Approved by EARAZA Presidium
28.11.2023

EARAZA Animal Welfare Standard

INTRODUCTION

The Eurasian Regional Association of Zoos and Aquariums (EARAZA) considers the achievement and maintenance of a high level of animal welfare in all its member organizations as its highest priority. EARAZA is committed to playing a role of the regional leader in promoting activities aimed at the enforcement of positive animal welfare and implementation of programmes focused on achieving this goal.

For this purpose, EARAZA members must undertake to adhere to the principles set forth in the EARAZA Code of Ethics and other regulatory documents of the Association.

The process for assessing the welfare of animals kept at EARAZA member organizations is based on the concept of "Five Domains", the main provisions of which are presented in the World Zoo and Aquarium Animal Welfare Strategy document (WAZA, 2015).

GENERAL PROVISIONS

The following requirements must be met for the enforcement of positive animal welfare (related to the specified five domains):

1. **Animal environment:** animals must be provided with an appropriate environment that meets their biological and species-specific needs (physical, mental, social, and cognitive), ensures their comfort and safety, and allows animals to maintain control over their environment and make choices, which is a key component of positive welfare status and prevention of suffering and distress.
2. **Nutrition:** each individual must be provided with a suitable, individually- and species-appropriate diet, which must be presented in a way that ensures positive welfare and behavioural and physical health of the animals.
3. **Physical health:** all animals must be provided with the opportunity to experience good physical health at all stages of life through carrying out animal welfare programs, as well as the prevention, diagnostic and treatment of disease.
4. **Behaviour:** all animals must be provided with quality spaces and appropriate social groupings that would encourage the demonstration of a wide range of species-appropriate behaviours.
5. **Affective or mental states:** animals must be provided with the conditions, in which animals will have the opportunity to experience a predominance of positive emotional states and which will minimize negative experiences and emotional states.

Animal welfare

"Animal welfare refers to a state that is specific for every individual animal; it is how the animal experiences its own world and life through its association with pleasant experiences specific for that species such as vitality, affection, safety and excitement, or unpleasant experiences such as pain, hunger, fear, boredom, loneliness and frustration.

Many of these experiences can be generated through features of an animal's diet; environment; physical health and fitness (including injury and disease); social environment (including interactions with humans); and its ability to fulfil the species specific and individual animal's behavioural motivations to have positive physical or social experiences. An animal's welfare state can be influenced both positively and negatively by all parameters of its living environment with husbandry practices (i.e. animal care) being only one of them. The ability to have species specific choices and individual control over their environment are very important contributing factors for positive animal welfare."[1]

Two types of indicators can be used in the process of assessing animal welfare: "input" and "output" indicators.[2] "Input" indicators are the resources provided for the animal, including enclosures and holding

[1] Definition approved by the WAZA Council on 8 October 2020.
[2] Please refer to the document "WAZA Recommendation on Output-based Measures"

facilities, foods, husbandry methods, etc. “Output” indicators are what the animal actually experiences; these indicators should be quantitative, objective measures of welfare evaluated at the level of the individual.

Some of the potential indicators of animal’s condition are:

- Behavior;
- Physiological parameters (e.g., indicators of stress responses, indicators of proper physiological function such as heart rate, respiration rate, body temperature, etc.);
- Health (growth rate, body condition, disease, etc.);
- Longevity (implicitly a retroactive measure);
- Reproductive success;
- Keeper-animal relationship (fear/aggression vs. cooperation and trust);
- Keeper based assessments (e.g., validated ranked and relative assessments).

According to the model of Five Domains, the welfare of an animal should be assessed based on its responses to living conditions. The EARAZA Animal Welfare Standard sets out the basic requirements for maintaining positive animal welfare, based on the concept of Five Domains that provides a framework for defining critically important standards of animal welfare.

EARAZA STANDARDS

In order to achieve significant results in maintaining high standards of animal welfare and introducing appropriate working practices, EARAZA members commit to:

1) Provide animals with safe living conditions that meet biological and species-specific (physical, mental, social, cognitive) needs of individuals and create ample opportunities stimulating demonstration of natural behaviours;
2) Develop and improve guidelines on the care of animals used in the demonstration for public, interactions with visitors, and educational programs;
3) Carry out regular animal welfare assessments on systematic and ongoing basis in order to promptly identify and correct any problems, using both input and output indicators in the assessments;
4) Every three years perform annual welfare audits and submit the reports on their results to EARAZA Animal Welfare Committee.
5) Develop and implement animal welfare policies (e.g. in the form of animal welfare code, animal-visitor interaction policy, animal acquisition/disposition policy, etc.)

