

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

Chapter 9: Engagement and Interaction with visitors

Our commitment is to protect and enhance the welfare of all animals in all of their interactions with visitors while we engage visitors in wildlife

Editors' Note

WAZA's Animal welfare strategy is a much needed and timely milestone. It provides approach for assessing and managing animal welfare and thus responds to concerns over welfare of zoo and aquarium animals. It also provides approaches for conservation activities of zoos and aquariums. We have the permission from WAZA to serialise Caring for Wildlife: The World Zoo and Aquarium Animal Welfare Strategy. There should be something for everyone to do to make the zoos and the animals in their locality better. Happy reading! - Editor

RECOMMENDATIONS

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

1. Avoid using animals in any interactive experiences when their welfare may be compromised.
2. Undertake specific animal welfare evaluations and ongoing monitoring of all individual animals being used in interactive experiences. Withdraw animals from such activities if behavioural and other indices of distress are elevated.
3. Ensure that the messaging that accompanies all interactive experiences and the intent of any related presentations is to raise conservation awareness and/or achieve conservation outcomes.
4. Do not undertake, contribute or participate in animal shows, displays or interactive experiences where animals perform unnatural behaviours. Species conservation should be the overriding message and/or purpose.
5. Set in place processes to ensure that all animals in your zoo or aquarium are treated with respect. This includes how animals are depicted and presented.
6. Explain, via talks, signage and/or interpretation, how animal welfare improvements have been made in your organisation.
7. Access and use the body of knowledge and expertise that underlies the evaluation of the effectiveness of environmental education when considering developing interactive experiences to ensure that benefits are realised.

INTRODUCTION

Zoos and aquariums have seen a rapid growth in interactive experiences in recent years, taking advantage of a general affinity between humans and animals to encourage visitors to act to conserve wildlife. The progression from simply exhibiting zoo and aquarium animals for visitors to observe, which was common in the past, to present approaches that bring humans and animals into close proximity, has gained momentum because it engages visitors more effectively and thereby provides better opportunities to educate them about animals, and conservation of wildlife.

Interactive experiences vary between organisations. They may be minimal with visitors having access to a behind-the-scenes area. There are also situations where people are brought into the animals' exhibits and other situations where animals and humans may have hands-on contact.

All interactive experiences should be assessed for their impact on the welfare of the animals by: applying ongoing welfare assessment and monitoring; referring to the frequency, duration and timing (time of day) of the interactions; noting whether actual physical contact is necessary and, if so, with how many visitors; noting visitor characteristics; and evaluating how consistently the interactive experience is provided.

As with these animal-focused assessments, the impacts of differences in housing and husbandry need to be carefully evaluated, especially if they differ for animals used interactively compared to others in the zoo or aquarium. The possible impact on other members of a social group or exhibit companions should also be evaluated, if group members are periodically removed for interactive experiences. Any animal used in an interactive experience should have the same opportunities for positive welfare outcomes as other animals held within the zoo or aquarium that are not involved.

Where possible, zoos and aquariums should also explain the animal welfare and management processes to visitors, to build understanding of and respect for animals and the natural world (see *case study 9.1*). This can be done through talks, an animal welfare charter, signage and/or environmental education programmes.

The increasing use of interactive experiences in zoos and aquariums has largely been informed by the expectation that close proximity between humans and animals, and where possible 'actual contact', can increase the likelihood, scope and impact of environmental education and commitment to conservation actions. However, research on this proposition has not yet produced definitive results.

Nevertheless, as more zoos and aquariums adopt the intuitively attractive principle of 'connect, understand, act', there will be increasing opportunities to rigorously evaluate

the effects of different approaches towards environmental education, and also to consider carefully the welfare of animals in these programmes. Importantly, there is evidence that some animals find some interactive experiences unpleasant and stressful. More research is required to directly evaluate the impacts of such experiences, and it is the responsibility of the zoos and aquariums providing these interactions to ensure that this work is undertaken.

Organisations using animals in any interaction or show should always evaluate the impact and risks of such experiences on the welfare states of the individual animals and carefully monitor welfare impacts. Consideration of the animal's welfare should remain a priority.

Many zoos and aquariums, and the European Association of Zoos and Aquaria (EAZA), have developed guidelines for the use of animals in interactive or public demonstrations. These are useful guides for individual zoos and aquariums considering or undertaking interactive experiences or shows.

WHAT IMPACT DO VISITORS AND VISITOR INTERACTIONS HAVE ON WELFARE?

The nature of interactive experiences varies widely, as do the taxa involved. Our knowledge of their impacts on the animals is still very limited (see *case study 9.2*). To date, research has emphasised primates and carnivores and has focused more on the effects



Case study 9.1:

Stereotypes and the visitor experience

Recent evidence suggests that visitors are interested in viewing animals that are engaged in species-appropriate behaviour. Specifically, visitors who were shown a short five-second video clip of a tiger (*Panthera tigris*) pacing reported that they thought the animal received lower levels of animal care than did someone watching the same-length video of a tiger resting. Additionally, the visitors watching the video of the tiger pacing were less likely to support zoos and aquariums through visitation or donations. Given the importance of animal welfare and encouraging visitors to support conservation action, it is important for zoos and aquariums to focus on eliminating or reducing such behaviours. In addition to improving animal welfare, this is to ensure that visitors have a positive experience, which may then translate into pro-conservation behaviour.

