



# **EAZA Population Management Manual: Standards, procedures and guidelines for population management within EAZA**

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## Abbreviations and acronyms

<b>AI</b>	Artificial Insemination
<b>ALPZA</b>	Latin American Association of Zoological Parks and Aquariums
<b>APC</b>	Animal Populations and Conservation team at EEO
<b>ASMP</b>	Australasian Species Management Programme
<b>ATWG</b>	EAZA Animal Training Working Group
<b>AWWG</b>	EAZA Animal Welfare Working Group
<b>AZA</b>	Association of Zoos and Aquariums (North America)
<b>CAMP</b>	Conservation Assessment and Management Plan
<b>CPSG</b>	IUCN SSC Conservation Planning Specialist Group
<b>CEO</b>	Chief Executive Officer
<b>CfM</b>	Candidate for Membership
<b>CITES</b>	Convention on International Trade in Endangered Species
<b>CPM</b>	EAZA Conservation and Population Management team
<b>DNO</b>	Do Not Obtain
<b>EAAM</b>	European Association for Aquatic Mammals
<b>EAZA</b>	European Association of Zoos and Aquaria
<b>EEO</b>	EAZA Executive Office
<b>EEP</b>	EAZA Ex situ Programme
<b>EEP Cie.</b>	EEP Committee
<b>EAZA RGM</b>	EAZA Reproductive Management Group
<b>eNews</b>	Electronic newsletter sent out by EAZA
<b>EPMAG</b>	EAZA Population Management Advisory Group
<b>ESB</b>	European Studbook
<b>EU</b>	European Union
<b>EUAC</b>	European Union of Aquarium Curators
<b>F1</b>	First generation
<b>FL</b>	Fork Length (when measuring fish)
<b>GASP</b>	Global Animal Survival Plan (also referred to as GCS - Global Conservation Strategy)
<b>GCAR</b>	Global Captive Action Recommendation
<b>GD</b>	Gene Diversity



<b>GSMP</b>	Global Species Management Plan
<b>IATA</b>	International Air Transport Association
<b>ICAP</b>	Integrated Collection Assessment and Planning
<b>ISP</b>	Institutional Species Plan
<b>ID</b>	Identification or Identifier
<b>IUCN</b>	International Union for Conservation of Nature
<b>IUCN Red List</b>	IUCN Red List of Threatened Species
<b>IUCN SSC Specialist Group</b>	IUCN Species Survival Commission Specialist Group
<b>LTMP</b>	Long-Term Management Plan
<b>MAI</b>	Maximal Avoidance of Inbreeding
<b>M&amp;E</b>	EAZA Membership and Ethics Committee
<b>Mon-T</b>	Monitored by TAG, RSP category for non-managed species in EAZA, with no additional specific recommendation
<b>Mon-T REPLw</b>	Monitored by TAG, RSP category for non-managed species in EAZA, with a specific recommendation to replace the species with an EEP species.
<b>Mon-T Phase out</b>	Monitored by TAG, RSP category for non-managed species in EAZA, with a specific recommendation to phase the species out.
<b>Mon-T DNO</b>	Monitored by TAG, RSP category for non-managed species in EAZA, that are not held by EAZA Members and for which there is a specific recommendation to not obtain this species.
<b>MoU</b>	Memorandum of Understanding
<b>Mx</b>	Age Specific Fecundity
<b>OPA</b>	One Plan Approach
<b>PAAZA</b>	Pan African Association of Zoos and Aquaria
<b>PMx</b>	Software for analysis and management of pedigreed populations
<b>PMC</b>	Population Management Centre
<b>PMM</b>	EAZA Population Management Manual
<b>PMP</b>	AZA Population Management Plan
<b>QPA</b>	Quick Population Assessment
<b>Qx</b>	Age Specific Mortality
<b>RSP</b>	Regional Species Plan
<b>RWG</b>	Records Working Group
<b>SEAZA</b>	South East Asian Association of Zoos and Aquariums



<b>SPARKS</b>	Single Population Analysis & Records Keeping System
<b>Species360</b>	Not-for profit membership organisation providing the Zoological Information Management System (ZIMS)
<b>SSP</b>	AZA Species Survival Plan
<b>TAG</b>	Taxon Advisory Group
<b>TL</b>	Total length (when measuring specimen)
<b>WAZA</b>	World Association of Zoos and Aquariums
<b>WCPM</b>	WAZA Committee for Population Management
<b>ZAA</b>	Zoo and Aquarium Association (Australasia)
<b>ZIMS</b>	Zoological Information Management System
<b>Zooquaria</b>	Quarterly published magazine by EAZA
<b>Zootrition</b>	Zoo Nutrition Software Programme

## Introduction

This EAZA Population Management Manual (PMM) provides a thorough overview of the rules and procedures for, and gives guidance in relation to, population management in EAZA. The PMM is tailored towards three key audiences: EAZA Taxon Advisory Groups (TAGs), EAZA Ex situ Programmes (EEPs) and EAZA Members. The PMM is one of EAZA's key governing documents and includes Standards (must do) and Guidelines (should do) for EAZA Members to follow. There are five main chapters included in this PMM: (1) Background; (2) Regional Species Planning and Taxon Advisory Groups; (3) Rules and Working Procedures for EAZA Ex situ Programmes; (4) Institutional Species Planning and Management; and (5) Training and Further Information. Each chapter exist of a number of sub-chapters and paragraphs.

Chapter 1 provides general background information on the set up, development and the main principles and philosophies of EAZA's Population Management Structure. In Chapter 2 the Regional Species Planning process is explained and the roles, responsibilities and working procedures for TAGs are outlined. The third chapter provides a detailed explanation of the rules and working procedures for EEPs, including the do's and don'ts for the EEP Coordinator, EEP Species Committee and EEP participants, and when applicable, external partners participating in or cooperating with EEPs. The fourth chapter will zoom in on the species planning and management work and responsibilities of EAZA Members, for example acquisition and disposition of animals, and how these relate to the previous chapters as well to other EAZA documents such as the EAZA Standards for the Management and Care of Animals in Zoos and Aquariums (2014). The fifth and final chapter will zoom in on training possibilities in relation to the EAZA's Population Management activities and provide suggestions for further reading and information.

This PMM is tailored to the new EAZA Population Management Structure as approved by EAZA Council in April 2017 (Chester) and being rolled out from 2018-2023. Whilst we see some parts of the old structure disappear, most notably the European StudBooks (ESBs), these will gradually decrease in number until the implementation phase is completed in 2023. The 'old' ESB procedures will remain in place, unless otherwise specified, and will be presented in grey-colour or sometimes in separate box-texts, so it is clear which parts of the PMM will be deleted when all ESBs have migrated into the new structure.

With EAZA Membership and level of activities continuously growing, new rules and procedures are developed over time and therefore this manual can be regarded as a living document. For further information, please contact the EAZA Executive Office.

## 1 Background

This chapter provides an overview of the general foundations and concepts of (*ex situ*) population management and how these have informed EAZA's Population Management Structure as was approved by EAZA Council and AGM in April 2017. In the final section (1.3), the organisational structure of EAZA's Population Management activities is described.

### 1.1 Foundations and concepts of (EAZA) *Ex situ* Population Management

Since the mid-1980s cooperative breeding programmes in zoos and aquaria largely followed the "ARK paradigm". The default goal tended to be to build (mostly) closed, long term insurance populations that are demographically stable and large enough to maintain 90% of the gene diversity of the source population for 100-200 years (Soulé *et al.*, 1986). Animals that are part of these programmes would predominantly be kept on exhibit in many different zoos and aquaria within a region. This paradigm, with one clear 'concept' to get behind, was revolutionary and appropriate at that time. Cooperative species management among zoos and aquaria for the common good of populations was a relatively new concept that needed time to develop and has meanwhile become engrained in the culture within zoo and aquarium associations. EAZA and several other regional zoo and aquarium associations were at the time still in their infancy and now have well developed organisational frameworks for large scale *ex situ* population management. A few relatively younger zoo and aquarium associations are now in the midst of developing and further professionalising such frameworks. The ARK paradigm was a big stimulant for the development of the scientific principles, methods and tools for the management of small *ex situ* populations and these are currently well spread throughout the zoo, conservation and scientific community (Leus *et al.*, 2011). Through the course of the era of the ARK paradigm, zoos and aquaria were not only able to cope with the consequences of legislation governing the importation of wild origin individuals and the growing societal awareness of the need for species conservation and individual animal welfare but became advocates for these in their own right.

In more recent times, a number of internal and external developments and changes have taken place that are causing another paradigm shift (Baker *et al.*, 2011; CBSG, 2011; Barongi *et al.*, 2015; T aylor-Holzer *et al.*, in review):

- The world is continuing to experience rapid losses of species and populations and many of the extant populations are undergoing

significant declines and are becoming increasingly small and fragmented. A growing number of species can thus be expected to require intensive management of individuals and populations alongside other conservation actions to ensure their long-term persistence. Some of this intensive management may include *ex situ* management. Currently, conservation planning processes for *in situ* and *ex situ* populations often run largely in parallel (Redford *et al.* 2012, 2014); *in situ* stakeholders come together to develop conservation strategies/action plans to ensure viable *in situ* populations; and *ex situ* stakeholders do the same to ensure viable *ex situ* populations. This parallel approach may result in both communities missing out on the opportunity to make use of each other's wide range of expertise and experience; *in situ* plans perhaps paying insufficient attention to the potential need for intensive population management (*in situ* and/or *ex situ*); and *ex situ* plans not having the best design to make the strongest conservation contribution.

To help facilitate a more integrated approach to conservation, the Conservation Planning Specialist Group (CPSG) of the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN) has coined and is promoting the "One Plan Approach" (OPA) to species conservation planning: "*the joint development of management strategies and conservation actions for all populations of a species by all responsible parties to produce a single, comprehensive conservation plan for a species*" (Byers *et al.*, 2013). Simultaneously, IUCN SSC published its "Guidelines on the Use of *Ex situ* Management for Species Conservation", designed to help conservationists evaluate if, when and how *ex situ* management would be a valuable component of the overall conservation strategy for a particular taxon.

- Regional evaluations of the progress of programmes against the ARK paradigm's default genetic and demographic goals showed that many did not reach these (self-) sustainability criteria (Lees and Wilcken, 2009; Leus *et al.*, 2011; Long, Dorsey and Boyle, 2011). In reviewing these outcomes it became evident that standardised goals across all programmes did not sufficiently consider and reflect that these parameters are different in different context, across time and between taxa, which in turn led to the realisation that a priority assignment of the same role, goals and form to each programme was perhaps no longer the most appropriate way forward (e.g. Baker *et al.*, 2011; de Man *et al.*, 2016). Simultaneously a growing number of EAZA breeding programmes indicated that they felt limited by the fact that programmes had to be assigned to just one of two management categories (EEP or ESB), the characteristics of either

sometimes being inappropriate to the programme they ideally wanted to build. Over time differences between these categories had become somewhat arbitrary and they were not always applied consistently across Taxon Advisory Groups (TAGs). Furthermore, the growing diversity in the types of taxa managed in *ex situ* programmes highlighted the limitations of the traditional pedigree based analytical tools for some of these, in combination with the growing importance of molecular genetic techniques, assisted reproductive technologies, biobanks, etc.

To appropriately reflect the current breadth of population management activities, the needs of EAZA Members and the changes and opportunities within the conservation world at large, EAZA approved a new Population Management Structure in April 2017, following a thorough and holistic evaluation of EAZA's former population management structures.

### **1.1.1 Management of small populations**

Even if/when external threats can be managed, small populations can get caught up in an extinction vortex (Gilpin and Soulé, 1986; Frankham *et al.*, 2010) where demographic and genetic random events feed on each other to cause a high probability of population extinction. Random demographic events are issues such as normal environmental and intrinsic demographic variation in mortality rates, reproductive rates, sex ratio at birth etc., as well as catastrophes such as environmental catastrophes (floods, fires, etc.), disease outbreaks, political and/or economic instability etc. Random genetic events include loss of genetic diversity and inbreeding causing reduced fitness and evolutionary potential (genetic diversity makes natural selection possible). It is often readily accepted that small, fragmented wild populations thus require management to prevent extinction and ensure genetic and demographic health (i.e. that highly threatened species need intensive conservation actions, also at the level of individuals and populations). It should therefore come as no surprise that zoo and aquarium populations, which are both very small (compared to most wild populations) and very fragmented (spread over different institutions) need quite intensive management to be able to reach the conservation and/or non-conservation roles and the genetic and demographic goals and targets set out for them in Regional Species Plans (RSP) and Long-Term Management Plans (LTMP's).

Rather than automatically assuming one and the same role (insurance) and one and the same genetic/demographic goal (keeping a population large enough to be able to maintain 90% of gene diversity for 100 years) for each EAZA Ex situ Programme (EEP), the EAZA Ex situ Programme Structure approved by EAZA Council in 2017 was developed so that the Regional Species Plan (RSP)s more

precisely and more consciously evaluate which conservation and/or non-conservation roles are appropriate for which taxon, and so that the Long-Term Management Plans (LTMPs) investigate in more detail which genetic and demographic goals are best linked to the assigned roles and the situational circumstances of the taxon. Whereas developing (non)-breeding and transfer recommendations has traditionally received relatively more attention, other elements will see increased focus in addition to these recommendations, such as jointly developing strategies for socio-behavioural management, education, veterinary issues, banking, data gathering and research. The LTMPs are designed to provide a full action plan for the taxon to maximise the chances of it reaching its roles and goals.

Pedigree analysis is currently the most commonly used method for genetic and demographic management of zoo/aquarium populations and this has proven to be very effective for species with relatively complete pedigrees and with individuals that can be marked and managed at the individual level. The growing diversity in the types of taxa managed in *ex situ* programmes and the roles and goals assigned to them, together with rapid progress and development in various scientific fields (e.g. molecular genetics, biobanking, assisted reproduction, etc.) can be expected to lead to a growing number of cases in which pedigree management will (need to) be complemented with, or replaced by, other techniques. EAZA's present format for RSPs, EEP applications and LTMPs is designed to more rapidly and systematically identify those needs and opportunities, which is expected to lead to a) an intensification of partnerships between EEPs, EAZA committees and working groups, and external scientific partners; and b) a growing stimulus and momentum for the development of new science and tools.

In [Appendix 1: References and Recommended further reading](#) an overview is provided of the publications referred to in this chapter as well as a few suggestions for further reading if one wanted to take a deeper dive into topics described.

## 1.2 Outline of EAZA's Population Management structure

The EAZA Population Management Structure that was approved by EAZA Council in 2017 has taken the foundations and concepts as described in the previous section on board and is built around three main pillars:

1. **Regional Species Plan (RSP):** In the spirit of the One Plan Approach and through the application of the 5-STEP decision making process in the IUCN Guidelines on the Use of *Ex situ* Management for Species Conservation, Taxon Advisory Groups (TAGs) will decide which species are

recommended to be managed under an EAZA *Ex situ* Programme (EEP) and what the precise direct, and/or indirect, and/or non-conservation roles of each EEP will be. EEPs are defined as population management activities that are endorsed by EAZA for species that are managed by EAZA Members aiming towards (maintaining) healthy populations of healthy animals within EAZA or beyond. For species that are not considered for active management, the TAG will monitor the population trend. Each RSP will be submitted to and approved by the EAZA EEP Committee.

2. **Application for an EAZA Ex situ Programme (EEP):** For each new EEP that is recommended in an RSP (and during the transition phase for each already existing EEP/ESB that the first RSP “new style” recommends to be continued as a ‘new EEP’) an EEP application template will be completed. This template contains a series of questions concerning the envisaged participants, governance and general biological characteristics of the EEP that guide the TAG to make conscious decisions, rather than automatic assumptions, about the form and functioning of the EEP. The TAG can suggest tailor made options where the default is not in the best interest of the programme. Each application will be submitted to and approved by the EAZA EEP Committee.
  
3. **Long-Term Management Plan (LTMP):** At regular intervals (~5 years by default, but adaptable according to the needs of the EEP) a LTMP will be produced for the EEP. Following from the precise role(s) and very general biological characteristics of the EEP as defined in the RSP and EEP application, the LTMP will more precisely define the long term genetic and demographic goals for the programme and will stipulate an action plan with all the strategies and activities (e.g. demographic and genetic management, behavioural management, veterinary protocols, welfare science, data collection and research, education aspects, *in situ* support, etc.) to be implemented in the next 5 years in order for the EEP to stay on target in reaching its roles and goals. A LTMP may, but does not necessarily, include (non)breeding and transfer recommendations. When included, these recommendations will typically focus on the next breeding cycle and not cover the full span of the (5-year) LTMP. The EEP Coordinator and Species Committee are responsible for making further recommendations in the interim period between the publication of two LTMPs as often as is appropriate and required. Each LTMP is approved by the EEP Species Committee or equivalent (when in place) and after approval circulated to the all EEP participating institutions and the relevant TAG for information.



### 1.3 EAZA Organisational Structure for Population Management

The EAZA Council has delegated the responsibility for managing and overseeing the EAZA Population Management Structure to the EEP Committee, one of the standing committees of EAZA. The EEP Committee envisions that EAZA animal populations contribute to global biodiversity conservation and reconnect people with nature, inspiring them to care for the natural world. Without animal populations EAZA Members cannot contribute to global biodiversity conservation or reconnect people with nature. Regardless of whether the conservation contribution takes place *in situ* and/or *ex situ* and is direct or indirect, to be successful it is important that populations that are part of an EAZA programme are managed scientifically, cooperatively and professionally as well as realistic to their set roles and goals. Healthy populations of healthy animals are what EAZA aims to achieve with its population management programmes.

Core tasks overseen by the EEP Committee include: development and implementation of population management standards, rules, procedures and guidance; the publication of Regional Species Plans (RSP) and EAZA Best Practice Guidelines (BPG); approval of new, and changes to, TAGs and EEPs; approval of non-EAZA EEP participation and cooperation with other partners in relation to population management; addressing EEP related complaints, using the EAZA Sanctions document if needed be; and liaising with population management programmes in other regions. In alignment with the EAZA Strategies as developed every four years, the EEP Committee develops four-year Committee Action Plans that are available on the EAZA Member Area for more information.

EAZA Taxon Advisory Groups are at the heart of the EAZA Population Management Structure. For the taxa under its umbrella, TAGs are responsible for developing, implementing and updating the TAG's Regional Species Plan (RSP). The TAGs are supported in this task by the team at the EAZA Executive Office (EEO). TAGs oversee the EAZA Ex situ Programmes (EEP) run under their umbrella and provide support to the EEP Coordinator and EEP Species Committees in the day-to-day management of the programme, as well as provide guidance to the EAZA Membership in this regard. Another important task of the TAGs is the coordination of the production of EAZA Best Practice Guidelines (BPG) for the managed taxa under the TAG's umbrella. TAGs share the responsibility for the approval of non-EAZA EEP participants and other partners with the EEP Committee. For further details on the important role of EAZA TAGs please refer to [section 2.1.1 General TAG principles](#).

An EEP Coordinator, together with the EEP Species Committee (if in place) are responsible for the day-to-day management of each of the EAZA Ex situ

Programmes (EEP). Developing, implementing and updating a Long-Term Management Plan (LTMP) is one of their core tasks, which is supported by the team at the EAZA Executive Office. Managing the EEP studbook dataset, developing (non-)breeding- and transfer recommendations, catering to the needs of EEP holders in alignment with the goals of the population, and publication of studbook and annual reports are other important tasks of the EEP. More details on the working procedures for EAZA Ex situ Programmes are included in chapter 3 Working procedures for EEPs and ESBs.

In addition to the work of the TAGs and EEPs, the EEP Committee oversees three Working Groups, namely: EAZA Population Management Advisory Group (EPMAG), Animal Training Working Group (ATWG) and Animal Welfare Working Group (AWWG).

The EAZA Population Management Advisory Group (EPMAG) provides advice to, and shares expertise with, the EEP Committee, TAGs, EEPs and the team at the EAZA Executive Office, in relation to (*ex situ*) population management science and tools. This working group will work in close cooperation with the EAZA Population Management Centre. For more information please refer to the EPMAG pages on the EAZA website.

The EAZA Animal Training Working Group (ATWG) is in place to assist EAZA institutions with improving their animal training programmes. The ATWG aims to: develop and disseminate training protocols; share knowledge on the use of the most ethical, positive, least intrusive, and science-based animal training methods for positive animal welfare; establishing and maintaining a network of professional experts; and, contribute towards using animal training best practice into the process of enclosure design. For more information please refer to the ATWG pages on the EAZA website.

The EAZA Animal Welfare Working Group (AWWG) supports and advises EAZA *Ex situ* Programmes, Taxon Advisory Groups and other EAZA Committees and Working Groups in animal welfare best practice through applied, evidence-based, animal welfare science, in order to promote positive animal welfare throughout all EAZA institutions. For more information please refer to the AWWG pages on the EAZA website.

The EAZA Records Working Group (RWG) operates under the strategic framework as overseen by the EEP Committee and aims to advise and guide EAZA institutions in their recordkeeping standards and technical abilities. The EAZA RWG will provide a platform of open communication and knowledge sharing on best practice for registrars and recordkeepers within the EAZA

community. The EAZA RWG will act as a support for the EAZA Taxon Advisory Groups, EAZA committees and Working Groups on topics that involve animal related data. The EAZA RWG will predominantly focus on the husbandry side of animal data and the technical skills required. The EAZA RWG will collaborate with and support the EAZA Veterinary Committee (and EAZWV) where necessary, but the Veterinary Committee will continue to lead on medical animal data. For more information please see the RWG pages on the EAZA website.

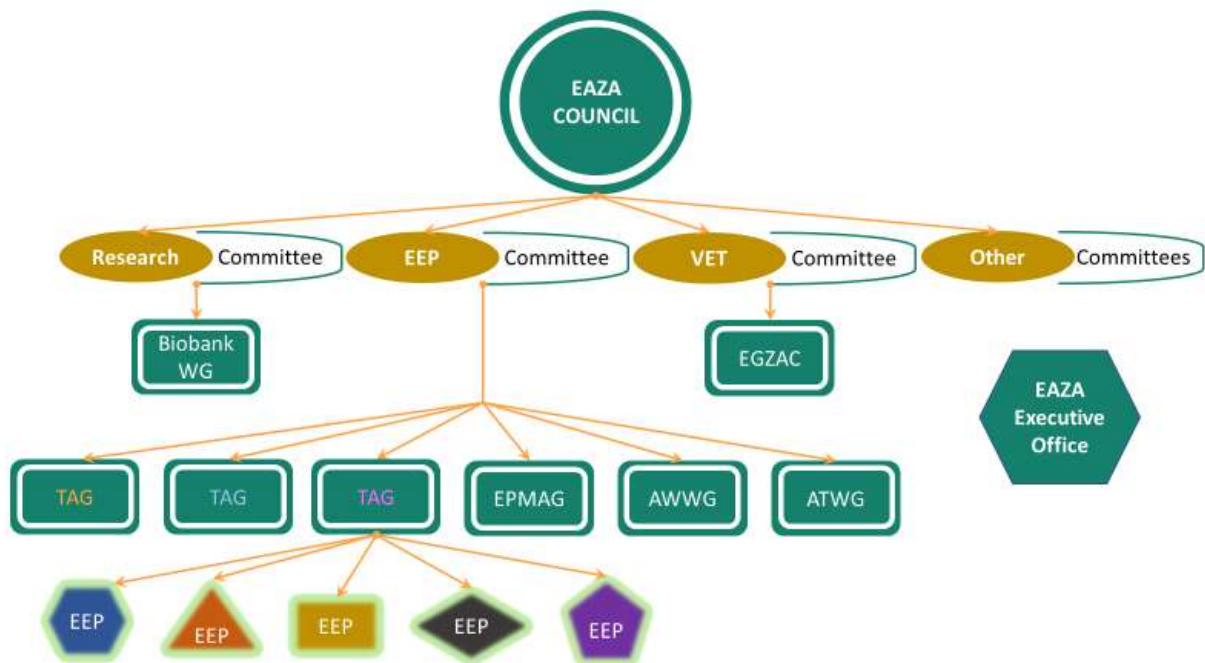


Figure 1 Organisational Overview of EAZA Population Management structure

The EEP Committee works closely together with other committees in the EAZA structure that provide important contributions to the successful implementation of the EAZA Population Management Structure. Most notably these are the Conservation Committee, Aquarium Committee, Veterinary Committee and Research Committee, which each have representation in the EEP Committee. As part of the approved Population Management Structure it is also to be expected that cooperation with the Education Committee will increase in the future.

Two working groups under the umbrella of the Veterinary Committee and Research Committee, respectively have a direct link to population management that require specific mentions here: the EAZA Reproductive Management Group (EAZA RGM) and the EAZA Biobanking Working Group.

EAZA RGM is a working group under the Veterinary Committee of EAZA and their mission is to support the EEPs, TAGs and EAZA Membership at large in relation to reproductive management in general and the use of animal contraception in

particular. For more information refer to [chapter 4.2.8 Contraception \(and the EAZA Reproductive Management Group\)](#) and the EAZA RGM page on the EAZA Member Area.

The Biobanking Working Group falls under the umbrella of the Research Committee. The purpose of the BioBanking Working Group is to help develop dedicated biobanking facilities within the EAZA zoo and aquarium community. This EAZA BioBank aims to be a primary resource for supporting population management and conservation research by using molecular genetics and genomics tools. For more information refer to [chapter 4.8 EAZA Biobank](#) and the Biobanking Working Group page on the EAZA website.

The EAZA Executive Office (EEO) provides day-to-day support to the EEP Committee, TAGs, EEPs, working groups and other committees referred to above. Although not exclusively, this is mostly through the Conservation and Population (CPM) department of the EEO, which is divided into the Animal Programmes and Conservation (APC) team and the Population Management Centre (PMC) team.

The APC team, among other tasks, supports the EAZA TAGs in the development of their Regional Species Plans (RSPs). Whereas the TAGs will be responsible for the content of the RSP publication as well as the decisions as to which species to propose to actively manage (EEP) and which species not to manage but to monitor (Mon-T), the APC team will be responsible for facilitating the RSP process and the technical preparation of the RSP publication for TAG approval.

The PMC team, among other tasks, will contribute to the development of Long-Term Management Plans (LTMPs) for the EAZA Ex situ Programmes (EEPs). The LTMP process can be facilitated by staff of the PMC team and/or members of the EAZA Population Management Advisory Group (EPMAG). Approval of the LTMPs lies with the EEP participants (or a representation thereof, e.g. an EEP Species Committee if in place). The PMC team will also focus on progressing population management science and further development of population management tools. Both teams work closely together, as well as with the Reproductive Biology Coordinator and Biobank Coordinator roles that are part of the Species Conservation department of the EEO.

## 2 Regional Species Management and EAZA Taxon Advisory Groups (TAGs)

This chapter outlines the working procedures for EAZA Taxon Advisory Groups (TAGs) and details the procedures for important regional species management topics such as the publication of Regional Species Plans (RSPs) and EAZA Best Practice Guidelines (BPGs).

### 2.1 TAG working procedures

This section on TAG working procedures intends to specify and explain the duties and responsibilities of a TAG, to document formally the work currently being carried out by TAGs and to provide guidance to manage TAGs. The procedures should include everything a TAG Chair, member or Advisor needs to know in order to fulfil his/her role in the TAG satisfactorily. Additionally, paragraph 1.2 aspires to ensure effective communication between TAGs, EEP Committee and the EAZA Executive Office.

There is a main **general** sub-section (2.1.1), which includes information on the structure and role of the TAG and its position within the organisational structure of EAZA, as well as the responsibilities of the TAG Chair. The following sub-section 2.1.2 Initiation and establishment of a new TAG explains a series of procedural points regarding TAG positions and their appointment, as well as steps in initiating a change in the remit of existing TAGs.

