"A circus tiger mauled and killed his trainer.
I wonder what set him off," said the commentator.
I don't know. How would you feel if separated from your family,
you were shipped to different cities in a cage no less,
Bound of life, with pain/pleasure techniques,
And complete humility for performance under duress,
A whip no less.
If you were a tiger would you do it?
Would you break away,
Think of escape and if desperate,
Kill and avow your infinite humiliation and guaranteed
Death?
Do you do it, now, as a human?
If not, then I understand why you were not sure
What set the tiger off, Mr. Commentator.

– Serj Tankian, "Circus Tiger"

The Captivity Industry

The reality of zoos and aquariums

By Lori Marino, Gay Bradshaw and Randy Malamud

Millions of people visit zoos, marine parks and aquariums every year. Ostensibly, these places provide an opportunity to look at, connect with and appreciate the beauty and behavior of the animals. Indeed, everyone is drawn to the majesty and mystery of animals who look and live so differently than we do, but nonetheless seem so similar to us.

But more is going on than meets the eye. Exactly what are we learning about other animals in these places? How is the zoo experience different for the animals than it is for the visitors? And what might we learn about ourselves by casting a more examining eye on the institution of zoos and aquariums?

Most zoo visitors don't think about what it means that the animals on display have been removed from their native habitats. When they do think about it, people often come to the conclusion that captivity is a necessary evil: Zoos and aquariums are necessary because it is important for people to be able to look at other animals and because this human experience actually helps other animals in the wild. Subsequently, the price we pay for this (or, more accurately, the price the animals pay) is justified.

But this rationalization sidesteps a fundamental question: Why do zoos exist in the first place? How did they begin? To understand why zoos endure so tenaciously in Western culture, we need to look at their historical origins.

A sordid past

Displays of animals in captivity go back to ancient times but, as a formal institution involving public spectatorship, zoos arose in the early 19th century to exhibit the living trophies of imperial conquest. The great European powers, engaged in the business of colonizing the planet, collected animals almost as a hobby and began displaying them in public zoos to engage the general public in the products and spoils of imperialism. A majestic elephant confined in a barred enclosure, a snarling tiger pacing menacingly in his cage, an exotic ostrich, a sinuous python and a timid koala all symbolized the conquests of the British (or Dutch or French or other) empire, which spanned the globe.

As time went by and colonial empires expanded, the traditions of the European zoos were adopted by non-Western cultures, in which public participation in zoo and marine park enterprises is just as enthusiastic as elsewhere. In 1860 the first zoo in the U.S., Central Park Zoo, opened to the public in New York City. The first marine park in the U.S. was Marine Studios, a dolphinarium (aquarium for dolphins) that opened in 1938 in St. Augustine, Florida, and is now known as Marineland Florida.

Other forms of animal confinement, such as traveling menageries, appeared in Europe as early as the turn of the 18th century. They were the precursors to modern circuses, which commonly included not only the display of other animals, but human freak shows. It was not uncommon for zoos and exhibitions like the World's Fair to create ethnographic displays that included people in cages along with other animals. Popular "specimens" of the human variety included people from the Japanese Ainu, Native American Kwakiutl, Filipino Igorot and other "primitive" cultures.

Zoos no longer exhibit members of our own species in cages, but the other animals are still there. We still capture them, "acclimatize" them, and make them visual targets of our whims. By definition, confinement subordinates its captives and gives the viewer complete power over them. Ideally, the experience of interacting with other animals should enhance our understanding of the interconnected, mutually shared web of life, but the institution of the zoo forestalls any such insights. We are out here; they are in there.

On their own

Very little real legal protection exists for animals residing in zoos and aquariums. Zoos, circuses and marine mammal parks are regulated under the Animal Welfare Act and its regulations, and

are inspected for compliance on a regular basis. But regulations are general. And while there are penalties for violations, they are small, and the agencies that perform such inspections are extremely understaffed relative to the number of institutions requiring examination.

The World Association of Zoos and Aquariums (WAZA) is an "umbrella" professional organization whose members include leading zoos and aquariums. It offers inspection-based accreditation. But as with all professional organizations, it provides only unenforceable recommendations for the treatment of animals. Even more important, since WAZA and the other professional organizations make up the zoo and aquarium community, they have a vested interest in maintaining and encouraging the existence of these institutions. This situation inherently puts these organizations in conflict with the interests of the animals.

There are also regulations restricting the capture and transport of animals. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement among member nations. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. But CITES relies on voluntary membership and, in essence, is a gentlemen's agreement among the member nations to enact their own widely different domestic laws. Sanctions against violating nations are possible, but occur very rarely because of the delicate nature of international relations.

