evidence, however, this consensus also tends toward resignation about the likelihood of answering some traditionally important questions, such as the ultimate origin and previous condition of servitude of the white herds.

But not all postmodern authorities are so careful where they tread. A recent contributor to the *Ark*, the journal of the Rare Breeds Survival Trust—in fact, the president of the Chillingham Wild Cattle Association, Ltd.—asserted confidently (in an attempt to gainsay a previous contributor's conflicting assertion), that "although there is still much that is not known about the origins of the Chillingham Wild Cattle, one fact that is certain is that they were never domesticated."<sup>72</sup> And in a pamphlet available to visitors to the Wild Cattle Park at Chillingham (the Chillingham estate was sold on the death of the ninth earl of Tankerville in 1980, at which time a charitable trust purchased the park, ensuring that the cattle could continue to roam their accustomed haunts), the dowager countess of Tankerville described the cattle as "direct descendants of the original ox which roamed these islands before the dawn of history"; she explained that because "the fittest and strongest bull becomes 'King' . . . Nature seems . . . to have ensured the carrying forward of only the best available blood."<sup>73</sup>

Nor are Chillingham aficionados alone in their inclination to repeat the certainties and reify the categories of a hundred years ago. The relationship between the various white herds that troubled the Victorians has been sorted out by institutionalization into two breed societies, roughly along the lines suggested by Storer—that is, White Parks have horns and British Whites have no horns. It is probably too early to speculate about what is at stake in these contemporary constructions or reconstructions, but it is at least suggestive that although the seventh earl of Tankerville was the first patron of the Park Cattle Society when it was founded in 1918, the Chillingham herd was withdrawn from its herd book in 1932 and now goes its own more nearly feral, if not wild, way.<sup>74</sup>

# Notes

I am grateful to Juliet Clutton-Brock and Stephen J.G. Hall for their advice on an earlier version of this essay.

- 1. Nicholas Russell, Like Engend'ring Like: Heredity and Animal Breeding in Early Modern England (Cambridge, 1986) chronicles this development. Bakewell's methods were widely, but far from universally, celebrated. For a discussion of the resulting controversy see Harriet Ritvo, "Possessing Mother Nature: Genetic Capital in Eighteenth-Century Britain," in Early Modern Conceptions of Property, ed. Susan Staves and John Brewer (London, 1992).
- 2. Stephen J. G. Hall and Juliet Clutton-Brock, Two Hundred Years of British Farm Livestock (London, 1989), 42; G. Kenneth Whitehead, The Ancient White Cattle of Great Britain and Their Descendants (London, 1953), 101–50.
- 3. For a more elaborate version of this argument, see Harriet Ritvo, *The Animal Estate:* The English and Other Creatures in the Victorian Age (Cambridge, Mass., 1987), 3–6.
- 4. Eric Quayle, The Ruin of Sir Walter Scott (London, 1968), 23-25.
- 5. In a note, Scott defined the "pryse" as "the note blown at the death of the game"; *The Poetical Works of Sir Walter Scott*, ed. J. Logie Robertson (London, 1904), 690.
- 6. J. Bertram McCabe, "The White Cattle of Cadzow," *Nature Notes* 8 (December 1897): 245; Edgar Johnson, *Sir Walter Scott: The Great Unknown*, 2 vols. (New York, 1970), 1:186; Scott, notes to "Cadyow Castle," *Poetical Works*, 689.
- 7. Richard Ormond, Sir Edwin Landseer (Philadelphia, 1981), 126–27; Campbell Lennie, Landseer: The Victorian Paragon (London, 1976), 221. This story was inevitably rehearsed by Victorian chroniclers of the Chillingham herd, including the fifth earl of Tankerville himself, although he did not bother to mention Landseer, whose need for a carcass had triggered the episode, in his account. See C. A. B. Tankerville and L. Hindmarsh, "On the Wild Cattle of Chillingham Park," Athenaeum 565 (25 August 1838): 611.
- 8. Ormond, Landseer, 210-12; Frederick G. Stephens, Memoirs of Sir Edwin Landseer (London, 1874), 108.
- 9. Alfred Heneage Cocks, "A Visit to the Existing Herds of British White Wild Cattle," Zoologist 2 (1878): 275; John Storer, The Wild White Cattle of Great Britain: An Account of Their Origin, History, and Present State, ed. Storer (London, 1879), 165-67.
- 10. Charles Oldham, "The Lyme Park Herd of Wild White Cattle," Zoologist 15, ser. 3 (1891): 85.
- 11. Philip Henry Gosse, Natural History: Mammalia (London, 1848), 202-3.
- 12. T. H. Nelson, "A Visit to Chillingham Park," Naturalist, August 1887, 229-34.
- 13. E. Bidwell et al., "Report of the Committee... on the Herds of Wild Cattle in Chartley Park and Other Parks in Great Britain," Report of the British Association for the Advancement of Science, 1887, 138.
- 14. J. R. B. Masefield, "Zoology," North Staffordshire Field Club Annual Report and Transactions 31 (1896–97): 48.
- 15. All of the tomes, and a representative selection of the rest, are referred to elsewhere in these notes.
- 16. Accounts appear in the Report of the British Association for the Advancement of Science 8 (1839) and 57 (1888).
- 17. Oldfield Thomas, "Mammals," in The History of the Collections Contained in the Natural History Departments of the British Museum, vol. 2, Separate Accounts of the Several Collections Included in the Department of Zoology (London, 1906), 58.
- 18. R. C. Auld, "The Wild Cattle of Great Britain," American Naturalist 22 (1888): 508-9.
- 19. Cambridge University Museum of Zoology, History Index 3, 1892–1897, items 252 and 253; Cambridge University Museum of Zoology, Additions to the Museum, vol. 1, 1867–1902, 181–82, 221–22.