#### 2.1.1 General TAG principles

##### *Structure and role of a TAG*

Each TAG consists of:

- A **Chair** and one or more **Vice chair(s)**. The EEP Committee nominates and appoints TAG Chairs and TAG Vice chairs. The TAG Chair is responsible to the EEP Committee. TAG Chairs are appointed for a period of five years and can remain in position for two five-year terms. TAG Chairs that step down are encouraged to continue as member of or Advisor to the TAG.
- A **core group** comprising all EEP Coordinators and European Studbook (ESB) keepers and TAG veterinary Advisor(s).

- A **membership** comprising a balanced representation of EAZA Member institutions with special interest in and/or expertise on the taxa covered, including a broad range of zoo disciplines.
- Experts on a specific field (e.g. veterinary, nutritional, education, research, conservation and animal welfare) working for an EAZA institution may be invited into the group as **(internal) Advisors**. Additional procedures are in place for appointed EAZA Veterinary Advisors (see [3.9.5 Veterinary Advisors](#) and [Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs](#) for more information).
- Appropriate experts from outside the EAZA zoo community may be invited into the group as **(external) Advisors**, e.g., IUCN/SSC specialist group Chairs, scientists and TAG Chairs in other regions.

The TAG Chair, Vice chair, all TAG members and internal Advisors all have one vote each. External Advisors are always non-voting members of a TAG. The majority vote is decisive and binding. All voting members must be given the opportunity to vote. Approving documents such as Regional Species Plans (RSP), EAZA Best Practice Guidelines (BPG) and approval of appointing Chairs, members or Advisors, and setting up new programmes, are topics that the TAG could vote on.

There is no maximum number of TAG members and Advisors. Members of the TAG who are not part of the core group can be delegated other responsibilities, e.g. coordinating EEP evaluations, in situ conservation projects and research projects, thereby further distributing the workload to benefit the whole TAG, and allowing more interested people the opportunity to participate actively in the TAG. However, TAG Chairs should be cautious about having too many TAG members, as the TAG may then become difficult to manage in terms of meeting arrangements and delegations.

TAGs that cover a large number of species and/or EAZA Ex situ Programmes can divide the group into subgroups with additional Vice chairs or appointed leaders in order to organise the workload more efficiently. The TAG can be divided in taxonomic and/or theme subgroups (see Box 1).

Box 1: Example themed subgroups of the EAZA Antelope and Giraffid TAG

For example, the Antelope and Giraffid TAG is divided into taxonomic subgroups (Okapi and Giraffe, Arid Land species, Woodland species and Savannah species) and theme subgroups (Conservation, Research and Education). The appointed subgroup leaders have the following responsibilities:



- Presenting reports on their subgroup in the Antelope and Giraffid TAG section of the EAZA Annual Conference.
- Summarising activities occurring in their subgroup and drawing attention to particular areas of interest.
- Providing the TAG Chair/Vice chair with a summary of their presentation in advance of meetings. The TAG Chair/Vice chair will minute any ensuing discussion during meetings.
- Representing the TAG's interests to relevant EAZA committees and working groups as appropriate.
- Stimulating and supporting the work of EEP Coordinators/Studbook Keepers and ESB keepers for "their" taxa within the subgroup.
- Bringing new issues to the attention of the TAG Chair/Vice chair and advising them on necessary changes in the RSP.

### *Responsibilities of the TAG*

- Develop and oversee the implementation of a Regional Species Plan (RSP) for the EAZA region in close cooperation with the team at the EAZA Executive Office. The RSP process is explained in detail in [section 2.2 Regional Species Planning](#).
  - Advise the EEP Committee on which species require management through cooperative EAZA Ex situ Programmes (EEPs) and propose candidates to the EEP Committee to fulfil the roles of EEP Coordinator for those species.
  - Assist EEP Coordinators and ESB keepers in the development of their programmes.
  - Monitor the performance of EEP Coordinators and ESB keepers. Assist them with finding solutions to problems and answers to questions.
  - Be proactive in communications and respond in a timely fashion to queries from EEP Coordinators, EAZA Members and other parties (even if an answer cannot (yet) be given or a request cannot be made).
- Evaluate each EEP at least every five years, or more often if considered necessary by the TAG or EEP Committee. The evaluation is about the programme and not about persons. Organising the evaluation is the responsibility of the TAG. The procedure comprises questionnaires answered by the EEP Coordinator, the Species Committee, (a percentage of) the participants, the TAG representatives, and the EAZA



Executive Office. The evaluation procedure is described in further detail in [3.17 EEP evaluations](#).

- Provide input into the TAG evaluation process as coordinated by the EAZA Executive Office on behalf of the EEP Committee and provide proactive follow up on any action outcomes deriving from the evaluation.
- Oversee the production of EAZA Best Practice Guidelines for all recommended taxa covered. A template with the general outline and desired contents of EAZA Best Practice Guidelines (BPG), as well as information about the publication process, is found in [Appendix 4: EAZA Best Practice Guidelines template](#)
- Where and when relevant support the EEP Committee with development of discussion documents, procedures and guidelines on population management in general and specific to the taxa under the umbrella of the TAG (e.g., MoUs with external partners, decisions in relation to non-EAZA EEP participation, etc.).
- Support the EEP Coordinators and EEP participants with managing, and where possible solving, complaints in relation to the management of the EEPs under the umbrella of the TAG. Work with the EEP Committee to address complaint situations that cannot be solved on TAG level. For more information see [section 3.20 EEP/ESB Complaint procedure](#)
- Identify research priorities in cooperation with the EEP Coordinators. It is important to get an overview regarding which studies are most urgently needed for a particular species/species group. Optimising husbandry and welfare are a high priority, and research on topics such as nutrition, housing facilities and reproduction may be necessary. Zoo research can also directly benefit *in situ* conservation efforts by providing data on life history of species and use of management techniques. The Long-Term Management Plan (LTMP) development process is set up to address and document such priorities. Research Advisors could assist in/undertake the writing of research proposals and organising and planning the projects as can the EAZA Research Committee (See *Developing the research potential of zoos and aquaria. The EAZA Research Strategy* produced by Reid, G. McG., MacDonald, A.A., Fidgett, A.L., Hiddinga, B., Leus, K. 2008. EAZA Executive Office, Amsterdam).

- Provide a central point to access information on topics relevant to taxa covered. All TAG documents, including RSPs and EAZA Best Practice Guidelines as well as meeting minutes and important references, news, overview of TAG members and Advisors and contact details can and should be made available on the EAZA website in the Member Area. It is the TAG's responsibility to update its section of the website regularly. The TAG liaison at the EAZA Executive Office can be consulted for assistance.
- Actively encourage and/or advise the EAZA Membership to hold the appropriate taxa in accordance with the RSP, and to manage these taxa following TAG recommendations and guidelines.
- Integrate zoo work with *in situ* conservation programmes where possible and appropriate. The TAG is encouraged to consult the EAZA Conservation Committee for cooperation and assistance as needed. Furthermore, the TAG should encourage EAZA Members to enter conservation related activities in the EAZA Conservation Database, which can be found at [www.eazaconservation.org](http://www.eazaconservation.org). The Chair of the Conservation Committee or liaison of the Conservation Committee at the EAZA Executive Office will be the first point of contact.
- Develop or encourage the development of educational material for their taxa.
- Provide a TAG Annual Report for inclusion in the overall EAZA TAG Annual Report publication.

#### *The tasks of a TAG (Vice) Chair(s)*

The role of TAG Chairs and Vice chairs is to direct, facilitate, coordinate and report on the TAG tasks specified above. Although tasks can be delegated to the Vice chairs, it is the TAG Chair's responsibility to ensure that these tasks are performed and that the appropriate reports and other documents are produced in a timely fashion on a regular basis.

The TAG Chair should ensure that:

- **A meeting is convened at least once a year.** Meetings may be held during the EAZA Annual Conference or during mid-year meetings or at other times if necessary. The TAG Chair can decide if such meetings are closed (with only the TAG members attending), or if it is open to all EAZA Members. Meetings during the EAZA Annual Conference are preferably open and will likely function to present on the work and activities of the

TAG to the EAZA community and share and discuss new developments and key issues that need to be addressed. The mid-year meetings will more likely function as working meetings to discuss relevant issues in more depth and develop documents and strategies on a number of topics (e.g. conservation, research, veterinary issues, RSPs and BPGs). Meeting minutes should be produced during each meeting, finalised and published on the relevant website pages. During meetings, the TAG Chair should review aims and achieved results with the members. Regular contact with the members by e-mail, phone, online meeting platforms, etc. should be encouraged.

- A **Regional Species Plan** is prepared and updated according to new developments (See also [chapter 2.2 Regional Species Planning](#)).
- General **EAZA Best Practice Guidelines** for recommended species are produced and regularly updated according to the newest scientific standards. Depending on the species covered, general guidelines for the whole group may be published, rather than having separate manuals for every individual species.

Species-specific guidelines are the responsibility of Studbook Keepers and EEP Coordinators; however, the TAG is responsible for coordinating the production as well as approving these guidelines and submitting them to the EEP Committee for endorsement (for further information on EAZA Best Practice Guidelines see [chapter 2.3 EAZA Best Practice Guidelines](#)).

EAZA Best Practice Guidelines are published on the public EAZA website and Member Area and “owned” by the EAZA community.

- **EEP evaluations are undertaken;** i.e. the appropriate forms for each section are distributed to the relevant colleagues and collected after completion. Once all forms have been received, the results should be summarised using the available template and sent to the EEP Committee through the EAZA Executive Office.
- **TAG evaluations are contributed to** and outcomes of TAG evaluations are discussed within the TAG and any action items concluded as part of the evaluation process are taken on board for follow up towards set or otherwise realistic deadlines.

- **Problems are solved in a timely and appropriate manner**  
Problems within the framework of EEPs should be solved at the lowest possible level. EEP participants should try to solve problems together with the EEP Coordinator and the Species Committee. When a suitable solution cannot be found within this framework, the relevant TAG can be asked to help solve the problem. The TAG Chair's role is to find a solution that satisfies both parties without comprising on the most important TAG and EAZA procedures and principles. A complaint should be forwarded to the EEP Committee only if the problem cannot be solved at TAG level. Documentation of the issues as well as the steps that so far were taken trying to solve the problem is important and must be sent along to the EEP Committee. Please refer to [section 3.20 EEP/ESB Complaint procedure](#) for further information.
- **Research priorities are determined** and identified according to current problems or questions within the TAG, and which address the needs of species within the RSP designated as "priorities" for research. The TAG may contact the EAZA Research Committee for assistance. The EAZA Research Strategy is recommended as a guideline and includes an Action Plan defining the TAGs' responsibilities for research identification and implementation.
- **TAG information on the EAZA Member Area is updated** regularly and all documents are made accessible to the TAG members and the EAZA Membership.
- **Appropriate and timely replies are given** when TAGs are contacted by TAG members, TAG Advisors, EAZA Members, the EEP Committee, the EEO or other relevant parties. Replies may include that the TAG does not (yet) prioritise a certain topic or action, that the TAG does not know the answer (yet) or is working on a topic towards a certain deadline and that patience will be required before coming back with a detailed answer.
- **Information of TAG goals and activities is disseminated**, via the EAZA website, the EAZA eNews, EAZA's quarterly-published magazine Zooquaria and other publications.
- Links are developed with ***in situ* conservation activities**. The TAG may contact the EAZA Conservation Committee for assistance and/or consult the EAZA Conservation Database ([www.eazaconservation.org](http://www.eazaconservation.org)).

- When applicable the TAG will coordinate the stakeholder processes of working towards ensuring the rules and procedures for releasing animals into the wild are met, as are described in chapter [4.3 Releasing animals to the wild](#).
- **The following information is distributed** to TAG members and Advisors, as well as to the EAZA Executive Office: minutes of all TAG meetings held, the TAG Annual Report, all editions of Regional Species Planning documents, copies of all best practice guidelines and studbooks published.
  - The EEP Committee strongly encourages sending copies of these documents to TAG Chairs in other regions and to IUCN/SSC Specialist Group Chairs, when this is relevant. The EAZA Executive Office can assist with bridging between the TAG and the relevant IUCN SSC Specialist Group(s).
  - These documents will be published on the TAG workspaces of the EAZA Member Area. TAG Chairs have the possibility to manage the content of these pages themselves.
- The annual **TAG Chairs meetings** are regularly attended, to support efforts to improve the TAG cohort and to build cohesion among TAG Chairs.
- The TAG **liaises with other TAGs** in EAZA and with relevant TAGs and other experts in other regions.
- **TAG statements** are produced when relevant. Please note that TAGs cannot produce official EAZA rules and procedures and that any TAG statements should be forwarded to the EEP Committee and EAZA Executive Office for information. Rules, procedures and official positions must be approved by the EEP Committee and later on by Council (and in some cases the Annual General Meeting). In cases where TAGs wish to make TAG statements stronger, the statements can be forwarded to the EEP Committee for discussions and possible approval. TAG statements should be developed, approved and published separately, prior to any inclusion of such statements in other documents like Regional Species Plans (RSPs) or Best Practice Guidelines (BPGs). The implementation of TAG statements should be monitored, and the statements should be reviewed (and updated) at relevant intervals.

Both the TAG Chairs' and the TAG Vice chairs' working performances are evaluated by the EEP Committee every five years. Evaluation is according to the agreed division of labour between the Chair and Vice chair(s). If a TAG (Vice) Chair consistently fails to perform his/her tasks, the EEP Committee may decide not to reappoint him/her, and to request that the TAG suggests a replacement. In rare cases, this may take place before the end of the five-year evaluation period. TAG (Vice) Chairs may appeal (in writing) against such a decision, and such appeals will be considered by the EEP Committee after soliciting the opinions of TAG members.

#### *The tasks of the other TAG members*

Assist or advise the TAG (Vice) Chair(s) when/where ever possible or requested.

TAG members

The evaluation process of TAG members' working performances may have two parts:

- a. TAG members being an EEP Coordinator and/or ESB keeper  
Obligations of EEP Coordinators and ESB keepers are listed in chapter [2 Regional Species Management and EAZA Taxon Advisory Groups \(TAGs\)](#)  
The TAG Chair/Vice chair monitors EEP and ESB activities and endeavours to see that the procedures are adhered to, offering help and support where necessary. They will also issue a warning to Coordinators/Studbook Keepers who are not performing adequately. Consistent failure of an EEP Coordinator/ ESB keeper to perform these tasks despite help and/or warnings from the Chair/Vice chair will be reported – after consultation of the supporting institution and the Species Committee members - to the EEP Committee by the TAG Chair. Based on such reports the committee may decide to dismiss the Coordinator/Studbook Keeper from the position. Normally this should be decided as part of the five-year evaluation of that EEP but in urgent cases this can be decided whenever necessary. The TAG will be asked to suggest a replacement for approval by the EEP Committee. A lapsed EEP Coordinator/ ESB keeper will not normally remain as a TAG member unless there are extenuating circumstances.
- b. TAG members without a species programme management task  
It is up to the Chair to evaluate his/her TAG members who are not an EEP Coordinator and/or ESB keeper. The TAG Chair is responsible for proposals regarding continuation of a person's membership based on the evaluation, and the TAG as a whole is responsible for deciding on this matter. Only those persons who are active and really involved should be a member of the

## TAG.

Internal and external Advisors are added to a TAG to have a special expertise incorporated in the TAG. When relevant or requested they can be asked for advice. Active input and commitment is required from all Advisors. The TAG Chair should ensure that all members and Advisors are actively involved in the TAG's work. All TAG members should regularly attend relevant TAG meetings, which for most members comes down to at least once a year.

### *TAG evaluations*

The EAZA Taxon Advisory Groups (TAGs) are at the heart of EAZA's species planning and management framework. TAGs are responsible for producing, implementing and updating Regional Species Plans and Best Practice Guidelines as well as monitoring the functioning of the EAZA Ex situ programmes that are run under the remit of the TAG. TAGs also have increasing responsibilities towards research and in situ conservation activities. It is thus of crucial importance that TAGs function to the best of their abilities. Hence the EEP Committee and EAZA Council consider it important to evaluate the functioning of the TAGs cyclically to get an idea of how TAGs are operating, what goes well and what are problems and challenges the TAGs are facing. The aim of such an evaluation is to improve the process of how a TAG functions and to improve and maintain a level of quality of its output.

#### *Procedure*

*As TAGs report to the EEP Committee in the EAZA structure, the TAG evaluation procedure is overseen by the EEP Committee and coordinated by the EAZA Executive Office (EEO). The order of evaluations will be decided upon by the EEP Committee to ensure the workload gets divided equally over the years. The TAGs are evaluated according to a five-year cycle. With around 40 TAGs that means 8-9 TAGs will be evaluated annually. A TAG can, however, ask to postpone its evaluation for one year. An evaluation will be launched by the EEO.*

*TAG chairs are asked to complete a standard questionnaire (see [Appendix 5 a: TAG Evaluation - TAG Chair Questionnaire](#));*

*TAG members (including vice chairs, internal advisors) are asked to complete a standard questionnaire (see [Appendix 5 b: TAG evaluation - TAG member questionnaire](#));*

*The EEO completes a questionnaire (see [Appendix 5 c: TAG Evaluation - EEO Questionnaire](#));*

*Input from the three questionnaires will be summarised in a summary report (see [Appendix 5 d: TAG Evaluation: Standard Summary Report](#)) that will be reviewed by the TAG evaluation subgroup that will submit a report to the EEP Committee.*



*Members of the subgroup and the resp. TAG liaison will discuss the results with the Chair and Vice-Chair before getting back to the TAG with a final response of the EEP Committee.*

#### *TAG Chair questionnaire*

*Per TAG one 'TAG Chair questionnaire' should be completed. The EEO will launch the Evaluation and circulate the questionnaire to the TAG chair. It is up to the chair to communicate with and include input from the vice chair(s). The vice Chairs will get the possibility to complete a TAG member questionnaire.*

#### *TAG member questionnaire*

*The EEO will ask the TAG chair for the most current overview of TAG members and distribute the 'TAG member questionnaire' to all members (including vice chair(s)) and internal (EAZA Member -based or -supported) advisors of the TAG. TAG members will be asked to send completed questionnaires to the EEO, who will collate the results. At least 50% of the TAG members should complete the questionnaire to get representative results.*

#### *EEO questionnaire*

*The EEO will complete the EEO questionnaire.*

#### *TAG Evaluation subgroup*

*The EEP Committee mandated an evaluation subgroup to finalize the evaluations. The subgroup exists of four members of the EEP Committee and the EEO. After collating the information from the parties involved, the EEO will circulate the summary report to the subgroup. The members of the subgroup will be asked to review the outcome and based on that answer the following questions:*

- Give an overall rating on the functioning of the TAG;*
- Give a rating on the leadership within the TAG;*
- Summarise the main problems and challenges;*
- Summarise the need for improvements and actions to follow up after evaluations, including who is responsible for following up.*

*Members of the subgroup and the resp. TAG liaison will discuss the preliminary results with the chair and vice chair during a call. The final results of the evaluation incl. the summary report and the suggested improvements and actions as approved by the EEP Committee will be made available to the TAG (vice) chair. The TAG members will receive a copy of the final results (letter) by the EEO, as well as the CEO of the EAZA member providing Institutional support to the TAG (vice) chair. The TAG chair will be asked to monitor the implementation of the improvements and report progress to the EEP Committee annually, until the actions are carried out. The EAZA*

*membership will be informed annually about the progress of the TAG evaluation cycle (eNews), and final results will be made available upon request.*

### 2.1.2 Initiation and establishment of a new TAG

Proposals for new TAGs (as a split off from an existing TAG) and EEPs, as well as proposals for a change to an existing TAG or EEP require approval from the EEP Committee. A number of documents specific the initiation and establishment of a new TAG needs to be submitted to the Chair of the EEP Committee (via the EAZA Executive Office) before being forwarded to the members of the EEP Committee for their consideration. An explanation of documents needed for this procedure can be found in [Appendix 6: Proposal for new TAG](#).

#### *TAG Establishment*

To initiate and establish an EAZA TAG, the TAG Chair should take the following steps:

- a. **Divide the TAG responsibilities** between themselves and the Vice chair(s) (where applicable). The division of labour will depend on the persons involved and on the needs of the TAG. However, it should be equable and distributed based on individual interests and expertise. The division of labour should be clearly defined as soon as a Vice chair is appointed and been communicated to all the members of the TAG, EEP Committee and EAZA Executive Office.
- b. **Establish links** with the equivalent TAG Chairs in other regions, appropriate SSC specialist group Chairs and CPSG.
- c. **Hold the first meeting** of the TAG, during which membership should be formalised.
- d. Following the first meeting, **inform the EAZA Executive Office** about the division of labour between the Chair and Vice chair and provide them with the names and addresses of the TAG members.

#### *Changing TAG Chairs and adding Vice chairs*

When a TAG Chair loses institutional support through a change of employment or for any other reason, it is their responsibility to obtain written support from another temporary or full EAZA institution i.e. unlike species management programmes, EAZA TAGs do not reside with the institution but can move with

the individual. If alternative support is not forthcoming within a six-month period, or if a TAG Chair chooses to step down the EEP Committee will invite the TAG to suggest a successor. All necessary documents are explained in [chapter 2.4 Procedures to approve new/changes to TAGs.](#)

### *Changing and adding TAG members*

- Newly approved EEP Coordinators –both for new programmes or existing programmes- are also automatically added to the core group of TAG members. The former EEP Coordinator can be added to the TAG membership if acceptable for both sides.
- A vice coordinator position is not automatically entitled to a (voting) TAG membership, given that the EEP Coordinator is already fulfilling this position per default. Approval as TAG member is up to the TAG in accordance with the normal procedure to appoint members.
- Interested colleagues of EAZA member institution can be invited and added to the TAG membership after approval of the current TAG members.
- Advisors can be invited and added to the TAG after approval of the current TAG members.

## **2.2 Regional Species Planning**

As described in the previous section, developing a Regional Species Plan (RSP) is one of the core responsibilities of EAZA Taxon Advisory Groups (TAGs). As part of the RSP TAGs should determine which species are recommended to be managed under an EAZA Ex situ Programme (EEP) and what the precise direct, and/or indirect, and/or non-conservation roles of each EEP will be. In this process it is important to find a balance between the need of the species, conservation and the EAZA Members on the one hand, and what is realistically feasible in terms of capacity (space, funding, staff) on the other hand.

### **2.2.1 Ex situ conservation priorities and Regional Species Planning**

In the ideal world all (threatened) species are covered by an integrated conservation action plan, developed according to the One Plan Approach (OPA) and applying the IUCN Species Survival Commission Guidelines on the Use of *Ex situ* Management for Species Conservation. This would make it clear to professional zoos and aquaria, like the EAZA Membership, which species require some form of *ex situ* management for conservation and which of those are best delivered by EAZA and its Membership. Despite a steady growth in the number

of taxa for which this is the case, and it being the ambition of the IUCN SSC to scale up the development of such conservation action plans, the majority of species is not yet covered by such an integrated plan.

Whilst EAZA is fully on board with the ambitious targets for conservation action planning as set by the IUCN SSC, this obviously is a long-term project. In the meantime, EAZA (like other regional zoo and aquarium associations) needs to be able to continuously plan its species and thus take a leading role in applying the OPA and the IUCN *ex situ* guidelines to develop the *ex situ* conservation priorities for EAZA to concentrate on as part of the EAZA Regional Species Plan.

EAZA therefore decided to use the 5-step assessment process of the IUCN *ex situ* guidelines as the foundation of its Regional Species Planning process. EAZA, together with other regional zoo and aquarium associations and the IUCN SSC Conservation Planning Specialist Group (CPSG) have jointly developed a process for this purpose, which CPSG now refers to as Integrated Collection Assessment and Planning (ICAP). The 5-step assessment process can be applied to develop EAZA Regional Species Plans focussed on regional level only but can also be used on a global level. Details on the rationale and methodology of the ICAP process can be found in Traylor-Holzer, Leus and Beyers (in review). This 5-step assessment process can equally be used for assessing and developing the non-conservation roles and goals (if any) for EAZA *Ex situ* Programmes.

### 2.2.2 EAZA's Regional Species Planning process

#### IUCN *ex situ* guidelines

The EAZA RSP process is structured around the IUCN SSC Guidelines on the Use of *Ex situ* Management for Species Conservation, which utilizes a five step decision process to determine if and which *ex situ* activities might be appropriate to be included in the overall conservation strategy for the species. These five steps are (IUCN SSC 2014; McGowan *et al.* 2016):

- a. Conduct a thorough status assessment (of both *in situ* and any known *ex situ* populations) and threat analysis.
- b. Identify potential roles that *ex situ* management can play in the overall conservation of the species.
- c. Define the characteristics and dimensions of the program needed to fulfil the identified potential conservation role(s).
- d. Define the resources and expertise needed for the *ex situ* management programme to meet its role(s) and appraise the feasibility and risks.

- e. Make an informed and transparent decision as to which *ex situ* roles and activities (if any) to retain within the overall conservation strategy of the species.

The RSP methodology below describes how this 5-step process was adjusted and applied in the context of developing an EAZA RSP.

#### RSP team

The work required to prepare, develop and publish an EAZA RSP will be shared by a team that will work together on all components of the process. The task focus can be described as follows: The TAGs will be responsible for the content of the RSP publication as well as the decisions as to which species to propose to actively manage (EEP) and which species not to manage but to monitor (Mon-T). Staff of the EAZA Executive Office's Conservation and Population Management Team will be responsible for facilitating the RSP process and the technical preparation of the RSP publication for TAG approval. When approved by the TAG, the RSP will need to be approved by the EEP Committee before being implemented.

#### Pre-workshop Preparation

The following describes the pre-RSP workshop preparatory work that needs to be undertaken.

#### *Defining the scope of the RSP*

The RSP team should determine the regional and taxonomic scope to work on and thus to include in the RSP publication.

TAGs with a smaller number of taxa will be able to include all taxa in one RSP session and do a thorough assessment for each taxon. For larger TAGs the scope of the RSP session will need to be adjusted – possibilities are:

- a. Regional scope: Is the intention to only make an EAZA level RSP or is the intention to first make global recommendations (e.g. through a global process) followed by an EAZA specific RSP session (that translates global recommendations to the EAZA situation and procedures).
- b. Taxonomic scope: Can all taxa in the TAG be dealt with in one RSP/workshop? A maximum of likely 40-50 taxa can be taken through a full species assessment during a two-day workshop. Options include but are not limited to:

- i. Split the taxon in several taxonomic groups and develop an RSP for each group over time (e.g. EAZA Troll TAG: RSP part I: Mountain trolls; RSP part II Lowland trolls);
- ii. Devise a system to limit/prioritise species that the TAG wishes to take through a full species assessment (with detailed evaluation of potential *ex situ* roles). Several parameters can be considered for this prioritisation (e.g. already in captivity/EAZA or not, already part of a managed programme or not, confidence in *ex situ* care, degree of threat, likelihood for need for *ex situ* conservation etc. – what is a relevant parameter will depend on the taxon and will be discussed with the TAG Chairs);
- iii. Take a larger number of species through a detailed assessment but adjust the RSP workshop format (e.g. work in working groups, group species with similar circumstances, facilitated online discussion for a subset of species whereby only those species for which there is no online consensus are brought to the workshop, etc).

#### *Select date and location of RSP workshop*

Depending on the size of the TAG (or sub-group being focused on for workshop), determine number of days needed. This is typically two to three days.

