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ANIMAL HEALTH
AND WELFARE



Examining the dental health of a **river hippopotamus** (*Hippopotamus amphibius*) at Copenhagen zoo

© Copenhagen Zoo

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ANIMAL HEALTH AND WELFARE

One of the greatest responsibilities for EAZA zoos and aquariums is the health and wellbeing of the animals in their care. Our mission, to support conservation of species, both in the field and in our institutions, to educate the public about biodiversity, and to conduct scientific research to allow us to understand more about species and conservation, would be greatly compromised without healthy animals living in conditions that meet their needs to the best of our ability. Keeping animals in the best of health and in the best conditions requires input from many people and disciplines.

The daily care of the animals is provided primarily by qualified zookeepers or aquarium care staff. If an animal is unwell, often it is the keeping staff who will be the first to notice and take appropriate action and inform veterinarians and other relevant people within the institution. Keepers are usually responsible for particular species groups at the zoo or aquarium, and so combine expertise in the husbandry of those animals with experience of observing them over the long term. They will be able to report on how animals react to new foods, new animals, changes to their enclosures and so on, and give a full picture to the curator, the veterinarian and other managers at the zoo or aquarium. Keepers may also be involved in operant conditioning for husbandry behaviours: this is exceptionally important when veterinarians need to take blood samples or treat an illness. Training also allows an animal to develop positive relationships with keepers through building trust via positive reinforcement for daily activities such as shifting, feeding, participating in educational talks and mental stimulation. Keepers maintain the animals' environment, ensuring that the enclosures are hygienic, constructed and furnished to encourage a broad range of natural behaviours, and free from other elements that could pose a risk to the health or wellbeing of the animals. In short, keepers are indispensable to the health and wellbeing of the animals in our community.

EAZA Members also employ and consult with veterinarians to provide preventative health care, health screening and treatment for illnesses among the animals held by the institution. Vets consult with keepers on their rounds, and design and carry out a schedule of vaccination and examinations to ensure animals stay healthy. Where illness or injury does occur, zoo and wildlife veterinarians have the experience, knowledge and equipment to make the best possible intervention for the welfare and long-term care of the animal. EAZA maintains a Veterinary Committee to help with the exchange of knowledge and

works closely with the European Association of Zoo and Wildlife Veterinarians (EAZWV). Together EAZA and EAZWV produce a number of guiding documents. These include the EAZA funded Journal of Zoo and Wildlife Medicine where evidence based medical research and guidance is published for the benefit of the community. The Associations also work to ensure that best practice is followed across the membership in the treatment of animals. Monitoring of the trends in animal health also falls under the mandate of the Veterinary Committee. EAZA veterinarians also contribute to the field of conservation medicine as their work in zoos and aquariums helps to inform an understanding of health in populations living in nature.

Animal health and welfare is not solely restricted to the physical domain; the mental or psychological wellbeing of an animal is also extremely important and can influence physical health too. Indeed, zoo animal welfare science aims to help people caring for animals to meet their mental needs through the fulfilment of physical or functional needs such as behaviour, environment, and nutrition. EAZA's Animal Welfare Working Group is responsible for the promotion of best practice in animal welfare science at our Member institutions, and holds an Animal Welfare Forum every two years, with the aim of bringing scientists and animal care professionals together to discuss ways of meeting the needs of our animals and keeping them healthy and fulfilled. Much of the knowledge about a species and its care in zoos or aquariums is set out in the Best Practice Guidelines produced by the Taxon Advisory Groups, which act as a comprehensive guide for everyone involved in animal care, from keepers to directors, and which can even help inform the planning of EEP population management programmes to meet their roles and goals.

