

Public animal programs and their role as affective forms of conservation education.

Introduction

Zoological institutions have experienced tremendous changes over the past years. What began as exhibitions of charismatic animals simply for the entertainment of visitors, and financial gain of the proprietors, have now evolved into multi-million dollar institutions with conservation and education as priority objectives in their mission statements. These institutions have enjoyed enthusiastic support from the public sector as they transform their small, archaic barred cages into larger, more aesthetically pleasing naturalistic exhibits.

Visitors have also embraced the new educational formats that have emerged in most institutions' animal shows. Animal shows have a long history of exploitation which is very hard for many people to forget. Visions of chimpanzees wearing dresses as they ride bicycles and smoke cigarettes easily come to mind for some people when they think of animal shows. Equally anthropomorphic images are conjured up in relation to parrots, elephants and marine mammals performing in shows. Fortunately, these aberrations are things of the past for most modern day zoological institutions. However, many zoological professionals still cannot forgive the legacy of these old-school shows. And many, if not most, people in the zoological community view shows simply as revenue makers and rarely consider their education and conservation values.

Some find it distasteful and even annoying to attach the label of "show" to our educational animal programs. I have been told countless times by zoo professionals that we should give our programs more respectful titles like "presentations, " demonstrations" or "encounters." For me, the word "show" is an appropriate term to use considering our audience. If our audience were zoo or scientific professionals I would consider another identifier for our shows. It is easy for some people to forget our audience is the general public who come from all walks of life. They visit our facilities, for the most part, to be entertained, not educated. If the goal for our shows is to educate people, we first have to get them into the amphitheater. If the word "show" will attract more audience members, then that is the word I want to use to promote the program.

Most zoological institutions have mission statements, or statements of purpose, that give guidance to their operation and set goals for the facility. Within these mission statements are words like education, conservation, and recreation. This paper will explore the role animal shows play in helping zoological institutions achieve these noble goals as well as the impact these programs have on the animals that perform in them.

Animal Welfare

In 1950 Heini Hediger wrote "What cannot be avoided in keeping animals in captivity, is isolation from the cycle of life; therefore, a fresh artificial cycle must be created. Naturalness in the treatment of wild animals does not consist, therefore, of a pedantic imitation of one model section of nature. It means that a substitute for it must be found suitable for animals, taking into account the new conditions of life in captivity."

Animals in zoos lead very different lives than their wild counterparts. Their lives are designed by curators, architects, nutritionists, geneticists, and behaviorists. We have gone to great lengths to provide these animals with everything we believe they need for a happy healthy life. We provide them with the best food, the perfect mate, a well-studied social group, and exhibits that often look better than the species' own natural habitat. Our beautiful new naturalistic exhibits may offer the opportunity for animals to practice species-typical behavior but often the animals lack the motivation or the skill to utilize the exhibits to their fullest potential. The lack of activity, the overweight animals, the aberrant behavior, and the well-worn paths around the exhibits are poignant reminders that there is something lacking in the lives of many exhibit animals. The zoological world has attacked this

concern and has developed a multitude of enrichment devices and opportunities for animals in their care. Enrichment is a wonderful thing, however, enrichment is not the cure-all for these animals' boredom. There is only so much an animal can do with a boomer ball, puzzle feeder, or food that has been frozen inside a block of ice.

What is missing for exhibit animals is the cycle of life that Dr. Hedigar wrote of. In the wild, animals have unlimited opportunities to make choices and experience the consequence of those choices. They have the need and the desire to explore their surroundings and learn from the interactions with their environment. The captive environment is a static one that, although biologically suitable for the species, gives little back and offers minimal encouragement for the animal to use its senses, adaptations, and skills to "earn" a living. Also, animals in exhibits are denied the countless mental challenges that are so much a part of a wild animal's life.

Training animals is in many ways similar to the way animals learn in the wild. A day in the life of an animal in the wild is filled with countless experiences that offer choices or require decisions. Every decision, right or wrong, is an opportunity for the animal to learn something and gain some level of control over its environment. When an animal decides to take an action, it is the consequence of the action that determines if the action will be repeated. When something good happens in association with an action the chance of that action being repeated increases. Decisions, actions, and consequences are the forces that shape behavior in the wild and are also the basis of operant conditioning training in captive animals. Operant conditioning is the form of training, based on positive reinforcement, where the animal is the "operator" and can choose to participate in the training session or not. This training involves "letting" the animal perform behaviors to earn reinforcements as opposed to "making" an animal perform out of fear of punishment.

Training creates an environment where captive animals have opportunities to experience choices, make decisions, and experience the consequence of their actions. Training is a tool that can create countless enrichment opportunities for animals and can help reduce stress, increase skill and confidence levels, and even provide enrichment and improved management techniques for an animal's human caregivers. Positive reinforcement training allows animals to engage in species-typical purposeful behavior and enhances their captive lives.