#### *Determine invitees to the RSP Workshop and send invitations*

People to invite to an EAZA RSP workshop are:

- a. All EAZA TAG members (e.g., Chair, Vice chair(s), EEP Coordinators, ESB Keepers, MON-P people, Advisors)
- b. Relevant *in situ* colleagues/organisations (e.g., IUCN Specialist Group Chairs/members, *in situ* experts, government officials, non-government organisations, etc.),
- c. Any additional relevant people (e.g. colleagues from other zoo associations are not standardly invited to EAZA RSP workshops, but in case this is opportune because of meeting overlap or in case there is a global process preceding the EAZA RSP, they can be included)

The TAG Chairs and CPM TAG liaison develop a list of persons to invite, thereby balancing benefit versus logistic and budget implications. The location and hosting costs of the workshop are calculated on a case by case basis. The TAG

Chairs send a “save” the date email as soon as it is clear where and when meeting will take place, later to be followed by a formal invitation to all potential attendees.

### *Species Assessment Sheets*

For each of the taxa selected for detailed assessment during the RSP workshop a species assessment sheet will be created (see [Appendix 2b: Species Assessment Sheet](#)). Before the workshop, information gathered on the *in situ* and *ex situ* status, the *in situ* threats and previously published *ex situ* roles/recommendations is summarised on the species assessment sheets, as is the feedback received through email consultation among *in situ* colleagues regarding potential *ex situ* roles for conservation. During the workshop, each partially completed species assessment sheet is reviewed and discussed. This forms the basis for the generation of the list of potential direct, indirect or non-conservation roles for *ex situ* management and the evaluation of the characteristics, benefits, feasibility and risks of each of the roles. This role generation and evaluation process, as well as additional comments and the final recommendations are added to each taxon’s sheet. Details on the methodology for each of these process components can be found below.

## **IUCN *Ex situ* guidelines STEP 1: Conduct a thorough status assessment (of both *in situ* and any known *ex situ* populations) and threat analysis**

### ***In situ* status and threats**

For each taxon, the IUCN Red List category of threat, complemented (where relevant) by the European and Mediterranean IUCN Red List category of threat, the EU Habitat Directive listing, the Global and EU CITES (Convention on International Trade in Endangered Species) listing and the CMS (Convention of Migratory Species) listing and the population trend; as well as a brief summary of the status, range and threat information should be recorded on the species assessment sheet.

In order to apply the IUCN *ex situ* guidelines and more precisely identify *ex situ* roles that best address the threats and challenges faced by the taxon, it is important to not merely consider the status/category of threat, but to also summarise the main threats faced by each taxon, extracted from relevant published sources such as full Red List accounts, BirdLife accounts, publications, or by consulting *in situ* stakeholders.

### ***Ex situ* status**

According to the OPA, the status of not only the *in situ* but also any *ex situ* populations should be taken into consideration when identifying and evaluating



potential conservation strategies for a taxon, in order to take account of the full range of possibilities.

Regardless of whether a Species Plan is conducted at a global or regional/national level, the status of *ex situ* populations in both EAZA and other regions should be considered as this is relevant to decisions concerning division of responsibilities between regions and potential for collaboration.

Whenever available and sufficiently reliable, the following population parameters are to be recorded for each population:

- Population size (males. females. Unknown sex);
- Number of holding institutions;
- Number of living wild-born individuals;
- Percentage of the pedigree that is known;
- Number of founders (unrelated wild born individuals with living descendants);
- Number of potential founders (living unrelated wild born individuals without living descendants);
- Current gene diversity retained (% of the wild source population);
- Potential gene diversity retained (% of the wild source population);
- Long-term growth rate (Lambda from the last \_\_\_ years); which time period is relevant for a long term lambda will depend on the population in question;
- Short-term growth rate (Lambda from the last 3 years);
- Level of programme management within the region (e.g. EEP, Yellow SSP, studbook, none);
- Data source (e.g. EAZA studbook, SSP breeding and transfer plan, ALPZA survey, etc.);

When a parameter is not available, cannot be calculated or is insufficiently reliable due to data quality issues a “?” should recorded. When more than one

data source is available for a region (e.g. an international and regional studbook), the most current and comprehensive source should be selected to complete the *ex situ* status for that region.

For EAZA populations, the EEO will use the ZIMS for Studbook databases (or SPARKS if the studbook has not yet migrated), the ZIMS for Husbandry database (for non-managed programs) or other data sources submitted by the TAG (e.g. for *ex situ* populations in partner organisations) to fill in the *ex situ* summary table in each of the species sheets within the RSP draft document (where necessary in consultation with the EEP Coordinator). If a species is held in other regions with regional or national zoo associations, the EAZA TAG Chairs will ask the TAG Chairs of the other regions holding this species if there is some form of managed programme for this species in their region and if there are any existing population data or analyses for the species in their region that could be shared with EAZA (e.g. masterplans, breeding and transfer plans, year reports, survey reports, published studbooks, etc). Whatever is the most recent source that holds most of the data needed in the species sheet *ex situ* status table should be chosen. The TAG liaison supports where relevant. The TAG Chair passes the information received on to the assigned Assistant Population Biologist who summarises the information in the table on the species sheet. Where no programs exist, the assigned EEO will look up the ZIMS population numbers for these regions. The TAG liaison will also check with the TAG Chairs if they are aware of important *ex situ* holdings that are not regional/national zoo associations or ZIMS institutions and that are very relevant to the decisions to be taken for the EAZA RSP.

The *ex situ* status of the taxon should be summarised in a few lines above the *ex situ* status table.

## **IUCN *Ex situ* guidelines STEP 2: Identify potential roles that *ex situ* management can play in the overall conservation of the species.**

### ***Potential ex situ roles***

Under the principle of the OPA, *in situ* and *ex situ* specialists should jointly evaluate which are the most appropriate actions to save a species, and within that, if there are direct or indirect roles for *ex situ* conservation. However, in the context of an RSP workshop where a large number of taxa is being evaluated at the same time, it is not possible or effective to invite all *in situ* specialists for all the taxa. In order to canvas as wide a representation of the *in situ* community as possible, relevant *in situ* specialists will be surveyed by email ahead of the workshop.

Using the knowledge of the TAG, EEO, and the relevant IUCN SSC Specialist Groups or other conservation bodies (e.g. BirdLife etc.), *in situ* specialists working with particular taxa should be identified that can complete a survey asking them to identify potential direct and indirect conservation roles for *ex situ* activities within the conservation needs of the species of their expertise. The survey should ideally be completed for both threatened and non-threatened taxa because a) there might be recent changes in status and threats that are not yet reflected in the IUCN Red List and b) non-threatened species can play a role in the conservation of threatened species, for example as model species. For TAGs with a large number of species it is likely only feasible and relevant to send surveys concerning those taxa selected for detailed species assessments during the EAZA RSP workshop (see “defining the scope of the RSP” above).

The survey package should contain the following:

- a cover letter with an introduction to the EAZA RSP process;
- a questionnaire that asks the *in situ* experts to identify potential direct and indirect *ex situ* conservation roles for the taxa of their expertise (see [Appendix 2d: Investigating potential ex situ Conservation Roles](#)).
- a document defining and describing the different kinds of direct, indirect and non-conservation roles (see [Appendix 2c Standard RSP role descriptions](#)).
- an advanced draft of the relevant taxon sheet(s) with the summary of the *in situ* status and threats, the *ex situ* status and any previously published *ex situ* roles or recommendations (see ‘prior *ex situ* recommendations’ below).

All feedback from the survey should be summarised on the relevant species assessment sheets and a list of all the *in situ* colleagues that provided feedback included as an appendix to the RSP publication.

### ***Prior ex situ recommendations***

With the help of TAG, EAZA, CPSG and the relevant IUCN SSC Specialist Groups or other conservation bodies (e.g. BirdLife etc.), published conservation strategies and action plans for the taxa within the scope of the RSP should be gathered and consulted to extract any existing *ex situ* recommendations or mandates. This includes documents such as regional, national or local governmental plans, IUCN SSC Specialist Group plans, CPSG Population and Habitat Viability Assessments (PHVAs), CPSG Conservation Assessment and Management Plans (CAMPs), plans by international or local NGOs or conservation alliances, etc.

Information on any existing *ex situ* recommendations or mandates should be summarised on the species assessment sheets.

### ***Suggested preparation timeline***

A detailed timeline for the pre-RSP workshop preparations is available from the TAG liaisons at the EAZA Executive Office.

### RSP workshop

Two weeks before the start of the EAZA RSP workshop the participants should be presented with:

- a. the species assessment sheets, which included for each taxon:
  - the summary of the *in situ* status and threats;
  - the *ex situ* status;
  - any previously published *ex situ* roles or recommendations;
  - potential *ex situ* conservation roles identified through the pre-workshop survey.
  
- b. a workshop manual containing information that needs to be read before the workshop and also be readily at hand during the workshop. Examples of such manual are available from the EAZA Executive Office.

For each taxon within the scope of the RSP the following process should be followed:

- a. Presentation and review of the *in situ* status and threats, prior *ex situ* roles suggested in existing strategies/action plans, potential *ex situ* roles summarised from the role survey among *in situ* specialists, and of the *ex situ* status. Suggested comments/changes/ additions are recorded.
  
- b. Facilitated group discussion on the potential direct, indirect and non-conservation roles that may be applicable to this taxon (in view of the information presented under 1.); potential roles should be recorded in the relevant tables of the species assessment sheets.

### **IUCN *Ex situ* guidelines STEP 3: Define the characteristics and dimensions of the program needed to fulfil the identified potential conservation role(s).**

- c. Facilitated group discussion regarding very broad characteristics and dimensions of the *ex situ* population needed to fulfill the identified potential role(s). Suggested characteristics should be recorded in the relevant tables of the species assessment sheets.

**IUCN *Ex situ* guidelines STEP 4: Define the resources and expertise needed for the *ex situ* management program to meet its role(s) and appraise the feasibility and risks.**

- d. Facilitated discussion on, and rating (High, Medium or Low) of, the benefit, feasibility (considering, for example, existing *ex situ* population, husbandry challenges, technical or logistical challenges, availability of skilled staff, availability of sufficient financial and other resources) and risk (considering e.g. sensitivity to catastrophes, consequences for wild population, occupying *ex situ* space for other species that need it more, human health and safety risks, political risks, risks for social or public conflicts) of each proposed role. Rating and associated comments recorded on the species assessment sheets.

**IUCN *Ex situ* guidelines STEP 5: Make an informed and transparent decision as to which *ex situ* roles and activities (if any) to retain within the overall conservation strategy of the species**

- e. Based on the above facilitated reaching of consensus on:
  - a. Which *ex situ* role(s) are recommended for the taxon in general
  - b. Which *ex situ* role(s) are recommended/relevant for the taxon in the EAZA region and whether it is feasible to deliver this in the EAZA region.

For those taxa for which one or more roles is recommended for the EAZA region, one of the following EAZA RSP Categories should be assigned:

<b>CATEGORY</b>	<b>DESCRIPTION</b>
EEP	EAZA Ex situ Programme. The taxon needs proactive management to fulfil its specified roles. This includes programmes that require proactive management to phase out the taxon or replace it with one or more other taxa. For new EEPs or old EEPs, ESBs or Mon-Ps transferring to the new EEP format for the first time, an EEP application form should be completed specifying the characteristics of the EEP.
MON-T REPLw	The TAG will monitor the replacement of this taxon with one or more other taxa (specify which).
MON-T Phase out	The TAG will monitor the recommended disappearance of this taxon from EAZA collections.

MON-T DNO	The taxon is currently not present in EAZA collections and is not recommended to be obtained in EAZA collections. Its presence/absence will be monitored by the TAG.
MON-T	The taxon is present in EAZA collections and while there is no specific role for the taxon (with associated management), there is also no active recommendation to replace or phase out the taxon. The TAG will monitor the numbers of this taxon in EAZA collections.

The rationale behind the decision to recommend a particular EAZA programme category to a taxon should be described under “programme decision statement” on the species assessment sheet.

At the end of the EAZA RSP workshop, the complete list of programmes recommended for an EEP should reviewed with regards to the feasibility of delivering on this number and type of programmes within the EAZA region (in terms of overall space availability, the characteristics of the programmes mentioned during the role evaluation during the workshop, human and other resources etc.).

At the end of each species assessment sheet; a description in sentences of all the roles selected for a particular should be inserted under “Role description for potential EEP”. If time is short during the RSP workshop this can be completed after the workshop through email consultation.

For each new EEP that is recommended in an RSP (and, during the transition phase from the old to the new EAZA Population Management structure, for each already existing EEP/ESB/Mon-P that the first RSP “new style” recommends being continued) an EEP application template needs be completed (see section “changes to, and approving new, EEPs” below). If time is short during the RSP workshop, at least one or two EEP application templates should be completed as a group in order to allow the TAG members/RSP workshop participants to become familiar with the template and to make it possible for the EEO staff facilitating the RSP workshop to provide extra guidance and explanation regarding the questions on the template. Additional EEP applications can then be completed after the workshop through email consultation.

**Post RSP workshop**

Following the RSP workshop, the TAG liaison will coordinate the tasks to be carried out by the different RSP team members (TAG Chairs (and/or appointed

TAG members), population biologist, assistant population biologist, TAG liaison) to produce a first draft of the RSP publication following the RSP standard format in [Appendix 2a: EAZA Regional Species Plan, standard format](#). Following review of the draft by all the TAG members and the RSP workshop participants, the TAG approved version of the RSP needs to be submitted to the EEP Committee for approval.

RSPs are published on the TAG workspaces of the EAZA Member Area and the publication of a new RSP is announced through the monthly EAZA eNews.

An RSP is a living document and will be evaluated and updated at regular intervals, normally every ~5 years. EAZA Members are strongly encouraged to follow the recommendations from the RSP and to focus their institutional species plans on recommended species. Please see [chapter 4 Institutional population management](#) information on institutional species planning.

## **2.3 EAZA Best Practice Guidelines**

Good animal husbandry is a pre-requisite for good population management. Therefore, EAZA Best Practice Guidelines should be developed for all EEP species as defined in the RSP (Regional Species Plan). EAZA Best Practice Guidelines aim at optimal conditions for well-being and reproduction of all animals in the population of the species. [Note: optimal reproduction does not always indicate maximum reproduction. Rather it indicates levels of reproduction optimal to management of the population, which in some instances may involve birth control.]

### **2.3.1 Process, status and publication**

Preparation of EAZA Best Practice Guidelines is the responsibility of the relevant EAZA Taxon Advisory Group (TAG) together with the EEP Coordinator and the Species Committee and the *Studbook Keeper* (in case of an ESB species). Appointed TAG and EEP advisors, e.g. veterinary advisors, should be part of the development process looking to ensure the guidelines are considering available expertise as well as peer-reviewed publications. Wherever relevant, TAG members should join efforts to prepare EAZA Best Practice Guidelines for the taxon as an entity, so that only species-specific details need to be added for the individual recommended species. In this task TAGs may seek assistance from other experts. TAGs are advised to collect Best Practice Guidelines which may already have been prepared in other regions, as a basis for drafting guidelines for their own species. EAZA Best Practice Guidelines should ideally follow the



available template for the publication of EAZA Best Practice Guidelines (See [Appendix 4: EAZA Best Practice Guidelines template](#)).

Subsequent drafts are sent to the members of the TAG and Species Committees and compilers and their input is included in the guidelines whenever feasible. In case of ESBs a group of TAG members joined by some of the most experienced holders can assist the ESB keeper (and TAG) in the preparation of the EAZA Best Practice Guidelines. The final draft is sent to all TAG members for approval (which is obtained by simple majority of votes). The approved version should be sent to the EAZA Executive Office together with a confirmation from the TAG Chair. When external partners have been involved in the production of the BPGs, they have to agree on the publication, reflecting that it has been a collaborative effort. The TAG needs to have confirmation from these partners. The TAG Chair is encouraged to mention this in his confirmation to the EEP Committee, but the EEP Committee does not require a separate letter. The EAZA Executive Office (EEO) will liaise with the Best Practice Guidelines subgroup of the EEP committee for a final review. Once approved, the TAG will be informed and requested to make the final version available free of charge to all present and future holders. All EAZA Best Practice Guidelines will be published, including the approval date of the EEP Committee on the front cover, on the EAZA website and availability will be announced to the Membership at large (e.g. through the EAZA e-News and social media).

EAZA Best Practice Guidelines are owned by the EAZA community.

Best Practice Guidelines are living documents. Minor updates of officially approved Best Practice Guidelines, do not require renewed approval by the EEP Committee as long as they are supported by the TAG. The TAG and EEPs are encouraged to regularly (e.g. once every five years) review the guidelines. Reviewed editions of the Best Practice Guidelines do require renewed approval of the EEP Committee.

Whenever relevant TAGs are requested to produce relevant taxa specific and more detailed guidelines under the framework of the EAZA Guidelines on the use of animals in public demonstrations (2014). These can be included as part of the BPG or be developed as a separate document. When produced as a separate document these taxa specific guidance on animals in public demonstrations will be subject to the same process and procedure as described above for EAZA Best Practice Guidelines.

All EAZA Members should follow the EAZA Best Practice Guidelines and - whenever necessary- should make improvements or adjustments within a

reasonable period of time. EAZA Members should take note of the 'EAZA Best Practice Guidelines disclaimer' as well as the 'Preamble' for more details on liability and status of EAZA Best Practice Guidelines in relation to minimum standards (See [Appendix 4: EAZA Best Practice Guidelines template](#)).

## **2.4 Procedures to approve new/changes to TAGs**

Taxon Advisory Groups are responsible to the EEP Committee. The EEP Committee appoints TAG Chairs and TAG Vice chairs, as nominated and put forward by the TAG membership through the TAG Chair or Vice chair, or when not in place, through the EAZA Executive Office. TAG Chair and TAG Vice chair position are appointed on personal expertise basis and does therefore not sit with an institution. However, a TAG (Vice) Chair does need to have support from an EAZA Member institution for carrying out the work.

TAG Chairs are elected by the TAG membership and recommended to the EEP Committee for appointment for a period of five years. Appointment is limited to two consecutive five-year terms. After these two terms a TAG Chair cannot be re-elected for another five-year term, nor can be elected as TAG Vice chair. Past Chairs are encouraged to remain involved as TAG Advisor after completion of their term(s). In exceptional cases the EEP Committee may decide to allow a TAG Chair to be eligible for a third five-year term. TAG Chairs that have completed their second five-year term may be elected as TAG Chair or TAG Vice chair of another TAG.

TAG Vice chairs are elected by the TAG membership and consequently appointed by the EEP Committee for a period of five years. A TAG Vice chair may be appointed at the same time as the TAG Chairs, however, this is not a necessity for example in order to maintain continuity in the TAG or when a Chairs step down in during their term of office. Appointment is limited to two consecutive five-year terms. After these two terms a TAG Vice chair cannot be re-elected as Vice chair. TAG Vice chairs can be elected as TAG Chairs either after completion of their term(s) or when a TAG Chair steps down during the five-year period. In exceptional cases the EEP Committee may decide to allow TAG Vice chair to be eligible for a third five-year term.

TAG Vice chairs that have completed their second five-year term (and do not become the TAG Chair) may be elected as TAG Chair or TAG Vice chair of another TAG.

TAG (Vice) Chair elections are coordinated by the relevant TAG liaison at the EAZA Executive Office. The TAG Chair and TAG Vice chair elections process will start in 2020 with the first eight (approx.) TAGs. All TAG Chairs that are elected according to this new process may be elected for two five-year terms, regardless

whether they might have been the TAG Chair prior to the first election under this new procedure. Elections will follow the same schedule as put in place for the RSPs so that the TAG Chair and TAG Vice chair election take place more or less in between two RSP processes.

TAGs nominate the species for which to establish EEPs. Approval for establishing EEPs lies with the EEP Committee. Similarly, EEP Coordinators are nominated by the TAG and appointed by the EEP Committee. EEP Coordinators are responsible to the relevant TAG. The EEP Committee is responsible for overseeing the functioning of TAGs.

#### **2.4.1 Changes to, and establishing new, TAG**

Proposal for a new TAG (as a split-off from an existing TAG or merging of two existing TAGs)

- a. A proposal that outlines the scope and aims of the TAG, structure, potential members and so on (see [Appendix 6: Proposal for new TAG](#)).
- b. A letter of support from the existing TAG(s) that currently covers the taxonomic group(s) that will be covered by the new TAG.
- c. A letter from the proposed new TAG (Vice) Chair stating his/her willingness to take on this position.
- d. A letter of support from the director or CEO of the institution that employs the proposed (Vice)Chair of the new TAG, stating that the institution will provide the Chair with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).

Proposal to appoint a Vice chair's position to an existing TAG

- a. A letter from the TAG Chair explaining the task division between him/her self and the Vice chair(s).
- b. A letter from the proposed Vice chair stating his/her willingness to take on this position.
- c. A letter of support from the director or CEO of the institution that employs the proposed new TAG Vice chair, stating that the institution will provide the Vice chair with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).

Proposal to re-appoint an existing TAG (Vice) Chair because of his/her move to another institution

- a. A letter of support from the director or CEO of the institution that will employ the (Vice)Chair of the TAG, stating that the institution will provide the (Vice) Chair with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).

Proposal to replace an existing TAG (Vice) Chair

- a. A letter from the out-going TAG (Vice) Chair stating his/her willingness to hand the position over to the proposed new TAG (vice) Chair.
- b. A letter from the proposed new TAG (Vice) Chair stating his/her willingness to take on this position.
- c. A letter of support from the director or CEO of the institution that employs the proposed new TAG (Vice) Chair, stating that the institution will provide the Chair with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).

#### **2.4.2 Decision making procedure**

Proposals for changes to, and establishing new, TAGs can be forwarded to the EEP Committee via the relevant TAG liaison at the EAZA Executive Office. As soon as all relevant documentation has been received in satisfactory order the proposal will be circulated among the members of the EEP Committee, who will make a decision within three weeks. The EAZA Executive Office will inform the TAG about the outcome within two weeks after the decision was made.

#### **2.4.3 EEP, ESB and TAG roles and GDPR compliance**

In order for EAZA to be compliant with the EU General Data Protection Act (GDPR)<sup>i</sup> to the Association needs to ensure that there is an active consent (opt in) to keep personal information like contact details from any person working in an EAZA role (TAG Chair/Vice chair/member, EEP Coordinator, ESB Keeper, or any member of a Committee or working group). This 'opt in' option has been automatically built in to the process of setting up an Member Account to access the EAZA Member Area. If, for whatever reason, someone does not provide consent for EAZA holding their data, then they cannot be a TAG chair/vice chair, EEP coordinator, ESB keeper or hold any of the other EAZA roles.

For external colleagues a Non-Disclosure Agreement (NDA) must be signed before a Member Area Account is created.

For background information please visit the EU Commission website about [EU data protection rules](#). This website provides information for businesses and organisations and the outlines the rights of EU citizens. For a quick overview of the GDPR principles please refer to [this website](#).

## **2.5 Procedures to approve new/changes to EEPs**

EAZA Ex situ Programmes are held by an institution that is a Full- or Associate EAZA Member. On the expectation that the institution will make it to become a full EAZA Member these roles may also be taken on by (or stay with) a Temporary EAZA Member. If the institution does not make it (back) to Full Membership, the institution automatically loses the EEP position. EEP Coordinators typically are employees of EAZA Member institutions in the categories outlined above. However, in exceptional cases the EEP Committee may appoint other individuals into this role provided the EEP is held by an EAZA Member institution that provides institutional support to that individual for performing as EEP Coordinator.

When an EEP Coordinator leaves the service of the supporting institution (for whatever reason), the institution can propose a candidate successor from among its staff to the TAG. In case of disagreement on the suitability of the candidate for the EEP, the EEP Committee may decide to nominate another candidate as proposed by the TAG (from that institution or another EAZA Member). In such cases the EEP Committee will decide on the EEP holder and EEP Coordinator based on prior consultation with the hosting institution and the TAG. When an EEP host institution refrains from its right to propose a candidate from among its staff, the EEP Committee will invite the relevant TAG to propose a successor. In that case the original EEP Coordinator may be reappointed (e.g. when he/she enters the service of another institution that is a Member of EAZA). The process of (re)appointing a (new) Coordinator should be completed as soon as possible and in any case within a two month period.

A number of documents need to be submitted with the proposal to establish a new EEP or changes to existing programmes. The necessary documentation differs for each proposal (e.g. the necessary documentation for a new EEP is different from the documentation that is needed for a proposed change of a TAG Chair). The remainder of this chapter summarises the different kinds of proposals as well as the documentation that is needed to complete each

proposal. Standard forms and sample letters that can be used in putting together the proposal are referred to when applicable.

### 2.5.1 Changes to, and approving new, EEPs

Documentation needed for a proposal for establishing a new EEP:

- a. A completed EEP application template that outlines the aims of the proposed EEP, the structure and so on. Under normal circumstances this information is derived from and aligned with the most recent RSP. In some cases, this might however not be practically feasible, and in such cases the EEP application template can be completed and submitted independently from the RSP (see [Appendix 3: Template for proposing a new EEP](#)).
- b. A letter of support from the TAG Chair for the proposed new EEP coordinator elaborating on the process of selecting the candidate (see [Appendix 7c: Example letter for providing TAG support for EEP Coordinators](#)).
- c. A letter from the proposed new EEP coordinator stating his/her willingness to take on this position.
- d. A letter of support from the director or CEO of the institution that employs the proposed coordinator of the new EEP, stating that the institution will provide the coordinator with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).

*Please note that in the transition period to the new Population Management structure proposals for existing ESBs and EEPs (old style) to become EEPs (new style) do not require renewed documentation, as the existing institutional support letters (b-c-d) will still apply (assuming the same Coordinator/institution are proposed for the EEP new style).*

Documentation needed for a proposal to re-appoint an existing EEP Coordinator because of his/her move to another institution:

- a. A letter from the director or CEO of the previous institution that employed the EEP Coordinator stating his/her willingness to withdraw the institutional support to the EEP (see [Appendix 7b: Example letter of withdrawing institutional support](#)).

- b. A letter of support from the director or CEO of the institution that will employ the EEP Coordinator, stating that the institution will provide the Coordinator with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).
- c. A letter of support from the TAG Chair for the proposed new EEP Coordinator elaborating on the process of selecting the candidate for the EEP (sub)species (see [Appendix 7c: Example letter for providing TAG support for EEP Coordinators](#)).

Documentation needed for a proposal to replace an existing EEP Coordinator

- a. A letter from the director or CEO of the institution of the out-going EEP Coordinator stating his/her willingness to withdraw the institutional support to the EEP (see [Appendix 7b: Example letter of withdrawing institutional support](#)).

*Applicable only if the new Coordinator is employed by another institution as where the out-going Coordinator was employed.*

- b. A letter from the proposed new EEP Coordinator stating his/her willingness to take on this position.
- c. A letter of support from the director or CEO of the institution that employs the proposed new EEP Coordinator, stating that the institution will provide the Coordinator with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support](#)).
- d. A letter of support from the TAG Chair for the proposed new EEP Coordinator elaborating on the process of selecting the candidate for the EEP (sub)species (see [Appendix 7c: Example letter for providing TAG support for EEP Coordinators](#)).

Documentation needed for a proposal to discontinue an EEP

- a. This follows from the EEP Committee decision to approve the TAG's RSP, which will include which EEPs will be discontinued and why. Or otherwise, a letter of explanation from the TAG that covers the EEP (sub)species is required.

### **2.5.2 Changes to, and approving EEP Vice coordinators**

The responsibility for the EEP lies with the hosting institution and EEP Coordinator. The Vice coordinator position is a supporting role. The Vice



coordinator position is tied to the institution, so institutional support is needed when the Vice coordinator is first proposed or when the Vice coordinator is moving institutions and want to continue in the role. In the latter case the former institution would need to withdraw institutional support first. It is the TAG's responsibility to consult with the EEP Coordinator and indicate in the TAG support that they are in support of the appointment of the vice coordinator role. Preferably the role deviation between both positions should be covered in the TAG support letter as well. If the EEP Coordinator position becomes vacant, it is first of all up to the hosting institution to nominate a candidate. If the hosting institution is withdrawing their institutional support, the Vice coordinator might be one of the potential candidates to take over (but it is not the default other institutions can also put themselves forward). Separate EEP Committee approval and renewed Institutional support and TAG support would be required.

