

Caring for Wildlife - The World Zoo and Aquarium Animal Welfare Strategy

Chapter 6: Conservation Welfare

Our commitment is to ensure that our wildlife conservation activities incorporate animal welfare goals

RECOMMENDATIONS

To realise our commitment to high animal welfare standards, the *World Zoo and Aquarium Animal Welfare Strategy* calls on member organisations to:

1. Establish animal welfare as a component in all conservation activities and projects supported by your organisation.
2. Work with partner field conservation organisations and collaborate on animal welfare knowledge and skills that are relevant to their field operations, including, for example, reintroduction projects.
3. Evaluate whether the animal welfare implications of management interventions are outweighed by their conservation benefits.
4. Build understanding of the importance of integrated species conservation frameworks that include assessing animal welfare.
5. Make sure that in your conservation work, and the work of your conservation partners, the review of an individual's needs and the promotion of positive animal welfare is considered at all times.

INTRODUCTION

The term 'conservation welfare' emphasises the major theme of this chapter that animal welfare and conservation are intrinsically bound together. It emphasises that sound animal welfare principles and practices should be embedded in conservation activities and be integrated into how modern zoos and aquariums operate from day to day.

Conservation welfare acknowledges that any human activity that intentionally or unintentionally impacts on sentient animals in their wild or natural environments has the potential to cause animal welfare compromise. For example, the welfare of countless wildlife species is compromised directly and indirectly by human activities, threatening the survival of populations, species and ecosystems.

CONSERVATION AND ANIMAL WELFARE—NOT A DICHOTOMY

Conservation and animal welfare both focus on harm to animals, but their orientations differ. Whereas conservation is concerned mainly with the survival of populations, species and ecosystems, animal welfare emphasises the subjective experiences or quality of life of individual animals. Also, conservation thinking and practice embrace a wide range of activities mainly involving free-living wildlife as well as wildlife in human care in as much as they can contribute to conservation aims.

There is strength in close collaboration and alignment between conservation and animal welfare. After all, should the adverse impacts on wild animals—caused

by virtually all forms of human activity—be classified as conservation problems or animal welfare problems? Wild animals are parts of social groups, populations and ecosystems. Hence, actions affecting the welfare and survival of individuals can also have consequences for these larger systems, and *vice versa*.

As explained in *Chapter 1*, zoo and aquarium animal management that is focused mainly on survival-critical factors can, at best, usually only achieve neutral animal welfare states. Today, we expect more, so that more is required than merely meeting the minimal survival needs of animals held for conservation purposes, as may have occurred in the past. As animals can also have positive experiences, our zoo and aquarium management processes should strive to make this possible and enable this to occur. The recurrent theme in this Strategy, that the widespread attention already given within the zoo and aquarium sector to environmental enrichment should be continued and expanded, includes its greater application to animals held for conservation purposes. It is apparent that this orientation harmonises with the concept of conservation welfare, as it incorporates the aim of enhancing animal welfare whilst pursuing conservation objectives.

CONSERVATION WELFARE IN ZOOS AND AQUARIUMS

Examples of conservation welfare in operation include reconciling animal welfare and conservation interests in wildlife management, wildlife research or ecotourism (see *case study 6.1*). Many zoos and aquariums are involved in diverse conservation activities in their local area and also further afield. Zoo and aquarium conservation welfare must be applied to these broader activities through concern with the physical and psychological well-being of individual members of wildlife species in intensively managed populations in a conservation context.

Good zoo—or aquarium-based conservation practice—seeks to manage animal welfare well. Advances in caring for wildlife species can improve their welfare (*Chapters 1 and 2*) as well as the success of breeding programmes (*Chapter 5*). Building on this expertise, zoos and aquariums can help partner conservation

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Case study 6.1:

Welfare implication of handling wildlife species

Intentionally intervening in the lives of wildlife species for conservation purposes can have impacts on the welfare of the individual animals concerned. Even simple observations may have an effect. Hence, handling such animals for sample collection, marking, tagging, vaccination and treatment can have negative welfare impacts. The adverse effects associated with such deliberate interventions may evoke biological costs. Examples include physical damage, disruption to social hierarchy, disruption of natural movement, disruption to breeding behaviour or increased vulnerability to predation. Thus, these effects may alter the biology of individuals to the extent that the data they provide could be unreliable. Zoos and aquariums have the competency needed to develop welfare-friendly handling protocols for wildlife species. They also provide a testing ground for measuring the potential animal welfare consequences of such conservation interventions. This, in turn, provides links between zoos and aquariums, animal welfare and conservation.

- Myakka City Lemur Reserve, FL, USA, Mongoose lemur

organisations that work in the field to aim for high animal welfare standards.

Potential conflict between animal welfare and conservation objectives may arise in cases where species are not apparently able to adapt to being kept in zoos or aquariums. Conversely, adaptation to

“There is strength in close collaboration and alignment between conservation and animal welfare”.

managed environments may reduce an animal’s capacity to adjust to the wild, raising welfare concerns for those that are destined to be returned to their natural habitat (see case study 6.2). Thus, many zoos and aquariums involved in breed-for-

release programmes adopt strategies aimed at mitigating such potential problems.

Given rising conservation urgency, it is becoming increasingly necessary to intervene in the management of wildlife and their environments in order to mitigate threats. The impetus for such interventions may be to mitigate animal welfare problems, manage disease outbreaks or meet a conservation priority to undertake animal translocations. Also, it is likely that some species will not survive without human intervention. However, interventions may themselves compromise the welfare of individual animals and such impacts need to be traded-off against the anticipated contribution to the broader aim of species conservation.

