The World Zoo and Aquarium Conservation Strategy — Chapter 9
Ethics and Animal Welfare

Summary

This chapter outlines a vision of zoos and aquariums working ethically and maintaining the highest standards of animal welfare in their management of viable populations for conservation; they will thus convey credible conservation education messages to the public. The World Association of Zoos and Aquariums (WAZA) Code of Ethics and Animal Welfare represents the common ground on which WAZA members base their ex situ management and in situ conservation activities. Actions taken should be in the context of species survival, without compromising individual welfare. Animal acquisition and disposition policies are covered, with discussion of the realities of population management. In collections, where predation, disease, and food shortages do not occur, breeding programmes have the potential to produce a surplus. Zoos and aquariums are urged to keep surpluses to a minimum and to consider transfer to other accredited institutions, release into semi-reserves, or release to the wild as part of a coordinated conservation programme, or temporarily preventing reproduction. The disadvantages of long-term contraception are also discussed. If nothing else is feasible, a quick, painless, stress-free death should be considered as a last resort. Collections must provide suitable environments which meet animals' physical and psychological needs. Enrichment activities should be part of routine husbandry. Zoos and aquariums are encouraged to use evidence-based assessments of animal welfare and to use the results when designing enclosures. The chapter mentions a range of policies and procedures which zoos and aquariums should adhere to. Lastly, zoos and aquariums are urged to aim high and exceed legislated standards, thus establishing themselves as responsible organizations which can be trusted to provide the best care for their animals.

Vision

All zoos and aquariums will follow ethical principles and maintain the highest standards of animal welfare in order to establish and sustain viable populations of healthy animals for conservation purposes and to convey credible conservation education messages to the public.

9.1 Introduction

Ethics can be defined as the philosophical study of the nature and grounds of moral thought and action. Practical ethics and the analysis of arguments that lead to particular moral conclusions are often coded into ethical principles, sometimes termed codes of practice. Ethical principles and moral behaviour are defined and justified in various ways in different societies, cultures, and religions.

Zoos and aquariums have a moral obligation to contribute to the conservation of habitats and biodiversity in the interests of society and of the animals themselves. Zoos and aquariums must always consider both their visiting public and their resident animals. The existence of zoos and aquariums depends on their ability to provide strong ethical justifications for maintaining living collections and to demonstrate exceptional attention to the welfare of the animals in their care. The views and the sentiments of visitors and the media are continually changing and the resultant ethical and welfare debates should be viewed as a continual process of critical thought and deliberation.

In the context of this document, animal welfare deals with the behaviour of humans in relation to the individual animal. In every situation where the use of animals for conservation is in conflict with animal welfare then zoos and aquariums must carefully consider and decide which one of these should be given priority. In making these decisions zoos and aquariums should consider that while species survival is a high ideal, it can never justify suffering of animals in their care.

All zoos and aquariums must be widely trusted as caretakers of animals and focus not only on the ultimate goal of conservation, but also on meeting the immediate needs of the living creatures for which they are responsible.

WAZA has adopted a Code of Ethics and Animal Welfare which is accepted by its constituency throughout the world, in spite of regionally differing ethical concepts and welfare considerations (Box 9.1). This Code represents the common ground on which WAZA members base their ex situ management and in situ conservation activities. All Institution, Association and Affiliate members of WAZA have to sign a Memorandum of Agreement to the effect that they will comply with the Code.

In addition, regional and national zoo and aquarium associations and individual institutions have their own codes of ethics, and some have detailed animal husbandry guidelines, that take into account their own specific social and cultural situations. Most of the regional and national associations' codes are more detailed and stricter than the WAZA code, which as an umbrella organization has to take into account the views and situations of all its members.

Zoo and aquarium associations establishing codes or guidelines should strive to set higher requirements than the legal minimum standards applicable in the geographic area in which they operate. It is essential that all zoo and aquarium associations follow their agreed codes of practice and the animal welfare standards of the associations.

9.2 Ethical issues

Ethical problems often arise because of conflicting interests. In some cases a solution can be found by following existing legislation, guidelines or standards. In other cases the conflict can be solved by weighing competing values, and these considerations are often complex and dependent on context. In many cases the
Box 9.1

WAZA Code of Ethics and Animal Welfare

Preamble
The continued existence of zoological parks and aquariums depends upon recognition that our profession is based on respect for the dignity of the animals in our care, the people we serve and other members of the international zoo profession. Acceptance of the WAZA World Zoo Conservation Strategy is implicit in involvement in the WAZA.

