



INVESTIGATES 



THE BRONX ZOO

Bronx, New York

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INTRODUCTION

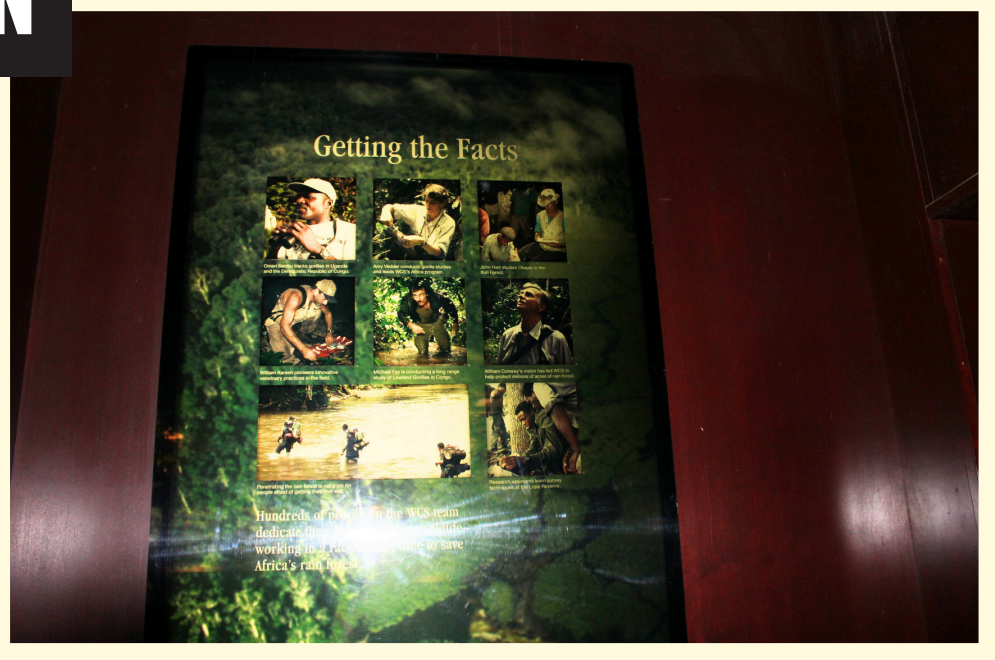


In October 2025, our team completed an undercover zoo investigation for one of the top Association of Zoos and Aquariums (AZA)-accredited zoos in the United States: the Bronx Zoo in New York. One of the oldest in the country, the zoo opened its gates in 1899. Today, encompassing 265 acres, it is also one of the nation's largest zoos, despite its urban setting. It is operated by the conservation organization, Wildlife Conservation Society,¹ which runs multiple zoos as well as various global conservation projects.

During our visit, we assessed the accuracy and efficacy of major aims stated by the zoo industry, including educating visitors about the animals, providing optimal animal welfare with appropriate physical and mental stimulation, and participating in, or leading, meaningful conservation efforts. It is our intention, with providing data from some of the top AZA-accredited zoos in the U.S.² – often considered the 'gold standard' of the zoo industry – that we illustrate a more accurate picture and scrutinize what these facilities offer the animal inhabitants and human visitors.

We then explore whether zoos can justify keeping wild animals in captivity based on our findings. We will only analyze zoos that are largely considered to excel in the fields of animal care and facilitate meaningful interactions between animals and human visitors. This research forms part of a wider project which will investigate ten of the country's highest-ranking zoos between 2025 and 2027.

EDUCATION



If zoos are to be believed, simply exhibiting animals to the public serves adequate educational and conservation goals, with additional educational resources at the zoo including signage, zookeeper talks, and animal demonstrations functioning to enhance visitor knowledge. A small number of papers have been published to counter zoo claims that they effectively educate,³ and long-standing ethical arguments make the case that lifetime captivity for the animals cannot be justified even if zoos did serve an educational purpose. One peer-reviewed article stated that: "... to date there is no compelling or even particularly suggestive evidence for the claim that zoos and aquariums promote attitude change, education, and interest in conservation in visitors."⁴ While the educational value of activities and resources in zoos is rarely questioned by visitors, our investigation sought to better understand if these pedagogical tools work in practice for zoo visitors.

