

BUSTING THE TOP 10 MYTHS PERPETUATED BY ZOOS

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Following are the arguments that debunk the top ten myths that Zoos have been perpetuating for decades. Zoos are in the archaic business of incarcerating animals for profit; where animals suffer tremendously, because their needs are always supplanted by the interests of people. Only once the public truly understands the Zoos true mandate, can there be an end to the agony endured by millions of wild animals imprisoned in their confines.

For the purposes of this discussion, the terms “zoo” will refer to those institutions operating under the conventional zoo model, meaning those in the business of displaying (wild) animals for recreational purposes. This includes over 99% of the estimated 10,000 –12,000 zoos and animal collections worldwide.

MYTH NO. 1: ZOOS WERE ESTABLISHED FOR ANIMALS.

REALITY CHECK: Zoos are human-centered and profit-driven; yet they wish their public to believe they exist expressly for the benefit of animals. Zoos are in the *business* of exhibiting wild (and often domestic) animals for *human enjoyment*. This omni-present directive is written plainly on page 5 of the Edmonton Valley Zoo ‘s Master Plan, “ *Never forget that the Zoo is in the ‘visitor experience’ business*”. Confirmation that the needs of the animals on display, are always secondary to the needs of human visitors, and of the shareholders for which the zoos exist.

MYTH NO. 2: BECAUSE OF THE EVER-DECREASING BIODIVERSITY ON THE PLANET, ZOOS PLAY A CENTRAL ROLE IN THE CONSERVATION OF ENDANGERED SPECIES VIA ENDANGERED SPECIES BREEDING

PROGRAMS WITH THE INTENTION OF REINSTATING THEM BACK INTO THE WILD.

REALITY CHECK: This myth that has been perpetuated for some 35 years now. Zoos palliate people's concerns around the imprisonment of animals for entertainment purposes, by justifying their existence as critical to the survival of endangered species.

Around the middle of the 20th century, support for the original colonial reasons for zoos as collections for exhibition and research was being challenged along with other politically incorrect cultural phenomena. When public awareness of nature and environmental issues came to the forefront in the 1970's, zoos rebranded themselves as principle agents for endangered species preservation and public education, which served to deflect attention from their primary, albeit less sexy purpose, which has *always* been, displaying captive live animals for the benefit of people.

Firstly, we cannot forget that Zoos contributed to the loss of species in the wild in the first place, often the very species they now claim to be doing a huge service for.

Secondly, organized breeding efforts like the Species Survival Programs (SSP's), came about in response to various regional, national and international laws and treaties that emerged in the 60's and 70's, like CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora), which made extractions of animals from the wild, much more difficult and uncertain. Organized zoo-based breeding programs, therefore were self-serving survival mechanisms designed by zoos to ensure they had genetically viable, self-sustaining zoo populations for periods of up to 100-150 years.

At the outset, these programs were all designed purely to replenish zoo stocks with no plan or legitimate mechanism to return any animals to the wild. Much, much later, zoos participated in some release programs, many that were already underway, and in others

they played only a peripheral role. Overall, if you compare the numbers of endangered animals actually produced by the efforts of the some 12,000 zoos worldwide, versus the millions of wild animals they confine in captivity, their contribution to the wild populations seems inconsequential.

According to Rob Laidlaw of Zoocheck Canada, “a significant portion, possibly as high as 95% or more, of the worldwide zoo industry does not participate in, or make any attempt to participate in, recognized captive propagation and reintroduction initiatives”.

David Hancocks, author of “A Different Nature: the Paradoxical World of Zoos and their Uncertain Future”, and a zoo director for thirty years concurs, “*fewer than five species have been saved from extinction by zoos, and some of them more by providence than prudence.*”

Mike Seidman, author of “Zoos and the Psychology of Extinction”, also observed that “*Zoo’s claim to save endangered species to captive breeding programs and to promote knowledge and respect that will lead to protection of animals in the wild. My own view is that such claims claim too much by far and are intended to deflect attention from the central activity of zoos – the public display of captive wild animals.*”

Michael Hutchins, the director of conservation and science for the American Zoo and Aquarium Association admitted, “*reintroduction is not the primary reason for captive breeding*”. This further refutes the notion that the goal of zoo-based captive breeding is to replenish wild animal populations and dispels the presumption that once that is done, there will be no reason to confine those animals further.

Many species are endangered because of loss of habitat. Many environmentalists and animal advocates believe that habitat protection is the best way to protect endangered

species. If Zoos were genuinely breeding animals with the goal of reintroduction, one of their biggest mandates should be habitat preservation, as maintaining small populations of rare animals in zoos, while the species has been effectively removed from the ecosystem, defeats the purpose of protecting endangered species from an environmental standpoint.

