

An Evaluation of the Ethics of Zoos

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Introduction

Just how did zoos come to be? Animals from all over the world, imported into our cities, organized in an orderly manner—it doesn't seem strange until you realize, wait, this giraffe is from a whole other continent! What are you doing in California? Humans have owned animals for thousands of years, as far back as 2500 BCE in Egyptian and Mesopotamian aristocratic menageries (Rutledge et al.). Menageries are private collections of animals, especially ones that are exotic, typically for exhibition. Zoological gardens, or zoos, gained more attention and interest in the 16th and 17th century when the Age of Exploration allowed discoveries of exotic animals. Noblemen were the most interested in the exotic animals, which were considered luxury items (Hardouin-Fugier and Baratay). But since then, the missions of zoos have shifted from entertainment to conservation (The Editors of ProCon). The “modern zoo” model was created around the 18th century, during the Age of Enlightenment. The period, characterized by increased scientific, rational, and logical thought, prompted a more scientific perspective towards captivity (Rutledge et al.). Thus, these organizations have become much more ethical over the last few centuries, acting as significant contributors to conservation as our planet continues to burn. **Although zoos' main ethical justification is conservation, research shows that conservation efforts do not justify captivity.**

See

The defining ethical characteristic of zoos is their dedication to conservation. The Association of Zoos and Aquariums (AZA), a non-profit organization, accredits zoos and certifies that they live up to welfare standards, including conservation efforts. They are committed to their mission of “advancing animal wellbeing, public engagement, and the conservation of wildlife and wild places, setting the global standard of excellence” (Strategic Plan). The ethicality of AZA zoos in particular is discussed throughout this paper. The Accreditation Commission, a team of experts in operations, animal management, and veterinary medicine, overlook the accreditation process. The process works in several steps: candidates apply for accreditation, supplying various records including their policies, records, reports, etc. Then, a team of experts, also in veterinary medicine, animals, and operations, come to inspect and evaluate the facility and create a report. The inspectors report is reviewed and candidates are either rejected or accepted by the Accreditation Commission. This process takes several months (“Accreditation Basics”). Accreditation guarantees that AZA zoos work to conserve, and at the very least, protect wildlife. While animal welfare works as an ethical baseline, animal welfare alone doesn’t dictate ethicality. Animal welfare is humane treatment, not necessarily ethical treatment. Dr. Michael Hutchins, former William Conway Chair of the Department of Conservation and Science for the AZA, argued at the 2002 AVMA Animal Welfare Forum that the strongest justification for zoos is conservation and animal welfare efforts (Kuehn). If zoos did not benefit animals through conservation and welfare programs, then there would be no moral justification for these institutions to exist. Hutchins, in the same forum, stated “do the benefits of accredited zoos[...]outweigh[individual animal welfare cost]?” (Kuehn). In order to judge ethicality, conservation efforts must be analyzed to justify captivity, regardless of how well the animals live in their enclosed environments.

Conservation methods fall into one of the three following categories: breeding, research, and advocacy. Conservationists conduct captive breeding by creating ideal, supervised environments for animals to breed, while also protecting and monitoring their health (Davidson). In a 2022 article, Mikaeylah Davidson from the University of Melbourne defined captive breeding objectives by splitting them into three goals: creating insurance populations, increasing endangered populations, and reestablishing extinct populations (Davidson). Although individual zoo plans vary, these are typical outcomes an institution may aim for with their breeding programs (Davidson). Conservation researchers working in zoos study animal biology and physiology, behavior, cognition, etc. to better understand how to help & conserve animal populations (Lazure). They do this by observing animals in a captive, accessible environment (Lazure). According to Britannica, 228 accredited zoos published 5,175 peer reviewed papers in 1993-2013, or around 259 papers per year (The Editors of ProCon). However, research also shows that only 7.3% of the papers were specifically for conservation, with 31.9% for zoology, 13.3% for ecology, 10.5% for marine and freshwater biology (Loh et al.; Marris). Conservation through advocacy, or education takes place in zoos by raising awareness regarding environmental issues and generating interest for others to take action. Robin Ganzert, CEO of American Humane, a society with the aim to make a safe world for animals, says that zoos allow a human-animal connection that elicits empathy from people, especially children, claiming “people won’t protect what they don’t know” (The Editors of ProCon).