Whilst recognising that each region may have formulated its own code of ethics, and a code of animal welfare, the WAZA will strive to develop an ethical tradition which is strong and which will form the basis of a standard of conduct for our profession. Members will deal with each other to the highest standard of ethical conduct. Basic principles for the guidance of all members of the World Association of Zoos and Aquariums:

(i) Assisting in achieving the conservation and survival of species must be the aim of all members of the profession. Any actions taken in relation to an individual animal, e.g. euthanasia or contraception, must be undertaken with this higher ideal of species survival in mind, but the welfare of the individual animal should not be compromised.
(ii) Promote the interests of wildlife conservation, biodiversity and animal welfare to colleagues and to society at large.
(iii) Cooperate with the wider conservation community including wildlife agencies, conservation organizations and research institutions to assist in maintaining global biodiversity.
(iv) Cooperate with governments and appropriate bodies to improve standards of animal welfare and ensure the welfare of all animals in our care.
(v) Encourage research and dissemination of achievements and results in appropriate publications and forums.
(vi) Deal fairly with members in the dissemination of professional information and advice.
(vii) Promote public education programmes and cultural recreational activities of zoos and aquariums.
(viii) Work progressively towards achieving all professional guidelines established by the WAZA.

At all times members will act in accordance with all local, national and international law and will strive for the highest standards of operation in all areas including: animal welfare, use of zoo based animals, exhibit standards, acquisition of animals, transfer of animals, contraception, euthanasia, mutilation, research using zoo based animals, release-to-the-wild programmes, deaths of animals whilst in care, and external wild animal welfare issues.

More detail is given in the full text of the Code at www.waza.org

WAZA Code of Ethics and Animal Welfare, or the guidelines issued by WAZA or by IUCN provide an approach to solutions.

In practice there could be a conflict of interest between the conservation of a species or population and the welfare of an individual animal. According to the WAZA Code, actions taken in relation to an individual animal must be undertaken in the context of species survival, although the welfare of the individual animal should not be compromised. Animal welfare must be taken into account when an animal is in human care. The release of animals must strictly follow the IUCN Guidelines for Re-introductions, which offer general, practical policy guidance for any reintroduction, including details of preparation and follow-up.

Wild animal collections
Zoos and aquariums should not keep animals in conditions which pose a risk of injury or disease to visitors. In particular, they must ensure that animals that may have direct contact with visitors are not carriers of zoonotic diseases. An institution which holds a collection that is considered to pose a major risk to public health, must assess that risk and if necessary take remedial action; if the public perceives a risk this will compromise the institution’s conservation messages.

Zoos and aquariums should always be aware that invasive exotic animal and plant species are a potential threat to the indigenous fauna and flora. They should ensure that exotic animals in their care do not escape and pose a risk to indigenous species. They should also be careful in the selection of plant species for landscaping, and aquariums should ensure that no water plants, or parts or seeds thereof, can get into natural waters.

Acquisition of animals
The World Zoo Conservation Strategy published in 1993 stated ‘that the commercial wild animal trade as a source of zoo animals should cease as soon as possible. Such animals as must be collected from the wild, must be collected for specific educational and conservation purposes. They should not be chosen from dealers’ lists of animals randomly collected for commercial purposes. The Strategy also takes the long-term view that the placing of price tags on zoo animals may be counter-productive to fostering true conservation-based programmes. It therefore endorses the nil commercial value on conservation-sensitive zoo animals and requires that all national and supranational zoo associations develop policies towards the elimination of price tags where these still exist.’ These goals, while closer than in 1993, are still valid. (See also Chapter 4.)

All zoo and aquarium associations should develop and implement animal acquisition policies, to ensure that the actions of their members do not jeopardize the animals that are brought into their facilities, and to minimize the impact on wildlife populations. All zoos and aquariums must be accountable for how and where they obtain their animals. Ethical considerations must be taken into account even when acquisitions meet all legal requirements and association and institutional requirements; policies must
be constantly evaluated to reflect new considerations and information.