Ocelots, for example, became endangered because of habitat loss and overhunting, therefore logic dictates that the focus needs to be on protecting the last remaining cats in the wild, as well as finding ways to preserve their natural habitat. Zoos however, feel the answer is to capture some of the last remaining individuals from the wild, and breed small numbers of often closely related individuals, or even crossbreeding different subspecies if it became necessary. The result of their wisdom is to have these genetically inbred or hybrid ocelots, exist in an unnatural environment, and with unnatural selection pressures placed on them. And, all the while the zoos are ignoring the habitat they intend to return them to – *if* that was their real intention in the first place.

It should be noted, because the various national laws that implement the CITES treaty, only apply to species threatened by trade, many animals are still taken from the wild by Zoos and Aquaria; including whales and dolphins, most species of bears [excluding pandas], and other mega-fauna. The sad reality is that many other laws also have severe limitations.

One indication of how problematic and misguided zoo breeding often is, is the seemingly ubiquitous hand-rearing of animals. To justify hand-rearing, zoos often claim that the mother was neglecting her baby or posed a danger to it. While this may be true, maternal rejection is a serious problem created by the zoos themselves, and one they keep on perpetuating.

Problems with hand-raising begin with the psychological distress on both mother and infant, and its impact extends well into adulthood, with consequences for future generations as well. *"It's well documented that hand raising has long-term behavioral effects,"* admits Michael Hutchins, director of conservation and science for the American Zoo and Aquarium Association. *"Animals become socially attached to human caretakers, and later on in life can develop a sociosexual attachment to the species that hand raised them. In a popular sense, you can say they are confused about their species identity. This can have a long-term effect on breeding."* In fact, hand-raised animals often reach sexual maturity earlier than their wild counterparts, they often do not respond appropriately in breeding situations, and they suffer from low fertility rates. When an animal that identifies more with humans than its own kind, and lacks the learned behaviors normally imparted firstly by its mother and allomothers, and then other members of their group in a social context, it is understandable that they would be confused about the process of delivering, and caring for a baby. It should then also come as no surprise that such an unskilled mother would reject or even attack her baby.

If hand-rearing is recognized as a serious problem and discouraged by the zoo's very own associations, why is this practice still perpetuated? Perhaps the reason is that hand-rearing produces a calmer, more easily handled, and better adjusted display animal, which is certainly in line with the zoo's *raison d'être*.

And lastly, we cannot ignore the problem of surplus animals that zoos are producing on an annual basis. The lack of controls on breeding programs results in a predictable surplus of already common animals. Regarding endangered species breeding programs, there are problems with the production and disposal of animals deemed already sufficiently represented, in a genetic sense, and in the program population.

Dealing with the male progeny can be problematic in species where males become aggressive with maturity, or need to be segregated from family units at puberty.

When Zoos cannot sell, trade or loan their surplus animals to other zoos, these surplus wild animals are often sold to animal dealers and brokers, as well as to circuses, canned hunting facilities, slaughter houses or into the pet trade.

MYTH NO. 3: RELEASING CAPTIVE-BRED ANIMALS TO RE-ESTABLISH WILD POPULATIONS IS A VIABLE PROPOSITION.

REALITY CHECK: The re-introduction of captive-bred animals is fraught with complexities and complications, including but not limited to the following:

- a) It has been shown that rare, often detrimental genetic variations normally suppressed in the wild can become common in captive creatures. In other words, captive-raised animals are subject to *unnatural* selection forces acting on their genetic make-up, making them less likely to survive in the wild.

- b) Removing a substantial number of animals from an environment can result in significant changes to that ecosystem in response to their absence, resulting in a less hospitable environment for those re-introduced species.

- c) Captive-raised animals have little to no opportunity to acquire cultural or traditional learning behaviors, and as a result, their survival in the wild is severely compromised. While there is much genetically hardwired information provided, most of what social wild animals need to learn for survival is taught, first by parents and older siblings, and then by their conspecifics over time. Loss of a natural fear of humans is also highly maladaptive.

d) There is the very real potential that a previously unknown parasite or disease organism may be introduced from captive-bred specimens to an existing wild population, with potentially catastrophic effects. According to wildlife veterinarian, Michael Woodford, “zoo-bred stock is off exposed to exotic pathogens brought in from foreign countries and two infections transmitted by a tenants and visitors (and vermin). Furthermore, captivity subjects some species to continual stress, resulting in immunodepression and increased susceptibility to infection.” Because many diseases are in a constant state of evolution in response to their hosts, mutations will slip through even the strictest screening methods.

e) According to Jonathan Ballou, population manager at the National Zoo, it is felt that a minimum of “ 25 or 30 [founding] animals are necessary to maintain 90 percent of the gene pool for 100 years, but only if the descendant population can eventually grow to 400 or more ” adding that, “with fewer, it wouldn't take much time to run into all sorts of problems.