Visitor Behavior

Multiple school groups were at the zoo on the day of our visit, but no zoo staff accompanied them. The groups moved swiftly through the zoo, pausing briefly at some enclosures and bypassing others altogether. The noise caused by the school groups was significant, with lots of shouting and disruption. In the section of the zoo where the gorillas were housed, school groups were particularly disruptive. In the area that visitors pass through prior to reaching the gorillas, the children were loudly shouting "OH MY GOD" at every animal they saw. While rushing through the spaces, the children asked some questions "What is that thing?" to which the teacher replied: "That's a horse." The animal in question was an okapi; a species related to giraffes, not horses. On reaching the mandrill exhibit, the children were laughing and ridiculing the animals. "LOOK AT THIS GUY'S BUTT! HE'S SHOWING HIS BUTT!" to which the other children laughed and parroted the same words repeatedly.



On arrival at the gorilla enclosure, there was more shouting and screaming. When the gorilla demonstrated at the crowds – a warning behavior that suggested he felt threatened and wanted people to back off, the children burst into raucous laughter. The gorilla spent most of his time with his back against the glass as people shouted to try to get him to turn around. One child turned his back on the enclosure and shook his behind at the gorilla while screaming and laughing. One child exclaimed “IT’S SO UGLY” in reference to the gorilla, and the rest of the children laughed.

Overall, the school groups showed little meaningful interest in the animals and, instead, treated them as objects of ridicule. The teachers appeared disinterested and tended to stand together chatting while the children looked at the exhibit. None of the adults accompanying the group were heard asking the children to be quiet even when the noise they were creating was overwhelming.



Signage

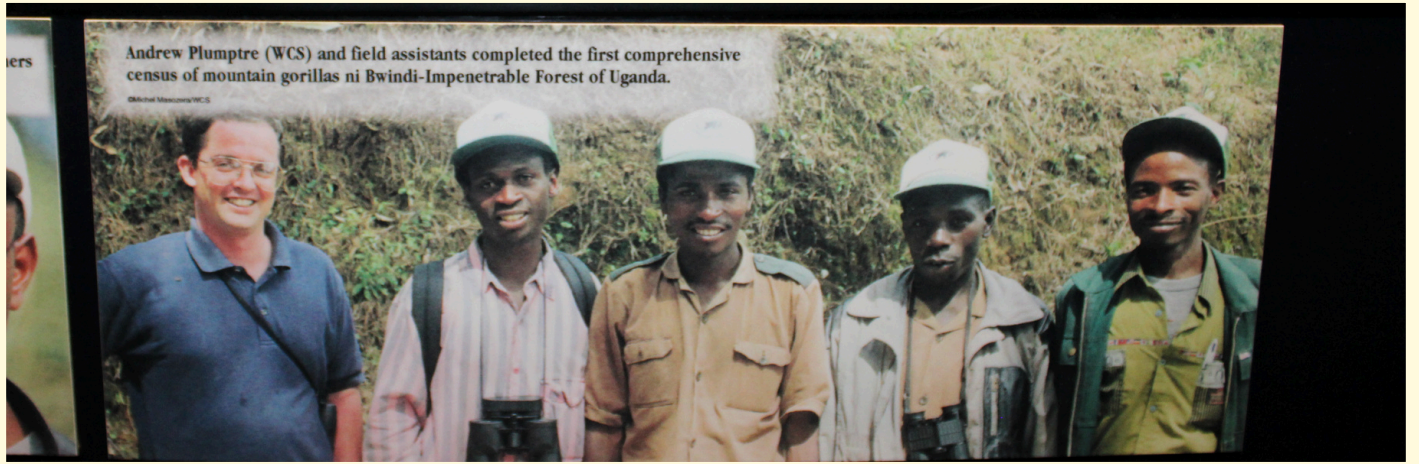
At the Bronx Zoo, signage was plentiful and detailed. There were interactive and engaging elements in much of the signage, with quizzes and questions for visitors to ponder. While the signage was generally informative, very few visitors stopped to engage with it and, instead, might glance at it to confirm the name or species of animal they were looking at before moving on.