Documentation needed for a proposal to appoint a new EEP Vice coordinator

- a. A letter from the proposed new EEP Vice coordinator stating his/her willingness to take on this position.
- b. A letter of support from the director or CEO of the institution that employs the proposed new EEP Vice coordinator, stating that the institution will provide the Vice coordinator with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support to a TAG \(Vice\) Chair or EEP Coordinator](#)).
- c. A letter of support from the TAG Chair for the proposed new EEP Vice coordinator elaborating on the role division between both positions and providing confirmation that the appointment is supported by the EEP Coordinator (see [Appendix 7c: Example letter for providing TAG support for EEP Coordinators /ESB keepers](#)).

Documentation needed for a proposal to reappoint an existing EEP Vice coordinator because of his/her move to another institution

- a. A withdrawal letter from the hosting institution.
- b. A letter of support from the director or CEO of the institution that will employ the EEP Vice coordinator, stating that the institution will provide the Vice coordinator with all the necessary support to carry out the tasks involved with the position (see [Appendix 7a: Example letter of providing institutional support to a TAG \(Vice\) Chair or EEP Coordinator](#)).

- c. A letter of support from the TAG Chair for the reappointment of the EEP Vice coordinator (see [Appendix 7c: Example letter for providing TAG support for EEP Coordinators /ESB keepers](#)).

### **2.5.3 Decision making procedure**

Proposals for changes to, and establishing new, EEPs/ESBs can be forwarded to the EEP Committee via the relevant TAG liaison at the EAZA Executive Office. As soon as all relevant documentation has been received in satisfactory order the proposal will be circulated among the members of the EEP Committee, who will make a decision within three weeks. The EAZA Executive Office will inform the TAG and Coordinator (or Studbook Keeper) about the outcome within two weeks after the decision was made.

### 3 Working procedures for EEPs and ESBs

This chapter describes the working procedures for EAZA Ex-situ programmes (EEPs). Obviously, these procedures are relevant for EEP Coordinators, but these are equally relevant for Species Committee members and EEP participants.

#### 3.1 Initiation and establishment of an EEP

In order to establish a newly approved EEP, the EEP Coordinator takes the following chronological steps:

- a. Contact the holders:
  - Inform the EAZA Members holding the species of the decision made by EAZA to initiate an EEP for the species and of your appointment as its EEP Coordinator (See chapter [2.4 Procedures to approve new/changes to TAGs](#)). Also inform the holders that EEP working procedures are now applicable to the species and about the specific programme characteristics.
  - Ask the holders to designate one of their staff members (preferably someone with experience in keeping and breeding the species) as the holder's representative for the species and ask if this species representative is eligible for a position on the EEP Species Committee (if applicable, depending on the programme characteristics).
  - Develop a studbook dataset, which typically should be done using ZIMS for Studbooks, unless otherwise agreed in the programme characteristics. Species360 can be contacted to ask for assistance with building an initial studbook dataset in ZIMS for Studbooks, including holders' current and historic collection of the species. Also, double check for EEP participants that might not be entering data to ZIMS (e.g. when they are not a member of Species360) and add their current and historic collection to the dataset manually. Upon completion of the initial studbook dataset, contact the current and, when relevant historic, holders to check for correctness and completeness of the data in the initial studbook dataset. After this process is completed publish a current and historical studbook.
  - When contacting the institutions to check the data included in the initial studbook dataset you should also ask the holding institutions if they want to maintain the species in their collections in the future, and if so, how many individuals approximately they are willing and able to keep.

- Request a quick response and include a "please return before..." date, as the establishment of the population management programme should be completed within one year. Re-address non-respondents after one month, urgently requesting them to respond. It might take more than one reminder before all institutions have replied. When most holders have replied continue with the next steps even if some holders did not reply yet. Data of these institutions can be double checked or added at a later stage. [Inform the EAZA Executive Office and the relevant TAG Chair of institutions that recurrently do not reply.]
  - In some cases, it might be important to collect data on individual animals that are, or were, held in non-EAZA collections (e.g. for tracing pedigree information). Please see [section 3.6 Non-EAZA Members and EEP Participation](#)).
- b. Unless it was decided not to have an EEP Species Committee, the Coordinator should, no later than six months after mailing the first announcement to the holders:
- Send an election form for the Species Committee, listing all species representatives who declared to be eligible, indicate the number of Species Committee members that should be elected (See also [section 3.9 The EEP Species Committee](#)), and ask the holders to return the completed form within one month.
- c. Perform a first genetic and demographic analysis of the population data included in the studbook (See also [section 3.13 Studbook analyses](#)).
- d. Organise the first meeting of the EEP Species Committee – when applicable - within twelve months after the start of the programme, to discuss:
- Goal(s) of the EEP, as defined in the Regional Species Plan.
  - The current state of affairs of the programme and identifying potential problems.
  - The population management measures to be taken in the next year (see [section 3.14 Annual breeding and transfer recommendations](#)).
  - Initiation of the process of developing a Long-Term Management Plan (LTMP – see [section 3.10 Long-Term Management Plan \(LTMP\)](#)).
  - Initiation of the process of producing EAZA Best Practice Guidelines (see also [section 2.3 EAZA Best Practice Guidelines](#)).
  - Possible division of tasks among the committee members.

- Inform the participants of the management proposals (of the Species Committee) and start implementing these.
- e. Submit the first (preliminary) EEP annual report to the EAZA Executive Office and the relevant TAG covering the first full calendar year after approval of the programme (see [section 3.11 The EEP annual report](#)).
- f. If an International Studbook (ISB) is in place get in touch with the ISB keeper at an early stage to agree on division of tasks with regard to data collection, studbook numbers and data exchange. Whenever possible and practical it is strongly encouraged to work towards using one single dataset. In any case it should be prevented that EAZA institutions are contacted twice for the same data.

Newly appointed EEP Coordinators and Vice coordinators must participate in the Introduction to EAZA *Ex situ* Programme Management Course and attend one of the next two courses that are organised when being formalised into these positions. These courses are regularly organised by the EAZA Executive Office under the umbrella of the EAZA Academy, and deal with the scientific backgrounds of joint population management, tools for population management, the practical functioning of EEPs and the framework of zoo collection coordination and conservation in general. See also [chapter 5 Training/Further information](#))

If an EEP Coordinator encounters organisational or practical problems during the above-mentioned stages of initiation and establishment of a new EEP or has any questions regarding these, they are invited to contact the relevant TAG or the EAZA Executive Office for obtaining advice or further details.

### **3.2 Management of the EAZA Ex situ Programme after establishment**

After an EEP has been established according to the above-mentioned schedule, the Coordinator should perform the following routine tasks:

- a. Work together with the EAZA Population Management Centre (PMC) to develop a Long-Term Management Plan (LTMP) for the EEP at relevant intervals. In between the publication of the existing and next LTMP, the EEP Coordinator should work on the implementation of the LTMP and where relevant update the LTMP in cooperation with the EEP Species Committee and PMC. See also [section 3.10 Long-Term Management Plan \(LTMP\)](#).

- b. Ensure that the studbook data, as recorded in ZIMS for Studbooks, is kept up to date and of high quality. If not already recorded, remember to ask holders for additional information that is relevant for population management such as a social group setting, number of eggs laid/hatched, still births, reproductive behaviour, etc., that are not necessarily included in standard ZIMS for Husbandry reports.
- c. For studbooks that have not yet migrated to ZIMS, the Studbook Newsfeed is available to assist with keeping up to date with changes to animals in your population that are recorded by Species360 member zoos throughout the year. This functionality is automatically built into ZIMS for Studbooks.
- d. Analyse the population data, formulate management proposals for the current and next year in the framework of the Long-Term Management Plan (LTMP) and in light of recent developments in the population.
- e. Prepare a studbook publication, typically running from 1 January to 31 December of the previous calendar year. Distribute copies of the studbook to all participants, the EAZA Executive Office, the relevant TAG Chair and the international Studbook Keeper if applicable. Refer to [section 3.12 The studbook](#) for more details.
- f. Prepare an annual report for the preceding year and submit it to the EAZA Executive Office and the relevant TAG Chair not later than 1 July.
- g. EEP Coordinators should organise meetings of the EEP Species Committee (when in place) at regular intervals according to the necessities of the programme, in order to discuss the management proposals, the development and implementation of the Long-Term Management Plan, the development of EAZA Best Practice Guidelines, research needs, and any other relevant aspects of the programme. See also [section 3.9 The EEP Species Committee](#).
- h. Maintain regular contact with the EEP participants through the year and provide timely responses to incoming request. Assist participants in solving possible problems with animals that are in need for outplacement. See also [section 3.6.5 Procedure for sending EEP animals outside of programme](#).
- i. Maintain regular contact with the relevant TAG Chair(s) in case of problems, and send copies of reports, Best Practice Guidelines, LTMPs,

minutes and agendas of Species Committee meetings, samples of questionnaires, relevant correspondence and any other material relevant to the development of the programme to the TAG Chair as well as to the EAZA Executive Office.

- j. Maintain regular contact with the relevant TAG regarding the development of Best Practice Guidelines and any species-specific problems or questions.
- k. Maintain regular contact with programme leaders for the same species in other regions (for example the SSP Coordinator) and when in place the convenor of the relevant Global Species Management Plan (GSMP) and/or the International Studbook Keeper to keep aligned on relevant matters with other regional programmes or global plans for the species. Information on species management programmes in other regions can be obtained from the EAZA Executive Office.
- l. In case the EEP or one of the EEP participants is (planning to get) involved with releasing EEP animals into the wild the EEP Coordinator and Species Committee needs to be proactive in working the TAG and other stakeholders to follow the rules and procedures as laid down in [chapter 4.3 Releasing animals to the wild](#)
- m. Archive the most relevant EEP correspondence such as agreements with institutions and publications such as studbooks, management plans, best practice guidelines, minutes of relevant meetings, etc. Please see [chapter 3.3 Handing and taking over an existing EEP or ESB](#) and [Appendix 29: Guidelines for population management programme administration and handover](#) for more information and guidance on programme administration.

When an EEP is discontinued the following steps need to be taken:

- a. Inform all holders of the discontinuation of the programme.
- b. Disband the Species Committee.

In managing their programmes, EEP Coordinators and ESB keepers continuously may request advice from the relevant TAG, the EAZA Executive Office and other EAZA working groups relevant to specific problems or questions.

### **3.3 Handing and taking over an existing EEP or ESB**



If an EEP Coordinator or ESB keeper discontinues as leader of the programme (for whatever reason) all documentation built up in the archive as described in point m of section 3.2 must be handed over, preferably directly to the new EEP Coordinator but otherwise to the EAZA Executive Office.

Guidelines are available to help Coordinators determine whether all essential administration is saved and available ([Appendix 29: Guidelines for population management programme administration and handover](#)). The guidelines provide general tips and a checklist with the most important topics to consider. It is essential for Coordinators to check this list periodically during their EEP Coordinator career and especially while starting with a new programme or stepping down.

Before anything else a newly appointed EEP Coordinator should get in touch with the previous Coordinator and the relevant TAG to obtain the archive and to discuss the state of affairs of the programme. All EEP participants should be informed that there is a new EEP Coordinator. The EEP Coordinator should then continue managing the programme as described in [section 3.2 Management of the EAZA Ex situ Programme after establishment](#)).

### **3.4 EAZA Members and EEP Participation**

EAZA has the following Membership categories: Full Member, Associate Member, Temporary Member, Candidate for Membership, Honorary Member and Corporate Member (EAZA Constitution, 2018). EEP participation is not applicable to the latter two Membership categories. In this section expectations and possibilities for participation of the other Membership categories are described. [Section 3.6 Non-EAZA Members and EEP Participation](#) deals with non-EAZA Members. For further general information on EAZAs Membership categories and Accreditation process please refer to the 'EAZA Membership and Accreditation Manual' [here](#).

#### **3.4.1 Full Members**

Full Members of EAZA are obligated to participate in scientifically-based coordinated breeding programmes at national, European and global levels as described in the EAZA Codes, Standards, and Sanctions and further by-laws of the association (Article 11.1.d of the EAZA Constitution, 2018). EAZA Ex situ Programmes (EEPs) are EAZA's scientifically-based breeding programmes which means that participation in EAZA Ex situ Programmes is obligatory for EAZA

Members holding animals. It is thus expected that EAZA Members participate in all EEPs for which they have animals.

As part of the 'one size does not fit all' philosophy, TAGs can make a case to the EEP Committee for exemptions to be made to the rule above for a given EEP. There might for example be a reintroduction programme for a given species running in three EU countries and where one EAZA zoo in each of these countries holds animals that were locally captured for breed and release purposes. These zoos might opt for using the EEP framework to manage this population and there could at the same time be local government requirements that the individuals may never mix with any other animals. So, the EEP in this example might not need, want or be allowed to focus on any other individuals outside of those three EAZA Members, whilst other EAZA Members might also keep the species in question. In such a situation these other zoos might not need to be part of the EEP. Exceptions need strong argumentation and will be considered based on the roles and goals of the population and not on individual needs of one or more institutions.

There might be extenuating circumstances in which participation in certain EEPs for certain Member institutions is obstructed for practical, personal, or other reasons. EAZA Members facing such circumstances then must clearly state these to the Chair of the EEP Committee. The EEP Committee will review the situation and can decide to excuse a Member from participating in a certain EEP. Such cases, however, should be considered as exceptions, obliging the Member institution concerned as well as the relevant programme Coordinator, its Species Committee, and EAZA as an organisation, to keep trying to eliminate the obstructions involved. Such exceptions should never be used as an excuse to give up the ideal of total participation in all relevant programmes throughout EAZA's entire Membership.

### **3.4.2 Associate Members**

Associate Membership can, at the discretion of the EAZA Council, be awarded to any individual, professional organisation or any other institution. Associate Membership can be awarded to any individual, professional organisation or any other institution located in any country, whether inside or outside of Europe (EAZA Constitution, 2018). There are EAZA Associate Members with, as well as, EAZA Associate Members without, an animal collection. EEP participation is not applicable to Associate Members without an animal collection.

The EEP participation procedure for Full Members as described above is also applicable to all Associate Members holding animals, regardless whether the

Associate Member is an individual, professional organisation or other institution, and regardless of whether the Associate Member is located in the EAZA region or not.

### **3.4.3 Temporary Members**

The EEP participation procedure for Full Members as described in 3.4.1 above is also applicable to Temporary Members of EAZA. However, Temporary Members are not allowed to acquire additional EEP species, that are not yet held in the collection, without EEP Committee approval. EEPs can request approval by completing the “Standard application form for EEP participation A” ([Appendix 9: Temporary Member participation in an EEP - standard format for requesting approval from the EEP Committee Application form A –Temporary Membership \[including Temporary Membership under construction\]](#)).

The same procedure for Temporary Members applies to ‘Temporary Members (under construction)’ which is a category for zoos and aquariums that are being newly built or in the process of complete renovation. The Members cannot acquire EEP species, that they do not yet hold (or held) at the time of becoming a Temporary Member (under construction) without EEP Committee approval.

Whilst becoming an EEP participant for species not yet in the collection whilst being a Temporary Member is exceptional and requires EEP Committee approval, the number of EEPs cannot be set at a maximum as this will depend on different factors, most importantly the existing collections upon becoming a Temporary Member and the institutional collection as reviewed during the screening process. In all cases the EEP Committee will consider the current and proposed collection when making their decisions. The decision of the EEP Committee is final.

If it is recommended by the EEP Coordinator to transfer animals to a Temporary Member, it is strongly suggested to do this on a ‘on loan’ basis only.

### **3.4.4 Candidate for Membership**

Candidates for Membership (CfM) are not automatically authorised to participate in EEPs (EAZA Constitution, 2018). Candidates for Membership do not meet the EAZA Standards and are several years (5 or more) from being able to reach these. The EAZA Technical Assistance Committee appoints a mentor to these institutions, who helps the institution in the process towards complying with the EAZA Standards. EEP participation will only be possible after liaising

with the appointed mentor of the institution. If the mentor is in favour of non-EAZA EEP participation in a certain EEP, the participation will then need to be approved by the EEP Committee. EEPs can request approval by completing the “Standard application form for EEP participation B” (See [Appendix 10: Candidate for Membership participation in an EEP - standard format for requesting approval from the EEP Committee](#)).

As per default, Candidates for Membership can participate in a maximum of five EEPs. This is regardless of the number of species the institution has at the time it becomes an EAZA CfM. The mentor plays an important coordinating role in this regard, liaising with the Candidate for Member and EEP Coordinators towards ensuring the maximum will not be exceeded. In exceptional cases the EEP Committee may decide to allow participation in more than five EEPs. It is expected that CfMs abide to the EAZA Acquisition and Disposition standards for all animals in their collection, as described in [chapter 4.2 Animal acquisition and disposition](#).

Candidates for Membership are not required to pay an EEP participation fee, given that they are already subject to paying the CfM fee.

### **3.5 EEP participation consequences for zoos leaving EAZA Membership**

It occasionally happens that an EAZA Member leaves the Membership, either by choice or by the decision of EAZA Council. Should these institutions be participants or otherwise involved in one or more EEP programmes decisions then need to be made regarding their continued role in these EEPs.

EAZA has consequently decided that if a zoo or aquarium leaves EAZA’s Membership:

- a. The EAZA Executive Office informs the EEP Coordinators about the Council decision;
- b. Institutions that leave the EAZA Membership cannot participate in any EEPs for two years after termination or voluntary withdrawal. The EEP Coordinator can contact the EEP Committee in case this decision is of great detriment to the EEP;
- c. By default, after a two-year period requests to include a former EAZA Member zoo as a non-EAZA EEP participant can be submitted to and decided on by the EEP Committee through the regular procedure (see [chapter 3.6 Non-EAZA Members and EEP Participation](#));

- d. In exceptional cases (e.g. violation of law or EAZA procedures) the EEP Committee can decide that EEP participation will not be possible for a period of five years;
- e. If a Member of staff of the institution in concern is an EAZA TAG Chair, EEP Coordinator or ESB keeper they must give up this task, unless otherwise decided by the EEP Committee;
- f. The relevant TAGs will identify new Coordinators/Studbook Keepers if the institution in concern holds one or more EEPs and/or ESBs;
- g. Any and all correspondence and datasets pertaining to the EEPs/ESBs must be handed over to the EEP Committee (c/o EAZA Executive Office) within two months after the institution has been informed of its terminated Membership.

### **3.6 Non-EAZA Members and EEP Participation**

In this section the procedure for non-EAZA institutions to participate in EAZA Ex situ Programmes (EEPs) is described. The section explicitly focusses on including animals into EEPs that are held by parties that are not a Member of EAZA.

[sections 3.6 Non-EAZA Members and EEP Participation](#) describe the procedures for cooperation with partners that are not a Member in EAZA in the context of Regional Species Plans (RSP) and Long-Term Management Plans (LTMP). A decision tree for easy reference is available in [Appendix 8: Decision tree EAZA EEP participation procedure](#).

#### **3.6.1 General non-EAZA EEP participation philosophy and procedure**

Participation of non-EAZA Members holding animals into EAZA Ex situ Programmes can refer to a diverse range of institutions and individuals including:

- a. Zoos and aquariums in the EAZA region;
- b. Zoos and aquariums outside the EAZA region;
- c. Private holders and private breeders;
- d. Conservation breeding centres;
- e. Sanctuaries and Rescue Centres; and

f. Universities and Research organisations.

The roles and goals of the EEP as defined in the TAG's Regional Species Plan and the management strategy, including population specific goals, as defined in the Long-term Management Plans for the EEP will determine the need to include non-EAZA participants into the EEP. There can be various reasons why participation might be important including: adding underrepresented bloodlines to the EEP; bringing husbandry expertise on board that is lacking in the EAZA Membership; adding individuals and holding space to meet demographic population targets; and/or *ex situ* conservation action that requires animals in human care to be part of one single *ex situ* management programme or framework.

In general, EAZA will look positively towards accommodating the needs of the EEPs in this regard. At the same time, the needs for the programme must be balanced with the needs of the EAZA Membership at large. EEPs are, by and large, managed, overseen and funded by EAZA Member institutions, and are an important EAZA Membership service. Therefore, non-EAZA EEP participants will be expected to pay an EEP participation fee. Non-EAZA Members cannot participate in more than five EEPs (institutions or individuals are then expected to become a Member of EAZA). The EEP Committee can decide to make an exception to this on a case by case basis, for example for institutions or individuals that are not eligible or able to become a Member of EAZA.

Regardless of the type of non-EAZA Member as listed in the categories above, the credibility and reputation of EAZA are of key importance when considering cooperation with non-EAZA Members, including and particularly when considering the participation of non-EAZA Member into EEPs. To be eligible for non-EAZA EEP participation, holders should not be involved in any activities that can cause serious damage to EAZA's reputation. EAZA Members are subject to a cyclical inspection under the EAZA Accreditation Programme, whilst non-EAZA Members are not. There should be a level of guarantee that a non-EAZA EEP participant has acceptable standards both for the EEP species concerned and in general.

For the reasons outlined above the following rules and procedures will apply to non-EAZA EEP participants (applicable equally across all taxa):

- a. Non-EAZA EEP participants are expected to participate in the framework of that specific EEP in the same way as other EEP participants would (as laid down in this Population Management Manual).

- b. Standards for animal welfare, husbandry and veterinary care need to be aligned with general and species-specific EAZA standards similar to what is expected of full EAZA Members. The EEP has a responsibility to ensure this is the case with a focus on the species they request non-EAZA EEP participation approval for. In the approval process the EEP Committee might additionally consider if this non-EAZA EEP participant does not go against important EAZA principles and procedures as laid down in the EAZA Code of Ethics and EAZA Standards for the Accommodation and Care of Animal in Zoos and Aquaria.
- c. An appropriate and transparent record keeping system and means for the identification of EEP animals needs to be in place.
- d. Required legal paperwork needs to be in place (CITES, veterinary certificates, operating licence, etc.).
- e. An appropriate level of communication needs to be in place.
- f. An appropriate level of commitment to the goals of the programme from the non-EAZA EEP participant should be in place (similar to what is expected from EAZA Members).

It might in some situations be needed to visit the institution in question to be able to comfortably and understandably answer all the points above. It is important to note that approval is given for only that specific EEP, meaning that a non-EAZA Member that is approved for participation in one EEP is not automatically approved for participation in other EEPs.

It is strongly suggested to send EEP animals to approved non-EAZA EEP institutions on a loan basis, to be able to retrieve animals when applicable. **The EEP animals should furthermore not be sent to non-EAZA Members prior to EEP Committee approval**, except for 'temporary parking' an EEP animal.

The decision to 'temporary park' an EEP animal in a non-EAZA institution can be made at EEP Species Committee level and does not need official approval from the EEP Committee. The EAZA institution only needs the confirmation of the EEP. A time frame for the duration of the animal's stay at the non-EAZA institution has to be included, and this time frame needs to be related to a special event (building of a new enclosure, accommodation, etc.). Furthermore, animals must in these cases always be sent on loan to the non-EAZA institution so that they can easily be retrieved after the scheduled period, and the non-EAZA institution must provide suitable accommodation for the animal(s).



Non-EAZA EEP participants that are approved by the EEP Committee are required to sign a non-EAZA EEP participation contract. The EEP Coordinator is responsible for arranging this and getting the contract signed. A template non-EAZA EEP participation contract is available in [Appendix 13: EAZA Template contract for non-EAZA EEP participants](#)

Non-EAZA institutions can be divided in two main categories:

- a. Non-EAZA institutions in the EAZA region;
- b. Non-EAZA institutions from outside the EAZA region.

These different categories need a different approach in the framework of non-EAZA EEP participation.

### **3.6.2 Non-EAZA EEP participation: EAZA region**

The following European countries are in the EAZA region:

Albania, Andorra, Austria, , Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Holy See (Vatican City), Hungary, Iceland, Ireland, Italy, Kosovo Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia (FYROM), Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine and United Kingdom of Great Britain and Northern Ireland.

The following Western Asian countries are in the EAZA region:

Armenia, Azerbaijan, Bahrain, Georgia, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen.

The category non-EAZA institutions within the EAZA region can be split up into several subcategories:

- a. Institutions that have previously been an EAZA Member and their Membership has ended (either voluntarily, following an EAP screening or after a complaint procedure).
- b. Institutions that have been an EAZA applicant but were denied Membership.
- c. Institutions that are currently an applicant for EAZA Membership.

- d. Institutions with no (recent) history of EAZA (applicant for) Membership.

EAZA Members are published on the EAZA website. Information on other institution's status in relation to EAZA Membership can be obtained through the EAZA Executive Office.

### **Terminated Membership**

Institutions that voluntarily ended their EAZA Membership cannot participate in EEPs for two years following date of withdrawal. After this two-year period EEPs can request approval from the EEP Committee by completing the "Standard application form for non-EAZA EEP participation C" (see [Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee](#)).

EAZA Council may terminate the Membership of an institution (after a complaint procedure or EAZA Accreditation Programme inspection). If this occurs the institution cannot participate in EEPs for two years following the date of termination. After two years, an EEP can request approval from the EEP Committee for non-EAZA participation in the EEP by completing the "Standard application form for non-EAZA EEP participation C" (see [Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee](#)). In exceptional cases (e.g. violation of law or EAZA procedures) the EEP Committee can decide that the institution cannot participate in EEP for a period of five years.

See also [section 3.5 EEP participation consequences for zoos leaving EAZA Membership](#) and also [section 3.20 EEP/ESB Complaint procedure](#) and [Appendix 24: EAZA Fundraising Account Application](#).

### **Former applicant, Membership denied**

Institutions that were refused EAZA Membership after an EAZA screening mission or in the application phase cannot participate in EEPs for two years after the decision of EAZA Council. When a non-EAZA institution was approved as participant in one or more EEPs, prior to the screening and the decision of EAZA Council, this participation will be reassessed by the EEP Committee in consultation with EEP Coordinator.

After two years, an EEP can request approval from the EEP Committee for non-EAZA participation in the EEP by completing the "Standard application form for non-EAZA EEP participation C" (see [Appendix 11: Non-EAZA institution](#)

[participation in an EEP – standard format for requesting approval from the EEP Committee](#)).

### **Applicants for EAZA Membership**

Applicants for EAZA Membership are institutions that have applied for Membership by completing the EAZA Membership accreditation questionnaire but of which a decision on Membership has not yet been made by EAZA Council. Non-EAZA EEP participation requests for these institutions will be dealt with similarly to those for institutions that do not have any history of EAZA (applicant for) Membership. EEPs can request approval from the EEP Committee by completing the “Standard application form for non-EAZA EEP participation C” (see [Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee](#)).

### **No (recent) history of EAZA (applicant for) Membership**

EEPs can request approval from the EEP Committee by completing the “Standard application form for non-EAZA EEP participation C” (see [Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee](#)).

#### **3.6.3 Non-EAZA EEP participation: other regions**

This subsection deals with EEP participation of non-EAZA Members from outside the EAZA region. Please note that the EEP participation procedures for institutions outside the EAZA region that are an Associate Member of EAZA are described in [section 3.4.2 Associate Members](#)

EAZA encourages the cooperation between EEPs and population management programmes that are run by other professional regional zoo and aquarium associations. Such cooperation might range from an informal exchange of information all the way to official partnerships between two or more programmes (e.g. via a Memorandum of Understanding between two regional programmes or via a Global Species Management Plan as run under the auspices of WAZA). Refer to [section 3.6.4 EEP participation and MoU partners](#) for more information about establishing such partnerships as part of defining the roles and goals of the EEP in relation to other population management programmes as part of the EAZA Regional Species Planning process.