The reality is that with most endangered species, like the ocelot for example, have subspecies that are represented by only one or two individuals in captivity in the whole world. The entire weight of practical experience suggests that these fragments of breeding populations cannot be maintained with any success at all.

A 30-years as a zoo director, David Hancocks maintains, “*Zoos are not, and for many reasons cannot be, sanctuaries for saving the world wildlife: they deal with two few species and too little space for it.*”

MYTH NO. 4: ZOOS PERFORM IMPORTANT RESEARCH IN ANIMAL REPRODUCTION.

REALITY CHECK: Species such as elephants breed just fine in the wild, therefore research in reproduction is yet another self- serving endeavor; aiding in the

development of effective breeding programs to ensure sustainability of existing populations of protected captive animals into perpetuity.

MYTH NO. 5: ZOOS ARE COMMITTED TO PUBLIC EDUCATION.

REALITY CHECK: Zoos claim they serve an important role in educating people about animals and conservation. Given that the average visitor spends less than 20 seconds per exhibit viewing a psychologically disturbed representative of the species, confined in an impoverished enclosure, and experienced completely out of context; it is questionable what the take-away message is. As well, when animals are sleeping, or huddled during inclement weather, visitors tend to walk right past their exhibits. Information boards may explain some of the natural history or behavior, but the amount of information that can be presented is limited by space. Information boards also assume not only that all visitors can read it, but that they will read it.

At the Edmonton Valley Zoo, a parent was overheard telling her children that the stereotyping elephant (Lucy) rocking back and forth was “dancing”; and a zoo interpreter was heard explaining to visitors that Lucy paints pictures, and proudly stated that she is the only elephant that chooses her own colors! Misinformation like this devalues animals, and is worse than no information at all.

The Zoo community extols one particular AZA survey (Falk et al, 2007). Based on a 54% positive response rate, the study concluded, “*visits to accredited zoos and aquariums prompted individuals to be considered their role in environmental problems and conservation action, and to see themselves as part of the solution.*” However, Lori Marino et al’s critical evaluation of this AZA study, which appeared in *Society and Animals 18 (2010) 126-138*, concluded “*that numerous methodological weaknesses render the findings (of Falk et al), difficult or even impossible to interpret. More important, their claims—extensively disseminated on zoo and aquarium Web sites—*

greatly outstrip their methodologically limited findings. We therefore urge zoos and aquariums to cease citing this study in their promotional materials as evidence that visitors' attitudes are changed for the better, as this conclusion is unwarranted and potentially misleading to consumers”.

Rather than imprisoning animals for a lifetime, for the few seconds of attention the public may give them; education could be better achieved through the use of present day technologies. Brilliant cinematography like BBC's Planet Earth Series and IMAX Productions, the many cogent documentaries available, interactive games, eco-safari's, robotic technology, and virtual reality, are just a few ways to deliver a wealth of relevant information in a far more humane way.

MYTH NO. 6: ZOOS ARE LEADERS IN CONSERVATION.

REALITY CHECK:

If this were true, one would imagine that a large proportion of the Zoo's annual budget would be earmarked for conservation efforts. In reality, zoos spend more on marketing and advertising than on real conservation programs. For example, Los Angeles zoo, which plans a \$40 million exhibit expansion for the 5-6 elephants, spends only 0.5% (\$90,000) of its annual \$17 million budget on conservation, while 12% (\$2 million) of its annual budget is spent on marketing and advertising. The Oregon Zoo claims \$320,000 in conservation spending, while the city spends 1.3 million annually on marketing and conservation. Even while the Edmonton Valley Zoo is being criticized for not providing sufficient medical care for their lone elephant Lucy, they have launched an expensive public relations campaign to improve their image.

Billions of taxpayer money is also spent on maintaining frustrated, psychologically disturbed, animals in absurdly small, unhealthy and paltry zoo enclosures. Case in point, approximately forty AZA zoos have agreed to commit to what is estimated to cost between $\frac{1}{4}$ billion and $\frac{3}{4}$ billion dollars to refurbish or build new elephant enclosures. As well, AZA zoos spend an estimated \$16 million annually to maintain the fewer than 300 elephants in captivity in North America, based on an average of \$58,000 per year per elephant.