Education

Most zoological institutions have education departments that teach information about the natural world. Most often these departments produce educational programs that target certain audiences, such as school or family groups, and often require reservations and additional fees for people to attend. Some institutions even expect their education departments to raise enough money to sustain themselves. How important is education to zoos? What percentage of the zoo's budget is committed to education? How is this education spread to the millions of visitors who come to our institutions each year?

Few zoos have formal educational programs for their daily visitors. Six hundred million people visit zoos each year. How many millions of them leave our facilities without learning any thing about their important relationship to the animals they have viewed? The zoos that do have educational programs for their general visitors often entrust these valuable experiences to volunteers instead of paid professional staff. Certainly not taking anything away from the volunteers, most of them do a wonderful job, but it seems to me that something important enough to be in a mission statement should be important enough to assign professional staff to conduct.

The relatively new keeper talk programs that are beginning to appear at zoos around the world are excellent educational experiences for general zoo visitors. When these interpretive programs include training the animals to perform natural behaviors as part of the presentation, the stage is set for some real learning to take place. Hopefully we will see more of these enlightening programs in the future.

Educating people about the natural world is far more than reciting natural history facts and figures. Too often our well intentioned attempts to educate people may actually detract from our goals. In the introduction to the book Beyond Ecophobia, Reclaiming the Heart In Nature Education, Jennifer Sahn says “As adults we know the value of facts and figures, so we wish for children to know details about nature: names of trees and birds and geologic formations. Yet the names won’t stick unless there’s a bedding of empathy where the knowledge can take root. And in our desire to prepare the next generation of adults to deal with the legacy of our ecological assaults, there is a tendency to inform children of the problems concerning the human-nature relationship while failing to share with them its beautiful possibilities. In rushing to teach them about global issues and responsible activism, we neglect the fact that young children have a fascination with the immediate, and an undying curiosity that requires direct sensory experience rather than conceptual generalization.” In Beyond Ecophobia, the author, David Sobel, makes it clear that the best teaching occurs when the emphasis is less on imparting knowledge and more on joining the child on a journey of discovering the natural world. I believe most of this holds true for adults as well as children.

Animal shows create a connection between humans and the natural world. Far more than any book, television, or teacher can convey, a close encounter with a live animal can open peoples’ minds and touch their sense of wonder. Confucius said “Tell me and I’ll forget, show me and I may remember, involve me and I will understand.”

A properly produced animal show is quite probably the most educational experience a zoo visitor will have during their visit to the zoo. Few visitors read graphic at exhibits as we want them to. They look at animals, eat, go to a show, eat, look at animals and go home.

There are many different forms of animal shows, and some are more acceptable than others, depending on who is evaluating the program. Who is to say what is exploitation and what is not? Is sharing fruit and posing for a photograph with Ah Ming, the famous Orang-utan at the Singapore Zoological Gardens, exploitation? Many, if not most, zoo professionals think so. I find it intriguing, by the way, that many of these zoo professionals are people who find it perfectly acceptable to take these animals out of the wild to put into their exhibits. They say they are breeding these animals for conservation. I have to ask the question, what does breeding Orang-utans have to do with conservation? They seem to breed pretty well in captivity. The species seems to be saved from extinction, at least in captivity. It may not be long before there are more Orang-utans in captivity than there are in the wild, especially when you consider all the hybrids being bred. Is there some hope of releasing them back into the wild? How are these exhibits helping to save Orang-utans in the wild? Or, is the Orang-utan exhibit simply to attract and entertain visitors?

As for Ah Ming...she willingly participates in these programs with her trainers, who are possibly the best primate trainers in the world. They use only positive reinforcement and never any physical abuse. She looks forward to, and enjoys, her interactions with the public. Her life is far more enriched than that of other primates living in exhibits. Before she shares fruit with someone and poses for a picture with them, the people attend a 20 minute lecture about Orang-utans. They learn about the animals at the zoo and how they are cared for and trained. They also learn about the rainforest and other species that live there with the Orang-utan. Then, they have an opportunity to sit with Ah Ming for a photo that will hang on their wall as a reminder of this once-in-a-life-time encounter with one of the most incredible animals in the world, that, by the way, is declining because of the human incursion on its environment. The best Orang-utan exhibits in the world cannot have this kind of impact on changing peoples’ feelings about an animal, a species, or our natural environment. So then, if you can think outside the proverbial box, the questions might be asked; which is more educational, which has the greatest conservation value, and which is more exploitive?

One of the first large scale animal shows featuring a Killer Whale was Shamu Goes To College at Sea World in San Diego in 1976. The Orca would leap out of the water in fantastic displays of high bows, breaching and ball touching. The audience was entertained by the tamed man eater swimming around the pool wearing Orca size

glasses and sporting a graduation cap. Then, the magical moment happened, a trainer stepped onto the back of the giant whale and rode Shamu around the pool. The sentiment of the show changed dramatically when the human-animal connection was made. Shamu was transformed from a man eating beast into an intelligent, friendly, companion to the trainers. It was at this moment that people started to care about whales and the “save the whale” movement began. True whales around the world began to realize the benefits of Shamu’s celebrity status.