INTEGRATING SPECIES CONSERVATION AND ANIMAL WELFARE

It is apparent that integrated management of species within and outside their natural habitats is becoming increasingly important. Such management



Case study 6.2:

Welfare of reintroduced animals

Reintroductions are interventions that highlight, within the animal welfare–conservation nexus, a duty of care for the individual animals to be reintroduced as well as for the population to be restored. Releasing individual animals to the wild after periods of human care, which may include preparing animals for release, may compromise their welfare, as well as have an impact on other local species. Pre- and post-release monitoring and supportive measures, which may include providing conspecific tutors, supplementary feeding or veterinary care, can improve both reintroduction success and animal welfare. Behavioural and environmental enrichment, targeted at developing specific skills important for survival and reproduction in the wild, can have equal value. Zoos and aquariums have the expertise required to take such management actions. This, in turn, highlights a key role for zoos and aquariums in the animal welfare and conservation arena.

- North Carolina, USA, Red wolf

involves a range of activities that often include the capture, restraint and transport of animals, where minimising animal welfare compromise and providing opportunities for positive experiences become key issues. It is therefore necessary to assess the animal welfare implications and determine if the consequences of an intervention are outweighed by conservation benefits, and *vice versa*.

The knowledge within zoos and aquariums of animal welfare and care can benefit conservation efforts in areas such as the recovery and management of small populations, translocation biology and conservation medicine. Importantly, seeking to improve the welfare of wildlife does not necessarily conflict with conservation aims, because measures taken to enhance animal welfare may, by improving survival and reproductive prospects, enhance the conservation value of the whole endeavour.

The relationship between animal welfare and conservation can be represented in a decision schema for considering the intersection between separate dimensions of the two objectives (*Fig. 6.1*). Practices that combine good animal welfare with good conservation are preferred, whereas other practices are less desirable but still acceptable, and, clearly, the combination of poor animal welfare and poor conservation is unacceptable. Indices of minimised welfare compromise and enhanced welfare (*Chapter 1*) provide practical means for assessing these practices.

DECISION SCHEMA

Good conservation practices can and should be implemented with close consideration of the welfare of individual animals. Thus, this decision schema

may be especially helpful when pressure to disregard individual welfare in the interests of conservation is high, as it helps to keep in mind both animal welfare and conservation concerns.

GUIDING PRINCIPLES AND UNRESOLVED QUESTIONS

There are no universally agreed principles guiding those who work with wildlife welfare and conservation. However, a useful framework, slightly modified here, has been provided by principles suggested in a consensus statement arising from a 2009 Conservation and Animal Welfare Science Workshop held at the University of British Columbia:

- The welfare of all individual wildlife species is of equal moral concern. This does not mean that all such animals must be treated equally, just that their well-being should be given equal consideration.
- Actions that affect animals are of moral concern whether they exert their effects directly or indirectly.
- Actions that might harm the welfare or conservation status of wildlife should not be undertaken without careful consideration of the necessity of the action.
- The severity and scale of harm (in terms of the number of animals affected and the duration of the harm compared to the lifespan of the animal) should be minimised.
- Actions with irreversible impacts should be considered to be more serious than those with transient impacts.

Many issues relating to wildlife welfare and conservation require further consideration. The following is an initial list of unresolved questions raised at the above-mentioned workshop:

- Given that suffering can occur in the normal lives of animals, what baseline should be used to determine

Fig 6.1 A decision schema for considering the intersection between the separate dimensions of animal welfare and conservation (modified from Bradshaw & Bateson 2000)



when harms caused by human activities are of moral concern? Although consensus and quantification may be difficult to achieve, we should not conclude that all levels of suffering are therefore acceptable.

- How direct a link with human behaviour should be demonstrated in order for it to generate concern?
- How do the affective states of individual animals map onto outcomes important to conservation, such as disease status or reproductive success?
- Can we identify principles that lead to morally defensible actions when it is necessary to severely compromise the welfare of some individuals in order to achieve goals such as the survival of a population?

Resolving such issues will require cross-disciplinary dialogue involving conservation biologists, animal welfare scientists, and those working on ethics, law and social issues.

CONCLUSION

It is increasingly important to recognise the relevance of animal welfare when dealing with problems of wildlife conservation. The same human activities driving the current biodiversity crisis are compromising animals' welfare and these interlinked concerns attend the work of zoos and aquariums on conservation and saving wildlife species.

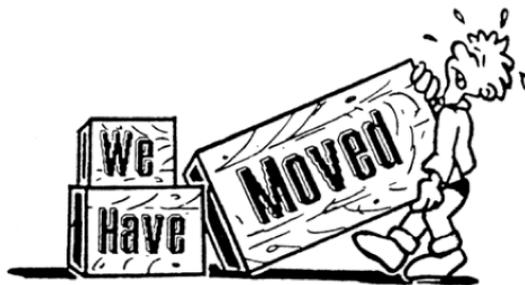
The welfare of wildlife species can be directly and indirectly assessed in increasingly sophisticated, scientifically validated ways. The fact that animal welfare is assessed on an individual basis, whereas some wider goals of wildlife conservation are measured on populations or species, does not necessarily make them incompatible.

Animal welfare and conservation scientists and advocates are increasingly recognising each other's work as complementary. Zoos and aquariums need to ensure that their conservation work in the field, and the work of their conservation partners, include strategies aimed at minimising welfare compromise.



Hannover Zoo, Germany, Atlas beetle larva

Announcement



We have moved

Our New Address Is:

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