It is general practice for zoos and aquariums to obtain animals from each other, usually by exchange, as loans or gifts, and in some countries, when rescued from unsuitable circumstances. If a zoo or aquarium is asked by a government agency or an accredited organization to provide a home for confiscated wild animals, they must comply with the ‘WAZA Guidelines on the acceptance of seized or confiscated animals’. They should try to be helpful but if possible should accept confiscated animals only if they have the necessary expertise and can ensure appropriate care and accommodation.

Acquisitions from the wild that have been proven to be a necessary supplement for the maintenance of a managed population are acceptable only if all the legal obligations are fulfilled, and their acquisition does not have a deleterious effect on the wild population. Taking individuals of a species threatened with extinction is acceptable only if there are measures and plans in place to ensure the long-term maintenance of the in situ population.

Under no circumstances may zoos and aquariums be involved in illegal or unjustified trade of wild animals. The removal of animals from wild populations must: (1) be in compliance with international treaties, and regional and national legislation, (2) not threaten the long-term survival or recovery of that species in the wild, and (3) be done in cooperation with the responsible authorities of the country of origin. Animals that come from the wild must offer a contribution to the maintenance of their wild conspecifics, either through their optimal use in educational programmes, and/or by contributing to the conservation of threatened species within the framework of breeding and research programmes.

Disposal of animals
Ethical considerations should always be a part of animal disposition policies and as such should evolve along with an understanding of the needs of an animal in care. The WAZA Code of Ethics and Animal Welfare acknowledges that animals to be disposed of by member institutions should be sent to other institutions or organizations where they will receive the same high standards of care throughout their lives.

Zoos and aquariums must seek to ensure that the basic husbandry and welfare needs of their animals are being met even after they leave their institutions.

Population management
Animals in zoos and aquariums must be kept in a manner that takes into account their natural behaviour, including the opportunity to reproduce. Conditions suitable for reproduction in collections should mirror as much as possible those in the wild. However, while in the wild reproduction often leads to a much larger number of animals than can survive, predation, disease, food shortages, competition, climatic changes, and emigration will reduce these numbers. Successful breeding programmes in zoos and aquariums, where these factors are absent or controlled, have the potential to produce surpluses.

Zoos and aquariums, particularly those involved in cooperative animal management programmes, have a duty of responsibility, in compliance with animal welfare standards, to regulate the size of their animal stocks. Surplus animals can be: (1) transferred to other responsible zoos, aquariums, or similar institutions, (2) released into semi-reserves, (3) released into the wild in the framework of a coordinated conservation programme, or (4) temporarily prevented from reproducing. If none of these possibilities is feasible without causing suffering, adversely affecting group behaviour, or compromising the continued existence of the ex situ population, then it may be necessary to consider euthanasia. If practised within an ethical policy, euthanasia can be part of population management, thus replacing normal loss in nature. Euthanasia, which for some people is ethically wrong, should be considered only when all other possibilities have been reviewed; the issues involved must always be handled sensitively.

Every effort should be made not to produce surplus animals, and consideration should be given to the establishment of facilities where animals not intended for breeding (e.g. bachelor herds), or post-reproductive individuals, can be kept under suitable conditions.

Zoo and aquarium staff should however be aware that preventing animals from breeding may have negative effects on the health and well-being of the individual, the functioning of social groups and the long-term maintenance of ex situ populations. The maintenance of post-reproductive animals may occupy much needed space and also may give rise to suffering due to age-related diseases. However, the full process of reproduction, such as courtship, pair formation, mother-infant attachments, and socialization of young, can often have positive effects on individuals and can be said to enrich their lives. There can be objective welfare reasons in favour of breeding and there can be objective welfare reasons for euthanasia or culling under certain circumstances. If the animal experiences a quick death in a fear-free environment then killing is not a welfare issue, although it is recognized that objections could be raised on anthropocentric ethical grounds. Such concerns must be taken seriously but must also be judged against welfare and conservation principles.

Zoos and aquariums should keep the number of surplus animals as low as possible. Limiting reproduction and management euthanasia are two of the many options that need to be considered by population managers, and what action is subsequently taken will vary with country and culture. Institutions should explore all other options before going ahead with euthanasia, and they must explain to the public, media and staff why it is considered necessary in terms of maintaining healthy animals and populations.