ANIMAL ENVIRONMENT

1. Animal Exhibits

To objectively assess the extent to which the following standards are met, the organization's staff must have sufficient qualifications, education, experience, and knowledge of recognized practices for the management of captive wild animals.

1.1. Display

Each animal must be exhibited in a manner that:

a. Provides a setting resembling the animals’ natural habitat;
b. Provides sufficient environmental choices, stimulation and variability for encouraging an animal’s wide range of natural behaviours;
c. Provides protection from adverse conditions attributable to environmental and climatic factors;
d. Provides a comfortable area and suitable resting places, including items such as appropriate substrates, nesting boxes, shelters, pools, etc.;
e. Provides land areas (shores) and pools with clean water for appropriate swimming/bathing opportunities for aquatic and semi-aquatic animals;
f. Provides protective physical barriers from disturbance and harassment by the viewing public and direct contacts between animals and visitors;
g. Enables effective cleaning, disinfection, and maintenance of enclosures and technical facilities and animal management, ensuring a high standard of animal care;

h. All institutions should use appropriate relevant and up to date husbandry and specific species management guidelines.

1.2. Enclosure size and space

Enclosure size, shape, and layout must:

a. Provide sufficient space (both vertical and horizontal) to enable the animals to demonstrate normal behaviours and locomotion;
b. Provide conditions preventing undue dominance and conflicts between the animals;
c. Allow for appropriate social grouping at all times;
d. Ensure that the carrying capacity of the enclosure (the minimum space per individual/group of animals established for each species in the relevant husbandry manual and applicable regulations[3]) is not exceeded.

1.3. Indoor facilities and holding enclosures

If holding or indoor facilities are used in addition to an exhibit, these facilities must have adequate space that:

a. Allows for appropriate environmental choices, stimulation and variability that encourage an animal's normal range of natural behaviours;
b. Is provided with enrichment materials and structures;
c. Contains visual barriers and shelters providing individuals with an opportunity to hide from people, conspecifics (if the animals are kept in groups), and other animals within the facility.

Besides, each holding enclosure or indoor facility must:

a. Be of appropriate size and have adequate lighting for proper cleaning and carrying out routine health and hygiene checks and necessary veterinary procedures;
b. Be provided with ventilation and designed to minimize undue draughts, odours and moisture condensation;
c. Be provided with light of due quality, intensity and duration that meet physiological and behavioural requirements of the animals (i.e., animals of diurnal or nocturnal species).

1.4. Safety and security

1.4.1. Gates and doors

a. If possible, gates or doors on the perimeter of an enclosure must open inwards to the enclosure.
b. All gates and doors must be provided with locks and other security measures to prevent animals from opening or lifting the gates or doors off their hinges or slide them off their tracks.

1.4.2. Prevention of animal escapes

a. The enclosure must be designed in such a way that neither visitors nor employees working with animals are exposed to any danger, the possibility of animals escaping is excluded, and the risk of injury to animals in the enclosure is minimized.
b. The enclosure must be protected from predators and its design must meet the animals' needs to exhibit natural behaviour.
c. The enclosure in which a digging or burrowing animal is kept must be constructed with a subterranean floor consisting entirely of concrete or other suitable materials.
d. All institutions should have a written emergency protocol for managing animal escapes, which must comply with all relevant local and national legislation. All institutions must keep a record of all cases of animal escapes.

1.4.3. Provisions for dangerous animals

a. The entrance to an enclosure in which a dangerous animal is kept must be presented by the system of successive gates or doors which are kept locked at all times.

[3] Standards and recommendations of international associations may differ from the standards legally approved in a particular country. The standards approved by legislative acts are recommended to be considered the minimum acceptable standards.

b. If the doors or gates through which such an enclosure is entered are electrically operated, they must be provided with alternative means of control, by which they may be manually operated without risk to the operator.
c. The operating position for gates, door, slides or other means of access must provide a safe and clear view of the gates, doors, slides and other means of access and the immediate surrounding area.