Finally, all these laws, treaties and guidelines take as their starting point the assumption that zoos and marine parks are not inherently detrimental to animals. Therefore, there is no regulating body that gives any weight to the argument that captivity itself should be questioned. The animals are very much on their own and subject to the dictates of organizations that have a financial interest in maintaining their captivity.

Reality check

In modern times, support for the original colonial reason for zoos has gone the way of other politically incorrect cultural phenomena and, as a result, public awareness of nature and environmental issues has come to the forefront. Zoos and marine parks have adjusted to this shift in political winds by re-branding themselves as principal agents for species preservation and public education – that is, modern-day Noah's arks.

This new message saturates every element of the zoo and marine park experience, including the appearance of animal displays, the kinds of items sold in gift shops, the language used in display text and by docents and trainers, and even the ways visitor activities are described. For example, on its website the Bronx Zoo (which now calls itself the Wildlife Conservation Society) refers to some of its displays as "living classrooms."

Even the physical appearance of zoos has been contrived to replace the old circus-like atmosphere with components of "nature," such as trees, boulders and water. But, we might ask, while the new messaging of zoos and marine parks may advertise conservation and education, has there been any real change in their motivations and purpose? What is the reality behind all the hype? Is there any evidence that visits to zoos and marine parks have an educational and conservation impact? These facilities proclaim educational and conservation benefits in their brochures and on their websites, but the evidence is lacking.

Recently, we analyzed a major study funded by the National Science Foundation and conducted by members of the Association of Zoos and Aquariums (AZA). The study has been widely promoted by the zoo and aquarium industry as definitive evidence that zoo and aquarium visits produce long-term effects on people's attitudes about animals. A press release refers to the report as a "groundbreaking study" and claims that "visiting accredited zoos and aquariums in North America has a measurable impact on the conservation attitudes and understanding of adult visitors."

> "Zoos create a false sense of security about the survival and welfare of other animals. A zoo filled with empty cages might be a more realistic way to convey the impending loss of species."

The report goes on to quote Cynthia Vernon, vice president of conservation programs for the Monterey Bay Aquarium and an investigator on this project: "The Visitor Impact Study shows that zoos and aquariums are enhancing public understanding of wildlife and the conservation of the places animals live. It validates the idea that we are having a strong impact on our visitors."

AZA president and CEO Jim Maddy asserts that "for the first time we have reliable data validating the positive impact zoos and aquariums have in changing visitors' feelings and attitudes about conservation." Is this study the Holy Grail that zoos and marine parks have been waiting for to validate their message of education and conservation and to justify keeping animals in captivity?

Our analysis of the AZA study methodology reveals that the study lacks scientific rigor and is extremely flawed, and its conclusions are unwarranted. (Our detailed findings are being prepared for publication.) In short, the AZA or other agencies have not yet demonstrated how zoos and marine parks enhance public education or promote conservation of wild populations. Moreover, as Bob Mullan and Garry Marvin describe in *Zoo Culture*, in a recent study of visitors to the Reptile House in the National Zoo, Washington, D.C., the average time recorded for people visiting the entire house was 9.7 minutes, with an average of only 26 seconds spent in front of each enclosure. It is difficult to see how any meaningful learning can occur in such short time periods.

More disturbing is that the beliefs and practices of zoos have spread to other venues, such as marine parks that promote interaction between visitors and dolphins. Many people are seeking interactive encounters that allow them to get "hands on" with the animals. This need for a more "consuming" experience has led to the growth of the swim-with-dolphins industry.

These interactive programs are also related to the highly lucrative business of dolphin-assisted therapy (DAT), in which a person pays to swim or interact with a dolphin in captivity while also engaging in other mainstream learning and physical rehabilitative tasks. The patient is led to believe that the dolphin is the key therapeutic agent in

the process. However, two studies by Lori Marino and Scott Lilienfeld analyzing the scientific validity of DAT showed that these programs are based on highly flawed methods and there is no evidence for the claim that DAT is effective treatment for any disorders.

The conservation fallacy

In asserting that captivity is necessary to save wildlife, a serious ethical assumption is made: The prolonged suffering of confined animals balances out the effort to save their counterparts in the wild – a central premise of zoos and aquariums. Yet science shows that the stress and trauma of captivity compromises the mental and physical health of individuals. The result is that countless efforts to re-introduce animals into (a mostly desecrated) wild have failed.