Presence of staff at the zoo was limited. One member of staff was seen talking to a small group of people at the giraffe exhibit, but no other staff were seen engaging with visitors around the site.

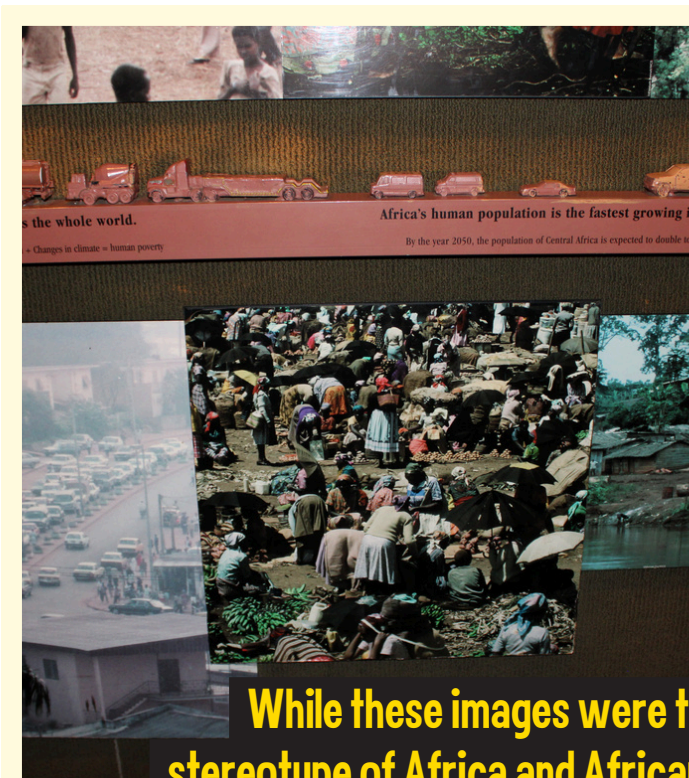




While the signage certainly had its strengths, in the gorilla conservation sector, signage was problematic. Here, the information fell into a common prejudiced trope in zoo education, which is to paint zoo staff as experts with scientific knowledge, and local people that live around the animals' native habitat as "assistants" or "guides" to the zoo scientists. For example, group photos of black field staff rarely had their names attributed, even when the white people in the photographs were identified by name. For example, "Andrew Plumbtre (WCS) and field assistants completed the first comprehensive census of mountain gorillas..." This erases local conservationists and dismisses the value of traditional ecological knowledge (TEK) and community-based expertise.



In addition to the erasure of individual local conservationists, images of Africa were of dirt roads with scores of people walking down them, women in traditional dress carrying items on their heads, markets with people sitting on the ground selling fruit, and other stereotypical images. While these images were taken in Africa, they play to a strong Western stereotype of Africa and Africans as poor, lacking diversity, distinct cultural and national identities within the continent, and modern development. This distorted, monolithic view of Africa and Africans is what Nigerian author, Chimamanda Ngozi Adichie calls “The Danger of a Single Story” in her highly lauded TED talk, in which she discussed her experience living as a young Nigerian woman in the U.S. Her college roommate held a myopic view of Africa and Africans and regarded Adichie with “well-meaning pity” and made assumptions about her life based on common Western stereotypes.⁵



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“Ambassador Animals”

Despite the known dangers of public interaction with wild animals, and the practice of wild cat interactions being more closely associated with unaccredited “roadside” zoos, the Bronx Zoo holds cheetah encounters where a cheetah on a leash is walked around close to visitors who have paid extra for the experience.⁶ These opportunities are offered as educational experiences.