This section focusses only on those situations where a non-EAZA Member outside the EAZA region participates in an EEP in a similar way to any other EEP participant.

As a default procedure, non-EAZA Members outside of the EAZA region are expected to participate in population management programmes as provided by their respective regional association. If there is a regional population management programme for the EEP species run by a colleague regional association (e.g. SSP, PMP, ASMP), EEP participation for non-EAZA Members outside the EAZA region is not possible.

If there is not such a population management programme for the EEP species in the respective region of the institution, and provided that it does not go against the regions species planning priorities, EEPs can request approval from the EEP Committee for non-EAZA participation in the EEP by completing the “Standard application form for non-EAZA EEP participation D” (see [Appendix 12: Non-EAZA institution participation in an EEP- standard format for requesting approval from the EEP Committee](#)).

#### **3.6.4 EEP participation and MoU partners**

EAZA has Memoranda of Understanding with colleague zoos and aquarium associations and other partner organisations (e.g. ALPZA, AZA, PAAZA, EAAM, EUAC). As part of such MoUs there might be more specific agreements laid down in relation to EEP cooperation (among other options, this might include non-EAZA EEP participation). In such cases the EEP Coordinators will be informed upon signing or renewing such MoUs.

#### **3.6.5 Procedure for sending EEP animals outside of programme**

There are circumstances where EEP animals can be appropriately sent outside of the framework of the EEP, either within the EAZA region or outside the EAZA region. In this case the animals move out of the programme and are no longer managed as part of the EEP population in any way or form. It is important to stress that sending animals outside of the EEP is never an alternative to non-EAZA EEP participation and that the decision to place EEPs animal outside of the programme must be made by the EEP, including Coordinator and Species Committee, and based on the roles and goals of the programme as laid down in the Regional Species Plan and Long-Term Management Plan. The rules and procedures for sending animals out of the EEP are described in [3.15.4 Placement of animals out of the EEP](#)

#### **3.6.6 Forwarding non-EAZA EEP participation requests**

The EEP Coordinator is responsible for coordinating the non-EAZA EEP participation request including checking the conditions as listed above, soliciting Species Committee approval (if in place) and completing and submitting the application form.

After completing the relevant standard application form the EEP Coordinator should forward it to the TAG liaison at the EAZA Executive Office for approval by the EEP Committee. If the application form was completed correctly it will be forwarded to the EEP Committee and TAG (Vice) Chairs. The EEP Committee together with the TAG (Vice) Chairs will then review the application looking at three main elements:

- a. The needs for the EEP;
  - Follows from the role, goals and management strategy (RSP, LTMP processes).
  - TAG (Vice) Chairs will review this element.
- b. The needs for the EAZA Membership;
  - EAZA Members invest in the EEP structure, pay Membership fee, and are subject to inspection under the EAZA Accreditation Programme (EAP).
  - EEP Committee will review this element.
- c. The reputation of EAZA;
  - A non-EAZA partner should not be involved in any activities that can cause serious damage to EAZA's reputation.
  - This links to professional standards and behaviour
  - TAG (Vice) Chairs and EEP Committee will both review this element.

The EEP Committee and TAG Chairs will have two weeks for the review process that will take place via email. The EEP Committee and TAG (Vice) Chairs will consequentially take one of the following three decisions:

a. **Approve the non-EAZA EEP participation request, pay participation fee**

There is a need to include the non-EAZA Member in the EEP, the balance with Membership needs are checked and the reputational risk considered minimal. The non-EAZA Member must pay the non-EAZA EEP participation fee.

b. **Include in the EEP, no participation fee (only exceptional cases)**

There is a need to include the non-EAZA Member in the EEP, the balance with Memberships needs are checked and the reputational risk considered minimal. There are valid reasons why payment of participation fee is not possible for the participant and hence payment of the fee is exempted. This option is not supported for licensed zoos and aquariums in the EAZA region, who will always have to pay the fee.

**c. Do not include in the EEP**

The EEP Committee and TAG (Vice) Chairs are not convinced of the necessity of inclusion in the EEP or believes there is reputational risk for example based on not meeting professional animal management and care standards or has experiences negative experiences with this institution within the context of another EEP.

A non-EAZA Member outside the EAZA region (see [3.6.3 Non-EAZA EEP participation: other regions](#)) that is a Member of a regional or national association in their country or region, where that regional or national association is an Association Member of WAZA, is exempted from paying a non-EAZA EEP fee. All other non-EAZA institutions outside the EAZA region must pay the non-EAZA EEP fee, unless special conditions as mentioned under point b apply.

Within two weeks after the official approval the EEP Coordinator will be informed on the Committee's decision. The EEP Coordinator will then have to communicate this decision to the non-EAZA institution and (when applicable) explain the follow-up procedure regarding the payment of the participation fee (see [subsection 3.6.7 Non-EAZA EEP participation fee](#)).

Approved non-EAZA EEP participants are eligible for a seat in the elected EEP Species Committee when such exist, however the EEP Coordinator must ensure that at least two-third of the seats are taken by EAZA Members (for more information on the Species Committee see [section 3.9 The EEP Species Committee](#)).

Non-EAZA EEP participants should be included in the formal EEP evaluation procedure that is carried out once in every five years. Overviews of approved non-EAZA EEP participants are available on the Member Area of the EAZA website and must be consulted prior to any non-EAZA participation evaluation. Non-EAZA EEP participants that fail to follow the rules and procedures for EEP participation as described in this Chapter, risk for their participation to be discontinued. This decision can be made by the EEP Species Committee or, when required, the EEP Committee (following the normal EEP complaint procedure – [3.20 EEP/ESB Complaint procedure](#)). If the non EAZA institution is officially

approved for their participation in more EEPs, the resp. EEP coordinators should be informed about this decision. When the non-EAZA EEP participant in question is approved to participate other EEPs, the EEP Committee has the right to decide to discontinue participation in those other EEPs as well.

In exceptional cases the ignorance or counteracting of EEP recommendations by a non EAZA institution, even when not officially approved in that resp. EEP, might have implications on their even participation in the resp. EEP (s) they are approved for.

### 3.6.7 Non-EAZA EEP participation fee

Non-EAZA Members that are approved by the EEP Committee as a participant in one or more EEPs are charged a yearly non-EAZA EEP participation fee. The fee depends on the number of programmes that the institution is approved for.

#### **EEP participation for non-EAZA institutions, fee structure 2024 (1 January 2024 – 31 December 2024) \*:**

- Participation in 1 EEP: €243
- Participation in 2 EEPs: €476
- Participation in 3 EEPs: €708
- Participation in 4 EEPs: €939
- Participation in 5 EEPs (max.): €1171

*\* Fees will increase with 3% annually. Otherwise the amount of the fees can be subject to change, as proposed by the EEP Committee, to be decided upon by the EAZA Executive Committee.*

Invoices will be distributed by the EAZA Executive Office once a year. The EEP Committee can decide to waive the participation fee for a non-EAZA EEP participant, in exceptional cases.

If a non-EAZA institution does not pay the obligatory EEP participation fee within six months the EEP Committee will withdraw the approval of the non-EAZA EEP participant. EEP animals might need to be retrieved for the EEP population. The non-EAZA institution cannot participate in the EEP for a period of at least two years and would need to pay outstanding fees prior to being reconsidered as non-EAZA EEP applicant after this two-year period.

### 3.7 ESB participation

The procedure for participation in ESBs is different from that of EEPs as described in the previous two sections. EAZA Members are expected to



participate in ESBs according to the interpretation of best Practice of EAZA's Constitution that is presented in paragraph [3.4.1 Full Members](#). Similar to EEPs, ESBs should focus on meeting the population management needs of EAZA collections. When relevant for the EAZA population non-EAZA Members can participate in ESBs provided that they are committed to the goals of the overall population and that, for the species in question, they apply to the EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria. The decision is made by the ESB keeper. When needed, the ESB keeper can turn to the ESB participants and/or the TAG for advice.

### **3.8 Rules of joint population management**

This section explains the rules of joint population management for all parties involved in EAZA Ex situ Population Management programmes, including the EEP Coordinators and participants.

The roles and goals of the EEP will define the characteristics of the programme. This requires a certain level of flexibility to develop these characteristics, which is part of the EEP application process. At the same time, it is important to have clear rules and procedures for the implementation of the programmes. The EAZA Membership and other EEP participants must know what they can expect from an EEP and in turn what is expected from them as participants in the EEP.

#### **3.8.1 Rules of joint population management in EEP's**

The rules for participating in an EEP are as follows:

- a. As a default, participation in EAZA Ex situ Programmes is obligatory for EAZA Members (see [chapter 3.4 EAZA Members and EEP Participation](#))
- b. The participant commits itself to the long-term joint management of the species' population.
- c. The participant agrees to place a certain minimum number of enclosure spaces at the disposal of the programme. Sufficient notice must be given when this commitment is ended.
- d. Breeding and transfer recommendations for individual animals may or may not be part of an EEP. Where they are, these will be developed following a democratic process (Species Committee or otherwise).

- e. The participant will follow the recommendations of the long-term management plan and the annual breeding and transfer recommendations which are based on this plan whenever possible. If - for whatever reason - the implementation of a recommendation is considered difficult or even impossible, the participant will justify its objections to the EEP Coordinator or the Species Committee in order to enable reconsideration. EEP Coordinators should respect institutional requests and problems and consider alternative suggestions as proposed by EEP participants and try to accommodate these wherever possible and in alignment with the overall goals of the EEP. If, after this, still no acceptable solution is found, a final and binding decision may be taken by the EEP Species Committee as the representatives of all participants of the particular EEP programme.
- f. The participant will always request EEP approval prior to each and every animal transfer (to and from its own collection) not specifically recommended in the species' management plan. This is a particularly delicate matter when transfers in and out of the EEP population (from and to non-EEP participants) are involved.
- g. Ownership should be respected in the implementation of transfer recommendations. This might for example apply to cases where EAZA Members are housing confiscated animals that would need clearing by the confiscating Authority prior to breeding or transfers in the framework of an EEP being legally allowed.
- h. The participant - although being the rightful owner of particular individuals of the EEP population - will cooperate in the species' management as if its population were common property of the entire group of participants.
- i. EEPs are non-commercial. In order to ensure the non-commercial status of EEPs any selling of EEP animals is not allowed and **must** be avoided. This also applies to deceased EEP animals (whole carcass or separate body parts).
- j. The participant will follow the recommendations of the EAZA Best Practice Guidelines for the EEP species as closely as possible in order to guarantee optimal well-being and reproduction of the animals of this species under its care.

- k. The participant receiving a recommended EEP animal following a transport from the sender, should inform the sender that the animal(s) have arrived in good condition.

In return to these commitments by the participant, the community of all participants of a given EEP, represented by the species representatives and, when in place, the elected Species Committee, and guided by the EEP Coordinator, will act as much as possible in the interest of all individual participants, guaranteeing - whenever possible - the continued presence of the desired number and quality of animals in each of the participants' collections. Good communication is essential in this regard and the EEP Coordinator should therefore always respond to request from EEP participants in a timely fashion (and vice versa).

Participants violating any of the above rules of joint population management in the EEP should be reported to the TAG and, if problems remain unresolved, to the EEP Committee (See [chapter 3.20 EEP/ESB Complaint procedure](#)).

There might be exceptional circumstances where the rules as outlined above cannot be adhered to in full. For example, in cases where the EEP is part of a larger consortium of partners and where the decision to transfer or breed animals lies with an external partner (e.g. for species that for which a government is a lead partner for a species recovery project and might hold the decision-making mandate in this regard). Any need for deviating agreements in relation to the above rules will be programme specific and not institution specific and must be included in the EEP application and submitted for approval by the EEP Committee. Such request should never be in conflict with EEP roles and goals as laid down in the EAZA Regional Species Plans or the EAZA Constitution and EAZA Code of Ethics.

### **3.8.2 Rules of joint population management in ESB's**

- a. The rules for participating in an ESB are as follows:
- b. The participant commits itself to the long-term joint management of the species' population.
- c. The participant agrees to place a certain minimum number of enclosure spaces at the disposal of the programme. Sufficient notice must be given when this commitment is ended.
- d. The participant is strongly encouraged to follow the recommendations made by the ESB keeper based on the studbook analyses.

- e. The participant is encouraged to obtain advice from the ESB keeper prior to each and every animal transfer (to and from its own collection) not included in the ESB recommendations.
- f. The participant - although being the rightful owner of particular individuals of the ESB population - will cooperate in the species' management as if its population were common property of the entire group of participants. In order to ensure the non-commercial status of ESBs any selling of ESB animals must be avoided.
- g. The participant will follow the recommendations of the EAZA Best Practice Guidelines for the ESB species as closely as possible in order to guarantee optimal well-being and reproduction of the animals of this species under its care.

In return to these commitments by the participant, the community of all participants of a given ESB will act as much as possible in the interest of all individual participants, guaranteeing - whenever possible - the continued presence of the desired number and quality of animals in each of the participants' collections.

Participants violating any of the above rules of joint population management in the ESB should be reported to the TAG and, if problems remain unresolved, to the EEP Committee (see [chapter 3.20 EEP/ESB Complaint procedure](#)).

### **3.9 The EEP Species Committee**

This chapter will provide the structure and working procedures for the EEP Species Committee. As per default EEPs will have a Species Committee. Based on the programme characteristics it is possible in the EEP application process to propose opting out of having a Species Committee or propose an alternative set up for democratic EEP decision making. When transfer and breeding recommendations are part of an EEP it is particularly important to have a Species Committee (or alternative form) to guarantee a process of democratic decision making. See [2.5.3 Decision making procedure](#)

#### **3.9.1 Number of Species Committee Members**

The eligible number of Species Committee members depends on the total number of participants of an EEP. The following numbers are suggested as a guideline:

- up to 10 participants: 5 to 7 members

- 11 to 20 participants: 7 to 9 members
- 21 to 40 participants: 9 to 11 members
- 41 to 80 participants: 11 to 13 members
- 81 or more participants: 13 to 15 members

Within these limits the number of Species Committee members is determined by the EEP Coordinator. It might in some cases prove difficult to get enough Species Representatives volunteering for a seat on the Species Committee. In those cases, it is acceptable to have fewer seats as suggested above, provided that a minimum of five members are on the committee.

Although the Coordinator may be his/her institution's representative for the species, he/she is not regarded as an eligible member of the Species Committee. The EEP Coordinator however does have a casting vote on the committee. A Vice coordinator is a non-voting member of the EEP Species Committee unless they are elected on the Species Committee as institutional representative

### **3.9.2 Elections**

The members of the Species Committee are elected by the species representatives of the participants in the EEP programme, and from those representatives who indicated their willingness to be eligible. Thus, election forms should list all names of the latter group, be distributed to all participants' representatives. Each species representative should vote for the total number of available seats on the Species Committee, and those representatives receiving the highest number of votes are elected. The EEP Coordinator takes part in the voting only if they are the species representative of their institution. The EEP Coordinator must ensure that no less than 2/3 of seats are taken by species representatives from participants that are Full Members of EAZA.

### **3.9.3 Geographic representation**

In EEPs with large number of participants from various parts of Europe, the EEP Coordinator may advise that there is geographic representation on the Species Committee. In that case the EEP Coordinator groups the eligible candidates on the election form according to countries or regions and advises the participants' representatives to vote for at least one candidate per region/country. For each country/region the candidate with the highest number of votes is elected; the remaining seats go to those candidates who receive the highest numbers of votes overall.

### 3.9.4 Advisors

If certain crucial disciplines are not represented among the Species Committee's membership, the EEP Coordinator may advise the committee to appoint Advisors (e.g. veterinarians, ethologists, geneticists or other experts in regard to the species and its husbandry). Such Advisors may attend meetings but cannot vote. Additional procedures apply for appointing TAG and EEP Veterinary Advisors (see [3.9.5 Veterinary Advisors](#)).

### 3.9.5 Veterinary Advisors

Approved TAG and EEP Veterinary Advisors (VAs) serve as part of the TAGs and EEP Species Committees by advising on issues concerning individual and population health, contributing to best practice guidelines and providing information and clinical advice to collections and their veterinarians as required (See [Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs](#) and the supporting guidance document '[EAZA Vet Advisor Resource Manual](#)').

All EAZA TAGs and EEPs should appoint at least one (or more) Veterinary Advisor(s). VAs can be appointed at EEP-level (i.e. advising on or more individual species) and/or at TAG-level (i.e. advising on the respective taxonomic group as a whole and not advising on individual species). TAG and EEP VAs have slightly different duties and responsibilities. For more details, see [Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs](#) and the supporting guidance document '[EAZA Vet Advisor Resource Manual](#)'. Approved EEP veterinary Advisors are per definition a non-voting member of the Species Committee.

The VA position is a position based on personal expertise with institutional backup from an EAZA Member. This also applies for VAs not working for an EAZA Member. EEP Veterinary Advisors are nominated by the EEP Coordinator and approved by the EEP Species Committee (when in place). Veterinary Advisors working only at TAG level are appointed by the TAG Chair with approval by the TAG members. A VA advert form and application form, as well as more details on the application procedure, can be found in [Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs](#) and the supporting guidance document '[EAZA Vet Advisor Resource Manual](#)'.

Upon appointment, VAs must, amongst others, confirm to the relevant EEP Coordinator and/or TAG Chair:

- Their understanding of the VA commitment and duties.

- Their letter of institutional support from a Full, Temporary or Associate EAZA Member to ensure that they have access to ZIMS and other data / documentation required for the relevant species.
- Their GDPR consent to EAZA and EAZWV for storing their contact details.
- Their agreement to abide by the data confidentiality and ownership clauses

Once an EEP Veterinary Advisor or TAG Vet Advisor's appointment is confirmed by the EEP or TAG respectively, the EEP Coordinator or TAG Chair informs the EEO TAG liaison, who will add the contact details of the VA to the Veterinary Advisor directory and EAZA Vet Advisor emailing list.

The EAZA Veterinary Committee will assist in matching suitable candidates with vacant VA positions. The EAZA Veterinary Committee also provides general oversight of the Veterinary Advisors, regularly reviews and updates the VA role description and guidelines, and provides advice on cross taxonomic issues.

In order to successfully perform their duties, EEP and TAG VAs must have access to relevant medical information pertaining to the animals that are managed under the umbrella of the TAG or EEP. Without access to such data, Veterinary Advisors cannot contribute to the overall aim of healthy population of individuals with positive animal welfare within the EAZA community. It is envisaged that VAs will increasingly have access to medical information pertaining to the species connected to their roles via ZIMS. However, there are other ways to gather information, ranging from questionnaire data to individual inquiries by email, post or telephone. Irrespective of the method of data collection, the next few paragraphs outline the EAZA rules and procedures about the ownership and use of data obtained by TAG and EEP Veterinary Advisors. The TAG Chair or the EEP Coordinator has a responsibility to ensure that the VA has access to all the relevant information.

#### *Confidentiality*

- Medical data is shared with the EEP or TAG Veterinary Advisors in their role under EAZA rather than as individuals.
- When using medical data, institutions may not be singled out and data pertaining to individual animals or institutions cannot be used for other purposes, nor shared or published without prior consent.

#### *Ownership*



- Ownership of (medical) data stays with data provider.
- Publications using the data provided must first be approved by the EEP/TAG, and when external parties are involved non-disclosure agreements may be required.
- Papers using anonymized aggregated medical data arising from >10 institutions, do not also require consent from the institutions providing the data.
- Publishing individual case data, novel techniques, datasets originating from <10 institutions, or anonymized aggregated data that could be easily traceable to an individual animal or institution must be preceded by a formal request to the data providers.

### **3.9.6 Terms of membership and re-election**

The terms of membership of the Species Committee is five years. Five years after the previous election a re-election is held for the entire committee and all participants should again be asked if their representatives are eligible. There is no limit to the number of 5-year terms that one can serve on the Species Committee. The EEP Coordinator is encouraged to highlight the balance between experience and rejuvenation when inviting candidates to stand for election.

A committee member giving up his/her membership (e.g. by leaving the institution which they represent) in between of two elections is replaced by the candidate who obtained the highest number of votes of the representatives after those that were elected during the previous election. If there is still an acceptable number of members (see above), the committee may decide not to replace a leaving member until the next five years' election.

### **3.9.7 Meetings, agendas and minutes**

Species Committees should meet three times during the five-year election period, unless the development of the programme requires more frequent meetings (which may occur in the beginning phase), or unless the programme clearly warrants less frequent meetings (which may occur in well-established programmes with less complicated population structures).

The EEP Coordinator organises and Chairs Species Committee meetings, which may be held in conjunction with the EAZA Annual Conference, TAG meetings or other meetings which Species Committee members are likely to attend. This is in order to make the most efficient use of people's time and travel expenses. Besides face to face meetings the EEP Coordinator is encouraged to initiate email discussions and organise online meetings whenever relevant.

The agenda of each meeting is prepared by the EEP Coordinator and sent to the committee members, TAG Chair and EAZA Executive Office in advance. The minutes of each meeting are sent to all Species Committee members of the EEP, the TAG Chair and the EAZA Executive Office within two months after the meeting.

As per default there would be one Long-Term Management Plan meeting organised during the five-year election period that might be held in conjunction with, or replace the regular, Species Committee meeting. For more information about this process please refer to [section 3.10 Long-Term Management Plan \(LTMP\)](#)

Members of the Species Committee should be able to attend at least two meetings during the elected period of the committee.

### **3.9.8 Voting and conflicts**

Decisions of the Species Committee are taken on the basis of a simple majority of votes of the members. Only in the case of equally divided votes, does the EEP Coordinator have a vote, which is then a casting one. A Vice coordinator is a non-voting member of the EEP Species Committee unless they are elected on the Species Committee as institutional representative. Equally divided votes in this context either means the exact same number of votes (e.g. seven "yes" and seven "no" votes) or a one vote difference (e.g. seven "yes" and eight "no" votes).

### **3.9.9 Subjects to be dealt with by the Species Committee**

The Species Committee should deal with all strategic aspects of the EEP, and should particularly discuss (and where appropriate approve):

- a. The annual breeding and transfer recommendations.
- b. The Long-Term Management Plan.
- c. The EAZA Best Practice Guidelines (including animal welfare).

- d. Research proposals for the improvement of husbandry, reproduction, etc.
- e. Possible conflicts between participants and EEP Coordinator regarding the implementation of recommendations.
- f. Proposed new (non-EAZA) participants for approval.
- g. Conservation activities.
- h. Appointment of Advisors.

Alongside the EEP Coordinator, the Species Committee has the responsibility for ensuring the successful management of the programme. In case the EEP Coordinator is not functioning as expected (members of) the Species Committee should express their concern to the Coordinator and, if that fails, the relevant TAG Chair. It is recognised that the way the species committee functions might be slightly different from one EEP to another. When relevant Species Committee members must be prepared to take a proactive role in the preparation and implementation of the subjects mentioned above. After the election of a new Species Committee or appointment of a new EEP Coordinator the working relations should be tabled for discussion in order to re-establish current working procedures or when relevant adapt these accordingly.

Species Committees for species that are taxonomically close and facing similar population management issues (e.g. related to husbandry) are encouraged to work together whenever relevant.

### **3.9.10 Exceptions and alternatives**

For some programmes there can be legitimate reasons why the default structure and format for Species Committees does not work either permanently or temporarily. In those cases, the EEP Committee can decide to approve another approach for that particular programme such as:

- a. A joint Species Committee for species with similar issues and/or that compete for spaces.
- b. A smaller Species Committee (minimally the Coordinator, Studbook Keeper and TAG Chair and Vice chair).
- c. Include all participants automatically in the Species Committee (even in big populations)

- d. Work with a more flexible working group concept (appoint a working group for a certain issue and appoint another working group for another topic, overseen by the Coordinator).
- e. Electing a new committee before the five-year term is completed.
- f. Species Committee role (in part) lays with an external partner (e.g. a government who might have ownership over animals).

Based on the outcomes of the RSP process the relevant TAG can ask the EEP Committee to approve such an alternative approach. This would normally be part of the EEP application process but may also be proposed in the interim between two RSP sessions if so required. This will only be approved where there is clear reasoning and agreement of the participants in the programme or programmes.

The functioning of the EEP will be evaluated every five years and will include a session on the Species Committee (or alternative).

### **3.10 Long-Term Management Plan (LTMP)**

A Long Term Management Plan (LTMP) should be developed for each EEP. In its simplest form a LTMP should describe the management strategies in support of the roles for *ex situ* management as defined in the Regional Species Plan (RSP) for the EEP. In absence of an RSP, the roles will have to be defined during the LTMP process.

Per default a LTMP is published once every five years, however this may vary depending on the roles and goals of the EEP and the (reproductive) biology of the species concerned. The LTMP will typically include the demographic and genetic population management strategy for the EEP population but will additionally include strategies for research, husbandry developments, education and conservation activities, etc. as relevant and applicable to that EEP.

The LTMP process is facilitated by the PMC team of the EAZA Executive Office and run in close cooperation with the EEP coordinator. There are different types and styles of LTMPs varying from a two-page strategy towards keeping a population demographically stable and developing education and awareness for a given species, to a holistic analysis including a tailored made, detailed, strategy for the demographic and genetic parameters of the population; (non)breeding and transfer recommendations for the next cycle (year or otherwise); and other actions required to deliver all of the EEP's assigned roles, such as activities related to husbandry, research, welfare, education, *in situ* conservation support,

etc. The content and set up of the LTMP will be discussed between the EEP Coordinator and the PMC team in advance. While for the development of some LTMPs a 1-2 day LTMP workshop together with the Species Committee and any other relevant stakeholders might be required, for others an online meeting with a small group of stakeholders (e.g. EEP Coordinator or TAG chair) might be sufficient.

The LTMP document is drafted by the PMC team for approval by the coordinator and when in place the EEP Species Committee. The PMC team aims to produce the LTMP within one month after the LTMP meeting, with approval to follow within one month after sharing the draft LTMP with the EEP coordinator and EEP Species Committee (and other stakeholders if so applicable).

A LTMP may or may not include (non)breeding and transfer recommendations for the next cycle of breeding and transfers. In the period between LTMP publications the EEP coordinator and their Species Committee are responsible for the implementation of the LTMP and developing and/or updating the annual breeding and transfer recommendations and, if required, (aspects of) the management strategy.

While the LTMP report is a static documentation of the plan at one point in time, the actual plan should be a “living” process. Annual evaluations by the EEP Coordinator and EEP Species Committee are necessary to assess if actual developments in the population are in accordance with the targets. If, after a given period of time, actual developments in the population deviate too much from the target, or if external factors (e.g. changed conservation status of the species in the wild) would require redefinition of targets, the plan should be reviewed. Any fundamental changes to core strategies in the plan should be made together with the species committee (if there is one) and the TAG. The EEO PMC can be contacted for advice.

It should be noted that EAZA is in the process of gaining further experience with the formulation of LTMPs as described above. Please refer to [3.10 Long-Term Management Plan \(LTMP\)](#) for more information on the planning process. EEP coordinators can gain experience by viewing existing LTMPs posted on the EAZA Member Area and starting the process by reflecting on how to apply these management plan ideas to their own species. While doing so it is suggested to seek advice from the relevant TAG members, EEP Species Committee members, EPMAG and the EAZA Executive Office.

The EEO PMC prepares a yearly schedule for LTMP sessions. This will be largely driven by the RSP schedule since the RSPs set, confirm or change roles for EEPs.

However, the PMC may also prioritise EEPs in case of urgent need and EEP coordinators can contact the PMC to indicate needs. It should be noted that the PMC is still in the process of increasing staff capacity and that the number of LTMPs that can be dealt with per year will grow in synchrony.

