

INTRODUCTION



On a rainy day in May 1988, a lowland gorilla named Willie B. stepped outdoors for the first time in twenty-seven years. Born in Africa in 1958, Willie B. had been captured by an animal collector and was delivered to the zoo in Atlanta, Georgia, in 1961, where he was housed by himself in an enclosure of concrete and heavy bars. Twenty years later, after complaints about the zoo's management, a television was provided to relieve his isolation. (He watched *M*A*S*H**, *60 Minutes*, and a save-the-zoo telethon.) Willie B. was listless and overweight, and hardly an ambassador for gorilla conservation, until the day when he tentatively looked out on the grass and trees of a new, naturalistic immersion exhibit at the renovated Zoo Atlanta. Other gorillas were released into the exhibit, and Willie B. soon adjusted to life in a social group, became a father, and evidently lived happily until his death in February 2000 at the age of forty-one. Willie B. had been the zoo's most popular attraction; a crowd of more than seven thousand people attended a memorial service in his honor. In his lifetime he had journeyed from being an object of voyeurism in a sterile cage to a muscular silverback, foraging for raisins and behaving like a gorilla. He achieved a kind of zoological fulfillment in his opportunity to live a more authentic gorilla life than he had behind bars, a transcendence in his return to nature.

Willie B.'s story parallels accounts—familiar through the news media—of how American zoos have introduced naturalistic exhibits in the last thirty years and begun to understand and implement ways of caring for animals so that they behave as they would in their wild habitats. During his life, zoos stopped collecting animals from the wild and started captive breeding programs. Americans changed the ways they wished to view animals in the zoo—bars became unacceptable. Field studies of gorillas, their behavior, and their natural environment—scientific knowledge unavailable to earlier generations—became widely available to the public and was applied to gorilla-keeping in zoos. And

the importance of preserving gorilla populations and habitats, an inconceivable problem at the time Willie B. was captured and brought to Atlanta, emerged as the overriding educational message of gorilla exhibits at zoos.

Willie B.'s life also recapitulates the promise zoos have made to their human visitors for over a century. From their beginnings in the late nineteenth century, American zoos have offered people an escape from the cement, stress, and physical confinement of the city to a lush landscaped park. A trip to the zoo has long been presented as a journey into nature. And the idea that an excursion into the natural world is a healthy activity, restorative to mind and body and full of potential for self-improvement, has a long history. Part of the appeal of Willie B.'s story is that every zoo visitor can appreciate that the gorilla himself made the transition from life in a prisonlike cell to days spent lolling on a grassy hillside in the sunshine. In the late twentieth century zoo animals as well as zoo visitors have made an excursion into nature.

Of course, nature in the zoo presents all sorts of contradictions. What could be more unnatural than polar bears in Miami or giraffe in New York City? Zoos present a peculiar blend of nature and culture. They bring the natural world under the control of human civilization; they are parks that constitute a middle ground between the wilderness and the city, specially constructed meeting places for wild animals and urban Americans. This juxtaposition of wildness and civilization, naturalness and artificiality, makes up a large part of their fascination. And popular interest in zoos has been long lasting. Each year more than 130 million Americans visit zoos—more people than attend professional baseball, football, and hockey games combined.¹

Most historical accounts of zoos look back to the animal collections of ancient history for precedents. Civilizations that accumulate wealth have long taken an interest in exotic animals. Queen Hatshepsut of Egypt sponsored expeditions to collect giraffe and cheetahs around 1400 B.C. Chinese emperor Wen Wang established a "garden of intelligence" before 1000 B.C. that included deer, antelope, and pheasants. In the fourth century B.C. Aristotle studied the animals sent back to Greece by Alexander the Great during his conquests. Exotic animals kept for pleasure, study, or as tokens of power retained their appeal in Europe during the middle ages on a smaller scale, the collections of the

thirteenth-century Holy Roman Emperor Frederick II being the best known. During the Renaissance, explorers and traders collected live animals on their voyages, and royal menageries became symbols of status and power.²

Only a privileged few had access to such collections, however, and although they deserve study, they were the products of rather different historical circumstances than the zoos of the last century. Zoological gardens and parks for the amusement and education of the public are an invention of modern Western culture. In Europe, public zoos began to replace royal menageries in the late eighteenth century. Following the European example—in particular, imitating the London Zoo and various German zoos—Americans began building zoological parks in the late nineteenth century. The first zoo in the United States opened in Philadelphia in 1874, followed by the Cincinnati Zoo the next year. By the turn of the twentieth century, Chicago, San Francisco, Cleveland, Baltimore, Washington, D.C., Atlanta, Pittsburgh, St. Paul, Buffalo, Toledo, Denver, and New York City all had zoos. Tallies differ, but by all accounts, by 1940 there were zoos in more than one hundred American cities.³