In 2022, the Big Cat Public Safety Act⁷ banned private ownership of big cats as well as public interactions with them in zoos. The Act states that: “during public exhibition of a lion (*Panthera leo*), tiger (*Panthera tigris*), leopard (*Panthera pardus*), snow leopard (*Uncia uncia*), jaguar (*Panthera onca*), cougar (*Puma concolor*), or any hybrid thereof, the animal is at least 15 feet from members of the public unless there is a permanent barrier sufficient to prevent public contact.” Exempt from this rule are cheetahs, despite cheetahs being included in the overall private ownership bans; suggesting that they are considered too dangerous to be kept as pets. Male snow leopards weigh 99 to 121 pounds, while females weigh 77 to 88 pounds.⁸ The Smithsonian cites cheetahs’ weight as 75 to 140 pounds.⁹ It is unclear, then, why interactions with cheetahs would not be subject to the same restrictions as cats of the same size or smaller.

There have been documented incidents of cheetahs used as “ambassador animals” attacking zoo employees or visitors. For example, in the early 2000s at a zoo in California, a cheetah who was being walked through the zoo on a leash attacked a visitor. The woman was bitten on the leg, and the attack caused her young child to fall to the ground, injuring their head on the concrete.¹⁰ In 2012, a visitor to a South African zoo was mauled during a photo op in the cheetah’s enclosure. She told press that she had intervened when one of the cheetahs grabbed a child.¹¹ In addition, a woman was mauled to death by cheetahs in 2007, after she deliberately entered their enclosure after hiding in the zoo after closing.¹²

It is entirely unnatural and unsafe for a wild cat to be “tame” enough to allow themselves to be trailed around on a leash and it is well-known that, to train wild animals to allow such treatment, they are required to be unnaturally and inappropriately exposed to humans. This process often involves the removal of the animals from their mothers at a young age to be hand-reared.¹³ Even those who have been subjected to this demeaning behavior for their whole lives remain wild animals, who pose significant danger to both zoo staff and visitors when taken out of their enclosure to act as unwilling “ambassadors.” As well as the cheetah encounter, the Bronx Zoo uses other animals in their ticketed animal encounters including sloths, penguins, Fennec foxes, porcupines, and several reptiles.¹⁴



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Close interaction with all these animals creates both health and welfare concerns for the animals, as well as public health and safety concerns for human visitors. The Bronx Zoo appears to somewhat recognize the potential for zoonotic disease spread in their FAQs on animal encounters, which state:

“At this time, there are no programs requiring masks to be worn. For the health and safety of our animals, WCS reserves the right to implement mask requirements, regardless of vaccination status, for indoor programs at the time of the session. If this is implemented, staff will have masks available for guests. In addition, guests and staff may choose to wear masks for a variety of reasons, so please be kind and considerate of others.”¹⁵

That the wearing of masks is largely at the discretion of the visitors, and the apparent lack of other personal protective equipment used in the encounters not only puts animals but also visitors at risk during encounters where touching animals is encouraged. Zoo videos show reptiles such as alligators and tortoises being touched by visitors. These animals can be carriers of illnesses like salmonella, which can be transferred to humans. Salmonella spreads from reptiles or amphibians to humans when fecal matter is carried on the animal's skin or surroundings. When the contaminated skin or area is touched and people then touch their mouths, the bacteria is transferred. According to research published by the CDC using a sample of reported salmonella cases in Ontario between 2015 – 2022, 6.3% (n=513 individuals) of all sporadic cases of salmonella in humans were found in people who had contact with reptiles or amphibians during the week before symptom onset.¹⁶

CONSERVATION



The Bronx Zoo is unusual in its management in that it forms part of the Wildlife Conservation Society (WCS),¹⁷ which is the overarching nonprofit operating multiple zoos in New York and a swathe of local and global conservation programs. The WCS runs an impressive number of true conservation projects across 55 countries, investing a reported \$223,737,513 in conservation programs in 2025.¹⁸ The potential impact of this level of financial investment in conservation should not be underestimated.