- Zoos Victoria, Australia, Tigers

of human presence rather than the interactive events. Some research indicates that the daily arrival of visitors may be disturbing and can be a source of distress for animals. This may manifest as increases in anxiety-related behaviours and within-group aggression, and decreases in social behaviours towards other group members. Also, the animals may exhibit threatening behaviours towards visitors and the corticosteroid levels in faeces, urine or saliva may be elevated, suggesting that the animals may be stressed.

Alternatively, other animals may show no obvious signs of stress when exposed to visitors. It is likely that individual responses will vary because of past experience and differences in exhibit design, environmental enrichment and relationships with animal keepers. Equally, some species do not naturally show any outward signs of stress, or may have behavioural stress responses that can be commonly misinterpreted by humans. In order to minimise distress, provision should be made for animals to retreat from public view. Alternatively, some kind of physical or psychological barrier, such as screening at windows or solid barriers with small viewing windows, should be provided.

Many zoos use domestic animals such as sheep, goats and pigs for interactive animal experiences, with no ill effects on most of these animals. However, some animals in petting zoos and contact yards may display undesirable behaviours towards visitors, a problem solved by simply withdrawing those animals. As with animals in 'traditional exhibits', animals in 'contact areas' should be able to remove themselves (retreat) from human contact, but still access, for example, food, water and areas for resting and thermal comfort.

In situations when visitors are taken into exhibits, for example involving relocation of animals within the zoo or aquarium, bird shows, interactive shows with big cats and animal feeding by visitors, it is unclear whether the welfare impacts are good, neutral or poor. Given this uncertainty, it is important that zoos and aquariums carefully monitor such events and withdraw animals if there are indications of welfare being compromised. Also, animals should be carefully selected for their suitability for such events on the basis of their natural history and individual characteristics, as assessed by experienced staff members who are familiar with each animal.

If animal interactions take place, they should be done in an environment where the animal is free to leave the interaction whenever it chooses. An experienced animal keeper who has a clear understanding of the individual animal's needs should undertake all interactions, and as with all close encounters, both in public and behind the scenes, positive reinforcement training should be used to create a positive and stimulating environment. Close contact between visitors and animals in zoos and aquariums can also

carry health risks for both, including infectious diseases. Reducing these risks, for example with hand hygiene stations and a transition area between animal and non-animal areas, is vital. Risks of injury must also be appropriately managed. It is essential for event-specific health and safety standards to be developed and applied.

MONITORING IMPACTS OF INTERACTIVE EXPERIENCES

It is recognised that zoos and aquariums should base decisions about whether they should provide interactive experiences on evidence about the individual animals and the need to provide conditions that encourage positive animal welfare states.

There is a difference between public and staff animal interactive experiences. The former should always be carefully evaluated (see below), while the latter, if carried out appropriately, can be part of a stimulating and positively reinforced training programme that contributes towards positive welfare. The two interactions must be reviewed separately when considering the justification for such activities.

Given the risks involved and the dearth of research in this area, it is recommended that an animal ethics and welfare committee, or equivalent entity, evaluates whether



Case study 9.2:

Visitor influence on gorillas

Probably the most promising way of interpreting how visitors affect animals is to compare the responses of different individuals within the same species under a range of different housing and husbandry conditions. Gorillas (*Gorilla gorilla*), for example, have now been studied at a number of zoos. At six of these zoos, gorillas showed what appeared to be a negative response (e.g. more aggression, undesirable behaviours or visual scanning), while at two zoos they showed a mildly positive response (less undesirable behaviours or seeking proximity to the visitors) and at those remaining they showed no apparent effect. How can we interpret this? It is likely that differences in housing, husbandry, previous experience and animal personality are important. And what can be done about visitor influence? Visual barriers at Belfast Zoo, for example, led to less aggression and stereotypies in the gorillas. At one zoo gorillas were less aggressive and interacted

less with visitors when staff members spent more time with them, but at another they showed more aggression. Individual differences in gorillas, and many others species, are likely to be important in understanding these patterns of visitor influence.

- Houston Zoo, TX, USA, Western lowland gorilla

interactive experiences are appropriate. In some regions, there is a legal obligation for organisations to establish such committees, the membership of which may include qualified professionals, community members and advocates from other conservation and animal welfare non-governmental organisations.

Monitoring of all interactive experiences is essential to increase our understanding of their impacts and ensure high levels of animal welfare. This requires a good understanding of animal welfare science. Thus, it is strongly recommended that ongoing monitoring of animals be coupled with staff training at all levels of the organisation.

Where practices for managing some zoo and aquarium animals deviate from those applied to other animals, they should be carefully monitored to clarify any untoward long-term impacts on behaviour and welfare. For example, it is well established that imprinting on humans can adversely affect animals. Thus, species prone to imprinting should not be hand-reared for the purpose of interactive experiences.

Finally, interactive experiences should accommodate the animals' natural history and behavioural repertoire; should not require great effort on the part of zoo or aquarium staff members to engage the animal in taking part; should represent to visitors our respect for the animal; and should have overriding conservation messages consistent with the purpose of modern zoos and aquariums.

CONCLUSION

Many zoos and aquariums use interactive experiences to support various conservation, research and education goals. Ensuring that these interactive experiences are provided in a manner that prioritises good animal welfare requires the adoption of evidence-based animal management practices and should be informed by systematic and objective animal welfare research.

Interactive experiences should be non-invasive, safe and non-stressful for animals. Monitoring of all animals involved in interactions must be ongoing and have professional oversight. Risks to animal welfare should be minimised by carefully considering whether interactive experiences are appropriate, and if they are, by accommodating the animals' particular needs.

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