The new zoos set themselves apart from menageries and traveling animal shows by stating their mission as education, the advancement of science, and in some cases conservation, in addition to entertainment. Zoos presented zoology for the nonspecialist, at a time when the intellectual distance between amateur naturalists and laboratory-oriented zoologists was increasing. Zoos also provided a new way for urban Americans to encounter the natural world, and they attracted wide audiences. By 1903, well over a million people toured the New York Zoological Society's Bronx Park each year, and in 1909 the Bronx Zoo's attendance was twice that of New York's more centrally located American Museum of Natural History. The Toledo, Ohio, zoo became a regional attraction. It reported a turnstile count of 1,216,400 in 1927—four times the city's population.⁴

Zoos quickly became emblems of civic pride, an amenity of every growing and forward-thinking municipality analogous to other institutions such as art museums, natural history museums, and botanical gardens. This study explores the cultural and physical landscape of the zoo rather than providing a chronological account of its institutional

development, so a brief summary of the institutional story is called for here. Most American zoos were founded as divisions of public parks departments. They were dependent on municipal funds to operate, and they charged no admission fee. They tended to assemble as many different mammal and bird species as possible, along with a few reptiles, exhibiting one or two specimens of each, and they competed with each other to become the first to display rarities, like a rhinoceros. In the constant effort to attract the public to make return visits, certain types of display came in and out of fashion; for example, in the 1920s and 1930s dozens of zoos built “monkey islands.” In the 1930s, the Works Progress Administration funded millions of dollars of construction at dozens of zoos. City zoos provided inexpensive recreation during the Depression and World War II. For the most part, collections were organized according to a loose taxonomic scheme—mammals, birds, reptiles—in a combination of houses and paddocks.

Although many histories of individual zoos describe the 1940s through the 1960s as a period of stagnation, and in some cases neglect, new zoos continued to open and old zoos changed their exhibits. In the 1940s the first children’s zoos and farm-in-the-zoo exhibits were built. And after World War II an increasing number of zoos tried new ways of organizing their displays. In addition to the traditional approach of exhibiting like kinds together, zoo planners began putting animals in groups according to their continent of origin and designing exhibits showing animals of particular habitats, for example, polar, desert, or forest. By the late 1960s a few zoos arranged some displays according to animal behavior; the Bronx Zoo opened its World of Darkness exhibit of nocturnal animals. Paradoxically, at the same time as zoo displays began incorporating ideas about the ecological relationships between animals and their habitats, big cats and primates continued to be displayed in bathroomlike cages lined with tiles.

By the 1970s, a new wave of reform was stirring. Popular movements for environmentalism and animal welfare called attention to endangered species and to zoos that did not provide adequate care for their animals. Zoos began hiring full-time veterinarians and research scientists, and they stepped up captive breeding programs. Many zoos that had been supported entirely by municipal budgets began recruiting private funding and charging admission fees. In the prosperous

1980s and 1990s zoos built realistic “landscape immersion” exhibits, many of them around the theme of the tropical rainforest. Increasingly, conservation and the advancement of science moved to the forefront of zoo agendas, and educational programming expanded.

There is more to the story of American zoological parks, however, than a tale of progress and increasingly humane treatment of animals. The founding goals of entertainment, education, the advancement of science, and conservation sound surprisingly familiar today, but the meanings of zoos to both their audiences and their administrators have changed over the course of more than a century. The history of how zoo animals have been collected and displayed reveals a long-standing tension between nature appreciation as popular pastime and observing nature as scientific endeavor. As physical expressions of the uneasy pairing of wildness and civilization, science and popular culture, and education and entertainment, zoos have much to say about how Americans envision the natural world and the human place in it. This book seeks to understand how the zoo, an immensely popular and commonplace feature of American cities, took shape, and how relationships between urban people and wild animals have been constructed in the zoo landscape.⁵