### **3.11 The EEP annual report**

#### **3.11.1 EEP pages**

EAZA believes it is important to demonstrate and promote the work of EAZA Ex Situ programmes and to showcase the variety in EEPs, their aims and set up. EAZA therefore will set up an so called 'EEP page' for all programmes, which will be populated by the EAZA Executive Office in close cooperation with the EEP Coordinator. The EEP pages have both an externally facing part on the EAZA public website to share EEP information in a transparent manner, and an internally facing part on the Member Area which includes specific information linked to the management of the EEP that is relevant to the EEP Participants and EAZA Membership.

The public pages include name of the EEP, name of coordinator, hosting institution, roles in a table format, link to the BPG, logo of the IUCN status with a link to the relevant page, logos and names of programme partners with links to the website (where applicable), highlights which include news stories (Zooquaria, JZAR), species events, in situ news, research and other information fit for the public. The EAZA member area includes links to the RSP, EEP application and LTMP, decision statement, management strategy, progress made towards goals/objectives in the LTMP, species committee/programme governance, highlights (information that only relates to EAZA members) and calls for action. Call for action can include requests for holders, research priorities, veterinary and conservation updates. The EEO works closely together with the Coordinator to create and keep the EEP pages up to date.

The EEO recognizes that there is a transition period before each new style EEP has its own EEP page and therefore should Coordinators wish to continue to send in annual reports they can use the template in [Appendix 23: EAZA Template Programme Annual Report](#)

### **3.12 The studbook**

This chapter describes the procedures regarding the studbook including on the population management software, data management, data use, data access and data ownership. The section is tailored to studbook datasets that are maintained for the purpose of managing EEPs, ESBs and Mon-P. The studbook dataset is

managed by the EEP coordinator, ESB keeper or Mon-P (or someone delegated to do so on their behalf). This person is referred to in the chapter as the 'Studbook keeper'. The Studbook keeper must always represent an EAZA Member institution.

In addition to the EEP, ESB and Mon-P studbook datasets, that are run on a permanent basis to support the management of the programme, there are situations where the EAZA Executive Office might support TAGs by setting up an unofficial temporary studbook dataset for analytical purposes only, for example in preparation for an RSP workshop to support informed decision making. These datasets serve a specific and short term analytical purpose and have a defined beginning and ending. Whilst conceptually the same principles apply to such temporary datasets, much of the sections described in this chapter will not be applicable to these temporary studbook datasets. The EAZA Executive Office, working in close cooperation with the TAGs, will keep an oversight over these temporary datasets.

Permanent studbooks should only be maintained to support management of EEPs, ESBs and Mon-P. It is however recognised that there might be occasions where there is value to maintain an analytical studbook dataset on a more permanent basis to support the decisions made for taxa that have a Mon-T RSP category. In such cases TAGs can propose for a Mon-T studbook dataset to be maintained to the EEP Committee. In this regard it is relevant to keep in mind that the dataset should not be used for 'day-to-day' management of the population. The EAZA Executive Office will maintain an overview of Mon-T for which such an exception has been approved. Where applicable the same procedures apply to these Mon-T studbook datasets as those for EEPs, ESBs and Mon-P.

### **3.12.1 ZIMS for Studbooks**

A digital studbook dataset is essential to allow the various analyses that are needed to inform population management (see also [chapter 3.13 Studbook analyses](#)). EEP, ESB and Mon-P studbook data has to be maintained in ZIMS for Studbooks, which is supported by Species360. EAZA does not support the use of any other software for maintaining pedigree-based studbook data. EAZA does recognise that the natural history characteristics of certain taxa are not (yet) compatible with the use of ZIMS for studbooks (e.g. group managed species). For populations managed at group level - a significant number of challenges remain regarding tools for the registration and analysis of pedigree and demographic data. Information on currently available methods and tools, as well as future challenges, can be found in section [3.13.3 Group management](#).



### 3.12.2 Data to be included in the studbook

Please be sure to check the EAZA Standards for Accommodation and Care of Animals in Zoos and Aquaria.

An EEP, ESB or Mon-P studbook dataset should aim to include as a minimum:

- a. All individuals ever held in EAZA Member institutions, including those that have not been entered in ZIMS by institutions and which will thus not appear in the Suggested list of ZIMS for Studbooks.
- b. Known holdings outside the EAZA Membership, if relevant to the population and feasible. (For non-EAZA institutions that are ZIMS users, please see the Global filter in the Suggested list).
- c. All direct ancestors of these specimens (regardless of location), tracing lineage to original wild-caught founders.
- d. All stillbirths, premature births and early deaths should be registered as individuals to enable analysis into the effects of inbreeding, husbandry problems and hybridisation to be carried out.

It is noted that for some taxa, particularly those with long *ex situ* histories, it may not be able to obtain records for all appropriate specimens; this should, however, remain the clear eventual aim of all EEPs, ESBs and Mon-P.

The information maintained for each individual should include as a minimum:

- a. Identities of sire and dam;
- b. Date and location of birth;
- c. Full transaction history (names of owners and dates of ownership changes); where the holding institution is not the owner of the specimen, the studbook should record both the actual location of the animal and the owner institution;
- d. Where animals have been obtained from or released into the wild, the studbook should record, if possible, details of the capture or release location;
- e. Any individual identifiers (e.g. house names, local identification numbers, tags, transponders, tattoos);

- f. Any data on the reproductive potential of living animals (e.g. temporary contraception method and dates, permanent contraception such as castration);
- g. Date and location of death;
- h. Cause(s) of death and information on disposal of body. EEP Coordinators and ESB keepers and their Vet Advisors are encouraged to collect data on causes of death to enable studies of the effects of inbreeding and hybridisation and to identify potential husbandry problems. The same may apply to a Mon-P;
- i. Other information pertinent to a particular programme (e.g. sub-species, genetic analysis).

If any assumptions are made, to be used for demographic or genetic analysis, these should only be recorded in an Analytical Overlay. The reasons for each of these assumptions should be clearly documented in the notes. Any assumptions made to determine a used birth and death date should also be clearly documented in the individual's notes.

Additional detailed notes on any of the above should be made, as needed. Studbooks for egg-laying species should include, if possible, data on clutch size, fertility and hatchability. All information should be included within the studbook dataset itself, not as separate paper records.

### **3.12.3 Studbook data validation**

It is the responsibility of the EEP Coordinator, ESB keeper or Mon-P not only to maintain data into a correct studbook format, but also to assess the quality of the data by investigating missing information, inconsistencies among reporting institutions, logical errors and other potential sources of error in the data. Several tools exist within ZIMS for Studbooks to assist with data validation, including Data Quality tools and comparison with institutional data as recorded in the ZIMS Husbandry module. Data validation should be performed, and potential errors investigated, before using data for analyses or prior to publication of the studbook

### **3.12.4 International and regional studbooks**

As part of the RSP process as described in Chapter 2, EAZA wants to set priorities for our population management programmes considering the global context and to develop integrated plans according to the One Plan Approach where

needed. For that reason, EAZA believes that a level of transparency and sharing of EAZA studbook data with other professional zoos and aquarium associations is relevant. At the same time having a level of access to studbook data from other regions is necessary. By sharing our regional studbook data and having access to studbook data from other regions, we facilitate the analysis of combined data sets that will empower better species conservation and animal care.

#### *3.12.4.1 Data collection*

In cases where there is a WAZA International Studbook (ISB) in place for an EEP species, ideally data is recorded into one studbook dataset to avoid duplication of efforts. Both the international studbook keeper and the EEP Coordinator should in this case have editing access to the studbook. Between the ISB keeper and EEP coordinator clear rules should be established around data entry and communication with the holders. Unless otherwise agreed, the EEP coordinator should take responsibility for data from, and correspondence with, EEP participants, regardless of the ISB hosting region. The same principles might be applied to ESB and Mon-P species.

Sometimes it will not be possible to come to an agreement with an ISB keeper, or it might make sense to maintain a separate International studbook and EAZA studbook, such as when opinions on historical pedigree differ. In this case, it is recommended that the EEP Coordinator and International Studbook keeper provide each other analytical access to the EAZA studbook and ISB studbook, following the EAZA/ZIMS for Studbooks Access roles guidelines [See [Appendix 30: Access Roles in ZIMS for Studbooks](#)]

#### *3.12.4.2 Studbook IDs*

In case separate International and EAZA studbooks are maintained, it is recommended that the studbook keepers try to come to an agreement regarding assignment of studbook numbers. For example, it is recommended to try to agree with the ISB keeper that specific sets of ISB IDs are reserved for EEP, ESB or Mon-P animals. These studbooks IDs can then be assigned to animals registered in the EEP, ESB or Mon-P studbook. If all individuals receive only one, international, studbook number their number does not change if they happen to be transferred through different regions (and their respective regional studbooks) and this will prevent confusion in communication between different regions. In cases that international and regional studbook IDs cannot be

attuned, it is essential that IDs other than the EEP IDs are also recorded in the EEP, ESB, Mon-P studbook.

In case an WAZA ISB is in place for an EEP species, the EEP Coordinator is encouraged to also consider the WAZA policies around ownership, use and access to ISB data which is available on the WAZA website. This is of particular importance when a single dataset is used for the purpose of both the ISB and the EEP

### **3.12.5 Publication of studbooks**

Publication of the studbook is no longer a mandatory requirement as holders can request access to ZIMS for Studbook information and as such can have real time access to the studbook data and run analysis on the data via export to PMx (See [3.12.7 Sharing studbook data within and outside EAZA](#) for more information). Furthermore, detailed analyses are also included in the EEP Long-Term Management Plan (LTMP). It is recognised that some EEP Coordinators may still wish to publish an electronic version of the studbook which can be done using [Appendix 14: EAZA studbook template](#).

### **3.12.6 Ownership of studbook data**

Studbook data are routinely collected from zoos and aquariums for the purpose of supporting the coordinated management of *ex situ* populations of wildlife species.

Where the primary objective is to facilitate the coordinated management of *ex situ* populations, an EEP/ESB studbook is established under the auspices of EAZA as the regional zoo and aquarium association that administers these species management programmes. EAZA authorises EEP Coordinators, ESB Keepers and Mon-Persons, to collect and maintain data on behalf of the association and requires its Member institutions to contribute data to the studbook. In such cases, institutions contribute data on the understanding that the data are to be used for the collective benefit.

EAZA considers that the purpose for which a studbook is established and the basis on which data are provided to the studbook are of relevance to the ownership of the studbook data and the subsequent availability of the studbook dataset in all its formats. Therefore, EAZA considers:

- a. That all studbooks managed under the auspices of, and on behalf of, EAZA are developed for the collective benefit;
- b. That the data in such studbooks are held under the ownership of EAZA;

- c. That, for such studbooks, the Studbook keeper is the curator of the data and neither the Studbook keeper nor the institution at which that person is employed holds ownership over the data in the dataset;
- d. That, a process for access to studbooks data needs to be in place for EEP and ESB participants, further relevant EAZA stakeholders and external stakeholders that balances the importance of data transparency with the professional expertise needed to be able to use such data (See section [3.12.7 Sharing studbook data within and outside EAZA](#))

As part of the One Plan Approach, some EEPs might work in a broader framework with external partners (governments, sanctuaries, NGOs, etc) who might bring in additional or different requirements with regards to ownership of studbook data. As the process above is based on key principles in EAZA, any deviating procedure with regards to ownership of studbook data must be approved by the EEP Committee.

### **3.12.7 Sharing studbook data within and outside EAZA**

In addition to the day-to-day use by the Studbook keeper, data in the studbook is or can be of relevance to other stakeholders as well. This includes internal EAZA stakeholders (for example TAG chairs, vet advisors, EEP Species Committee members and so on), zoos and aquarium organisations in other regions (for example WAZA ISB keepers, regional programme coordinators like SSP or ASMP Coordinators and TAG chairs from other regions) and other external stakeholders (for example researchers, students, teachers, NGOs, governments and so on).

EAZA believes that transparency is key to the success of any coordinated breeding or population management effort and, secondly, that correct use and interpretation of studbook data in population management software (e.g. ZIMS and PMx) requires professional expertise and is best done by, or under supervision of, specialists. Sharing information can be mutually beneficial for all parties and can lead to more effective *ex situ* population management and species conservation. However, data sharing is not always mutually beneficial and can lead to concern, reluctance and risks (e.g. misuse, misinterpretation, sharing of information beyond intended audiences and modification of studbook data). Therefore, sharing studbook data should only happen after careful consideration. The process described in this paragraph is important for the Studbook keeper, as the curator of the data.

The decision to share access to studbook data should be subject to a number of considerations:

- Be aware that the studbook data has been contributed by institutions, in the understanding that the data are to be used for the collective benefit and that this is done on a basis of trust.
- Be aware that the studbook data may contain sensitive information or information that may be considered controversial (e.g. death causes, specific notes on individuals).

#### Possible methods of sharing studbook data

Studbook keepers and the EAZA Executive Office can share studbook data in several ways. Data can be shared by providing an extract of the studbook information, such as a Census Report or exported list of individuals. The studbook publication (see section [3.12.5 Publication of studbooks](#)) is shared with many of the relevant audiences as well. Furthermore, an Export to PMx can be provided, containing detailed information of the studbook. Finally, the Studbook keeper can choose to share the studbook information in its entirety, by allowing someone access to their real-time studbook dataset.

Sharing studbook data by allowing access to a studbook in ZIMS for Studbooks is efficient, as it is a real-time studbook database that allows for the access of multiple people to a single studbook at the same time. Therefore, one will always have access to the most up to date version of the studbook available. Studbook keepers can assign others with viewing or analytical access to their studbook data in ZIMS for Studbooks. However, this option is also the riskiest and needs the most careful consideration:

#### Access to studbook data within EAZA

Sharing studbook data with stakeholders within EAZA can be important for the successful running of the programme and management of the species and population. EEPs, ESBs and Mon-P are run under the auspices of EAZA and on behalf of the membership and therefore sharing studbook data within the EAZA community is considered important. This is mainly achieved through sharing of studbook publications and presentations at meetings. In some cases, it might also be relevant or desirable for EAZA stakeholders to have access to the studbook data in ZIMS. The following procedures are laid down for such situations:

- The Studbook keeper is the only person that can by default edit and add EAZA studbook data. This 'Edit role' can only be granted by the EAZA Executive Office. In deviation from the default the EEO may, at the request of the Studbook keeper, give one additional programme assistant and one

temporary position (e.g. a student doing work on a programme) editing rights.

- Besides the Studbook keeper, the relevant EAZA TAG chair, vice chair and EAZA Executive Office staff (e.g. TAG Liaisons and population biologists) can, by default, view EAZA studbook datasets and export them for analyses in PMx. They will not be able to edit the studbook data.
- If so desired, EAZA Members (in particular, programme advisors, species committee members, and institutional participants) can also request to view EAZA studbook datasets and use it for analyses in PMx. This will not be a default possibility and will require access that is enabled by the Studbook keeper or staff at the EAZA Executive Office. They will not be able to edit the studbook data.
- EAZA Studbook keepers of a similar species may also wish to perform comparative research and view EAZA studbook datasets and use it for analyses in PMx. This will require access that it is enabled by the Studbook keeper or staff at the EAZA Executive Office. They will not be able to edit the studbook data.

See [Appendix 30: Access Roles in ZIMS for Studbooks](#) for more details about the different types of access roles.

Having access to studbook data comes with a responsibility to ensure data is used for appropriate purposes only. **The Studbook keeper and EAZA Executive Office may decide to share data with other parties**, internal or external to the EAZA community. The rules and procedures for doing so are described in the next sections. It is important to stress that **anyone else - granted 'Read Only' access, 'Analytical' access or otherwise- may only use the data for their own purposes and must never share it** with any other persons.

#### Sharing studbook data within the global zoos and aquarium community

- On a case by case basis, it can be decided to allow partner regional associations access to view and export EAZA studbook datasets, particularly population biologists and Studbook keepers for the same species in those regions. This will require access that it is enabled by the Studbook keeper or staff at the EAZA Executive Office. They will not be able to edit the studbook data. See also section [3.12.4 International and regional studbooks](#) .

#### Sharing data with external parties

EAZA encourages the use of studbook data for professional research purposes and peer-reviewed publication. Sharing studbook data with parties outside the EAZA (and WAZA) community needs more careful consideration. There are



several conceivable situations in which Studbook keepers would like to share their studbook data with people from outside the EAZA (and WAZA) community.

The following applies in these situations:

- It is important to verify who the third party is, and for what purpose they want get access to the studbook data. The Studbook keeper should only share studbook data with third parties for research (or other) purposes that are specific to the species under the umbrella of the programme. Third parties that would like to gain access to data from multiple studbooks for cross-taxa or general, non-species specific, purposes must contact the EAZA Executive Office.
- The Studbook keeper or EAZA Executive Office should ask for a project proposal to be submitted by the third party requesting access. This request should be approved by the EEP Species Committee (EEP-species-specific) or EEP Committee (broader types of research), respectively. If approved, a signed non-disclosure agreement (NDA) with the third party about the use of the data must be signed, prior to providing a third party access to studbook data. This is irrespective of the type of access (e.g. printed studbook, Excel file, PMx export file, access to the dataset in ZIMS, etc.). A template non-disclosure agreement is available in [Appendix 31: Template Non-Disclosure Agreement EAZA Studbook Data](#).

### 3.13 Studbook analyses

#### 3.13.1 EEP roles, goals and recommendations

EEP Coordinators are expected to assist their TAG with determining the precise roles of their population and the main goals of the population required to be able to fulfil these roles (see [section 2.2 Regional Species Planning](#)). Further detail on the demographic and genetic targets for the population and further actions required to meet the roles and goals of the population are determined as part of the development of the Long-Term Management Plan (see [section 3.10 Long-Term Management Plan \(LTMP\)](#)). Analyses of the studbook dataset is important both for the development of the RSP as well as to set the genetic and demographic targets for the LTMP.

Another major task of the EEP Coordinator and EEP Species Committee is the implementation of the LTMP and the appropriate management of the species' population according to ongoing developments in the population. This will often include management aimed at the population's long-term survival and viability. A complete demographic and genetic analysis is necessary at regular intervals as

a basis for the formulation of population management recommendations. These analyses are best evaluated and provided annually, or with short-living, highly reproductive species, even more frequently.

### 3.13.2 PMx

PMx (available at <http://www.vortex10.org/PMx.aspx>) and various other software packages are freely available online to carry out detailed demographic and genetic analyses of the EEP population (the managed population). These analyses will help to determine the current status of a population, to evaluate effects of previous management measures, to determine future management approaches and to identify and design research that may be required to improve current conditions. All analyses should be interpreted with caution and with common sense. Genetic analysis may not be reliable with less than 85% known pedigree and with incorrectly recorded parentage. Demographic analysis may be confounded by a series of factors, including small sample size, erroneous data and unrepresentative data. Whenever necessary, these analyses should be performed in consultation with someone of acknowledged expertise in population biology, such as the EAZA PMC or a member of EPMAG (EAZA Population Management Advisory Group).

In order to receive training in genetic and demographic analysis of studbooks, new EEP Coordinators are required to attend EAZA's Introduction to EAZA Ex situ Programme Course and are encouraged to attend further courses (Breeding and Transfer Recommendation Training as given by the EAZA PMC). Written guidance and instruction can be found in the documents referred to in [chapter 5 Training/Further information](#).

### 3.13.3 Group management

For group managed populations a significant number of challenges remain regarding tools for the registering as well as analysing genetic and demographic data. The approach to record data, analyse and manage these populations highly differ per species. Therefore, Coordinators that use group management for the management of their EEP are encouraged to contact the EAZA PMC to determine the best way to record data and to develop a tailor-made analysis and management strategy for their population.

## 3.14 Annual breeding and transfer recommendations

### 3.14.1 EEP recommendations

Although most EEPs are expected to include EEP recommendations for individual animals, or groups of animals, not all of them will. When they are, these recommendations usually include breeding, non-breeding and transfer recommendations.

On an annual basis the EEP Coordinator (and the Species Committee) should determine which breeding, non-breeding, transfer and potential other recommendations need to be made per individual (or group for group living species) in the population. These recommendations should be based on:

- a. The goals set out for the population in the Long-Term Management Plan (LTMP) (see [section 3.10 Long-Term Management Plan \(LTMP\)](#));
- b. Demographic and Genetic analyses of the most recent population data (See [section 3.12 The studbook](#)).

The annual (non-)breeding and transfer recommendations and Long-Term Management Plans are scientifically based and by default democratically approved by the Species Committee which is elected by and from the EAZA Member participants' representatives for a given EEP species. After Species Committee approval their implementation must be attempted to be completed in the following year (unless otherwise indicated in the recommendations). [Note that it may be necessary to work on a shorter than annual basis in short-lived, rapidly reproducing species.]

A detailed description and explanation of this process for individually managed species with pedigrees can be found in: Ballou, J.D., Lees, C., Faust, L.J., Long, S., Lynch, C. Bingaman Lackey, L. & Foose, T.J. 2010. Demographic and Genetic Management of Captive Populations. In: Kleiman, D.G., Thompson, K.V. & Bear, C.K. (Eds.) *Wild Mammals in Captivity – Principles and Techniques for Zoo Management*, Second Edition. The University of Chicago Press: Chicago and London. Pp 219-252.

EEP Coordinators receive the necessary training to complete this task for individually managed species with pedigrees during the 'Introduction to EAZA Ex situ Programme Management Course'. Further assistance can be obtained from the EAZA PMC team and/or EPMAG (EAZA Population Management Advisory Group). Further information and literature can be found in [section 1.1.1 Management of small populations](#) and [section 3.12 The studbook](#).

The population analysis software package PMx provides the necessary results from pedigree analysis. In practice, the EEP Coordinator will need to find the best possible compromise between genetic and other biological (e.g. age, breeding experience, health, social group composition, reproductive strategies, etc.) and practical aspects (e.g. various transport restrictions, transport costs, exhibit needs, etc.).

The number of breeding recommendations should be governed by the targeted growth rate for the population, which in itself follows from the long-term demographic and genetic goals set for the population in the Long-Term Management Plan and the RSP (see [section 2.2 Regional Species Planning](#))

A recommendation should be given for every individual (or group for group living species) in the population, even if this recommendation is not to change the current situation. In this way institutions receive confirmation that what they are currently doing is still what is required, it gives all institutions the continuing feeling of being involved in the programme (even if they have been keeping a non-breeding situation for a number of years) and the risk of institutions taking unilateral action due to lack of communications from the Coordinator is minimised.

Apart from breeding recommendations, other potential recommendations that may need to be made include (but are not limited to): separation or contraception of animals to prevent breeding, regrouping individuals for companionship/welfare reasons, instructions for monitoring of reproduction, behaviour, health etc., instructions to keep things as they are, rearing instructions, etc.

For optimal transparency it is recommended to send all recommendations to all participating institutions – while ensuring that individual institutions can easily and quickly find their particular recommendations.

For group living species a significant number of challenges remain regarding tools for the registration of pedigree and demographic data, tools for genetic and demographic analysis, and methods for optimal management. Information on currently available methods and tools, as well as future challenges, can be found in [section 3.13 Studbook analyses](#).

### **3.14.2 ESB recommendations**

European Studbook Keepers are encouraged to make breeding and transfer recommendations much in the same way as described for EEPs.

ESB participants are expected to follow these breeding and transfer recommendations but contrary to EEP recommendations, ESB recommendations are not binding. In the absence of a Species Committee or a long-term management plan, participants and the relevant TAG can be consulted in the process of making ESB recommendations.

ESB recommendations should be prioritised for EAZA institutions. However, where there is clear benefit to the EAZA population, recommendations may include trustworthy non-EAZA Members. These recommendations should also be included in the ESB Annual Report. Institutions that were expelled from/refused EAZA Membership must be excluded from recommendations.

Animals that are sent to non-EAZA Members should be sent on a loan basis. The EEP Committee would like to stress that species in need of intensive management should be managed as EEPs.

As the decision for ESBs to issue breeding and transfer recommendations was made the EEP Committee, in cooperation with the EAZA Taxon Advisory Groups, will monitor the effectiveness of adding this over in the short till medium term.

### **3.14.3. Non-breeding recommendations (EEPs and ESBs)**

As non-breeding recommendations are often subject to debate some specific background on these recommendations is provided in this section.

The following procedures apply to non-breeding recommendations:

- a. As part of the overall management strategy of an EEP or ESB, an EEP coordinator or ESB keeper can issue a non-breeding recommendation for a certain individual or group of animals. This recommendation should be based on the needs of the population defined by scientific analyses (e.g. PMx) and the possibilities to hold or transfer offspring as defined by the holders. These recommendations should not be made too easily and must always be considered with care because the absence of breeding can affect the group dynamics in social species and not allowing females to reproduce (before a certain age) is known to lead to pathologies of the reproductive tract in several mammal species. Depending on the species and the method used to prevent breeding it might be difficult to bring animals back into a breeding situation if required at a later stage.

As with all EEP recommendations, the institution to which the recommendation is applicable has the possibility to enter into dialogue with the EEP Coordinator to discuss a possible alternative recommendation. However, when the EEP non-

breeding recommendation is made it must be respected. For ESBs this is a recommendation that holders are strongly encouraged to follow. Not following EEP recommendations, including non-breeding recommendations, is a serious violation of EAZA procedures (see sections [3.14 Annual breeding and transfer recommendations](#), [3.15 Conditions of animal transfers and the role of the EEP Coordinator](#) and [3.20 EEP/ESB Complaint procedure](#)).

- b. There are different options for how to respect a non-breeding recommendation issued by an EEP (or ESB):
  - Do not breed that programme species or individual (contraception, single sex groups, split pairs, etc.);
  - Breed and cull, whereby it is the responsibility of the institution involved to ensure this is also executed (after checking with the EEP Coordinator, as the situation within the EEP population might have changed by the time of culling the individual).
- c. Requests from institutions to change a non-breeding recommendation based on offering additional holding space at the institution need to be considered by the EEP. Nevertheless, a non-breeding recommendation might continue to be applicable for the genetic management of the population. To avoid over-representation and inbreeding, new space might need to be prioritised for other individuals in the population.
- d. If an animal is 'accidentally' born despite a non-breeding recommendation (e.g. when contraception fails, when a female was impregnated prior to the recommendation, if individuals became sexually mature at exceptional young age or in cases of parthenogenesis) the EEP participants should find a solution in close cooperation with the EEP. The EEP should try, but cannot be expected, to find a location for placing the individual(s) and management euthanasia/culling or sending the animal outside of the EEP population might be the only solution. Although such 'accidents' cannot be completely avoided it must be clear that EEP participants have a responsibility to do their utmost to prevent them.
- e. There might be a demand for an EEP species outside of the EAZA membership, for example in zoos or aquariums in another region. If so, the decision whether to cooperate and which individuals to select must go via the EEP. It is the responsibility of the coordinator and their species committee to integrate this in the EEP Long-Term Management Plan. EAZA and the EEP have a responsibility to ensure such transfers are not against the Regional Species Planning aims of other regions. When this is not the case, wherever possible individuals should be selected that will contribute

to setting up a healthy population. With this in mind, it is not acceptable to ignore a non-breeding recommendation with the aim to outplace animals to other regions, as such recommendations must go through the EEP. Also refer to [section 3.6.5 Procedure for sending EEP animals outside of programme](#). The same procedure is recommended in case of an ESB, where the TAG and (a representative number of) ESB participants can jointly fulfil the role of the EEP Species Committee.