1.4.4. Barriers between animals and public

a. Additional barriers must be provided to prevent direct contacts between the animals and visitors.
b. Enclosures should be separated from the areas for visitors by a safe zone.

1.4.5. Warning signs

If an enclosure contains an animal that is known to be dangerous, or may reasonably be suspected of being dangerous, or if the enclosure is dangerous because it includes an electrified fence, the enclosure must be provided with an adequate number of clearly visible and legible signs giving proper warning by means of words, symbols, or both.

1.4.6. Provisions for freshwater and marine animals

The environment in an aquarium requires careful management to safeguard the welfare of the animals within the aquarium. Water requirements will vary depending on the species being accommodated. All documented animal exhibit provisions apply to freshwater and marine animal enclosures. The additional requirements are listed below.

a. Aquaria must have suitable size, design, depth, and volume for the species and number of individuals accommodated.
b. Appropriate water parameters including spectral composition of light and chemical composition of water (pH, salinity, oxygen saturation, concentrations of carbon dioxide, ammonia, nitrites and nitrates, etc.) must be maintained in accordance with the species requirements.
c. Water must be filtered and must not contain harmful contaminants.
d. Enclosures and aquariums must be constructed using watertight materials that could be appropriately cleaned, well-maintained, and safe for the animals.
e. In situations where water environments are located outdoor, the water in the pools must be protected from contamination from drainage water or excessive overflow from surrounding land or buildings.
f. The institution must ensure appropriate controls on noise level at all times.

1.5. Guidelines for animal transfers

1.5.1. Acquisition of animals

a. All EARAZA members should endeavour to ensure that the source of animals is confined to those born in captivity and this will be best achieved by direct zoo to zoo contact. This will not preclude the acquisition of confiscated or rescued wild born animals for their use in conservation breeding programs, education programs, or biological studies.
b. If the animal is obtained from the wild, EARAZA members must be confident that its acquisition will not have a deleterious effect upon the wild population. An acquisition should only occur, if the institution has appropriate facilities and expertise to care for the species to a high standard for the whole of an animal's life.

1.5.2. Transfer of animals

a. EARAZA members should develop and follow a standard operating procedure and guidelines to ensure high standards of ethical animal transfers.
b. All institutions should ensure that the institutions receiving animals have appropriate facilities to hold the animals and skilled staff capable of maintaining the same high standard of husbandry and welfare as required of all EARAZA members.
c. All animals being transferred must be accompanied by appropriate records with details of health, reproductive and genetic status and behavioural characteristics having been disclosed at the

commencement of negotiations. These records will allow the receiving institutions to make appropriate decisions regarding the future management of the animal.

d. All animal transfers should conform to the international and national standards applying to the particular species. Where appropriate, the transported animals should be accompanied by qualified staff.

ANIMAL NUTRITION

1. Nutrition and feeding

General recommendations on nutrition, kitchen hygiene and kitchen protocols

1.1. Food

a. Each animal must be offered an appropriate balanced diet. All institutions must develop and follow nutrition plans based on developed animal diets.
b. The diet must be adapted to the animal's species, age, size, body condition, activity level, and reproductive and health status.
c. The institution must regularly review, evaluate, and, if necessary, revise animal diets.
d. Veterinary advice must be obtained and followed in relation to the addition of food supplements to the routine animal diets.
e. Food must be clean, unspoiled, and free from chemical and biological contamination.
f. Water for animals must be changed daily and not become stagnant.
g. Food must be presented to the animal in a way that satisfies the animal's natural feeding behavioural requirements and motivations. Food related enrichment strategies must be an important component of enrichment programs.
h. Where visitors are allowed to feed animals, the institution must exercise control over the amount of feed fed and the length of feeding time.