American zoos came into existence during the transition of the United States from a rural and agricultural nation to an urban and industrial one. The population more than doubled between 1860 and 1900. And as more and more middle-class people lived in cities, they began seeking new relationships with the natural world as a place for recreation, self-improvement, and spiritual renewal. Cities established systems of public parks, and nature tourism—already popular—became even more fashionable with the establishment of national parks. Nature was thought to be good for people of all ages and classes: Fresh Air Funds for city children were established, as well as scouting, the Woodcraft Indians, and the Campfire Girls. Nature study was incorporated into school curricula, and natural history collecting became an increasingly popular pastime. As they hiked, camped, bicycled, and picnicked, Americans collected minerals, bird eggs and nests, plants, butterflies, shells, and birds and small animals to mount as taxidermied specimens. In addition, the first movements emerged to preserve

nature and natural resources—to save the bison from extinction, for example, and to halt the hunting of birds for their decorative feathers.⁶

In addition, zoogoers at the turn of the twentieth century could learn about nature through popular essays and animal stories. Ernest Thompson Seton and Jack London wrote their best-selling books at this time. And it was in the realm of “realistic” stories about wildlife that a clash between science and sentiment in appreciation of the natural world was played out publicly, in the pages of *The New York Times* and elsewhere. Moral order in nature was an important theme of many stories, and writers also narrated from the perspective of animals or described the thoughts of wild animals. In 1903 John Burroughs, dean of American nature writers, launched an attack on the credibility of the writers of the new animal stories, later dubbed “nature fakers.” Such writers, he argued, only masqueraded as naturalists; they sentimentalized and anthropomorphized the lives of wild animals, doing a disservice to people who wanted to learn the truth about nature. The issues played out in the nature fakers controversy also were evident among zoo audiences and zoo managers who anthropomorphized wild animals while seeking an educational experience at the zoo.⁷

At the same time, the fields of study subsumed under natural history in the nineteenth century were expanding, differentiating, and becoming professionalized into, among other things, taxonomy, experimental embryology, and genetics. Laboratory research gained prestige in the zoology departments of American universities. In general, the gap between professional and amateur scientific activities widened. Natural history had been open to amateurs and easily popularized. Laboratory research required access to microscopes and other equipment, as well as advanced education.⁸

While aiming for the cultural status of scientific institutions, and claiming a measure of truth in their representations of nature, zoological parks encouraged nature study and popular natural history. William T. Hornaday, first director of the Bronx Zoo, spoke out against teaching zoology in the laboratory as a method that “strives to set forth the anatomy of animals without adequately introducing the animals themselves.” He advocated teaching children what he called practical zoology: “The pupil desires and needs to be taught about the birds of use and beauty, the big animals that are being so rapidly exterminated,

the injurious rodents, the rattlesnakes and moccasins, the festive alligator, the turtles." Forcing children to "write twelve paragraphs on the mouth parts of a crayfish" would both kill their interest and deprive them of "the immense amount of pleasure to be derived" from "a good general knowledge of the most interesting animal species." The zoo was a place to acquire this general knowledge.⁹

Although zoos were popular and proliferating institutions in the United States at the turn of the twentieth century, historians have paid little attention to them. Perhaps zoos have been ignored because they were, and remain still, hybrid institutions, and as such they fall between the categories of analysis that historians often use. In addition, their stated goals of recreation, education, the advancement of science, and conservation have often conflicted. Zoos occupy a middle ground between science and showmanship, high culture and low, remote forests and the cement cityscape, and wild animals and urban people. Furthermore, although zoos have always attracted diverse audiences, they are middle-class institutions. This may explain why historians of recreation and of popular culture, who have focused on parks, for example, as arenas of working class rebellion, have overlooked zoos. Zoos also may have been passed over by historians because of the lowly status of their animal inmates. The display of exotic animals has been less interesting to scholars than the display of exotic humans, which has figured in studies of ethnographic exhibits and freak shows.¹⁰

Historians of science may have dismissed zoos as too entertaining, connected to neither museum-based zoology nor laboratory science, or simply unscientific "places of spectacle and dilettante scientific interest." To be sure, unlike European zoos, the first American zoos had few ties to university zoology departments. The director of the National Zoo, when he visited the Amsterdam Zoo in 1929, commented—without irony—that "It was interesting to find zoology being studied in a zoo." The study of dead specimens in museums contributed far more to the advancement of scientific knowledge around the turn of the century than did observations of zoo animals. But amateur interest in science bears examination both in itself and in its relationship to professional science. This study has benefited from recent work that focuses on how popular culture is made and used, that looks at issues

of scientific practice and the history of natural history, and that seeks to understand cultural representations of nature.¹¹