### 3.15 Conditions of animal transfers and the role of the EEP Coordinator

#### 3.15.1 Conditions of transfers

For the benefit of the future viability of EAZA/EEP populations, all transfers of EEP animals (all individuals in the EEP population) must be arranged in full consultation with, and the agreement of, the EEP. **Participants will not transfer an EEP animal without prior approval of the EEP.** This also applies to animals that are transferred into the EEP population from external sources. Such transfers of animals from non-participants to participants also need prior approval of the EEP, who will grant permission only if such animals are considered valuable to the EEP population. Equally it applies to EEP animals that are transferred out of the EEP population as in accordance with the rules and procedures in [section 3.6.5 Procedure for sending EEP animals outside of programme](#).

Transfers of EEP animals between EEP participants can be performed under one of the following conditions:

- a. Donation (an animal X is made available, free of charge, by participant A to participant B, who becomes the new proprietor).
- b. Exchange (animals X and Y are exchanged between participants A and B, who become the new proprietors of the newly received animals; X and Y do not necessarily belong to the same [EEP] species).
- c. Loan (animal X is transferred from participant A to B, but A remains its proprietor; agreements can be made as to the ownership of the offspring of X).

**In order to ensure the non-commercial status of EEPs any selling of EEP animals must be avoided.** This also applies to animals that are transferred out of the EEP as in accordance with [section 3.6.5 Procedure for sending EEP animals outside of programme](#) and to the carcass, or parts thereof, of EEP animals that have died. Transfers should not be arranged via brokers or dealers.



When organising transfers following the approval of the EEP, participants should directly contact each other to organise transport details, and if necessary, the EEP Coordinator can act as an intermediate.

### **3.15.2 Transfers recommended for population management**

Transfers of animals for management of the EEP population will be recommended by the EEP Coordinator, and approved by the Species Committee, unless alternatively described in programme characteristics as explicitly approved by the EEP Committee, which could be depending on the involvement of external partners. Recommendations are typically issued on an annual basis (unless species-specific factors require more frequent or warrant less frequent recommendations). The EEP Coordinator contacts all participants involved in these transfers and stimulates their timely implementation.

### **3.15.3 Transfers suggested by participants**

Participants may suggest additional transfers, not specifically recommended for population management. In such cases they will always contact the EEP Coordinator, who will study the effects of these transfers on population structure. The Coordinator will grant permission if there are no negative effects; alternative transfers will be proposed if negative effects are expected.

### **3.15.4 Placement of animals out of the EEP**

Each EAZA Ex situ Programme has its own role(s) and goal(s), as identified in the Regional Species Plan, and a tailor made management strategy and action plan towards achieving these, as laid down in the Long-Term Management Plan (LTMP). As EEPs are operating under the auspices of EAZA the main focus of many of these programmes will be tailored to *ex situ* populations as held within the EAZA Membership, and where applicable approved non-EAZA EEP participants as per the rules and procedures in [section 3.6 Non-EAZA Members and EEP Participation](#). However, as part of its management strategy EEPs might make animals available for placement outside of the programme. Examples include animals that are bred to support setting up or strengthening *ex situ* population management programmes of other regional zoos and aquarium associations. Or animals that are released into the wild for reintroduction or restocking purposes as in accordance with [section 4.3 Releasing animals to the wild](#).

The key element from the examples above is that animals are bred or otherwise purposely selected to move out of the EEP population in accordance with (one of) the aim(s) of the programme. Under these, or similar, circumstances it is appropriate to place animals outside of the EEP. The EEP application and LTMP must in these cases clearly indicate that this is part of the EEPs management strategy. As per the standard procedure, breeding and transfer recommendations for animals to move out of the EEP population need to be approved by the EEP, including the Species Committee.

When EEP animals move out of the EEP to *ex situ* facilities outside of the EAZA region they should become part of a population management programme under the auspices of a regional association or a credible conservation organisation in that region. If these are not in place, animals should remain part of the EEP, and the institution should be approved as non-EAZA EEP participant as per the procedure as described in [section 3.6 Non-EAZA Members and EEP Participation](#). In case of the latter this might in some cases mean that the EEP participation offers the opportunity to gradually work towards an independently managed, separate (sub)population in that region in the future. In all cases it is important to not only consider the existing EEP population but also to avoid harm by selecting appropriate individuals in support of a healthy population in that region, and to avoid working against Regional Species Planning priorities as in place in those regions. For some species the above will be organised as part of a Global Species Management Plan (GSMP) run under the auspices of WAZA.

EEPs that do not have a strategy in place to breed and select animals to send out of the EEP population must seek to ensure that the population is managed in such a way as to minimise situations where EEP animals cannot be placed by the collective group of EEP participants or potential future new EEP participants. An important consideration in the EEP application process, and in more detail in the process of developing the LTMP, is therefore to consider whether the proposed goals of an EEP and the demographic and genetic targets based on them are realistically achievable in comparison with the space that is available for the care and management of the species among the EAZA Membership and potential non-EAZA EEP participants. See also [Appendix 3: Template for proposing a new EEP](#) and [Appendix 16: What is a Long-term Management Planning Meeting?](#)

The EEP is responsible for managing the **whole** population including animals that cannot (immediately) be placed among the EEP holders. Bachelor groups, non-breeding groups and other solutions must be taken in consideration while planning the future demographic management. Nevertheless, despite excellent management, situations where space for an EEP animal is not available will arise for a number of reasons:

- a. **Random demographic effects:** Based on the **average** age specific mortality and fecundity rates during the period of time used for the life table analysis, as well as the current age pyramid, analysis software packages such as PMx can indicate how many individuals are **likely** to die next year and therefore how many individuals should be born to ensure that the population increases/decreases by a certain percentage, or stays stable. Based on the *average* number of offspring produced per breeding female per year and the **likelihood** that a female that is given a breeding recommendation actually breeds, the programme can give an indication of how many breeding females **likely** need to receive a breeding recommendation in order for the programme to reach its demographic target for a given year. Because the above calculations contain a lot of averages and because some of the projections in PMx are deterministic (i.e. do not take random events into account), it is likely that despite setting up the recommended number of breeding situations, a population may still end up with slightly more (or indeed slightly less) individuals than required.
  
- b. **Genetic effects:** Genetic management combined with the current demographic status of the programme may demand that individuals with high mean kinship values should cease breeding. Should these individuals be allowed to produce further offspring, they would be in addition to requirements. This can occur by accident, because of non-compliance with recommendations, because methods to prevent breeding were shown to carry high risks to the future reproductive potential, because these individuals could be useful to other populations than the EAZA population, etc. In addition, at the time of initiation of the EEP/ESB, the lack of management in the preceding time may have resulted in the overrepresentation of a few genetic lines. Care must however be taken not to deprioritise the importance for the programme of too many of these individuals at a time when the programme is not yet demographically stable or at its target size.
  
- c. **Sex ratio effects:** If the sex ratio at birth, or of the surviving young, is skewed, an unequal number of animals of one sex may arise. Alternatively, the social structure of a species may result in lack of space for certain age/sex classes due to a skewed sex ratio in a stable group. If the sex ratio of surviving young is 1:1, bias towards one sex may thus still arise. However, a few cautions are in order with regards to these types' situations. In the case of higher numbers of females than males, it would be unwise to remove females from the population before the carrying capacity/target size of the population is reached. One would remove

reproductive potential and one never knows which unforeseen catastrophes might hit the population. Care must also be taken not to remove too many individuals of the dominant sex out of the population before they have had a chance to breed. If only few individuals of a particular sex do a lot of the breeding, the number of their relatives and thus their mean kinship value will rapidly increase. Whenever the social and reproductive strategies of the species permit this, these breeders should be frequently exchanged, which is only possible if a sufficiently large pool of individuals of that sex remains available. A skewed sex ratio in the number of breeding animals also results in a reduced effective population size, which increases the rate of loss of gene diversity in the population. Finally, some gene diversity will be sex specific and only allowing a limited number of individuals of one sex to breed may result in loss of that sex specific diversity.

d. **Other effects:**

- **Hybrid animals:** Hybrids may exist in EEPs either through historic practices or from revisions in taxonomy.
- **Accidental breeding:** Contraceptives can fail under certain circumstances, even some normally permanent methods such as vasectomy.

Simply placing animals for which there is no space in the EEP population out of the EEP as an ordinary tool for the management is not acceptable as it may lead to further management problems. For instance, the programme is losing part of its genetic diversity that might be needed in the future. Also, if animals are placed out of the studbook, their descendants may not be easy to trace back, and the animals can later re-enter the EEP e.g. through a new incoming Member of EAZA. This will complicate the genetic management of the species.

The following therefore applies to animals that cannot (immediately) be placed in the EEP population (regardless whether the EEP needed to achieve EEP goals or not):

- a. Possible recipients of the animals within the EAZA Membership should be sought by advertising the need for new holders by: informing all EEP participants; placing them on the ZIMS Available and Wanted Tool; and announcement in eNews, Zooquaria or on the EAZA website.
- b. Potential non-EAZA EEP participants should be sought particularly where the individual animals are important for meeting the goals of the EEP.

- c. If a. and b. are not successful and/or if after having considered that an animal is genuinely and definitely not required for the EEP, it can be decided that the individual animal(s) can move out of the EEP. Declaring that such EEP animals can move outside of the programme should only be done if they are genuinely in addition to the needs of the programme and will not be required again within the programme in any way.
- d. The decision to place an EEP specimen in either a non-EAZA participant zoo, or outside the programme, must involve not only the EEP Coordinator, but also the whole Species Committee. The Species Committee is responsible for both the decision that the animals may leave the EEP population as well as for making the recommendation where to the animal(s) can move out to and that acceptable standards as under h. are in place. EEP participants may only transfer these EEP animals after the permission of the EEP as communicated through the Coordinator.
- e. If EEP animals are placed outside of the programme, the Studbook Keeper must be alert to the possibility of these animals or their descendants re-entering the population. For this reason, all efforts must be made to maintain those animals and any offspring within the studbook. For this reason, it is recommended that the animals are placed on loan rather than in the ownership of the receiving institutions.
- f. Animals sent out of the EEP must have clear physical identifiers preferably of permanent nature.
- g. Where possible and appropriate, future breeding by these EEP animals should be prevented, through sterilisation or some other method of breeding control. The sending institution and the EEP Coordinator should seek assurance from the receiving institution that breeding will be avoided.
- h. If an animal becomes additional to the needs of an EEP, the exporting institution must make sure that the receiving institution fulfils the EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria and associated Best Practice Guidelines for the species (see also [section 3.15 Conditions of animal transfers and the role of the EEP Coordinator](#)).
- i. Management euthanasia/culling should be considered by the zoo holding the animals particularly if they cannot be placed elsewhere and the welfare of the animals suffers as a result. EEP animals should not be

culled without the express consent of the EEP Coordinator (See [Appendix 28: Position Statement on Management euthanasia/culling](#))

### **3.15.5 Animal transfers between regions**

[Section 3.6 Non-EAZA Members and EEP Participation](#) sets rules and procedures for EEP participation by (non-EAZA) Members outside the EAZA region and for sending animals out of the EEP to other regions, respectively. In cases of transfers between an EEP participant and a non-participant outside of the EAZA region, the EEP Coordinator will contact the species Coordinator in the region of the non-EEP-participant if there is a formal breeding programme for the species in that region. The Coordinator will then make sure that the suggested transfer will not interfere with the management plan in that region. Detailed guidelines including steps to consider under various scenarios are available in [Appendix 19: EAZA Guidelines for Animal Transfers between Regions](#).

### **3.15.6 importation of species from the wild into the EEP**

Wherever possible zoos and aquariums should strive to have self-sustaining animal populations. This is true for animal collections of EAZA Members in general and for EAZA's population management programmes in particular. This means that the importation of wild caught EEP species should be kept to an absolute minimum. The frequency of exchange to and from the wild population is also dependent on the roles and goals an EAZA Ex situ Programme.

As stated above transfers of animals from non-participants to participants also need approval by the EEP, who will grant permission only if such animals are considered valuable to the EEP population. This also applies to the importation of wild caught EEP species. The following appendixes provide further background information in relation to such importations and will be helpful in the decision-making process of the EEP: [Appendix 21: EAZA Statement about imports of birds and eggs from the wild](#) [Appendix 22: EAZA Guidelines for decision making when importing EEP animals from the wild](#)

Also refer to [section 4.2 Animal acquisition and disposition](#) on the Acquisition and Disposition of animals that in addition to this section also describes the procedures EAZA Members should consider around the importation of Mon-T species from the wild.

### **3.15.7 Exportation of species from the EEP to the wild**

Exportation of species from the EEP to be releases to the wild must be approved by the EEP and TAG prior to the release. The rules and procedures in this regard are described in further detail in [section 4.3 Releasing animals to the wild](#).

### **3.15.8 The role of the EEP Coordinator**

Apart from the role of the EEP Coordinator in animal transfers as indicated in the above paragraphs, the Coordinator may act as an intermediary between two participants in the implementation of recommended transfers. Strictly speaking the agreement on the conditions of a recommended transfer is a matter of the participants involved. However, if the participants do not arrive at an agreement on the terms of an important transfer, the Coordinator may try to bring parties together, or, if this turns out to be impossible, the Coordinator will try to find the next best solution for population management by involving a third or a fourth party in the transfer. If no acceptable alternative is found, the Coordinator may put the matter to the Species Committee to make a decision.

### **3.16 Conditions of animal transfers and the role of the ESB keeper**

The ESB keeper has a different role than an EEP Coordinator in relation to the conditions of animal transfers. In absence of a Species Committee and long-term management plan ESB breeding and transfer recommendations are not binding. Even though ESB participants are expected to follow these recommendations the final decision lies with the institution. An ESB keeper should try and facilitate recommended transfers between participants when and wherever possible.

### **3.17 EEP evaluations**

The EEP Committee closed the second cycle of EEP evaluations in December 2018. A new EEP evaluation structure will need to be developed in alignment with the new EAZA Population Management structure. However, more experience with the new structure is required before being able to develop this structure. The EEP Committee therefore agreed that:

- Production of the RSPs and LTMPs will be prioritised in the period 2018-2022.
- The third round of EEP evaluations will be launched latest in 2023, in a new style (This timeline might come forward if we get the new EEP evaluation process developed sooner.)
- The new EEP evaluation process will be developed in the period 2019-2022 to make it fit for purpose under the new EEP structure. Experience with the new structure is required before we can develop the best



process for the future EEP evaluations. Based on the present thinking the EEP evaluation process will be less 'one size fits all' and more 'tailor made' to the programmes.

- The EEP Committee will follow up on EEPs that were required a follow up evaluation as agreed as part of the second EEP evaluation cycle.
- The TAGs or the EEP Committee can decide to evaluate existing ('old style') EEPs using the former EEP evaluation process. This is optional for where TAGs and EEP Committee see a need, and not a must for all EEPs.

[Appendix 17: EAZA Evaluation of EEPs](#) and [Appendix 18: Evaluation of EEPs, standard summary report](#) be added as soon as the new EEP evaluation procedure has been developed. See comments in chapter 3 in this regard.

### 3.18 Conservation funding from EEPs

There is a difference between institutional funds for *in situ* conservation and similar funds generated in the framework of EEPs. The EEP Committee and EAZA only have a responsibility towards EEP funds generated in the framework of an EEP (accountability).

The EEP Committee appreciates and encourages the direct link between an EEP and *in situ* conservation projects, if relevant. Nevertheless, the following points must be taken into consideration:

- a. Providing funds for *in situ* conservation through an EEP can only be made on a voluntary basis and should not be mandatory.
- b. The provision of funds by an institution to a conservation project in the framework of an EEP should never influence recommendations for breeding and transfers nor lead to any other disadvantage for EEP participants that do not provide funds as opposed to EEP participants that do.
- c. Funding for *in situ* projects in the framework of an EEP need to be approved by the Species Committee.
- d. The TAG should be kept informed about the *in situ* conservation projects that are funded by an EEP.
- e. Projects funded by an EEP must provide a project proposal and annual budget for approval by the Species Committee.

- f. An annual report and annual accounts must be produced and sent to all EEP participants, the relevant TAG Chair, as well as the Chair of the Conservation Committee and the EEP Committee.
- g. All *in situ* conservation projects supported by EEPs should be included in the EAZA Conservation Database.

*In situ* conservation initiatives of an ESB and TAG should be dealt with according to the same principles.

When TAGs are looking to raise and distribute funds to relevant conservation, research and /or education projects it is possible to “house” these funds within the EAZA accounts and be administrated by the Executive Office. It is the responsibility of the TAG to discuss this possibility with their Executive Office liaison and complete an application form (See [Appendix 24: EAZA Fundraising Account Application](#)). Applications will be considered in the light of other funds, expected workload for the Executive Office, and overall EAZA financial set-up.

### **3.19 Population management programme communications**

#### **3.19.1 Internal communication**

Communication is a very important factor in population management programmes. Lack of communication is a major problem that is most often referred to in the EEP evaluation process. EEP Coordinators and ESB keepers should ensure that participants, the Species Committee, the TAG and EAZA Executive Office are updated on relevant events such as breeding and transfer recommendations, minutes of meetings, publication of studbooks, EAZA Best Practice Guidelines and management plans, relevant conservation and research activities, etc. Furthermore, it is important that EEP Coordinators and ESB keepers respond in a timely fashion to questions and requests from the participants and other parties involved in the programme. This does not mean you will have to offer a quick solution to every request or problem. More often than not this will take more time, but in those cases, it is important to at least acknowledge receipt of the request, so the sender knows the EEP Coordinator/ESB keeper will deal with it.

Equally important is for participants, Species Committee members, TAG members and the EAZA Executive Office to respond to requests from the EEP Coordinator or ESB keeper in a timely fashion and to keep them aware of ongoing developments during the year. Participants in particular might need to

have patience before the EEP/ESB finds a solution to a particular query as EEP Coordinators and ESB keepers are not magicians.

All parties involved in EAZA Ex situ Programmes should remember that EAZA is a multilingual region and that for the majority of people English is not the native language. These and other cultural differences in correspondence often lie at the heart of communication problems. Therefore, it is important to double check whether the message/request is entirely clear.

It is recommended that EEP Coordinators and ESB keepers discuss the communication strategy of the population management programme with the participants and Species Committee, so all parties agree with and are aware of the expected communication processes.

### **3.19.2. Social media**

Social media is a powerful tool for communicating between groups and to the public. As such, it can be used by groups such as TAGs or EEPs to share important information and news stories among themselves, or to inform the public about aspects of their work. Conversely, social media can also be problematic, as it provides an interface for the public and organisations to contact and criticize the page owner, potentially causing controversy and wasting time and resources. The EAZA Communication Committee, has developed guidelines that are aimed at providing assistance to TAGs, EEPs, Working Groups and Committees and EEPs when using social media as part of their activities. Please be aware that information (presentations, publications) available only on the EAZA Member Area website is, by definition, confidential and for the use of Members of EAZA only. You may not share any such information on any channel without the express permission of the author and the Executive Director of EAZA.

The Social Media guidelines are available from the EAZA Member Area and presented in [Appendix 25: Guidelines for independent EAZA-related social media managers](#) as well.

### **3.19.3 Publication and sharing of information through EAZA channels or with media**

TAG Chairs, TAG members, EEP Coordinators, EEP participants and members of the EEP Species Committees are encouraged to share news, experiences, articles, research outcomes, etc. through EAZAs printed and electronic publication channels which include: Zooquaria (printed quarterly magazine, also available for downloading), eNews (monthly electronic newsletter) Journal of Zoo

and Wildlife Research (for peer-reviewed research articles) and EAZA social media channels on Facebook, LinkedIn and Twitter. The TAG liaison or the EAZA Communications team can help determine the best channels for your message.

When approached by the media that would like to run a story or documentary on the EEP or TAG you are involved with please contact the Director of Communications and Membership at the EAZA Executive Office to discuss options and strategies for cooperation.

### **3.20 EEP/ESB Complaint procedure**

The EAZA Ex situ Programmes (EEPs) and European studbooks (ESBs) are very important flagships of EAZA. The better they work the stronger we all are. With many different programmes and several hundreds of participants from countries across the EAZA region, having different languages and cultures, it is impossible to completely avoid problems, and sometimes even conflicts. However, we can all do our part to facilitate the process and thus to make the EEPs and ESBs even more efficient and effective than they are now. Please refer to “The ten simple things we all can do to make EEP life easier” as available in most European languages in the EEP Committee page on the EAZA website.

Problems within the EAZA Population Management framework should be solved at the lowest possible level. EEP and ESB participants should try to solve problems together with the EEP Coordinator/ESB keeper and the Species Committee (EEPs). When a suitable solution cannot be found within this framework, the relevant TAG can be asked to help solve the problem. Documentation of the issues as well as the steps that so far were taken trying to solve the problem is important and must be sent along to the TAG. A complaint should be forwarded to the EEP Committee only if the problem cannot be solved at TAG level. After that the EEP Committee will deal with those cases in accordance with the EAZA Sanction document (see [Appendix 26: Sanctions in the case of a violation of the EAZA Code of Ethics or EEP Procedures](#))

## 4 Institutional population management

This chapter will focus on population management related topics at an institutional level, that go beyond the terms and conditions of participating in EAZA's breeding programmes as described in [chapter 3 Working procedures for EEPs and ESBs](#). The focus will be at those institutional species management topics that are directly or indirectly related to Regional Species Planning and thus go beyond the "day-to-day" animal management Practices at institutions. The EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria (2019) are in place for the latter. The difference is sometimes arbitrary and hence there will be cross-references where relevant.

### 4.1 Institutional Species plan

This section focuses on institutional species planning. EAZA Members participate in the EAZA Regional Species Planning and in EAZA Ex situ Programmes as outlined in the previous chapters. In addition, EAZA Members must maintain a written Institutional Species Plan (ISP) in accordance with the guidelines on Institutional Species Planning as described in this chapter. The ISP should be based on the institution's vision/mission and consequent conservation, educational and research goals and objectives.

#### 4.1.1 Rational

An Institutional Species Plan (ISP) gives an overview of the current species currently kept and the role of each species in the facility. An ISP might follow from a Masterplan, that can give the framework (focus on experience, theme, geographic orientation) but is not being replaced by a Masterplan. An ISP is a tool that is used to plan the future and progress towards it. The use of an ISP is as much in the process as in the end product. Having an up-to-date and regularly reviewed Institutional Species Plan helps internal communication within a facility and provides transparency and background on the reasoning why a certain animal and/or species is in the facility and what the plans are (e.g. group size, (non) breeding, bachelor group). Depending on the focus of the ISP it is also considering alternative species and/or potential future additions.

#### 4.1.2 Process

- a. The institutional species planning process should be embraced by all departments.
- b. The criteria for the planning process should be clearly stated and reflect the mission of the organisation.

- c. The process should involve an analysis of the species currently kept in the facility. Decisions on which species to keep should follow agreed criteria, which would include such aspects as conservation importance, good animal welfare and public appeal. The plan must be financially realistic (of course).
- d. An overall timeframe for the ISP should be set (usually 3-5 years). The ISP should be reviewed annually and its progress towards a 5-year plan monitored.

#### **4.1.3 When choosing species for the species plan, Members should consider**

- a. Whether the species is recommended as part of the EAZA Regional Species Plan (\*), automatically reflecting the conservation status of the species (e.g. IUCN Red List, One-plan approach, CITES –relating to international trade only-, national/regional native species initiatives).
- b. Whether there is a LTMP in place for the species, giving guidance on the future plans for the species.
- c. How the facility is going to contribute to one or more of the selected (in) direct conservation roles of EEPs e.g.
  - contribute towards maintaining a demographically, genetically and behaviourally healthy insurance population
  - and/or contribute towards (financially) supporting conservation projects
  - and/or contribute towards carrying out research relevant for the species
  - and/or contribute towards raising awareness, bringing the conservation educational messages across to the public
- d. The rationale for choosing a species with only non-conservation roles.
- e. EAZA Members must not engage in intentional breeding for the expression of rare recessive alleles. For further information, please refer to the EAZA Standards for the Welfare, Accommodation and Management of Animals in Zoos and Aquaria.
- f. Experience of the facility with the species:
  - Has the facility kept and bred this species?
  - If not, has the facility got or can it acquire the necessary staff expertise?

Members should refer in particular to four EAZA publications:

- EAZA Standards for the Welfare, Accommodation and Management of Animals in Zoos and Aquaria (2023, Council approved)

- EAZA Conservation Education Standards (2023)
- EAZA Research Standards (2022)
- EAZA Field Conservation Standards (2022)

Below is a suggestion of what an Institutional Species Plan could look like.

Introduction, capturing the philosophy of focus of a facility.

Common name	Scientific name	Current inventory	Planned inventory	Direct Conservation role(s) (*)	Indirect Conservation role(s) (*)	Non-Conservation role(s) (*)	EAZA RSP Recommendation	Planned actions	Justification of plans

**(\*) Regional Species Plan (RSP):** In the spirit of the One Plan Approach and through the application of the 5-STEP decision making process in the IUCN Guidelines on the Use of *Ex situ* Management for Species Conservation, TAGs will decide which species are recommended to be managed under an EAZA *Ex situ* Programme (EEP) and what the precise direct, and/or indirect, and/or non-conservation roles of each EEP will be. EEPs are defined as population management activities that are endorsed by EAZA for species that are managed by EAZA members aiming towards (maintaining) healthy populations of healthy animals within EAZA or beyond. For species that are not considered for active management, the TAG will monitor the population trend. Each RSP will be submitted to and approved by the EAZA EEP committee.

The most recent RSPs are available on the EAZA member area..

*Please check the member area for example Institutional Species Plans from EAZA Members.*

## 4.2 Animal acquisition and disposition

This chapter provides the rules and procedures for the acquisition, disposition and transport of animals to and from EAZA Members. It applies to all animal transfers, to which an EAZA Member is party.

These rules and procedures are tailored to ensuring EAZA Members acquire, transfer, and dispose of animals legally, sustainably and ethically, with due consideration for the welfare of the animals that are transferred. EAZA Members must ensure that any animal transfer involving their institution shall satisfy the requirements of the rules and procedures outlined in this chapter. Furthermore,



EAZA Members are required to have a written acquisition and disposition policy in place that reflects these rules and procedures.

The need for and appropriateness of transporting animals to/from EAZA Members is connected to other activities including institutional animal management, species planning, animal welfare, application of population management tools and EAZA Ex situ Programmes. This section should therefore be read in conjunction with other sections as included in Chapter 3 and Chapter 4 of this Population Management Manual.

#### 4.2.1 Terms and definitions

The table below provides definitions to the terms mentioned in the chapters below.

<b>Term</b>	<b>EAZA Definition</b>
Animal/Animals	Animals are multicellular, eukaryotic organisms in the biological kingdom Animalia
Specimen	Any animal or plant, whether alive or dead (including any readily recognisable part or derivative thereof).
Controlled environment	Is an environment that is manipulated for the purpose of holding animals of a particular species, that has boundaries designed to prevent animals, eggs or gametes of the species from entering or leaving the controlled environment, and the general characteristics of which may include but are not limited to: artificial housing; waste removal; health care; protection from predators; and artificially supplied food.
Wild caught specimen/animal	Specimens/animals that do not meet the definition of 'captive bred specimen'.
Captive bred specimen	Specimens born or otherwise produced in a controlled environment and shall apply only if the parents mated or gametes were otherwise transferred in a controlled environment, if reproduction is sexual, or the parents were in a controlled environment when development of the offspring began, if reproduction is asexual.
First-generation offspring (F1)	Specimens produced in a controlled environment from parents, at least one of which was conceived in or taken from the wild. <i>Note: A first-generation offspring (F1) does not automatically qualify as a captive bred specimen.</i>
Offspring of second generation (F2) or subsequent generation (F3, F4, etc.)	Specimens produced in a controlled environment from parents that were also produced in a controlled environment.