Conservation

A few years ago I had a conversation with the Director of one of the largest zoological institutions in the world. He asked me how many people might my show bring to the zoo if he hired me. I remarked to him that I’ll bet he didn’t ask himself that question when he built his okapi exhibit. And he confirmed he did not because he built the Okapi exhibit in the name of conservation. He didn’t expect attendance to increase with the exhibition of this rare animal, in fact, few people will even see the Okapi in their beautiful naturalistic exhibit, much less take the time to read the graphics to discover how rare the animals are. I then told him that I could do more for Okapi conservation with my show than he can do with his two Okapi.

After some discussion about breeding Okapi until they were common enough to make appearances at the opening of shopping malls, and the theoretical discussions regarding the feasibility of releasing captive-bred Okapi back into the wild, if there were any wild spaces left, he finally challenged me to back-up my statement.

I told him of my association with Dr. Ron Tilson’s idea to save the rare Javan Rhino from extinction. I was especially interested in his plan for this rhino because I just happened to be in Malaysia and got to see the first Sumatran Rhino ever captured. She was taken out of the wild to go to the US as part of a consortium of zoos that would breed the rare animals in captivity to save them from extinction.

Dr. Tilson’s plan was to save the Javan Rhinos in the wild; no capturing, no transporting, no exhibiting, just saving the rhinos. I liked the idea so much that I developed a plan to sell T-shirts at a 24 day show we did in Dallas, Texas. All the proceeds would go to help save the Javan Rhinos. During our show we had some macaws fly over the audience to a tree on the stage. We talked about the rainforest and segued into one of the rarest animals in the world; the Javan Rhino. In about two minutes we engaged, inspired and empowered the audience to help the rhinos. After three weeks we had raised over \$15,000 that went straight to the Javan Rhinos. This money helped build a boat and buy radios for the wardens to use to protect the rhinos. The people of Dallas had helped preserve one of the rarest animals on earth. Just as importantly, they participated in conservation and learned how easy, fulfilling, and important it is to save wildlife.

I then told the zoo director that for thirty minutes I will have a captive audience and I can tell them most anything I want. I can teach them more about Okapi or any other animal for that matter, than any other exhibit in the zoo. I can also empower them to make a difference by becoming a member of the zoo or dropping a coin in a wishing well. My show would surely be the most educational experience his zoo visitors will have on their entire visit to his zoo. The bonus, not the purpose, of my bird show is that it will draw more people than any other exhibit at the zoo... I got the job.

For me, conservation is the reason to do shows. I don’t have to tell you that the natural world is disappearing before our very eyes. My formula for education is: engage, inspire, and empower. My goal is to help people understand their shared kinship with the living earth and how important each species is to our own survival. I tell them that our earth is like an airplane that we are all traveling along in. Each rivet holding that airplane together represents a species; plant, insect, fish, animal, etc. Sure you can pop few rivets off the wing of that plane and it will keep on flying, but sooner or later you’re going to pop one too many rivets and the plane is going to crash. As humans, we are all responsible for popping rivets one way or another. But, as humans, we are the only species on

the planet capable of tightening those rivets by conserving what we have and educating people.

Conclusion

The role of animal shows has changed dramatically over the past years. What began as spectacles for human entertainment have evolved into educational experiences designed to help people develop a better understanding of the natural world. Heavy handed animal training techniques have given way to positive reinforcement techniques where animals are allowed to perform for reinforcements instead of being made to perform out of fear of punishment.

As zoological institutions around the world strive to find ways to enrich the lives of animals in their care, animal shows are providing opportunities for animals to have more control over their environment and use their adaptations, senses, skills and discretion to “earn” a living. The lives of show animals are both mentally and physically enriched as they learn new skills, make decisions, and experience the consequence of their choices.

Properly produced animal shows are the most educational experience the average visitor will encounter while at a zoological institution. Animal shows can engage people and touch their sense of wonder, inspire people to learn more about their undeniable dependency on the natural world, and empower people to take steps toward saving our precious natural resources.

As education is a key component of conservation, educational animal shows are one of the most affective conservation programs a zoological institution can possess. Though very different from breeding rare animals, educational programs can still have an important influence on saving the natural world, which is really what conservation is all about.

If we can see beyond the negative reputation that some animal shows still carry and evaluate them using our own mission statements as the standard by which we gauge their value, we will find that educational animal shows are very important assets to any zoological institution and the wildlife they strive to conserve.

References

Sobel, David. 1996, *Beyond Ecophobia, Reclaiming The Heart In Nature Education*, Orion Society, Myran Institute