

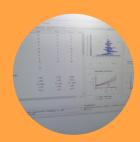


In 1999, by adopting the Zoos Directive*, the EU Member States pledged to ensure that every zoo or aquarium carries out:

ALL of these measures



Accommodate animals under appropriate conditions



Keep up-to-date animal records



Prevent animal escapes



Promote public education about biodiversity conservation

AND <u>at least one</u> of these four measures:



Captive breeding, repopulation or reintroduction into the wild



Research

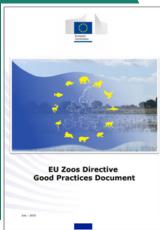


Training in conservation skills



Exchange of information related to conservation

The EAZA Standards, and the work of our Members, are broadly referenced as benchmark in the Good Practices Document published in 2015 to help EU countries achieve the objective of the Directive!



* the Directive is the overall EU umbrella. In the national law, each Member State may have interpreted it in a stricter way.

Check the nature protection laws in your country to find out what exactly is required!







Measure 1. Good Animal Care



How is it phrased in the Directive?

conditions which aim to satisfy the biological and conservation species, inter alia, by providing species specific enrichment of the enclosures. Maintaining a high standard of animal husbandry with a developed



The EU's Good Practices Document outlines good practice in all aspects of animal accommodation, husbandry, veterinary care, welfare assessments

and indicators, nutrition etc. The annexes list examples of husbandry manuals as well as case studies from all these areas.

Does being an EAZA Member mean you exceed the requirements of the Directive? **TES**, because:

Leading in zoo and aquarium animal management and care by maintaining healthy populations and individuals with positive animal welfare is our long-standing commitment and one of the focal areas of the EAZA Strategy 2017-2020.

The preamble to the Zoos Directive mentions EAZA and our Standards for the Accommodation and Care of Animals in Zoos and Aquaria as an example of good practice.

These Standards, available on our website*, present four areas of rules that each EAZA Member must comply with:

- Animal care welfare, health and hygiene, Population management, incl. reproduction,
- Animal care veterinary aspects,
- Safety and security.

EAZA makes available (and regularly updates) best practice guidelines for individual species, to ensure that animal husbandry across the Membership is based on data and evidence.

How does our community ensure excellence in this area?

Via **Standard-based accreditation**, done by experienced zoo professionals, for all EAZA Members when applying to join, and every several years.

Via **technical assistance and 5-year peer mentorship** for Candidates for Membership not yet complying with our Standards.

Via cooperation with international partners to remain at the forefront in the care for wild animals, provide excellent healthcare and exchange best practice in husbandry and animal welfare.

Via the **EAZA Animal Welfare Forum** (in March 2020*) bringing together animal welfare research and application, to improve evidence-based animal welfare best practice.





Measure 2. Record Keeping



How is it phrased in the Directive?

Keeping of up-to-date records of the zoo's collection appropriate to the species recorded.



The EU's Good Practices Document defines two roles for animal records:

1) They are a source of information for authorities during inspection and authorization,

2) They are essential for a zoo when planning and executing conservation, education and veterinary care programmes. Conservation activities depend on good animal records.

Internally, animal record databases assist zoological staff in caring for their animals as well as in population management. An up-to-date animal registry is important for administration, monitoring and control of the animal collection, as well as for animal welfare.

Externally, accurate records facilitate information exchange with other zoos, and are a valuable source of information for conservation scientists.

Does being an EAZA Member mean you exceed the requirements of the Directive?



EAZA Members are obliged to keep animal records on a computer system using the Zoological Information Management System (ZIMS), the world's largest set of wildlife data, maintained by Species360*.

This obligation is regulated in the Standards for the Accommodation and Care of Animals in Zoos and Aquaria, which also define which types of data are to be kept.

Provision of full data about all animals (where possible) is a prerequisite for the keeping of studbooks and for joint population management programmes - EEPs.

The data management policy of each Member is evaluated during the accreditation screening.

How does our community ensure excellence in this area?

The EAZA community participates in the shaping and evolution of ZIMS. Various aspects of its operation (e.g. medical data) are explained in EAZA Academy courses. Species 360 offers regular workshops at EAZA conferences.