If an animal has to be killed for management reasons, the institution will ensure that death is quick, painless and as stress-free as possible.
Release-to-the-wild programmes
The WAZA Code of Ethics and Animal Welfare requires that all release-to-the-wild programmes be conducted in accordance with the ‘IUCN Guidelines for Re-introductions’ officially adopted in 1995. This means that no release-to-the-wild programme shall be undertaken without the animals having undergone a thorough veterinary examination in agreement with The World Organisation for Animal Health (OIE)/IUCN quarantine and health screening protocols to assess their fitness for release. Their welfare post-release should be reasonably safeguarded, and a long-term monitoring programme should be established and maintained. (See also Chapter 2.)

9.3 Welfare issues
Zoos and aquariums cannot replicate the wild but, as far as possible, they should reproduce the animal’s natural environment and take into account the animal’s behavioural and physiological needs.

Most countries in which WAZA operates regulate animal welfare by law. Such laws specify how people must behave towards animals and in what conditions animals must be kept. In particular they require that animals be free to express ‘normal’ behaviour and they do not suffer from thirst, hunger and malnutrition, pain, injury and disease, distress.

In addition, laws and regulations may specifically define the requirements under which wild animals must be kept. Laws and regulations may be reviewed periodically and the general trend is for higher standards to be introduced. The policy of WAZA is to encourage zoos and aquariums to surpass the current minimum requirements in order to maintain populations of healthy and behaviourally undisturbed animals for conservation purposes, and to convey positive conservation messages to the public.

There have been many advances in zoo animal husbandry in recent years and the goal of all collections should be to ensure high welfare standards based on the best available science. This will be achieved mainly by the development of animal husbandry guidelines to which all zoos and aquariums will be expected to adhere.

Unlike many of their counterparts in the wild, animals in zoos and aquariums are well fed and cared for, and at no risk of predation or starvation. The fact that they do not have the same space for movement as in the wild should not normally compromise their welfare, as long as the size and design of their enclosures, the size and composition of their group, and husbandry procedures allow them to express their normal behaviour.

All zoos and aquariums should ensure that the animals in their care, including those animals not on public view, are kept in conditions which allow them to express normal behaviour.

In addition to an enclosure of adequate size and structure, enrichment activities may be necessary to cater for the variety of behaviours and experiences that would be common in the wild. Environmental enrichment has been defined as ‘an animal husbandry principle that seeks to enhance the quality of animals’ care by identifying and providing the environmental stimuli necessary for optimal psychological and physiological wellbeing’. Although many collections already use enrichment techniques, the science is still relatively new and more research and evaluation is needed. At least one regional association, the American Zoo and Aquarium Association, requires its members to have an environmental enrichment plan for their collection and show evidence of implementation.

The scientific study of animal welfare is now well established and zoo and aquarium staff need to be aware of and use the expertise and literature that is available. Assessments of welfare should be evidence-based and staff should be to assess their animals encouraged objectively for signs of adverse responses to their environment. It is particularly important that the results of such assessments are fed back into optimum enclosure design.

9.4 Conclusion
Zoos and aquariums in the 21st century bear a tremendous responsibility for the animals in their care and in helping to conserve biodiversity. If zoos and aquariums are to remain relevant in today’s society, they must constantly challenge themselves in the way they respond to their responsibilities. They should continually question their ethical philosophies and their moral codes. They must ensure that the animals in their collections are provided with their behavioural and physiological needs and ensure that the animals play their role in conservation as managed reserve populations and as true ambassadors for their counterparts in the wild.

It is especially important that the public also understand the realities of conserving wildlife and biodiversity and supports the conservation role of zoos and aquariums. At present there is considerable confusion about the concepts of rights, ethics, welfare and conservation and the implications that these have on conservation and wildlife management policies. Zoos and aquariums should have a critical and pivotal role in resolving this confusion. Forums, involving staff and the public, should be created for the discussion and resolution of the issues.

The ethical and welfare issues involved in managing wild animals in collections need to be constantly assessed and evaluated. This is essential for the future of zoos and aquariums and for their ability to implement their core missions of conservation, education and science. Such goals will only be met when zoos and aquariums have the trust of their visitors and donors. All members of the WAZA network must strive to meet the highest standards of animal care and continue to search for new ways to expand and improve their efforts to conserve wildlife and habitats.

