

Statement to Los Angeles City Council regarding elephants at L.A. Zoo

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3 December 2008

I am a conservation biologist and environmental consultant, a Canadian now living in Oxford, United Kingdom. I have studied and managed wildlife, starting with grizzly bears in British Columbia; for the past 30 years I've worked in research and conservation of African elephants, mainly in Kenya (in East Africa) but also in South Africa and Botswana (in southern Africa) and Mali and Ghana (in West Africa). I have been a member of IUCN - the World Conservation Union's African Elephant Specialist Group and have many colleagues in Asian elephant conservation.

I feel privileged to have been invited to talk to you about aspects of the elephant exhibit at LA Zoo, its current status and plans for the future. Yesterday (Tuesday 2 December) I visited the zoo and saw the single remaining Asian elephant, Billy, his living conditions and the area for proposed development, as well as exhibits of other species held in the zoo.

Observations of Billy

My immediate impression is that Billy is in very poor condition. His physical health is not good. He appears obese, with rolls of fat under his neck and along his belly, and it is likely that he has been consistently overfed, as well as having insufficient exercise. He is in musth, a state of sexual arousal, with elevated levels of sex steroid and stress hormones, increased metabolic rate and aggressive tendencies. Under natural conditions, the musth period occurs in older adult males for only 2-3 months once per year, and is characterised by extensive roaming over large areas as they search for sexually receptive females, mate with them and fight with other males over mating rights. Billy apparently spends extended periods of several months in this condition, and he must experience a frustrated, sexually aroused state that he is unable to express. He has cracked toenails, which could lead to, or be a symptom of, foot problems. But it is his psychological well-being (or lack of it) that was most disturbing. He shows pathological, stereotypical behaviour that is common with disturbed animals in captivity, but which is **never** seen in the wild. I saw him standing in one spot for an extended period approaching half an hour, bobbing not just his head but his entire body, rhythmically wrenching his neck, shoulders, ribs and hips backwards and forwards. Apart from evidence of mental ill-health, this activity must put enormous strain on his entire metabolic system, and could be dangerous for his health.

The area he has to move around in is tiny, and he can cover it from end to end, moving through both paddocks, in just a few strides. At one point, he entered the barn and banged on a metal door with his head and tusks for about 30 seconds. To continue keeping an animal in such a frustrated, distressed state, under such poor health conditions, and within such a limited and inappropriate enclosure must be considered by any objective estimate to be **inhumane**.

Zoos and conservation

I have seen it suggested by the LA Zoo, for example on their website, that they consider a primary justification for keeping elephants, particularly in their plans for the new facility, to be for breeding, in the service of conservation of wild populations. Asian elephants are said to be facing an inevitable decline towards extinction through poaching and loss of habitat,

giving the impression that the efforts of conservationists and governments amount to little and that the future of the Asian elephant can only be in captivity.

In fact, people working actively in elephant conservation in Asia and Africa consider the captive breeding of elephants to be of little value to conservation, in contrast to the few cases of species that were, undeniably, genuinely endangered or extinct in the wild, such as the California condor or Arabian oryx. There are currently some 30,000 elephants in Asia, 200 times the number in US zoos, and many populations are stable or increasing, with the elephants breeding successfully and leading relatively normal lives. People working in elephant conservation undoubtedly face enormous challenges, but they are dedicated to finding solutions and would be offended to hear that an American zoo thinks it can do better.

To quote a recent email from a colleague, Vivek Menon of the Wildlife Trust of India, "I don't believe elephant breeding in zoos is any consequence to elephant conservation in the wild. Our problem is not too few elephants, it is habitat management and conflict resolution now. "

The Wildlife Trust of India, among many other conservation groups, is actively engaged with these challenges right now, needing financial support and not the promise of captive-bred elephants.

Can US zoos claim any success to date in breeding Asian elephants? Over the last 10 years, only 25 calves have been born, and of these only six have survived. Improvements on this record will require radical changes in the way elephants are managed, of which there is little evidence to date.