Data collected in ZIMS can constitute the basis of various research projects, both internally in zoos and aquariums and with external research partners.

In 2019, a study by Species360 Conservation Science Alliance* showed that ZIMS data dramatically increase information needed to help save species.

* Visit www.eaza.net for all documents and information, and https://conservation.species360.org to know more about Species360 Conservation Science Alliance





Measure 3. Preventing Escapes



How is it phrased in the Directive?

Preventing the escape of animals in order to avoid possible ecological threats to indigenous species and prevent intrusion of outside pests and vermin.



The EU's Good Practices Document: zoos hold many animal species, most of them non-native. Zoo escapes have been reported worldwide, placing

zoos as potential sources of alien species if the animals escaped.

Although the importance of zoos in introducing invasive alien species (IAS) is low compared to other activities, such as horticulture or the pet trade, zoos must take every measure necessary to prevent the escape of their animals.

Does being an EAZA Member mean you exceed the requirements of the Directive? | Does being an EAZA Member mean you exceed the requirements of the Directive?

Our Members are obliged to prevent animal escapes, as regulated in the EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria*.

All zoo operators need possible escape routes within and from their institutions. In the case of an escape, emergency plans must be available, and staff must be trained to fully understand and practice them regularly.

While zoo escapes have been reported worldwide in the past, the European Code of Conduct on Zoological Gardens and Aquaria and Invasive Alien Species* recognizes that zoos and aquariums present a low risk in relation to IAS. Therefore, EAZA has been advocating that controlling these species (primarily through the EU's IAS regulation) must be done without detriment to the conservation role of zoos and aquariums as defined under the EU Zoos Directive.

How does our community ensure excellence in this area?

Via the EAZA's **Best Practice Guidelines** (BPG)* for the respective species or groups of species, that also contain guidelines on appropriate exhibit design including preventing escapes.

Via the **Exhibit Design and Planning course*** offered by the EAZA Academy.

Via the EAZA **Candidate for Membership programme**, a mentoring process - undertaken by a mentor from a Member zoo or aquarium - that includes making animal exhibits escape-proof.

* Visit **www.eaza.net** for documentation regarding Invasive Alien Species, BPG and information about the EAZA Academy courses





Measure 4. Education



How is it phrased in the Directive?

Promote public education and awareness in relation to the conservation of biodiversity, particularly by providing information about the species exhibited and their natural habitats.



The EU's Good Practices Document explains that zoo and aquarium education activities may involve:

• Undertaking public education

programmes directly related to conservation of biodiversity;

- Promoting the environmental, economic, cultural and intrinsic values of biodiversity;
- Promoting awareness of the impact of everyday habits on the wildlife conservation;
- Educating the public on adopting appropriate types of behaviour towards wildlife so as to contribute to the conservation of biodiversity.

Does being an EAZA Member mean you exceed the requirements of the Directive?



EAZA Members have an important role to play protecting nature and wildlife both at our zoos and in the wild, and communicating this role through conservation education is an important part of their work. Its principles are regulated in the EAZA Conservation Education Standards*.

Our Members follow the World Zoo and Aquarium Conservation Strategy, of which education is a key part. It recommends that regional associations "provide a coordinated approach to education, both formal and informal, and provide leadership in the formulation of principles, strategies, and minimum education standards."

How does our community ensure excellence in this area?

Every year, our Members receive **140 million visitors**, who can participate in conservation education actions that raise awareness, connect people to nature and encourage sustainable behaviours. But conservation education also takes place with our partners, within *in situ* projects and collaboratively on a global scale.

To maximize our community's **conservation impact** (a focal area of our 2017-2020 Strategy), we support EAZA Members to meet the Conservation Education Standards to deliver effective programming and content of learning opportunities.

For nearly 20 years **EAZA Conservation Campaigns** have addressed various threats to species and habitats, raised funds for field projects and promoting biodiversity awareness: from the first campaign focused on bushmeat and resulting in 1.9 million signatures - one of the biggest petitions ever submitted to the European Parliament - to our current campaign "Which Fish?" dedicated to the sustainability of aquatic resources."