In contrast:

- \$400,000 is the entire annual budget for the Amboseli Elephant Research Project, which protects the lives of 1400 elephants in 52 families in their native habitat in Kenya. *This is what some zoos spend to maintain four elephants for one year.*
- \$10,000 is the rough cost of supporting an antipoaching team (including salaries and food supplements, some medicine support and basic body equipment) in Thailand for one year.
- \$25 million is the entire annual budget for the Kenya wildlife service, which protects some of the world's most diverse wildlife populations, including more than 30,000 elephants across more than 20,000 miles of natural habitat. *The total combined size of all US zoo elephant enclosures is less than one square mile.*
- This disparity exists for other species also. The annual cost of maintaining 16 black rhinoceros in captivity, would cover the entire yearly operating costs of the 492,000 hectare Garamba National Park in Zaire, which protects an entire ecosystem and home to 31 white rhinoceros, 4,000 elephants, 30,000 buffalo,

the entire giraffe population of Zaire, 14 other ungulate species, 16 carnivore species, 10 primate species, and 98 species of small mammals.

Rob Laidlaw, a chartered biologist studying wild animals in captivity for over 25 years, and founding member of Zoocheck Canada, is emphatic when he says, *“it seems absurd that institutions claiming to be centered on conservation, throw hundreds of millions (perhaps billions) of dollars to keep a ragtag population of elephants in zoos, but throw crumbs to saving them in the wild”*.

Through his concise, and thorough examination of the conventional zoo model, David Hancocks concluded that *“zoos are not leaders in wildlife and natural resource conservation”*, and currently they fail *“to engender respect for all animals (or) interpret a holistic view of Nature.”*

Zoos are also incongruent in their messages about conservation. If they were truly concerned about the environment, one would think zoos would start by being more “green” themselves.

As self-proclaimed leaders in conservation, Zoos should “put their ethics where their mouth is” as Jeremy Leon Hance’s suggests in his paper entitled *Zoos: Why a Revolution is Necessary to Justify Them*. He adds some enlightened suggestions including, power generated entirely from sustainable sources; water conservation through rain collection and use of gray water, offering shade-grown and fair-trade products at the restaurant, carrying foods that are not contain palm oil or eco-certified palm oil, and ensure that items sold at the Gift shops that ethically and sustainably produced.

MYTH NO. 7: ZOOS PROVIDE OPPORTUNITIES FOR PEOPLE TO INTERACT WITH ANIMALS, FOSTERING NOT ONLY EMPATHY

TOWARDS ANIMALS, BUT A GREATER UNDERSTANDING OF THE INTERCONNECTED, MUTUALLY SHARED WEB OF LIFE.

REALITY CHECK: Firstly, the lesson of interconnectedness is lost by the mere fact that we are out here, and they are in there. Secondly, if seeing an animal is a prerequisite to caring about them, how does one explain millions of pre-schoolers who are passionate about dinosaurs and can name every prehistoric beast that ever walked the planet? There are countless land-locked people, who are also passionate about whales and dolphins, yet have never laid eyes on a real one.

Zoos are very selective in species that they exhibit. Being in the “visitor experience” business, the endangered status of a species is second to their “WOW” factor. As written in the Edmonton Valley Zoo’s Master Plan, “*one of the criteria for the collection plan is the “WOW!” value of each exhibited species. Attractiveness to humans is intrinsic in certain species: great apes that look very much like us, the sheer size of a rhino or elephant, the implied danger of a venomous snake...*”

It would be unlikely that an endangered Black-tailed Deer Mouse would get the same consideration as a black Rhinoceros.

MYTH NO. 8: ZOOS ARE CLOSELY REGULATED AND ARE GOVERNED BY INDEPENDENT ASSOCIATIONS WHO ARE LOOKING OUT FOR THE ANIMAL’S WELFARE.

REALITY CHECK: Very little legal protection exists for animals residing in zoos, aquariums, marine parks and circuses. For example, in the US animal exhibitors are subject to the Animal Welfare Act and its regulations. However, the regulations are mostly general, vague, and outdated. Furthermore, penalties for violations are small, and the enforcement agencies that perform inspections are understaffed relative to the number of institutions they are required to examine.

The World Association of Zoos and Aquariums (WAZA), is the “umbrella” professional organization whose members include leading Zoos and aquaria. The system of professional organization governance, is severely flawed, for the objectives of the organizations are in direct conflict with the interests of the animals.