The few scholars who have looked at zoos in their historical context have tended to focus on individual institutions and to emphasize the power relations implicit in the human gaze at caged animals, interpreting it as symbolic of imperial power over colonial subjects. Other writers have looked at zoo animals as stand-ins for humans, comparing zoos to prisons, for example, or analyzing the ways zoo visitors anthropomorphize animals. While zoos do express human power over the natural world, and until relatively recently they depended on colonial commerce to supply exotic animals, the process of collecting and exhibiting wildlife has been more complex than a display of dominance. Collecting, for example, has a history as a scientific endeavor, which zoos used in their attempts to raise their cultural status. It seems likely too that zoo audiences, particularly in countries without colonial empires, have seen zoo animals as more than surrogate colonials, and that the meaning of animals—elephants and eagles, for example—changes in different national contexts, and over time.¹²

Part of the impetus to analyze zoos as emblems of imperialism comes from their similarities to natural history museums. Museum scholars have looked to the ways in which museums ordered their collections, and at patterns of circulation through museums, for insights into relationships between knowledge and power, and into the means of social control exerted by bourgeois museum administrators over lower-class visitors. A parallel exercise could be performed with zoos. Early maps of zoos might reveal a narrative implied by the recommended order of viewing exhibits—a narrative of evolutionary progress, for example, reflecting the way some museums arranged their collections.¹³

But such an exercise is fraught with contradictions for both museums and zoos. Just as the availability of cheap natural lighting often dictated the placement of exhibits in museums, and helps account for their similarity to department store displays, the contours of the landscape played a role in the planning of zoos. An outcropping of rock might lend itself to a bear exhibit; a flat area could make a natural deer paddock. Clearly there was some order to the presentation of zoo collections, and it was often roughly taxonomic. But other considerations

such as sanitation and ease of maintenance also played a role in determining the layout of zoos. Furthermore, order in the zoo was continually disrupted. A sick bird might temporarily be kept in the reptile house. Managers rearranged exhibits in order to attract visitors, and particularly beautiful or entertaining animals—flamingos, for example—might be placed near the zoo entrance, away from the rest of their kind. Few zoos maintained an internal unity over time that would allow the writing of a master narrative of order and power.¹⁴

Furthermore, such an approach favors the perspective of administrators—their ideas about the purposes of their institutions and how their plans were carried out. But zoo visitors experienced the displays in ways that managers did not anticipate, and they did not necessarily follow instructions. “Not for me is the admirable itinerary recommended in the guide-book,” wrote one zoo lover, “. . . I make straight for the lions.”¹⁵

Clearly zoos were planned in a way to distinguish them from earlier menageries, which were considered disorderly. But rather than interpreting zoos as examples of human dominance over nature, or emblems of imperialism at a time when the United States was gaining strength as a world power, this study situates them in the historical context of the American relationship to the middle landscape. It draws from environmental history, the history of natural history, and studies of popular culture to explore how zoos have used a curious and often uneasy blend of scientific research, education, and entertainment to negotiate their desire to create an authentic experience of nature for a popular audience. The following chapters explore the ways in which the layout of the zoo, the built form of specific exhibits, and the practices of collecting and displaying animals contributed to the definition of nature in the zoo.¹⁶

The development of American zoos has been powerfully influenced by their placement in large country parks planned at the turn of the twentieth century and by middle-class ideas about nature that formed in the United States in the nineteenth century. The creation of zoos as part of urban public park systems in the United States helps justify their consideration separately from European zoos, which had largely private origins. European models were adapted to American circumstances and values. Although European zoos appear occasionally in

this study to provide points of comparison, they are not the focus here. Furthermore, this book does not provide an account of the institutional structure and management of particular zoos, or the details of their relationships to city governments and other cultural institutions. Rather, the aim here has been to understand, in broad terms, what the landscape of zoos, their displays, and the ways they have assembled their collections can tell us about relationships between city people and the natural world, and between science and popular culture. In addition, although zoo audiences have always been diverse and difficult to characterize, an effort has been made to examine their interaction with and contributions to the development of zoological parks. Zoos today often refer back to their founding goals: education, entertainment, the advancement of science, and conservation. The meanings of these goals have changed, but in the twenty-first century zoos continue to grapple with a problem that has remained consistent from their beginnings: how to convince their audience to appreciate wildlife.¹⁷