While captive conservation has some benefits, it has major drawbacks. In a study evaluating the effectiveness of North American AZA accredited zoos, research shows that U.S. zoos are important contributors to at-home/captive (*ex-situ*) and field (*in-situ*) conservation, particularly in recovering threatened species. *Ex-situ* conservation focuses on “*ex-situ* population

management,” or the captive breeding, rehabilitation, research, etc. *In-situ* conservation focuses on conservation in native habitats, namely educating communities nearby, preserving and restoring habitat, preparing for reintroductions, and monitoring animals (Che-Castaldo et al.). However, there are drawbacks to animal captivity. A concerning characteristic of captive animals is “zoochosis.” Animals with zoochosis exhibit “stereotypic behaviors,” or repetitive actions with no purpose, such as rocking back and forth (In Defense of Animals). These traits are unique and manifest in captive animals with little mental stimulation (In Defense of Animals). Regardless of the enclosures these zoos reproduce, they are still artificial. It’s impossible to fully replicate these habitats, especially when the animals have constant contact with humans. Other drawbacks include breeding success rate and reintroduction. According to a study on captive breeding limitations, only a small percentage of captive breeding is actually successful for endangered species and it is difficult to establish a stable captive bred population with several species, although it is possible (Snyder et al.). In addition, there are concerns that captive-born animals will have a hard time adjusting to reintroduction, such as when foraging or avoiding predators (Snyder et al.). This demonstrates that *ex-situ* conservation is not as effective for most animal species, yet many are still kept in captivity. The aforementioned paper also acknowledges this limitation, stating “if a species is especially difficult to house, cannot reproduce successfully, or has low survivorship in zoos, then establishing *ex-situ* populations may not be feasible or worthwhile” (Che-Castaldo et al.). The drawbacks of zoos undermine conservation efforts.

Conservation spending by zoos is only a fraction of total zoo spending. The ways in which money is managed to benefit animals helps determine the ethicality of these institutions. The funds for zoos come from a variety of sources. According to Britannica, U.S. zoos are owned and supported by the area they are located in, and also pull other funding from

subscriptions, entrance fees, and government subsidies (The Editors of Encyclopaedia Britannica). For example, the San Diego Zoo is managed by a non-profit organization, the San Diego Wildlife Alliance, and receives its funding from donors, ticket sales, grants, and auxiliary activities, such as merchandise and food (“SDZWA Consolidated Financial Statements and Independent Auditor's Report 2023”; “Support Us”). The AZA reported that U.S. accredited zoos spent \$3.8 billion in 2013, with \$160 million allocated to conservation, making up less than 5% of all spending (“The Economic Impact of Spending for Operations and Construction in 2013 by AZA-Accredited Zoos and Aquariums”; “AZA-Accredited Zoos and Aquariums Generate \$160 Million Annually for Wildlife Conservation”). However, this statistic includes all AZA zoos, not just U.S. based institutions. This demonstrates the lack of prioritization regarding conservation. AZA also reports that 54% of all 252 accredited zoos are non-profit, 35% are public-owned, and 11% for-profit (Marcy). Considering that over 50% of zoos are non-profits, there should be a greater economic contribution to conservation compared to what the data demonstrates.

Judge

Captive breeding efforts aren't successful enough to justify captivity. As previously mentioned, captive breeding is ineffective in most cases because of the difficulties establishing a stable population, reintroduction, and adaptations to captivity (Snyder et al.). Captive breeding is one of three major methods of conservation. If breeding is generally unsuccessful, then this method fails to provide sufficient justification for relocating and keeping these animals. In addition, when animals are bred in captivity, they are more likely to genetically adapt to their environment over time. For example, offspring will have more traits such as increased docility that help their chance of survival in a captive environment, but not in a wild environment (“Adaptation to Captivity”; Christie et al.; Williams and Hoffman). However, adaptation is a

slow process that affects generations, not individuals. But with every generation, behavior slowly starts to shift in favor of captive conditions, which is unfavorable for wild animals (“Captive Breeding”). Considering that animals raised in captivity can become inept at wild survival, captivity will end up harming animal populations. On top of that, these animals have the chance to develop zoochosis in their environments, damaging their mental state. According to BBC Earth, it is especially difficult to release more “complex” animals such as dolphins. (Cormier). This further undermines the effectiveness of captive breeding and reintroduction programs. AZA zoos also have their own way of managing adaptation, such as Species Survival Plans, which aim to maintain genetic diversity (“Species Survival Plan Programs”). However, only around 300 species have SSP programs across all AZA institutions, compared to the 8,700 total species they boast (Marcy; “Species Survival Plan Programs”). This is especially concerning for non-endangered zoo animals as their populations become continually used to humans, and for endangered animals’ chances of reintroduction. Captive breeding efforts are ineffective and can harm animals in the long run.