While the WCS undoubtedly benefits the preservation of species and habitats, its zoos' roles in conservation are unclear. Indeed, the zoos' operation is subsidized by the City of New York as part of a long-standing agreement. The 2025 accounts report taxpayer dollars granted to WCS from the City of New York amounting to \$41,244, 966. The overall cost of zoo operations, according to the accounts, was \$168,325,767 in 2025; an enormous sum of money to be spent on holding animals captive for visitors' amusement.

The simple reality is that most animals held captive in zoos are not threatened in the wild, nor are they released. Importantly, animals in zoos are held captive for their entire lives in the interest of amusing zoo visitors, which is both practically and ethically problematic, particularly when the zoos' role in species protection is questionable.

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Animal Enclosures

While natural elements were incorporated into many of the outdoor zoo enclosures, there were also worryingly poor spaces consistent with older zoos that continue to use old enclosures for existing animals. For example, some birds were housed in the “Pheasant Aviary”, which was originally built in 1905 and is typical of the period. Spaces were tiny and did not allow for the expression of many natural behaviors.



Other birds, such as the flamingos, were housed in open topped spaces which necessitates either feather clipping or a mutilation known as “pinioning” which surgically amputates the wing end at the carpal joint, permanently preventing flight. Chilean flamingos are migratory birds who would naturally travel hundreds of miles during their migration.¹⁹ In the zoo, they are confined to a small pond.



Some enclosures used visual elements, including mirrors, netting, and painted backdrops to give the impression of the animals having more space than they have. For example, the guenon enclosure appeared expansive but, on closer inspection, there was a net that acted as a barrier to the guenons' movement and a painted backdrop of a forest. These visual tricks make it appear that the animals have access to a much bigger space than they actually inhabit. These illusionary practices date back centuries to some of the first known menageries – the precursors to modern day zoos. For example, an artist's rendition of the Polito Royal Menagerie in London in 1812, showed a wall behind caging painted with what appears to be forest scenes.

This practice of creating the illusion of space evolved as zoo visitors became more concerned about animal welfare in recent decades. Referred to as “landscape immersion”, a new architectural practice in zoo design originating in the 1970s began to rethink animal enclosures in relation to the species’ natural habitat. This new approach sought to present the animals in surroundings that somewhat mimicked their natural environment. The initial idea was developed with a real intent to improve conditions and to create spaces where both animals and visitors felt “immersed” in a realistic habitat. While zoo proponents argued that some facilities did this very well, other zoos took elements of the concept while failing to truly deliver benefits for the animals. For example, visible barriers began to be replaced by hidden moats. At the Woodland Park Zoo in 1976, a plan for a new gorilla exhibit had a “moat [that] allowed unobstructed views out and beyond the exhibit area, so the landscape in the distance was borrowed as part of the general exhibit view.”²⁰ Criticisms were made of some zoos who landscaped animal “habitats” with plants native to the animals’ natural home, but “regrettably... plant[ed] all the natural vegetation out of reach of the animals, beyond moats and hot wires”. This cynical interpretation of the concept of immersive exhibits helped to create the illusion of improved living conditions for concerned visitors, while delivering little to no meaningful benefit for the animals.



At the Bronx Zoo, it appeared that the pygmy marmosets had no outdoor area and rainforest scenes were painted onto the back walls instead. Confusingly, the pygmy marmosets were exhibited in the “Congo Gorilla Forest” despite being native to the Americas and not found on the African continent. This enclosure also had fake, plastic foliage to give the impression of a natural living environment.

The mongooses were housed in a glass-fronted indoor room. They appeared to have no outdoor space, but an outdoor scene was painted on the back wall. There was also at least one hornbill in this enclosure, who had no opportunity to fly except between the branches of apparently dead trees in their small living space.