1.2. Utensils and food preparation area

a. Food preparation areas must be washed down daily and treated with appropriate disinfectants.
b. High standards of cleanliness must be observed by staff engaged in the preparation of food and water for the animals and adequate facilities must be provided for cleaning of utensils and equipment used.
c. Utensils and equipment used for the offering of food and drink to animals must not be used for any other purpose, must be easy to clean and designed to avoid injury to the animals and staff, and when placed in an enclosure must be in such a position that each animal in the enclosure has easy access to sufficient food and water and the risk of contamination from soiling by the animals is minimized.
d. Utensils and equipment used in the preparation and presentation of food and water must be cleaned after their use and kept clean when not in use.
e. Utensils and other equipment used in the preparation of food and water must not be used for any other purpose.

1.3. Storage of food

a. Supplies of food for the animals must be stored in facilities in which they are adequately protected against deterioration, mould, and contamination.
b. Toxic substances, dead animals, and discarded foodstuff must not be kept in a food storage area.

ANIMAL HEALTH

1. Animal health and veterinary care

1.1. Veterinary care

a. The institution must arrange regular and documented veterinary inspections headed by experienced veterinarians for assessing the animal health.

b. The institution must make provisions for effective communication between the veterinarians and the animal-care staff on a daily basis.
c. All sick or injured animals must be provided with the necessary treatment and care.
d. Prior to the transportation, a full veterinary examination of any animal that is to be transferred should be performed in accordance with the provisions of national legislation or/and international standards.
e. Veterinary facilities in zoological institutions should include a quarantine section and facilities for sick/recovering animals. In the absence of a veterinary department and (or) laboratory, the zoo must, on contractual or other terms, use the services of a third-party veterinary clinic and laboratory.
f. Proactive veterinary care must include:
    - routine clinical examinations of all animals kept at the institution;
    - development of the animal treatment and prophylactics protocols;
    - animal health monitoring (e.g., disease screening, regular blood, urine or faecal examinations, endoparasite monitoring, etc), as indicated;
    - scheduled collection, preparation, handling and appropriate forwarding of diagnostic and other biological samples for diagnostic and other tests (all the procedures should be carried out in compliance with safety measures);
    - training of zoo personnel in animal health and hygiene;
    - ensuring that post-mortem examinations and any necessary laboratory investigations are carried out, including the submission of suitable samples for pathological analysis, whenever possible;
    - supervision of quarantine procedures and other tasks required by law, or as part of good zoo veterinary practice;
    - the establishment of written procedures to be followed in the event of the accidental use of dangerous drugs;
    - secure management of all medications, including appropriate documentation, control, storage, issuing, and destruction and disposal of such veterinary drugs in accordance with manufacturer's guidance and recommendations and relevant local legislation.
g. Effective and regular program for the control of ectoparasites and vertebrate pests must be established and implemented. Enclosures must be designed as to minimize predation by pests and parasites.
h. Contraception may be implemented wherever there is a need for reasons of population management or maintenance of animal health and welfare. The possible side effects of both surgical and chemical contraception should be considered before a final decision to implement contraception is made. Regulations on animals classified as endangered may prevail over other considerations.
i. Mutilation of any animal for cosmetic purpose, or for changing physical appearance of the animal, is not acceptable. Pinioning of birds for educational or management purposes should only be undertaken when no other form of restraint is feasible. Marking animals for identification should always be carried out in a way that minimizes suffering and under professional/veterinary supervision.
j. Euthanasia must be carried out where an animal's physiological or psychological welfare is severely compromised and cannot be adequately improved through veterinary care and management. Euthanasia must be undertaken in a stress-free manner that involves a rapid and painless death; this procedure should be performed by personnel trained in the handling of species and administration of euthanasia drugs. Internationally recognised drugs proven to ensure a pain-free death must be used. An ethical review should be undertaken for all euthanasia procedures, which also apply to the animals that are killed to feed other animals at the zoo. All institutions must have a documented euthanasia protocol and carry out its regular review. Euthanasia may be controlled by veterinary or other bodies and regulated by laws. Whenever possible a post-mortem examination should be performed and results of post-mortem examinations should be recorded. Collected biological material should preserved for research and gene conservation.
k. No program of the release of animals into the wild shall be undertaken without the animals having undergone a thorough veterinary examination to access their fitness for the release. The IUCN/SSC Reintroduction Species Group guidelines for reintroduction, as well as provisions of national legislation should always be followed.

l. Unless there are sound reasons not to do so, each animal which dies in captivity or during a program of the release into the wild should be subjected to a post-mortem examination and a cause of death should be determined.