Education is an ineffective method of conservation. Many argue that zoos educate the many people who come by, thus making them more valuable and necessary. A study evaluating the “environmental identity,” or increased awareness or concern for animals demonstrated that environmental identity typically remained the same for visitors before and after entering (Clayton et al.; Torrella). Education at zoos does not generate an impact significant enough to justify it as a source of conservation. This study also does not take into account how many took action themselves afterward. Education is a powerful driving force for change, but only if change truly happens. In addition, another study which evaluated conservation education in children ages 7-15 after visits to the zoo found that 41% of children learned from educated tours and 34%

from unguided tours (Jensen). This demonstrates that the majority of children are not learning from zoos, especially unguided ones. Not only that, but most zoo visits are unguided. However, this study was conducted in London, and thus may differ from institutions described in this paper.

Research is underfunded and doesn't produce sufficient results to justify captivity. Not enough money is being invested into conservation to create a significant impact. Less than 5% of yearly spending is allocated toward conservation, yet around half of all U.S. accredited zoos are non-profit organizations. There is a significant disparity in these numbers—most zoos are non-profits, yet only a fraction of all AZA zoo spending goes to conservation. This demonstrates that conservation isn't being performed at its maximum efficiency. If zoos aren't doing all they can to contribute to conservation, then what are the animals being kept there for? This also raises questions regarding captive, yet non-endangered, non-native animals. The AZA reports that 900 IUCN-classified vulnerable endangered species are in their zoos, but they have a total of 8,700 species throughout all facilities (Marcy). Only 10% of all species in AZA-accredited zoos are endangered. It can be argued that zoos may house certain non-endangered, non-native animals for research. However, when the conservation budget is that low, there's little justification for keeping these exotic animals. The only reason they should be there is research, yet, that research doesn't seem to have much funding. Additionally, only 7.3% of research between 1993-2013 was attributed specifically to conservation, so even when research is funded, there isn't a significant conservation output (Loh et al.; Marris).

The Catholic Church would call for a re-evaluation in zoo missions. Pope Francis writes in his encyclical letter, *On Care for Our Common Home*, that we have a duty to replenish the environment because we are communal creatures all made in the image of God (Pope Francis).

Catholic social teaching instructs us to care for God's creation. Although these institutions have good intentions for saving these animals and their habitats, they are ineffective at doing so.

Captivity can also harm the animals in the process, directly going against our duty to protect the environment. The Church therefore would call zoos to do an inner reworking of what they really value and how much they actually contribute. Not only that, but the Church would scorn the 11% of zoos that are for profit. The Church teaches us that while profit is an integral part of businesses, it should serve an overarching objective (Garrett). Although AZA zoos have this objective, namely conservation, it fails to serve it properly. Zoos are humane in terms of their animal welfare, but if conservation isn't efficient, then we aren't replenishing the environment. Zoos must change in order to truly help the environment.

Act

Wildlife reserves and sanctuaries provide alternatives to zoos. Wildlife reserves are protected areas of land typically focused on conservation and research ("Wildlife Preserves Explained: 5 Examples of Nature Preserves"). They differ from zoos in that animals have a significantly larger amount of space and live in a natural habitat, while still getting the benefits of care and protection that zoos provide, as well as the conservation and research. Sanctuaries are institutions that take in animals that cannot be released back into the wild for a variety of reasons, including injury, like a retirement home (Hartigan). Unlike zoos, they do not trade, breed, or barter animals (Lin). Sanctuaries also generally provide a bigger space for animals compared to zoos (Animal Sanctuaries 101: Understanding Their Mission and Importance). In addition, sanctuary animals need to be in captivity because they cannot survive in the wild unlike most zoo animals, providing a more ethical way to view them. Regardless of where you visit to get your fill of animals, it is important to research the institution you are going to visit.

Especially when visiting a different country, stick to ecotourism and choose the most ethical options possible when interacting with nature. Your money has power, and we have a responsibility to support the right institutions and the right missions. God calls us to this mission to care for creation. Not only that, but because it is the moral action to take. AZA zoos are a safe bet, but it is even better to stop by a reserve or a sanctuary.

Conclusion

Zoos' current conservation efforts are unable to justify animal captivity. Conservation is engaged through education, research, and advocacy. However, conservation is often inefficient, including issues with low success rates in breeding and education programs. Research is also underfunded, producing little conservation research and providing insufficient justification for the captivity of non-endangered animals. Animal captivity has many harmful outcomes, such as zoochotic behavior and domestication, ethical concerns that aren't outweighed by conservation benefits. Considering the Church's dedication to improving the environment, current zoo efforts aren't enough and their missions must be re-evaluated. Better alternatives to zoos include wildlife reserves and sanctuaries, which provide bigger habitats for animals to live in. Wildlife reserves are more ethical because animals have little human contact and live in a natural environment. Sanctuaries are more ethical because they provide homes for animals that can't get back to the wild instead of capturing wild animals. We have a duty to protect the environment and make the right ethical choices for these creatures that cannot speak up for themselves.

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