ANIMALS OBSERVED AND WELFARE ASSESSMENT



During each zoo visit as part of this series, we selected some individual species for closer observation. At the Bronx, we monitored the gorillas, the lions, and the giraffes. We recorded uninterrupted footage for ten minutes at each of these enclosures, noting enclosure design and function, and both animal and visitor behavior. The average visitor viewing time for all species combined was just 1 minute 9 seconds (across 163 visitors).

The lion enclosure was worryingly inadequate and appeared to encompass a small peninsula of land surrounded by a ditch. Online information suggests that their enclosure is 0.37 acres,²¹ but it is unclear how much of that space is useable for the lions. In the wild, lions have differing ranges dependent on variables such as competition for territory, food scarcity and abundance, water sources, seasonality, human activity, and many others. That said, most recently available data published in 2025 for African lions in Chizarira National Park, Zimbabwe,²² found a core range (the area of intense use where they spent 50% of their time) ranged from 1.575 square miles (1,008 acres) to 50.44 square miles (32,000 acres). Their extended ranges (areas they utilized outside of their core range) were between 19.5 square miles (12,486 acres) and 272.93 square miles (174,676 acres).

The lions were listless and did not move at all during our observation period. Their enclosure was also minimally signposted, so it was easy to miss. Despite this, and due to more than one school group passing through during our ten-minute observation period, we noted 86 individuals stopping at the lion enclosure. The average observation period for the lions was just 1 minute and 12 seconds. The longest observation period was 2 minutes and 10 seconds and the shortest observation period was only 2 seconds.

Case Study: Happy and Patty

The elephants at Bronx Zoo, Happy and Patty, have long been the subject of concern from animal welfare advocates. Happy was captured from the wild around 1971 and, since that time, has lived in captivity. Since 1977, her home has been the Bronx Zoo. Patty was captured from the wild in 1973 and moved to the Bronx Zoo. We were unable to observe Happy or Patty on the day of our visit, but their stories are widely known.

In 2002, Patty and her friend, Maxine, injured a young elephant named Grumpy, who was euthanized because of the attack. Happy had been Grumpy's companion. Patty lived with Maxine until Maxine's death in 2018. Since that time, she has lived alone. After a brief period with an elephant companion after Grumpy's untimely death, Happy was placed in solitary confinement in 2006, where she has remained.

Campaigners have been calling on the zoo to rehome both Happy and Patty to accredited sanctuaries, but the zoo continues to claim all is well with the two elephants. Major concerns were raised around Happy's health when she was not seen on public display for much of the summer of 2024. When she was seen by visitors ten weeks later, she was reported to be laying on her side and had "significant foot damage."²³ The zoo responded that Happy was choosing to stay inside, but advocates feared she was ailing and was either being confined or was unable to move around her enclosure due to health problems. The advocacy group, The Non-Human Rights Project, has filed legal suits to compel the zoo to take action but has not been successful. Most recently, the New York City Bar released a statement supporting the demand to move Happy from the zoo, citing legal arguments in favor of a move. As profoundly social species, who live in large matrilineal groups in the wild, keeping an elephant in solitary confinement is unarguably cruel.



The Congo exhibit encompasses 6.5 acres of land at the zoo and houses multiple species, including 19 gorillas.²⁴ Online reports state that the gorilla enclosure itself spans 1.14 acres. The gorillas are split into two groups. According to online reports,²⁵ the two gorilla habitats are 22,000 sq. ft. and 28,000 sq. ft. This is 0.5 acres and 0.6 acres respectively, making it one of the largest gorilla enclosures in the country. That said, this species in the wild has a range of between 9 to 14 square miles (5,760 to 8,960 acres),²⁶ so the zoo's enclosures come nowhere close to providing adequate space.