- 20. McCabe, "White Cattle," 246.
- 21. Thomas Bewick, A General History of Quadrupeds (Newcastle, 1824), 38-41.
- 22. Thomas Pennant, History of Quadrupeds, 2 vols. (London, 1793), 1:17–20.
- 23. Storer, Wild White Cattle, xv.
- 24. James Edmund Harting, British Animals Extinct Within Historic Times, with Some Account of British Wild White Cattle (London, 1880), 213.
- 25. Jan Tavinor, "A Chapter in the History of the 'Chartleys," Ark 18 (1991): 379.
- 26. A. G. Bradley, The Romance of Northumberland (1908; reprint ed., London, n.d.), 86.
- 27. Ormond, Landseer, 126; Lennie, Landseer, 221.
- 28. G. L. H. Alderson, "The History, Development, and Qualities of White Park Cattle," *Ark* 15 (1988): 126–28.
- 29. George Vasey, A Monograph of the Genus Bos: The Natural History of Bulls, Bisons, and Buffaloes (London, 1857), 143.
- 30. Bidwell, "Report," 135. This tendency persists in surviving herds. The Rare Breeds Survival Trust, which owns the last of the Vaynol cattle, decided not to cull black calves because the numbers were so low. As a result, the herd has become three-quarters black. Juliet Clutton-Brock, personal communication.
- 31. J. R. B. Masefield, "The Wild Cattle of Chartley, Staffordshire," *Nature Notes* 9 (1898), 46.
- 32. Harting, British Animals Extinct Within Historic Times, 235.
- 33. Storer, Wild White Cattle, 358-59.
- 34. Bidwell, "Report," 137.
- 35. Tankerville and Hindmarsh, "On the Wild Cattle," 611; Jacob Wilson, "The Chillingham Wild Cattle," *Land Magazine* (January 1899): 14.
- 36. Bidwell, "Report," 135.
- 37. Richard Lydekker, A Hand-Book to the British Mammalia (London, 1895), 237.
- 38. Richard Owen, "On the Ruminant Quadrupeds and the Aboriginal Cattle of Great Britain," *Proceedings of the Royal Institution of Great Britain* (1856): 4 (offprint); Boyd Dawkins, "The Chartley White Cattle," *North Staffordshire Field Club Annual Report and Transactions* 33 (1898–99): 49.
- 39. Francis Burges Goodacre, A Few Remarks on Hemerozoology; or, The Study of Domestic Animals (London, 1875), 6.
- 40. This analogy explains Harting's inclusion of a chapter on "Wild White Cattle" in *British Animals Extinct Within Historic Times*.
- 41. Madeleine Hope Dodds, ed., A History of Northumberland, vol. 14 (Newcastle, 1935), 301
- 42. Victoria County History of the Counties of England: Staffordshire, vol. 1 (1908; reprint ed., London, 1968), 167; E. R. Alston, "Wild White Cattle," Zoologist 1, ser. 2 (1866): 242, 512.
- 43. See the "Descriptive List of the Ancient and Modern Herds of White Cattle in Britain" in Whitehead, *Ancient White Cattle*.
- 44. R. Hedger Wallace, "White Cattle: An Inquiry into Their Origin and History," *Transactions of the Natural History Society of Glasgow* 26 (1900): 220, 222.
- 45. "Origin and Early Progress of Our Breeds of Polled Cattle," *Banffshire Journal* (1881): 3 (offprint); Dawkins, "Chartley White Cattle," 50, 54.
- 46. Oldham, "Lyme Park Herd," 85-86.
- 47. Tankerville and Hindmarsh, "On the Wild Cattle," 611; William Patrick, "On the Ox Tribe, in Connexion with the White Cattle of the Hamilton and Chillingham Breeds," *Journal of Agriculture* 9 (1839): 528.