There is a very real danger to believing the message of zoos and aquariums. If we pretend that we can learn about animals by watching them in these human-created compounds of cement and steel, then we are saying that natural habitats are irrelevant. And if the animals' natural context is implicitly presented as unimportant, then zoos are actually contradicting the message they claim to affirm, that environmental conservation is a pressing concern.

Zoos palliate people's anxieties about a disappearing natural world, instead of forcing us to confront the imminent dangers to animals. In this way, zoos create a false sense of security about the survival and welfare of other animals. A zoo filled with empty cages might be a more realistic way to convey the impending loss of species.

By making captivity seem normal, zoos and aquariums hide the fact that forced confinement is brutal and cruel. In addition to causing severe physical hardships because poor environmental conditions fail to meet the evolutionary and ecological needs of an individual animal, captivity (outside appropriate sanctuary conditions) imposes serious psychological stress. Hard concrete, limited movement, noise, near-constant exposure to visitors, lack of family groups, and threat or actual violence by keepers all undermine the animals' well-being. For these reasons, many animals display behaviors and emotional states indicative of psychological trauma and distress: self-injuries, eating disorders, infanticide, hyper-aggression, depression and many others.

Even in zoos where an effort is made to provide nutritious food, some social contact, some kind of "natural setting" and environmental enrichment, the animals suffer terrible deprivation because we can no more simulate the richness of a natural life for other animals than we could for humans in captivity.

Sanctuary: the remedy

To help with the burgeoning number of animals who are left in the limbo of captive life, unable to return to their native homes, a growing number of sanctuaries have been established. The difference between a legitimate sanctuary and a zoo (or marine park) is enormous. Unlike zoos and aquariums, sanctuaries are places created only to help animals who are hurt or displaced, places where the culture of public viewing and entertainment do not compete with animal welfare. Sanctuaries do not seek to acquire animals from the wild or breed those held in captivity; they are established solely to provide refuge and care for individuals who have suffered at the hands of people.

Many animals actually come to sanctuaries from zoos. There are several reasons why zoos relinquish animals to sanctuaries. Zoos will sometimes agree to transfer an animal to sanctuary if the animal becomes sick or old, or is considered dangerous or difficult to handle. One good example is Maggie, the young African elephant who almost perished in the zoo where she was being kept.

Maggie lived in Anchorage's Alaska Zoo until 2007. After losing the companionship of another elephant, Maggie's health declined. Zoo personnel, veterinarians, scientists and public advocates feared that Maggie's survival was threatened after so many years of living in inhospitable conditions (including, most obviously, the drastic difference between her native African climate and Alaska's extreme cold).

After much debate, and more than one episode of collapse, Maggie was released and now lives at the Performing Animal Welfare Society shelter in California, where she quickly regained her strength and well-being. She lives with other elephants and is supplied with varied and nutritious foods, good medical care and treatment for her health issues. She enjoys acres and acres of expansive habitat more akin to that of her native Africa than what she experienced in Anchorage.

This brings us to another difference between zoos and sanctuaries. Sanctuaries reflect the perspective of the animal, not the human visitor – or the pocketbook. Zoos are established specifically for human objectives. Sanctuaries are specifically designed "from the eyes of the animal." For instance, there are sanctuaries designed for the needs of chimpanzees, many of whom are in recovery from being subjects of biomedical experimentation or from an arduous life in the entertainment industry.

Sanctuaries are also designed to support and reinstate every individual resident's sense of self. A sanctuary provides the right kind of terrain, plant life, water, companions, atmosphere and food; it offers interesting and exciting places to explore, and addresses any other special needs a resident may have. A sanctuary thereby creates competence, a sense of mastery and agency, the feeling of being able to make meaningful decisions and choices. It also offers security. The sanctuary can become an animal's home for the duration of his or her life, and it's a place to make friends and have relationships that endure long-term.

Our ethical responsibility

Caught up in the colonial legacy of conquest and possession, modern humans have made animals pay a terrible price. Our sense of entitlement to see any animal when, where and how we want has created a culture of slavery and oppression for animals. We have become complacent about the animals with whom we share our everyday lives and demand that if we live in, say, Atlanta or Cleveland or San Diego, far away from the African savannahs and jungles of India, we are entitled to see elephants and tigers.

We must ask ourselves: Are we humans entitled to have access to every creature on Earth, that is, the whole panorama of "charismatic megafauna" – giraffes and tigers, rhinos and chimpanzees, dolphins and killer whales? Do we really need such a star-studded smorgasbord of animals held captive in order to understand how important it is to save them and their natural habitats? Or shall we commit to developing a mutually supportive relationship with our "kin under the skin" and learn to care for them without having to touch them or confine them behind walls and bars? 🐾

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