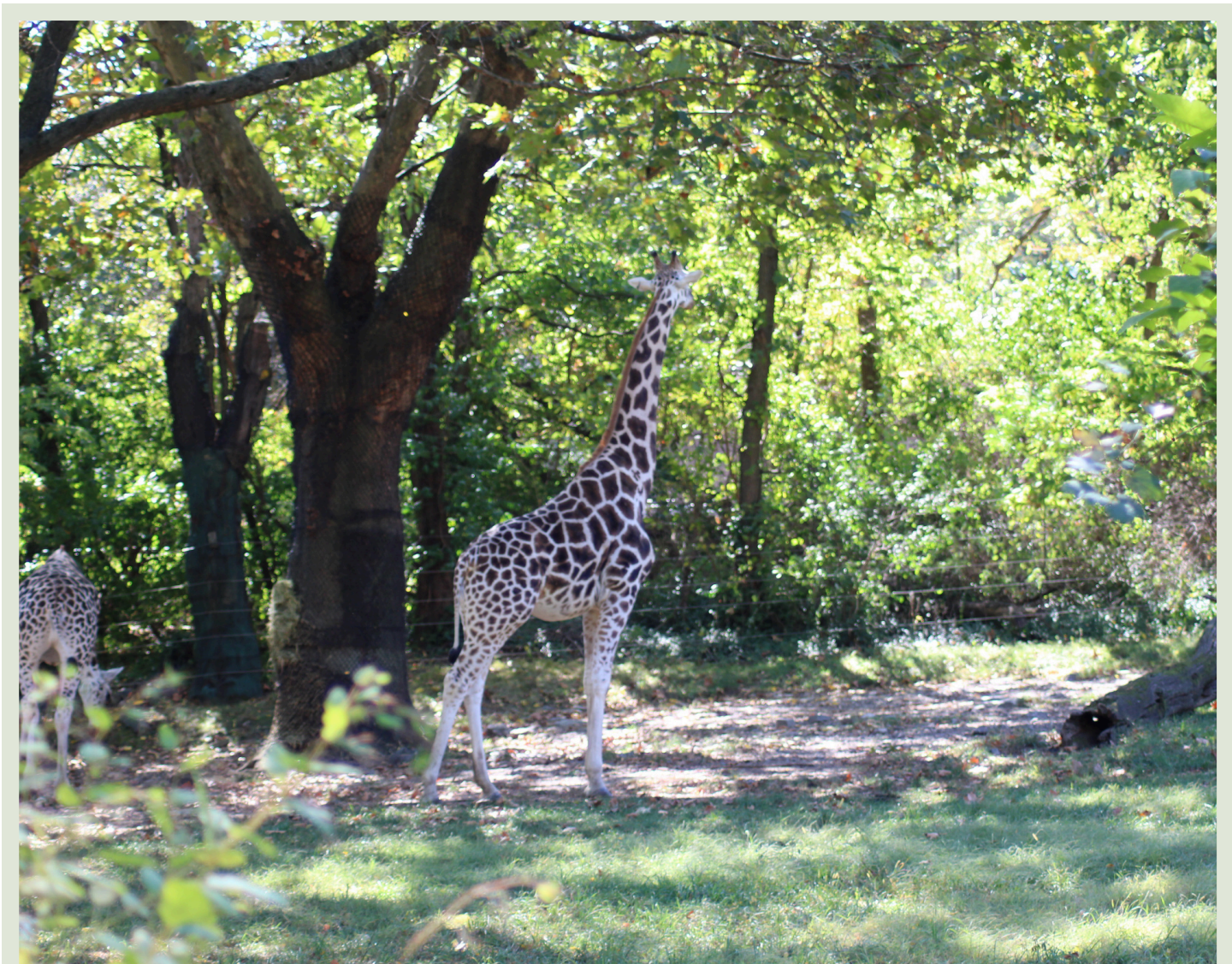
As noted above, the gorillas were subjected to intense and raucous crowds. The male silverback positioned himself against the observation glass with his back to the crowd and occasionally ran at the glass. These avoidant and aggressive behaviors indicate that he was uncomfortable and warning the people to stay away. Despite his efforts to frighten visitors, his living space was subject to constant crowds in the time we observed. Although there were always people at the enclosure, the length of time spent looking at the gorillas was minimal per visitor. Average viewing time at the gorilla enclosure was just 1 minute 8 seconds. The longest viewing time was 3 minutes 47 seconds and the shortest was 17 seconds. When considered in this context, the gorillas were subjected to constant shouting and disruption while people showed no meaningful interest in learning about them or even thoughtfully observing them. To note, the silverback had two large bald patches – one on either side of his head. This suggests overgrooming – a recognized sign of stress in captive primates.²⁷



