

Consensus Document

Responsible Reproductive Management: Guiding Principles



In keeping with the requirements of animal welfare standards, the adaptive capacity of wild animals in zoos must not be compromised, nor their functional capabilities allowed to atrophy. Reproductive behaviour is central to this consideration. Therefore, generally speaking zoo animals should not be prevented from breeding. However, whilst this principle is valid for all animal species irrespective of the emotional value they hold in human eyes, it is not applicable to each and every individual. In the implementation of this principle, it may be necessary to humanely put down (“no pain, no fear”) individual animals at times that approximate certain critical events they would encounter in the wild state. Such action should be openly communicated to both zoo staff and the public.

1. Animals in zoos must be kept in a manner that accommodates their natural behaviour. This includes providing them with the opportunity to reproduce. This is valid for all animal species, irrespective of their anthropocentric emotional value, but it cannot apply to each and every individual animal.
2. Reproductive management in zoos should reflect natural circumstances. In the wild state, animals generally produce surplus offspring, and not every individual is actually able to reproduce. Various factors such as emigration, immigration, disease, predation, competition, famine and climate regulate population sizes. Such regulatory processes should also be implemented – responsibly and in compliance with animal welfare standards – in zoos.
3. Zoos are obligated to responsibly regulate the size of their animal stocks and populations. The following strategies can be pursued:
 - a. Relocate surplus to other facilities (only to those operating on a humane and ethical basis; preferably to scientifically managed zoos),
 - b. Release to sanctuaries,
 - c. Release into the wild within the framework of coordinated species recovery projects,
 - d. Temporarily impede reproduction.

When none of these measures are feasible without causing stress or impacting upon group behaviour, then individual animals should be painlessly put down in a fear-free environment. Whenever possible, such individuals, hereafter referred to as surplus animals, should be “recycled” back into the zoo’s own food chain..

4. As opposed to plants, animals enjoy especial moral and legal protection because their capacity to suffer distress is greater. The so-called pathocentric (Greek: *pathos* = suffering) animal protection ethos strives to protect an animal’s quality of life. Animal protection ethics and animal welfare law consequently stipulate that animals must be humanely maintained and if necessary, humanely put down (for example: while anaesthetized). As opposed to pain and

distress, death itself, or the “state of being dead”, is no longer harmful to the animal, which at that point has no physical existence. As the animal experiences a quick and unexpected death, justified objections to killing animals without reasonable motive can be raised from a human perspective but not from an animals’ (so-called anthropocentric supplementary arguments; Greek: anthropos = human). In consideration of these anthropocentric interests, which include nature conservation and species conservation, zoological gardens commit themselves to maintain the number of surplus animals as low as possible and to explain in the framework of their public relations efforts, the necessity of culling in the maintenance of healthy zoo stocks and populations.

5. In order to promote natural behaviours and avoid negative breeding effects, sustainable breeding programmes require species-specific population sizes. The survival of such populations is therefore dependant on supportive or restrictive breeding measures. Consideration should be given to the following aspects:
 - a. In those species maintained as “assurance” populations, reproduction maintains vigorous populations suitable for reintroduction.
 - b. Reproduction becomes increasingly important when it enriches the lives of animals (courtship, pair bonding, mother-infant bonding, socialization of the young by the adults and *vice versa*). The provision of the opportunity to reproduce however, does not justify other deficits in animal husbandry.
 - c. If impeding reproduction causes distress, then that impediment must be discontinued or the facility should refrain from maintaining those animals.
 - d. The humane culling of surplus animals should take place at times that approximate natural processes of “biological crossroads”, such as birth, weaning or the leaving of the family group.
 - e. Reproductive technologies can be applied to help maintain non-viable populations due to low numbers. Methods of assisted reproduction are to be developed. Scientifically managed zoos support research into reproductive biology as a method to regulate reproduction in a humane and ethical manner (group management, contraception, sterilisation, artificial insemination, etc.).