At an EAZA zoo or aquarium therefore, the visitor should expect to see animals in suitable enclosures, as described by the EAZA Standards for the Accommodation and

Care of Animals in Zoos and Aquaria. Animals should have the opportunity to behave as closely as possible to their wild counterparts – foraging for food, climbing, exploring, establishing their place in the social group, mating, nurturing young, and so on. They should be fed appropriately, with some carnivores going for longer periods without food to replicate their wild feeding behaviours, and may have to jump, chase or otherwise make the effort to ‘hunt’ rather than just being given the meat they need. For foraging species, hiding food can make feeding unpredictable and help recreate the experience that their wild cousins will have. The aim is not to provide an animal with everything it needs at every moment, which would not reflect life’s ebb and flow with times of challenge or times of ease or moments of excitement followed by moments of quiet. Welfare as practiced at EAZA zoos and aquariums aims to make the overall balance positive by including experiences of all kinds where animals have appropriate choice, control, challenge and opportunity (while of course ensuring that the animal is free from pain and suffering either physically or psychologically). It’s a practice that needs everyone at the zoo or aquarium to do their part and to be trained fully and imaginatively in all the disciplines that together make up the positive welfare of animals across our network.

In addition to the Animal Welfare Working Group, EAZA also consults more widely with stakeholders as diverse as travel conglomerates and national governments to ensure an evidence-based approach to the health and wellbeing of animals in human care. This includes work on the humane management of Invasive Alien Species in European Union Member States, accommodation and husbandry aspects of zoo licensing and so on. On top of this, welfare science researchers study zoo and aquarium animals and push the discipline forward in ways that also benefit animals far from the institutions, meaning that our Members contribute materially to the advancement of human care of animals more widely too.



At every level of zoo and aquarium management, animal health, care and welfare remains a core focus of our institutions and their teams. By excelling in this field, EAZA Members ensure better conservation outcomes and a level of public confidence that is essential for the long-term future of *ex situ* conservation, education and research facilities. Knowing that the highest level of professionalism backs the passion of zoo and aquarium staff means that the public and other stakeholders are also far more receptive to messaging about sustainable living and nature protection. In short, positive animal welfare and good animal care are the preconditions of every aspect of our work.

Fire salamander
Salamandra salamandra

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CASE STUDY

EAZA ACADEMY'S ANIMAL WELFARE COURSES

As part of EAZA's commitment to developing zoos and raising the level of animal welfare knowledge across the EAZA region, EAZA has created a suite of Animal Welfare Courses ranging from Introduction to Animal Welfare workshops, through to advanced animal welfare seminars. Since its launch in 2013, the EAZA Academy has delivered 28 animal welfare-based courses, with 707 participants, across 32 countries and 146 different institutions.

One of the hosts of the Introduction to Animal Welfare workshops was EAZA Candidate for Membership, Košice Zoo, Slovakia. The four-day workshop introduced participants to both the theory and application of animal welfare best practice, culminating in a full day practical where participants redesigned animal enclosures to promote positive welfare: macaques received a deep woodchip floor to allow them to forage; a small pool for play and bathing; additional platforms, branching and ropes for resting, security and exercise; visual barriers to give them places where they can take a break from public view, browse hangers for feeding to challenge their balance and coordination, and puzzle feeders to promote problem solving and dexterity. Diets were also reviewed resulting in removal of sugary fruits and replacing with nutritionally balanced browse and high fibre vegetables. The team practiced forming a positive rapport with the macaques and recalling them into different areas to allow the team safe access to the enclosure.

Whilst some animals can be hesitant of the changes made, the team did not have to wait long for the macaques to fully embrace the new, enriching environment! The macaques were engaged, exploring, playing, foraging,

climbing and embracing the opportunity to behave as macaques are supposed to behave! This practical application during the workshop helped to reinforce the immediate improvement of animal welfare by simple application of species-appropriate behavioural opportunities and training.

Košice Zoo continued to make huge strides in improving the welfare of the animals in their care, applying the lessons learnt at the workshop across the zoo. In 2019, these changes contributed to Košice Zoo successfully meeting EAZA's Accreditation Standards and therefore becoming an EAZA Full Member.



Animal welfare course held by the EAZA Academy

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