When considered in this context, the gorillas were subjected to constant shouting and disruption while people showed no meaningful interest in learning about them or even thoughtfully observing them.

There is no publicly available information on the size of the giraffe enclosure at Bronx Zoo, but it forms part of the 18-acre “Africa Plains” habitat which also houses the lions and African painted dogs, among other species.²⁸ Giraffe home ranges in the wild range from 32.8 square miles to 579.15 square miles.²⁹ This equates to between 21,004 acres to 370,658 acres. The significant difference in range depends on multiple variables including climate, seasonality, and food abundance or scarcity, among others.

The giraffes could be viewed from multiple vantage points. The vantage point we chose was that which had the clearest view of the animals in their outdoor space. During our observations, we saw only nine visitors stop to see the giraffes, with the average observation time being just 53 seconds. The longest observation time was 2 minutes and 3 seconds and the shortest just 1 second as a visitor simply glanced at the giraffes while walking by. In addition to the 9 visitors counted during the 10-minute observation time, there was also a group of four people who appeared to be on a guided tour. They were still present at the enclosure at the end of the 10-minute observation period, so were not formally accounted for in our data analysis. They did, however, spend more than seven minutes at the exhibit. This may be influenced by the fact that the tour guide was talking to them about the giraffes for this period, suggesting that employee engagement substantially increases visitor observation time.



The giraffes had an indoor room where visitors could view them. Online reports state that there are also off view indoor spaces for them.³⁰ The zoo states that the giraffes can be viewed indoors during the winter months, and other reports state that they are brought indoors when the weather becomes “too severe.”³¹ The same article suggests that the giraffes are locked inside for two months of the year. On the day we visited, there was a sign inside the indoor giraffe space that said they were “outside today.” It is unknown whether this meant they were locked out of their indoor space, but we assume that was the case.



CONCLUSION



Our visit to the Bronx Zoo found genuine attempts to educate visitors using plentiful and interactive signage. However, these efforts fell short as those at the zoo on that day showed little to no interest in signage and other educational offerings. While the parent organization of the Bronx Zoo is unquestionably making excellent contributions to the conservation of species in the field, the role of the zoos in this wider mission is unclear. The zoo facilities appear to cost more to run than the income they create and are also subsidized by millions of taxpayer dollars from the City of New York as part of a long-term agreement.

While some enclosures contained natural elements and could be of a high standard within the zoo industry, the living spaces of the animals remain worlds away from their natural habitats and cannot possibly meet the needs of the zoo's captives to any meaningful extent. Extreme examples of failure to meet animal needs can be found in the heartbreaking cases of Happy and Patty. Other animals are denied space, appropriate social groupings, and ability to express fundamental natural behaviors. In the absence of adequate enclosures and the apparent inability of the zoo to generate income to cover, much less exceed, running costs, the purpose of the zoo is questionable. Ultimately, zoos claim that the captive keeping of animals for their lifetimes allows visitors to see animals they would not otherwise have the opportunity to see. This, they posit, has value not as entertainment but to create care and empathy for species under threat, with that care translating into a commitment to conservation. These lofty claims are not borne out in evidence and, indeed, visitors show little more than a tokenistic interest in actually looking at the animals, with most spending just minutes – or even seconds – at exhibits. This raises a vital ethical question: Can the sometimes decades-long, lifetime captivity of complex, sentient beings be justified in order to satisfy the trivial interests of zoo visitors who lose interest in the animals in mere seconds?

Our answer is a resounding “no.”

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