- Since WAZA and the other professional organizations are made up by members of the zoo and aquarium community, they all have a vested interest in maintaining and encouraging the existence of these institutions.
- All recommendations for the treatment of animals are unenforceable.
- Most importantly, all of the laws, treaties and guidelines take as their starting point the assumption that zoos and marine parks are not inherently detrimental to animals. *This means that there is no regulating body that gives any weight to the argument that captivity itself should be questioned.*

The sad truth therefore, is that the animals are very much on their own, and subject to the dictates of organizations that have a financial interest in maintaining their captivity.

MYTH NO. 9: ZOOS HAVE EXOTIC ANIMAL SPECIALISTS CARING FOR THEIR COLLECTIONS

REALITY CHECK: Not all animal collections receive regular veterinary attention. “Regular attention” can also mean anything from “as emergencies arise”, to once weekly visits, to a veterinarian on premises full-time. Until 2008, the Edmonton Valley contracted a farm veterinarian one day a week to handle the entire needs of their approximately 300 animals, representing some 100 different species. For the most part,

these veterinarians learn on the job, and over time can become skilled at addressing health conditions that they see repeatedly. As well, these veterinarians rely heavily on the observations of zookeepers and animal handlers, who spend a considerable amount of time with their charges. With experience, many zookeepers become very skilled in observation and certain technical tasks, however only a very few have training as Veterinary Technologists.

Only a handful of veterinarians in North America, can be considered specialized in Zoo animal care, as this distinction requires internship at a major Zoo, and extensive mentorship beyond the basic Veterinary degree. In fact, to become an “expert” in any field, requires some 10,000 hours of study/experience in that subject matter. Zoo associations require only that a veterinarian be licensed to practice, and that they have some large animal experience. There is no requirement for any knowledge of exotic animal species.

MYTH NO.10: AZA CLAIMS ITS MEMBERS ARE PERFORMING SIGNIFICANT FIELD RESEARCH.

Most often expounded, is the Wildlife Conservation Society (WCS), which was one of the first conservation organizations in the United States. The WCS began with a clear mandate: Advance wildlife conservation, promote the study of zoology, and create a first-class zoo. They have now created five large animal collections.

WCS’s staff of field and zoo experts, claim they work together in the service of a single mission: to save wildlife and wild places. Their veterinarians, curators, and keepers who care for the animals at the four zoos and aquaria in New York, share their insights with scientists working in the field, with the intent to helping the wild populations. In return, field staff report back their observations of animal behavior and needs in nature, which in turn bolsters their ability to care for the animals in their zoos and wild animal parks.

REALITY CHECK: The WCS is an anomaly in the zoo world. Few, if any, other zoos are as focused or devote the resources, even proportionately, that they do to legitimate field conservation initiatives. Unfortunately, the bulk of the research done in zoos has minimal value to wild populations. The differences between wild and captive populations are so vast and complex, as to make any correlations or inferences mere conjecture. As former zoo director and author David Hancocks can attest to, “ *the data collection is usually for the purpose of solving captive animal management problems, rather than contributing to the scientific literature. It would seem that veterinary studies leading to improved physical care of the animals are the most valuable purpose served by research: which raises the question of why the research is needed in the first place.*”

Noble as scientific studies are, the total amount provided by all zoos, pales in comparison to the contributions of independent conservationists.

CONCLUSION:

According to Hancocks, the capture and display of wild animals, which is the ancient and universal phenomenon embraced by zoos, embodies a dichotomy: humans revere nature yet seek to dominate and control it; a doomed endeavor that has caused widespread environmental degradation, and inhumane treatment of its animal inmates.

In the end, the 200-year old model of capturing and perpetuating the needless suffering of fellow creatures, does not justify the zoos stated objectives (public education, and animal and habitat conservation through breeding programs and research), nor even their implicit objective (of publically displaying wild animals for recreation).

In this high-tech modern world, there exist infinitely superior, substantially more cost-effective, markedly more environmentally-friendly, and definitely more humane ways; to educate people about flora and fauna, to foster a desire to preserve nature’s

biodiversity, and at the same time cultivate a healthy respect for our animal brethren, with whom we share the planet.

In time, society will come to see the suffering that zoos perpetuate in the name of public amusement; no matter how skillfully they reframe it. And, sooner or later, real change will come about. For the sake of animals and humanity, let's make it sooner.

“The indifference, callousness and contempt that so many people exhibit toward animals is evil first because it results in great suffering in animals, and second because it results in an incalculably great impoverishment of the human spirit.”

Ashley Montagu