Recommendations
The World Zoo and Aquarium Conservation Strategy (WZACS) recommends that all zoos and aquariums seek continually to improve their management techniques and the profession’s current practices, based on evolving knowledge and sensibilities.
The WZACS recommends that all zoo and aquarium associations have their own ethical codes and animal welfare policies, and that the associations ensure that their members comply with them.

The WZACS requires that zoos and aquariums acquiring animals of threatened species from the wild will fully comply with the ‘IUCN Technical Guidelines on the Management of ex situ Populations for Conservation’.

The WZACS requires that all animal transportation must be in accord with regulations, such as the International Air Transport Association’s ‘Live Animals Regulations’, and with relevant national regulations.

The WZACS requires that zoos and aquariums undertake every effort to prevent the escape of animals and plants of alien invasive species.

The WZACS calls upon all zoos and aquariums to comply with legal requirements under which animals must be kept but points out that legislation can only define minimum standards and the zoo and aquarium community should strive for even higher standards.

The WZACS advises that if there are legal or cultural reasons why the killing of surplus animals is not an acceptable option, and the prevention of reproduction would damage the health or cause suffering of the animals concerned, and if the surplus animals cannot be kept in acceptable welfare conditions, then the zoo or aquarium should not have these animals in their collection and they should consider the option of transferring them to another collection.

The WZACS recommends that all regional and national associations develop peer-reviewed animal husbandry guidelines, in particular for species that are managed by cooperative ex situ breeding programmes.

The WZACS recommends that zoos and aquariums provide environmental enrichment and should direct resources toward exploring ways that enrichment techniques can be expanded, improved and evaluated.

The WZACS recommends that more use be made of evidence-based objective welfare assessments, and that the results be used to improve the environment of animals in collections.

The WZACS recommends that all zoos and aquariums become more familiar with the relevance of ethics and welfare issues in their conservation activities, and they should increase their efforts to educate and involve staff and the public.

The WZACS recommends that all zoos and aquariums should have an ethics committee and an ethical review process for all aspects of their operations, including those off site.

WZACS Serialisation completed

The serialisation of the World Zoo and Aquarium Conservation Strategy has come to an end with this last chapter on Ethics and Animal Welfare. Zoo ethics and animal welfare are timely topics because never before have zoos been so much under criticism by the animal welfare lobby, and so much the target of tourists who become disturbed by perceived atrocities. This is ironic as many zoos today are more aware and concerned about ethical behaviour and human treatment of their animals than ever before. Today animal welfare science is stronger than ever also which appeals to the better zoos which have a scientific base and operate according to a mission statement which often includes words like science, conservation, ethics, animal welfare, etc.

Still, the number of zoos which are operated along modern scientific lines and modern principles of animal welfare and ethics are probably not very numerous when compared to the vast number of institutions that call themselves zoos, yet are operated so carelessly and/or so ignorantly as to create virtual hells for animals.

Recently we heard of a zoo in a supposedly civilised country in a civilised region which kept its large mammals so badly that the tiger had eaten off both its own back paws. The polar bear banged its head against the bars of its small cage till it bled. The jaguar chewed its tail and the wolves walk with tails between their legs, a sign of fear and many other unconsciousable conditions.

Yet, it is reported, the zoo is clean, has neat, well vegetated pathways and facilities for visitors. From this and other hints, the zoo seems to have sufficient funds to improve the animal enclosures but not the will to do or the awareness that they are keeping the animals in punishing conditions, or they just don’t care.

That such a zoo (and there are many such zoos) exists is a blight on the reputation of all good zoos. As zoo professionals and even as zoo enthusiasts, we must all take an interest now in what the “other zoo world” is doing and try to formulate a method of rectifying the situation. It is not enough to simply judge them – we have to teach them and their governments that they are committing a heinous moral crime. We must lobby for zoo and animal welfare legislation for every city and country so that there will be a way of making sure all institutions know the difference between good management and bad, and of bringing them to book, making improvements, or, if they do not care or respond to efforts to help them of just getting them wound up.

Ending substandard zoos is a conservation as well as a welfare action. Bad zoos contribute to extinction, to wrong attitudes towards wildlife and to untold suffering. WZACS and its soon to be available web-based manual can help us help zoos to become better.

WZACS Rocks ! Use WZACS and its Manual to rock the “other” zoo world into a different dimension.