* Visit **www.eaza.net** for the Conservation Education Standards and campaigns overview





Measure 5. Captive Breeding

Quoting the Directive:

"Captive breeding, repopulation or reintroduction of species into the wild" Zoo license holders must choose at least one of the four measures:











From the EU's Good Practices Document: captive breeding is probably the conservation activity in which zoos hold the most experience and expertise amongst the conservation community.

Does being an EAZA Member mean you exceed the requirements of the Directive? ves, because:

Cooperation in this field gave birth to EAZA in 1992. Joint population management in the EAZA Ex Situ Programmes (EEPs) - currently ~400 - has remained the backbone of our Association. EEPs* are guided by the IUCN SSC Guidelines on the Use of Ex Situ Management for Species Conservation and the One Plan Approach.

As summarized in the IUCN Guidelines, its possible roles are:

- Offset the effects of threats, by improving demographics and/or genetic viability of wild populations, especially small populations that face genetic isolation, reduced reproduction and reduced survival.
- threats to wild populations cannot be successfully and quickly addressed.
- Restore wild populations, when the primary threats have been sufficiently addressed, by

How does our community ensure excellence in this area?

and all potential resources available to achieve an integrated, holistic approach.

situ and ex situ needs of every species and determine how the population within EAZA, specifically in the EEPs, should help meet those needs. Some species require reintroductions (e.g. the Eastern black rhino - recently reintroduced to Rwanda) while other EEPs, if there is no immediate need or possibility for reintroductions, fulfil other roles as listed above.

Members play an important role in IUCN Specialist Groups and in other conservation bodies focusing on a broad variety of threatened species.









Measure 6. Research

Quoting the Directive:

"Participating in research from which conservation benefits accrue to the species"

Zoo license holders must choose at least one of the four measures:









Examples of research topics described the EU's Good Practices Document:

- Use of zoo data to create demographic projections and advance population management strategies.
- Development of technology for field work, e.g. Budapest Zoo tested a specific radiotelemetry in zoo meadow vipers before using it in their reintroduced peers.
- Research on wild animal health (e.g. physiological parameters) may directly contribute to that of their wild counterparts.
- Reproductive technologies (assisted reproduction and contraception).
- Conservation medicine (e.g. parasitology of wild vs. captive populations).
- Experimental wildlife conflict mitigation and management techniques.
- Sustainability issues.
- Conservation psychology (relation between human behaviour and the achievement of conservation goals) or conservation welfare.

Does being an EAZA Member mean you exceed the requirements of the Directive? VES , because:

EAZA's aspiration, as stated in our Research Strategy*, is that every European zoo and aquarium make a significant contribution to ethical, high-quality and effective research, particularly in biodiversity conservation and animal welfare.

High quality research is ensured by the EAZA Research Standards* which state:

- Zoo-based research should only be promoted when meeting a minimum quality and complying with the conservation and animal welfare aspirations of the zoo community.
- Projects should have a research proposal, an evaluation protocol and a research agreement that facilitates good flow of information between the zoo and external research partners.
- Fulfilling these and other EAZA Standards is an accreditation requirement for our Members.

How does our community ensure excellence in this area?

Via the **Journal of Zoo and Aquarium Research** (JZAR), an open-access forum - developed by EAZA - for novel, peer-reviewed research papers, reviews, technical reports and evidence-based case studies in zoo biology and related fields.

Via the **EAZA Biobank**, a primary resource for genetical support of population management and conservation research as well as to connect researchers to available samples.

The EAZA Members are well-established **research institutions or valued partners** in zoo-related research. We often showcase their research work on social media.

* Find our Research Standards and Strategy, JZAR and details about the EAZA Biobank on www.eaza.net Follow @EAZA01 on Facebook and @eaza on LinkedIn for the latest updates in zoo research and more





JOURNAL OF ZOO AND AQUARIUM RESEARCH







Measure 7. Training

Quoting the Directive:

"Training in relevant conservation skills"

Zoo license holders must choose at least one of the four measures:











This measure covers both conservation training for zoo professionals as well as training for other recipients at zoos.