- 48. David Low, The Breeds of the Domestic Animals of the British Islands, 2 vols. (London, 1842), 1:4
- 49. Vasey, Monograph of the Genus Bos, 150-51; Whitehead, Ancient White Cattle, 19-20.
- 50. Bidwell, "Report," 137.
- 51. Storer, Wild White Cattle, 213, 215.
- 52. Matthew Paris, Vitae Sancti Albani Abbatum; quoted in R.T., "On the Wild Cattle of Great Britain," Annals and Magazine of Natural History 3 (1839): 356.
- 53. Charles Darwin, *The Variation of Animals and Plants Under Domestication*, 2 vols. (New York, 1868), 1:107.
- 54. Tankerville and Hindmarsh, "On the Wild Cattle," 611.
- 55. Oldham, "Lyme Park Herd," 83.
- 56. Robert Service, "Wild White Cattle in South-western Scotland," *Zoologist* 11 (1887): 449–50.
- 57. Edward R. Alston, "Notes on the Wild Cattle at Cadzow," Zoologist 23 (1865): 9514.
- 58. Hall and Clutton-Brock, Two Hundred Years of British Farm Livestock, 45.
- 59. Claud Alexander, "Introduction," Park Cattle Society's Herd Book 1 (1919): 9.
- 60. Bradley, Romance of Northumberland, 89.
- 61. H. T. Mennell and V. R. Perkins, "Wild Cattle of Chillingham," *Transactions of the Tyne-side Naturalists Field Club* 6 (1863–64): 140.
- 62. In representing these relatively small-bodied cattle as large, artists were abetted by the animals' unusual color and by the fact that, unlike many domestic cattle breeds, they were (and are) not disproportionately short-legged. Stephen J.G. Hall, personal communication.
- 63. Vasey, Monograph of the Genus Bos, 146.
- 64. Wilson, "Chillingham Wild Cattle," 23.
- 65. Ibid., 22; Laisters F. Lort, "The White Cattle of Vaynol Park," North Staffordshire Field Club Annual Report and Transactions 33 (1898–99): 55.
- 66. Thomas Bates and Thomas Bell, *The History of Improved Shorthorn or Durham Cattle* (Newcastle, 1871), 8.
- 67. Robert Knox, The Races of Men: A Philosophical Enquiry into the Influence of Race over the Destinies of Nations (London, 1862), 44–45, 50; Knox, Great Artists and Great Anatomists: A Biographical and Philosophical Study (London, 1852), 18–19, 80.
- 68. Knox tended to be skeptical of claims on behalf of the white cattle's ancient, pure, and wild descent, in part as a result of a different analogy between the human and bovine inhabitants of Britain. He asserted that the most primitive cattle of Britain should be found in association with the most primitive people, whom he located in Cornwall, where the local cattle were black; [Robert] Knox, "Anatomical Examination of the Wild Ox of Scotland, with Some Remarks on Its Natural History," *Quarterly Journal of Agriculture* 9 (1838): 383–84.
- 69. According to subsequent scholarship, the bones identified as *Bos longifrons* in the nineteenth century do not represent a separate wild species ancestral to domestic cattle or *Bos taurus*, but merely the small domestic cattle of Neolithic Europeans. Along with all modern breeds, it is now considered to descend from the aurochs or *Bos primigenius*; Juliet Clutton-Brock, *A Natural History of Domesticated Animals* (London, 1987), 64–65.
- 70. Representative taxonomical ruminations can be found in William Patrick, "On the Ox Tribe," 531–34; and in the anonymous "British Wild Cattle," *Penny Magazine* 7 (1838): 443.
- 71. The most comprehensive work on British white cattle is still Whitehead's Ancient White Cattle. For summaries of recent research see Hall and Clutton-Brock, Two Hundred

- Years of British Farm Livestock; Stephen J.G. Hall, "The White Herd of Chillingham," Journal of the Royal Agricultural Society of England 150 (1989): 112–19; and Hall, "Running Wild," Ark 16 (1989): 12–15 and 46–49.
- 72. Ian Bennet, "Chillingham Cattle," Ark 18 (1991): 22.
- 73. Dowager countess of Tankerville, "The Wild White Cattle of Chillingham" (n.p., n.d.), 1–4.
- 74. Hall and Clutton-Brock, Two Hundred Years of British Farm Livestock, 42.