The implications of an actively breeding captive population have not been thought through; thinking has been for the short term and small scale. If elephants do eventually breed successfully, and therefore increase in numbers at a given site, the demands on resources and funding will grow rapidly, quickly outstripping facilities and budgets. There appear to be few, if any, plans for the long term, apart from separating and moving selected elephants to other sites when they become surplus to capacity; this practice is disruptive to the social bonds known to be important to elephants and such regular movement carries a risk to health. In addition to coping with increasing numbers, there appear to be no clear plans for dealing with the 50:50 birth sex ratio, which is at odds with a management regime based on very low male numbers in relation to females - this will lead very quickly to a huge surplus of male elephants that no zoos will want.

Zoos are said to aid conservation through education of the public about elephants and the challenges they face as a species, leading to greater support for field programmes. But the exhibits I saw at LA Zoo had very little interpretive information, even about elephant biology, and certainly no linkage to elephant conservation issues and how people can get involved or support field actions. Instead what people get are glimpses of unhealthy and socially disturbed "replicas" of the real animals, with no clear understanding of what goes on in their habitats back home. The actual conservation projects and programmes I am aware of from my years in the business may receive some support from zoos, but the amounts are very small compared to their needs and to other sources of funding. Zoological societies or conservation NGOs that have outgrown their connection to zoo exhibits play a much bigger role in genuine conservation. Zoos are **not** needed for fund-raising and there

are much better ways to educate the public about elephants than the inadequate exhibits currently available or planned.

The need for space

Space and its availability is a key issue in the biology of animal species, and this is where urban zoos, with high land prices, face the most difficulties. Wildlife species in captivity are not domesticated animals, which have been selectively bred for thousands of years in adaptation to the conditions of captivity. For wildlife only recently taken from the wild, or even bred **in** captivity, but not **for** captivity, the evidence of their biological needs **must** come from studies in their native habitats, where they evolved and to which they are adapted.

Studies of animals across a range of species show that home range size scales with body weight. Unsurprisingly, small animals such as rodents have small annual ranges, while ever larger animals have correspondingly large needs for space. Elephants, with their long legs and persistent spatial memory, are clearly adapted for walking long distances on both a daily and annual basis; wet season ranges, when food is abundant, are often larger than ranges in dry seasons when food is restricted. Studies of the home range sizes of Asian elephants have all shown spatial needs on the order of 100-200 km² at a minimum. By comparison, the 3.8 acres proposed for the new elephant exhibit amounts to 0.015 km², which is roughly 10,000 times less than what we know elephants are shaped by evolution to cover. Elephants may be highly adaptable, but nothing is **that** adaptable, to cope with a reduction by four orders of magnitude in their living space as they are taken from nature to captivity.

This lack of opportunity for sustained movement, coupled with the obesity that apparently comes from over-feeding, is most likely to underlie the health problems experienced in most, if not all, North American zoos. Many, many captive elephants have limb, joint and foot pathologies and cardiovascular problems, which in turn require intensive and expensive veterinary interventions. These problems are simply not seen in Asian habitats, where elephants have sufficient room to move. The problems cannot be solved by providing “variety” in a small space; the only solution is space itself, space suitable for animals of this enormous body size on the scale of tens, hundreds or thousands of acres.

The need for large enclosures and the very high level of veterinary care required to monitor and treat the ailments caused by captivity combine to make elephants the single most expensive species to keep in captivity, both in capital and recurrent costs, **yet with so little to show for it.**

The area planned for expansion of elephant habitat at LA Zoo need not be lost. A number of other animal enclosures are also far too small; I’m thinking particularly of the giraffes. Using the space for mixed herds of antelopes, as has been done for example at the Phoenix Zoo, would provide a more genuine wildlife experience for visitors, and would be more cost-effective with these smaller species, which require far smaller funds to manage.

Summary

Unless urban zoos such as that in Los Angeles are prepared to devote **substantial** sums to both capital and recurrent expenditure, well in excess of the currently proposed budget for Pachyderm Forest, they cannot adequately provide elephants in captivity with anything

approaching their natural requirements, nor can they claim to be educating visitors with the experience of seeing healthy, happy animals in reasonable environments.