2. Biosecurity

Care must be given to establish a biosecurity protocol in a zoological institution to prevent the introduction, transmission and spread of diseases among animals and minimize the zoonotic potential it may create. All institutions must develop an appropriate infectious disease policy and protocols to mitigate the risk of disease spreading.

Biosecurity protocols will depend on the animal collection, layout of the zoo, location of the zoo, sources of food, source of water, waste management, environmental considerations, established zoonotic potential in the zoo's location, animal movement, and movement of zoo staff and visitors. Biosecurity protocols include the provisions for maintaining cleanliness and safety of food and water sources, proper waste disposal system, hygienic practices for zoo staff and visitors, properly implemented preventative medical program, proper diagnosis and treatment of animals in isolated sections, investigation and recording of disease occurrences and quarantine and veterinary assessment in cases of animal transfer and releases. Biosecurity protocols must be recorded and maintained.

Biosecurity may be established in as simple as placing medicated foot baths and disinfection barriers for vehicles, as well as creating multiple hand-wash areas and safe zones. Biosecure areas include the entry and exit points for keepers, petting zoo areas, animal food kitchen, visitor facilities, and veterinary department.

2.1. Provisions for waste disposal

Provisions must be made for the removal and disposal of animal and food waste, unwholesome food and water, dead animals, and introduced rubbish from each animal enclosure to minimize vermin infestation and disease hazards, reduce odour and prevent the ingestion of harmful objects.

2.2. Provisions for newly arrived animals

a. All new animals must be kept in quarantine for at least 21 days for initial health screening tests.
b. The new animals should be kept in isolation for as long as may be necessary to provide for their full examination, acclimatization and, if necessary, restoration of health before being introduced to other animals.
c. Quarantine facilities should meet animal's specific physical, behavioural, and cognitive needs.

2.3. Provisions for dead animals

a. The institution should make provisions for the handling of a dead animal in a way that minimises the risk of transmission of infectious diseases.
b. Unless there is an arrangement for a dead animal to be quickly moved to specialized veterinary facilities outside the institution, facilities must be provided on the premises for performing a post-mortem examination in a safe and hygienic manner.
c. Provisions must be made for material to be stored under refrigeration, if an immediate post-mortem examination is not possible.
d. The facilities used for post-mortem examination must be provided with an efficient drainage system, washable floors and walls, and an examination/surgical table, as well as equipment and facilities for taking and preserving biological samples. Instruments and equipment used for the storage of post-mortem material must not be used for any other purpose.
e. Unless the remains of a dead animal are to be used for scientific or educational purpose or are offered to and accepted by an approved museum or other approved scientific institutions, they must be disposed of by incineration and, if incineration is not possible, by any other method approved by veterinary bodies.

3. Record keeping

3.1. Records must be kept and maintained with the information on all individually recognisable animals and groups of animals in the institution, which will contribute to the management of a long term archive system.
3.2. Animal records must provide information related to the management, veterinary care, health, and welfare of the animals. Such records can be kept for unlimited time.
3.3. As appropriate, all animals should be individually identified by a marking that causes the animal no long-term harm and does not affect their natural behaviour.

ANIMAL BEHAVIOUR

1. Environmental enrichment

a. Goal-based environmental enrichment should be part of the daily care routine and be designed to promote and encourage normal and positive behaviour patterns and minimise any abnormal behaviour.
b. Animals of social species must be kept in compatible social groups and never housed in isolation. The group must consist of an appropriate number of animals of adequate age and sex. Social animals should not be housed in isolation except where it is necessary for veterinary or zootechnical purposes.
c. Institutions must develop and approve documented and reviewed environmental and behaviour enrichment programs and plans for all species, which will contribute to the creation of a stimulating and appropriately complex environment. Such programs should cover a wide range of animal care aspects including species specific requirements of the animals, enclosure design and infrastructure, diet and feeding, composition of social groups, animal husbandry, and training and veterinary practices.

2. Animal training

a. Trainings should be carried out by qualified employees, based on the developed and approved plan.
b. All animal trainings must be aimed at achieving appropriate goals (such as veterinary, zootechnical, etc.) and carried out using appropriate methods based on the principle of positive reinforcement.
c. Training must not cause the animal any pain, injury, or distress.
d. The deliberate infliction of injury, pain, or fear is unacceptable.
e. Information about all training sessions must be documented and reviewed on a regular basis to ensure high standards of animal care and effectiveness of training programmes.