Modern zoos could not operate without knowledgeable staff who make conservation-conscious decisions. Training of students not only prepares future zoo staff but also increases connections with other institutions and research output; training of inspectors contributes to good law enforcement and better communication between zoos and environmental authorities.

Does being an EAZA Member mean you exceed the requirements of the Directive?

ves, because:

Fostering skills for conservation is at the core of EAZA Conservation Standards*. Our Members are also bound by the World Zoo and Aquarium Conservation Strategy which recognizes that "no other group of institutions has the scientific knowledge and practical experience to keep and breed thousands of animal species, thereby offering enormous potential for contributing to wildlife conservation."

How does our community ensure excellence in this area?

With support from Fondation Segré, the **EAZA Academy*** was developed in 2010, offering specialised courses for all zoo professionals (keepers, educators, horticulturalists and more), in animal husbandry and nutrition, zoo and aquarium management, education, etc.

Zookeeping skills vary between European countries, who sometimes have standardised formal qualifications while others have scarce training opportunities. To overcome these differences, EAZA has partnered with institutions, using Erasmus+ funding, to develop the **European Professional Zookeeper Qualification Framework*** (EPZQF), identifying the key competencies required for professional zookeepers working in an EU zoo. The framework, its training modules are available online in 7 languages (so far) to anyone willing to learn about the key knowledge, skills, and competences zookeepers need.

The biennial **EAZA Conservation Forum***, open to non-EAZA Members as well, brings together professionals from zoological institutions, conservation organisations and field experts for workshops, presentations and other activities, contributing to the advancement of conservation skills in the community.

Exchange of skills takes place in the **IUCN bodies** that our Members and staff are involved in, above all: the Conservation Planning Specialist Group and a few dozen Specialist Groups under the IUCN Species Survival Commission for specific groups of species.

the IUCN Species Survival Commission for specific groups of species.
 * Find our Conservation Standards, conferences, courses and EPZQF information on www.eaza.net







Measure 8. Exchange of Information

Quoting the Directive:

"Exchange of information relating to species conservation"

Zoo license holders must choose at least one of the four measures:











Conservation needs to be strongly based on sound scientific evidence. Exchanging information related to species conservation emphasises the benefit of using and sharing conservation information, particularly to complement *in situ* and *ex situ* conservation programmes.

The Document further states that being members of professional associations, such as EAZA (and WAZA on the global level and national associations more locally) provides zoos with opportunities to exchange information.

Does being an EAZA Member mean you exceed the requirements of the Directive? Note:

EAZA believes transparency is key and a good flow of information is fundamental with bodies both from within and outside of our community.

How does our community ensure excellence in this area?

In addition to the **governing bodies** (Council, Executive Committee, Annual General Meeting), EAZA is composed of **10 committees** that oversee all the areas of work of our association.

Experts from EAZA institutions work in around 40 Taxon Advisory Groups and oversee around 400 EAZA Ex Situ Programmes. Their regular **meetings and mailing groups** serve exchange of latest knowledge and information.

All our governing documents, standards, guidelines and policies are **openly accessible** on www.eaza.net, as well as the Best Practice Guidelines for respective animal species.

Our quarterly magazine **Zooquaria** is available in printed version and online. So is the **Journal of Zoo and Aquarium Research** (see EU Zoos Directive Measure 6).

Members have access to an archive of internal documents in the **intranet** and receive our monthly **newsletter** by e-mail.

The various **EAZA conferences** - general (Annual Conference, Directors' Days) and specialized (biennial Conservation Forum, Animal Welfare Forum, Education Conference, European Zoo Nutrition Conference, Zoo Design Conference) - allow discussions. Many are open to non-Members.

Whenever a **long-term strategy** for a taxon (Regional Collection Plan) within EAZA is developed, experts from the respective Specialist Group of the IUCN Species Survival Commission are invited and expertise between *in situ* and *ex situ* is exchanged.

* Find all our governing documents, standards, guidelines and policies; Zooquaria; conference details on **www.eaza.net** and follow **@EAZA01** on Facebook and **@eaza** on LinkedIn for our latest news