3. Animal breeding

a. The institution must develop and approve a documented collection plan that justifies the holding of species from a conservation, educational and animal welfare perspective.
b. The institution should have a documented breeding program that adheres to the overall institution collection plan.
c. Breeding of an animal should be preferably undertaken if it is part of a recognised and cooperative breeding programme and the institution has the appropriate veterinary and husbandry expertise.
d. The breeding of animals must not result in overcrowding, spread of disease (including genetic diseases), or stress.
e. All breeding animals must be provided with appropriate nesting and nursing facilities as well as refuge from the public and aggression from co-specifics with off show facilities made available, if needed.
f. New born animals must be provided with the necessary professional veterinary care and be appropriately integrated into social or compatible groups, if relevant.

4. Animal-visitor interactions, presentations of animals for public, and animal shows

a. Visitor interactions with individual animals can be allowed only as part of demonstrations for educational purposes. The use of wild animals exclusively for commercial and/or entertainment purposes (animal riding, photography) is unacceptable.

b. All animal-visitor contacts and animal demonstrations for public should only be carried out by trained employees or under their supervision.
c. When selecting animals for their use in educational and interactive programmes, the safety and welfare of the animals must be given paramount importance.
d. Considerations related to health and welfare of animals used in educational and interactive activities should influence the type of an animal, design of the display facility, amount of time on display/interaction/activity, safe zones, and skills and training of the zookeeper or animal handler.
e. Animal-visitor interaction and educational shows must be carried out in a way that complies with the animal welfare and husbandry standards before, during, and after the event.
f. During periods when animals are not used in interactions with visitors or demonstrations for public, they must be kept in conditions appropriate to their species-specific and individual requirements. (see section "Animal environment").
g. The institution must carry out regular monitoring and review of animal-visitor contact and animal demonstration for public programs to ensure a high level of animal welfare.

POSITIVE MENTAL WELFARE

Managing positive experiences in animals

Negative experiences and environments that cause individual animals fear and distress or prevent positive experiences such as contentment, play and rest, must be avoided. These include unnecessary handling or direct physical contact, inappropriate environmental design, fear through aggression or lack of refuge, and isolation for social animals.

Management and husbandry practices must consider the specific species requirements to promote positive experiences throughout the lifetime of all animals kept at the institution.

STAFF EXPERTISE AND BEHAVIOUR

All institutions should commit resources to:

a. Providing employees with systematic and consistent training in animal management and welfare practices to ensure that all staff members become experts in their field of work (training can be carried out by qualified specialists of the institution, as well as through the participation of the institution employees in specialized conferences and workshops held by EARAZA and other organizations);
b. Providing regular monitoring of staff behaviour and attitudes towards animal welfare and care.

VISITOR FACILITIES

Visitor facilities should at the minimum include the following: safe environment, adequately clean and well-maintained toilet facilities, wash facilities, and places where visitors can rest or take shelter from the exposure to adverse weather conditions.

INFORMATION AND WARNING SIGNS

a. Maps and directional signs showing the location of the animals on display and other visitor facilities should be in place in the institution.
b. Clear information about the rules of conduct for visitors should be presented on stands installed at the entrance to the zoo.
c. Signs requesting the public to refrain from interfering with the animals and feeding the animals must be conspicuously placed at appropriate places.
d. On each enclosure for animals on display there must be signs and illustrations that enable the visiting public to identity each species in the enclosure and provide information about the animals. It is recommended to include information on the conservation status, natural range and primary food sources of the species, and its physiological, anatomical and behavioural adaptations to the environment.

ETHIC COMMITTEE

All institutions must have an ethics committee where all welfare and ethical decision processes are referred to. The committee should be made up of relevant staff including managers, veterinarians, keepers, and educators.

ENHANCEMENT OF EARAZA ANIMAL WELFARE STANDARD

This EARAZA Animal Welfare Standard is a subject to periodical review and updating that shall be carried out by the EARAZA Animal Welfare Committee in consultation with relevant staff of EARAZA member institutions at least once every five years.