Commercial / Non Commercial	An activity can generally be described as 'commercial' if its purpose is to obtain economic benefit (whether in cash or otherwise), and is directed toward sale, resale, exchange, provision of a service or any other form of economic use or benefit. Any transaction which is not wholly 'non-commercial' will be regarded as 'commercial'. All uses whose non-commercial aspects do not clearly predominate shall be considered to be primarily commercial in nature.
Due diligence	Reasonable care and caution or the proper actions that a situation calls for, especially those that help to avoid harm or risk.
Ethics	Moral principles that govern a person's or organisation's behaviour or the conducting of an activity.
Intermediate party	Organisations or private individuals that make money through connecting source and destinations of animals that (potentially) move to or from EAZA Member institutions. Examples are brokers, dealers, consultants, suppliers, etc.
Non-EAZA Member	Any institution or private individual that is not a Member of EAZA.
Precautionary principle	An approach to risk management when there is no factual clarity or scientific agreement on the issue. In this context it means that an acquisition transfer or disposition should not be carried out if it is not clear that it is legal, sustainable and ethical.
Sustainable harvest	Sustainable harvest or sustainable yield is one that does not lead to extinction or an unacceptable decline in the harvested population. The sustainability of a population in the face of harvest depends on the number of animals harvested, who gets harvested, and how much the mortality imposed by harvest can be compensated. Exceptions might apply in case the survival of the species is at risk and the acquisition is part of a conservation plan by a credible partner organisation (e.g., IUCN) and approved by the local or national competent authority.

#### 4.2.2 Legal acquisition and disposition

EAZA Members must ensure that all local, national, regional and international laws and regulations are adhered to when acquiring, transporting, or disposing animals. This applies to all laws and regulations in source, transit and destination countries or areas. Examples include but are not limited to CITES, EU Animal Health Law and the EU Access and Benefit Sharing (ABS) Regulation.

The EU ABS Regulation lays down 'compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization', for which a guidance document for EAZA Members is available in [Appendix 32: EAZA and the Nagoya Protocol](#)

Whereas the prime responsibility for EAZA Members concerns the individual animals that are acquired for or disposed from the institution directly, EAZA Members also have a responsibility to avoid indirectly contributing to illegal trade. EAZA Members therefore need to make every reasonable effort to understand the broader context of the trade in the species, including consideration of the ancestry of the animals to be acquired for, or potential future trade (of offspring) of the animals to be disposed from, the institution. In case of lack of clarity or uncertainty, EAZA Members must apply a precautionary principle in their decision making.

#### 4.2.3 Sustainable acquisition and disposition

Acquisition or disposition of animals to or from EAZA Members must not lead to the long-term decline of biological diversity in the wild, in order for animals in the wild to maintain the potential to meet the needs and aspirations of present and future generations. This general principle applies when animals are either captured or released into the wild. The next section on ethical acquisition and disposition of animals outlines EAZA rules and procedures that apply in these circumstances in addition to this principle.

#### 4.2.4 Ethical acquisition and disposition

EAZA Members must only engage in the acquisition and disposition of animals when it meets the ethical standards as outlined in this section. Ethical acquisition and disposition of animals means that the acquisition and disposition:

- Is subject to a professional process of **due diligence** that considers the broader chain of supply and demand, as described in the section below.
- Is **traceable and transparent**, including through documentation and record keeping.
- **Prioritises captive bred** animals and only involves **importation of wild caught animals when conditions are met** as defined in the section below.
- Only involves **releasing of animals into the wild when specific conditions are met** as described in the section 4.3 on Conservation Translocations.

- Is (primarily) **non-commercial** (dispositions) or preferably (primarily) non-commercial (acquisitions).
- Is prioritised between EAZA Members and can involve **non-EAZA sources or destinations when specific conditions are met** as described in the section below.
- Is preferably arranged directly **without involvement of intermediate parties**, and when this is not possible that such parties meet required conditions.
- Is fully adhering to the **EEP rules and procedures, TAG statements and EAZA Standards, Guidelines and Position Statements**.
- **Meets the welfare conditions for the animals** that are transferred. All animals must be transferred correctly and must be held in appropriate facilities with professional standards at its destination.

#### *Due diligence*

EAZA expects all Members to undertake due diligence to ensure the acquisition, transport and disposition of animals is legal, sustainable, and ethical. This includes that every reasonable precaution is taken by EAZA Members to ensure that an animal transfer is not contributing to the illegal sourcing or laundering of animals, or the unsustainable and/or inappropriate removal of animals from the wild. Also, that these transfers do not result in animals being placed into poor welfare conditions, circuses or canned hunting operations.

It is the responsibility of the EAZA Member to ensure due diligence is performed and documented so that they can demonstrate this as and when requested. This will support monitoring the implementation of these rules and procedures and will contribute to supporting EAZA Members in the event of complaints.

#### *Traceability and transparency*

EAZA Members must always understand and record who and where animals are sourced from or are destined to. The expectations for EAZA Members with regards to record keeping are outlined in the EAZA Standards for the Accommodation, Care and Welfare of Animals in Zoos and Aquariums. With regards to the acquisition and disposition of animals it is particularly important that details of the source or destination of the animals are recorded into ZIMS as in accordance with the EAZA Standards for the Welfare, Accommodation and Management of Animals in Zoos and Aquaria.

Any details of rearing methods, breeding techniques used, health, diet/nutrition, reproductive and genetic status and behaviour that might affect management and reproduction of an animal being transferred (or other animals in the group

at the receiving institution) should be disclosed at the commencement of negotiations.

EAZA Members can and should enter their available animals on the ZIMS Available and Wanted tool. This will make the EAZA community at large aware of the availability of animals. Furthermore, EAZA Members can turn to the ZIMS Available and Wanted tool to look for animals. Besides the practicalities the Available and Wanted tool offers to EAZA institutions, it also facilitates cooperation with and between EAZA Members and reduces the need to work with intermediaries. Before listing EEP animals on the ZIMS Available and Wanted tool EAZA institutions should get in touch with the EEP Coordinator to seek consent.

#### *Captive bred animals and importation of wild caught animals*

All EAZA Members will endeavour to ensure that animals acquired are bred in captivity. EAZA recognises that there are appropriate circumstances to obtain animals from the wild. However, EAZA Members should only directly or indirectly acquire wild caught animals when one or more of the following two criteria apply:

1. there is a defined direct conservation need and mandate; A defined, direct conservation need must be based on the application of the 'IUCN SSC Guidelines on the Use of Ex situ Management for Species Conservation' and established as part of the EAZA Regional Species Plan, or be part of a defined conservation plan or a defined conservation action (or similar agreement) by a credible partner organisation (e.g., IUCN) or a local or national competent authority.
2. they are confiscated or rescued by the relevant authorities and non-releasable; EAZA Members can provide an important role supporting authorities with the housing and care of animals that are confiscated or rescued, in particular in cases where these animals are non-releasable. EAZA Members are encouraged to consider the 'IUCN SSC Guidelines for the management of confiscated, live organisms' when acquiring confiscated animals.

The above is not applicable to wild caught animals that were already held by EAZA Members on 1 May 2024. Furthermore, there can be exceptional circumstances where the above two criteria do not apply and where Members do have a strong rationale to obtain wild caught specimens (>1 May 2024) as part of their institutional species plan. This might in particular apply for taxa that are not (yet) reliably bred in human care and where animals can be sourced through professional schemes (e.g., fish and invertebrates). EAZA Members must in these exceptional cases have exhausted all the instances to obtain individuals that are born in captivity before deciding to acquire wild caught animals.

EAZA Members must always be confident that acquisitions of wild caught animals are sustainable (i.e., animals are sustainably harvested) and will not have a deleterious effect upon the wild population (see also [4.2.4 Ethical acquisition and disposition](#) and the list of terms for the definition of a sustainable harvest). Exceptions might apply in case the survival of the species is at risk and the acquisition is part of a conservation plan by a credible partner organisation (e.g., IUCN) and approved by the local or national competent authority. When considering acquiring individuals of a species that are caught in the wild, Members have to perform due diligence to the best of their ability to demonstrate that the animals are/will be sustainably harvested and will therefore not harm the population(s) nor the species. Proper capture techniques should be applied, and animals should be professionally handled and transported (also refer to [3.15 Conditions of animal transfers and the role of the EEP Coordinator](#)

#### *Releasing animals to the wild*

Releasing animals to the wild can benefit as well as harm species and biodiversity conservation. EAZA Members must therefore follow the rules and procedures for releasing animals into the wild that are described in [4.3 Releasing animals to the wild](#).

#### *Non-commercial*

The acquisition and disposition of EEP animals is organised and decided centrally by the EEP Coordinator and the EEP Species Committee. EEPs are non-commercial. In order to ensure the non-commercial status of EEPs any selling of EEP animals is not allowed and must be avoided.

All non-EEP animal dispositions from an EAZA Member should be (primarily) non-commercial. It is in this respect most important to avoid putting a monetary or other economic value on the individual animals that are disposed. In other words, EAZA Members should not sell non-EEP animals.

EAZA Members can request voluntary donations to conservation projects, and may ask for compensation of costs directly related to the disposition of the animals (e.g. transport). Further specific conditions are in place for EEP animals (See chapter 3.8 Rules of joint population management). Amicably agreed exchanges of non-EEP animals are not considered primarily commercial.

All non-EEP animal acquisitions into an EAZA Member are preferably non-commercial. EAZA Members are encouraged to use alternative options for acquiring animals to avoid buying of animals, whenever such options are available and appropriate.

#### *Prioritising transfers among EAZA Members and cooperation with non-EAZA Members*

The acquisition and disposition of EEP animals is organised and decided centrally by the EEP Coordinator and the EEP Species Committee. This includes

transfers of animals between EAZA Members and EEP Participants as well as any other transfer of animals into or out of the EEP population from sources, or to destinations, that are not an EAZA Member. The rules and procedures for EEP species are laid down in Chapter 3, and in particular sections 3.4, 3.6 and 3.8.

EAZA Members should prioritise the acquisition and disposition of (non-EEP) animals from/to other EAZA Members. Exceptions might apply in case of importation from the wild in accordance with a defined need or conservation translocations provided these align with the respective sections above.

Acquisition and disposition of non-EEP animals from/to institutions or persons that are not a member of EAZA (non-EAZA Members) can be appropriate provided that certain criteria are in place. Such exchanges can be important as part of collaborative work with partner organisations. EAZA Members are strongly encouraged to consider the EAZA Regional Species Plans, including conservation and population management needs, when deciding whether or not to exchange animals with non-EAZA Members. Non-EAZA Members receiving animals from EAZA Members must be professional, including following similar standards regarding the legal, sustainable and ethical acquisition and disposition of animals as described in this chapter.

EAZA Members must verify that institutions or persons they dispose animals to have conditions in place to meet the physical, psychological, and behavioural requirements of the animal, including appropriate facilities to hold the animals and skilled staff who can maintain a high standard of husbandry and welfare. Circuses and canned hunting operations would never be regarded as appropriate recipients of animals from EAZA Members. In case of acquisition of animals that responsibility equally applies to the EAZA Member itself.

Non-EAZA Members have not been accredited as part of our EAZA Accreditation Programme (EAP). In the case of dispositions to non-EAZA members, EAZA Members must consider this as part of their due diligence process and use a robust approach to be confident that the recipient has the appropriate standards in place. Preferably this includes either an onsite inspection of receiving facilities or receiving suitable written references regarding facilities and expertise. Accreditation of zoo and aquarium associations that have equal standards and procedures to EAZA, or membership of organisations that partner with EAZA can also contribute to understanding the level of professionalism of non-EAZA Members.

#### *Intermediate parties*

Acquisition and disposition of EEP animals must always be organised with and approved by the EEP (see sections 3.4, 3.6, 3.8 and 3.15). EAZA Members should plan and organise the acquisition and disposition of animals directly with the supplier or recipient destination and avoid the use of intermediate parties



(dealers, brokers, consultants, etc.) wherever possible. When this is not (yet) possible, EAZA Members may use the services of intermediate parties to acquire or dispose of animals provide that the following criteria are in place:

- EAZA Members must always know the full details of the supplier and source, or recipient and destination, of the animals and ensure that the acquisition or disposition of the animals is legal, sustainable and ethical as outlined in this chapter.
- Any payments to the intermediate party in cash or otherwise should solely be for services provided to connect the source (exporter) with the recipient (importer). Intermediate parties should not sell these animals.
- It must be clear that in situations where intermediate parties are involved in sourcing animals or helping to find a suitable destination, the responsibility of verifying appropriate facilities and professional standards of the source or destination, still lies with the EAZA Member.

#### *EEP, TAG and other EAZA rules and procedures*

EAZA Members must participate in and collaborate with existing EEP and EAZA TAGs as opposed to operating solely on institutional level (also see [3.14 Annual breeding and transfer recommendations](#)) to acquiring or disposing individuals of species for which an EEP exist, EEP approval must be sought. EAZA Members must avoid circumventing the waiting list for the EEP in order to get species quicker than can be provided through the programme.

For the benefit of the future viability of EEP populations, all transfers of EEP animals must be arranged in full consultation with, and the agreement of, the EEP. This also applies to EEP animals that are approved to be placed outside of the EEP population as in accordance with [3.6.5 Procedure for sending EEP animals outside of programme](#)

For non-EEP species (those that are not managed as part of an EEP) it is strongly recommended that EAZA Members consider the TAG's most recently published RCP before deciding whether or not to acquire animals. EAZA Members are encouraged to get in touch with the relevant EAZA TAG with questions and for advice.

TAG statements that include conditions in relation to the acquisition or disposition of species or individuals, that are endorsed by the EEP Committee, Executive Committee or Council (as appropriate) must be respected in this regard.

#### *Care for and welfare of animals*

Before acquiring an animal, EAZA Members must ensure conditions are in place to meet the physical, psychological and behavioural requirements of the animal.

As part of the Institutional Species Plan (ISP) this requires continuous periodical assessment after the acquisition (see chapter [4.2.4 Ethical acquisition and disposition](#)).

EAZA Members must verify that institutions or persons they dispose animals to have conditions in place to meet the physical, psychological, and behavioural requirements of the animal, including appropriate facilities to hold the animals and skilled staff who can maintain a high standard of husbandry and welfare. Circuses and canned hunting operations would never be regarded as appropriate recipients of animals from EAZA Members.

Any details of health, diet/nutrition, reproductive and genetic status and behaviour that might affect management of an animal being transferred/disposed (or other animals in the group at the receiving institution) should be disclosed at the commencement of negotiations.

EAZA is not in favour of the 'flooding the market' principle whereby EAZA Members would widely share certain species with private holders (or others) to meet demand and as such avoid that these individuals or institutions obtain animals from unreliable and unsustainable sources. The most important consideration in the context of this section is that it is difficult if not impossible to guarantee that the standards for housing and care at the high number of destinations are met.

The 'EAZA Standards for Accommodation, Care and Welfare of Animals in Zoos and Aquariums' and EAZA Best Practice Guidelines further define standards and provide guidance that can be used to assess whether a recipient will be able to suitably house and care for species and individual animals.

#### **4.2.5 Transport of animals**

All animal transfers should conform to the international standards and national and international regulations applying to the particular species. Where appropriate, animals should be accompanied by qualified staff and/or timely information should be provided that will facilitate the animal's adjustment to its new home. EAZA Member institutions are recommended to complete the transfer themselves or via specialist and well recommended companies. Refer to [3.15 Conditions of animal transfers and the role of the EEP Coordinator](#) for further information on transporting animals.

#### **4.2.6 ZIMS Available and Wanted tool**

EAZA Members can and should enter their surplus animals on the ZIMS Available and Wanted tool. This will make the EAZA community at large aware of the availability of animals.

Furthermore, EAZA Members can turn to the ZIMS Available and Wanted tool to look for animals. Besides the practicalities the Available and Wanted tool offers to EAZA institutions, it also facilitates cooperation with and between EAZA Members and reduces the need to work with dealers, brokers and any other intermediaries. Before listing EEP animals on the ZIMS Available and Wanted tool EAZA institutions should get in touch with the EEP Coordinator/ ESB keeper.

#### **4.2.7 Non breeding recommendations**

In the framework of the implementation of the RSPs, EEP Coordinators and ESB keepers can issue non-breeding recommendations e.g. for genetically less important animals and/or when facing a shortage of holding space. Non-breeding recommendations are therefore an important tool for the cooperative management of certain species and thus add to the conservation of global diversity. EAZA Members must follow non-breeding recommendations issued by the EEP and are strongly recommended to do so in case of an ESB. For further information, please refer to the relevant paragraph in [section 3.14 Annual breeding and transfer recommendations](#)

#### **4.2.8 Contraception (and the EAZA Reproductive Management Group)**

Contraception may be used as a tool for population management. The possible side effects of both surgical and chemical contraception, as well as any negative impact on behaviour (social impact), and the impact of permanent contraception, should be considered before a final decision to implement contraception is made. Adequate contraception measures that can be considered are listed on the EAZA Reproductive Management Group (EAZA RGM) website ([www.egzac.org](http://www.egzac.org)).

EAZA RGM is an EAZA Working Group under the EAZA Veterinary Committee and aims to support the EAZA Membership, TAGs and the EAZA Ex situ Programmes through:

- a. Compiling information on EAZA experiences with the use of animal contraception;
- b. Curating this information in a database;
- c. Complementing the Association of Zoos and Aquariums (AZA) Reproductive Management Center (AZA RMC);
- d. Identifying gaps in current knowledge on contraception use/efficiency;

- e. Encouraging and focusing research in key areas of need;
- f. Promoting a holistic approach to animal contraception through continuous health surveillance of individuals during and after contraception; and
- g. Making this information readily available to interested parties.

The EAZA Reproductive Biology Coordinator acts as a liaison between the Working Group and the wider EAZA Membership.

#### **4.2.9 Management euthanasia/culling**

If after having considered alternative solutions, it is deemed necessary to cull an animal, the technique used must ensure an absolute minimization of suffering of the animal during the process of ending its life. Management euthanasia/culling is considered appropriate where the only alternative is permanent transfer to accommodation which cannot assure a proper level of welfare for the animal and which cannot be improved within a short interval agreed by the responsible EAZA authority. Any management euthanasia/culling procedure by an EAZA Member must conform to the national legislation of the country in which it is located.

Under certain conditions management euthanasia/culling can be considered as a population management tool. Please refer to the EAZA Management euthanasia/culling Statement for further information (See [Appendix 28: Position Statement on Management euthanasia/culling](#))

#### **4.3 Releasing animals to the wild**

This chapter describes EAZA's rules and procedures for the intentional releasing of animals from EAZA Members to the wild. To avoid confusion and to align ourselves with language used in the international conservation community, we will use the term conservation translocations in this chapter. The IUCN Guidelines for Reintroductions and Other Conservation Translocations (2013, adopted by EAZA Council in 2015) provide the following definition:

- Conservation translocation is the intentional movement and release of a living organism where the primary objective is a conservation benefit: this will usually comprise improving the conservation status of the focal species locally or globally, and/or restoring natural ecosystem functions or processes. This includes Population Restoration (Reinforcement and

Reintroduction) and Conservation Introduction (Assisted colonization and Ecological replacement).

Rehabilitation and release of rescued animals is not part of this definition and indeed a very different scenario. Whilst not the focus of this chapter, EAZA Members involved in the rescue of animals should always consider the health, welfare and chances of survival of the rescued individual(s) as well as any impact on the wild population before releasing them back after the rescue operation.

Animals that are unintentionally released into the wild (escapes, releases by the public, thieves or animal rights activists) are also not included here. section 4.4 Invasive Alien Species the procedures in place for unintentional release, linked to alien invasive species.

This chapter, in summary, describes the rules and procedures that apply to every animal that intentionally moves out of an EAZA Member collection to the wild as part of a conservation translocation. Any other intentional release of animals into the wild, with the exception of rescued animals that are released after rehabilitation, is not supported by EAZA, and Members must not pursue such initiatives. Conservation Translocations from the wild to the wild that EAZA Members might be involved in are not included as part of the rules and procedures described here.

These procedures are applicable to all animals that the EAZA Member holds the responsibility for management for. They do for example not apply to range state projects that an EAZA Member might support financially or in kind, without having ownership of or responsibilities for the animals managed that might be held as part of such project.

#### **4.3.1 Rules and procedures for conservation translocations from EAZA Members**

There are a number of general principles that must apply to all Conservation Translocations where animals move from EAZA Members into the wild:

- a. There should be a document describing that the Conservation Translocation is in accordance with the IUCN Guidelines for Reintroductions and Other Conservation Translocations (IUCN, 2013), that must be prepared in advance of the project taking place. This document must follow the structure set out in the IUCN Guidelines to ensure that best practice is adhered to.

- b. The species conservation needs, for example as defined in species or habitat conservation action plans of conservation organisations and statutory authorities, must determine if a Conservation Translocation is the most appropriate conservation intervention when considering Conservation Translocations. Lack of space for placing animals, commercial gain, PR or marketing and communication are not considered to be acceptable arguments for the release of animals from EAZA Members.
- c. Involvement of and cooperation with *in situ* partners and local authorities is of key importance.
- d. As with all destinations, the EAZA Member holds final responsibility to decide if the destination the animals is disposed to, in this case released into the wild, is appropriate.

There are two scenarios for Conservation Translocations involving animals from EAZA Members:

1. the animal(s) are part of an EAZA Ex situ Programme (or ESB);
2. the animal(s) are not part of an EAZA Ex situ Programme (or ESB).

The next sections will describe the rules and procedures for both scenarios.

If the animal(s) is/are part of an EAZA Ex situ Programme (EEP) (or ESB):

- a. The TAG is responsible for evaluating and deciding whether the Conservation Translocation of an EEP (or ESB) species is appropriate. The TAG must consider the following points:
  - Is there an argued project proposal documenting that the proposed Conservation Translocation is in accordance with the IUCN Guidelines for the Reintroduction and other Conservation Translocations (including all sections if the guidelines, amongst other on the release techniques, pre- and post-release monitoring, biosecurity/ disease transmission risks, safety of human populations -for example when reintroducing/releasing hazardous animals, financial security of programme, veterinary risks)?
  - Is there a conservation action plan (or equivalent) in place that points to the need for Conservation Translocation in support of the species survival in the wild?
  - Is the Conservation Translocation supported by the relevant IUCN SSC Specialist Group and/or other appropriate conservation authority?

- Is the Conservation Translocation supported by the range state authorities?
  - Is there a need for formalising a Memorandum of Understanding between EAZA/EEP and partners involved in the Conservation Translocation?
  - Is the Conservation Translocation aligned with the roles and goals as set for the EEP as part of the TAG's Regional Species Plan?
  - Has a Long-Term Management Plan for the EEP been produced and has there been sufficient consideration given towards avoiding negative impact of releases of EEP animals for the *ex situ* population?
  - Has the EAZA Conservation Translocation Working Group reviewed the proposal?
- b. When evaluating the Conservation Translocation proposal based on the points above, the TAG is strongly encouraged to cooperate with external *in situ* organisations and the relevant range state authorities.
- c. The EEP Coordinator and EEP Species Committee (or equivalent) are responsible for preparing and submitting the documentation as described above to the TAG, as much as possible working in cooperation with conservation organisations and range state authorities.
- d. The EEP Coordinator and EEP Species Committee are responsible to select and recommend animals for release. The EAZA Population Management Centre can provide support when necessary.
- e. The EEP Coordinator, or someone appointed by the species Coordinator is responsible for the coordination of the above outlined EAZA review process among all steps and stakeholders. If the EEP Coordinator position is vacant the TAG will appoint someone who is (temporarily) responsible.
- f. The EAZA Executive Committee is responsible for approval of and endorsing formal agreements related to Conservation Translocations, upon prior approval from, and as proposed by, the EEP Committee. For example, Memoranda of Understanding describing commitments of EAZA and other partners in relation to the Conservation Translocation. Such agreements do not have an EAZA status if these are not approved by the Executive Committee and signed by the EAZA Chair.
- g. Conservation Translocations must not proceed without the explicit approval of the TAG and EEP Species Committee (if in place).



- h. The EAZA Member(s) involved in this conservation translocation are required to enter the conservation translocation into the EAZA Conservation Database. Especially when conservation translocations involve releasing animals from multiple EAZA members over a longer period of time, the EEP Coordinator might help coordinate input into the EAZA Conservation Database.

If the animal(s)\* is/are not part of a managed EAZA Ex-situ programme:

- a. The EAZA Member is responsible for evaluating and deciding if the Conservation Translocation of the non-EEP species is appropriate. The EAZA Member must consider the following points:
  - Is there an argued project description documenting that the Conservation Translocation is in accordance with the IUCN Guidelines for the Reintroduction and other Conservation Translocations (including all sections of the guidelines, amongst other on the release techniques, pre- and post-release monitoring, biosecurity/ disease transmission risks, safety of human populations -for example when reintroducing/releasing hazardous animals, financial security of programme, veterinary risks)?
  - Is there a conservation action plan (or equivalent) in place that point to the need for Conservation Translocation in support of the species survival in the wild?
  - Is the Conservation Translocation supported by the relevant IUCN SSC Specialist Group and/or other appropriate conservation authority?
  - Is the Conservation Translocation supported by the range state authorities?
  - Is there a need for formalising a Memorandum of Understanding between the EAZA Member (or Members) and partners involved in the Conservation Translocation?
  - Is the Conservation Translocation aligned with the roles and goals as set in the TAG's Regional Species Plan, and is the TAG in support of the Conservation Translocation? The EAZA Taxon Advisory Group should be contacted for advice.
  - Is the Conservation Translocation not hampering species roles as part of the TAG's Regional Species Plan? The EAZA Taxon Advisory Group should be contacted for advice.
  - Has a Long-Term Management Plan for the population been produced and has there been sufficient consideration given towards avoiding negative impact of releases of animals on the *ex situ* population?

- Has the EAZA Conservation Translocation Working Group reviewed the proposal?
- b. The EAZA Member(s) involved in this conservation translocation is/are responsible for the coordination of the above outlined EAZA review process among all steps and stakeholders.
- c. If EAZA is to become part of a formal agreement for the conservation translocation, the EAZA Executive Committee is responsible for approval of and endorsing such formal agreements related to Conservation Translocations of non-EEP species. For example, Memoranda of Understanding describing commitments of EAZA and other partners in relation to the Conservation Translocation. Such agreements do not have an EAZA status if these are not approved by Executive Committee and signed by the EAZA Chair.
- d. EAZA Members are encouraged not to proceed with the Conservation Translocation without the explicit approval of the TAG.
- e. The EAZA Member(s) involved in this conservation translocation are required to enter the conservation translocation into the EAZA Conservation Database.
- f. In the evaluation process EAZA Member(s) is/are strongly encouraged to cooperate with *in situ* organisations and the relevant range state authorities.

\* In case EAZA Members are involved in conservation translocations of plants they should follow a similar process as described above for animals. Rather than referring to the relevant Taxon Advisory Group, in these cases the EAZA Zoo Horticulture Group may be consulted as to whether the Conservation Translocation is appropriate. In this regard cooperation with organisations such as Botanical Gardens Conservation International (BGCI) are of key importance as well.

These rules and procedures will not be implemented retrospectively and thus not consider projects and releases prior to 2019. From the date of approval of the PMM document onwards, EAZA Members, TAGs and EEPs must follow the working procedures as described above. Failure to do so will be considered as a breach of an EAZA Standard and will be treated as such in case of any follow up.

## 4.4 Invasive Alien Species

EAZA Members must prevent introduction of invasive alien species at all times. This means that EAZA Members must take appropriate measures to prevent the escape and accidental release of animals and plants into the wild, thereby paying particular attention to species that in potential are at risk of becoming an alien invasive species in the EAZA region. In addition, EAZA Members must prevent unintentional introduction of species or pathogens into the environment via waste water e.g. from aquarium tanks. All waste water should be treated using appropriate sterilisation methods prior to being discharged.

EAZA Members should follow the European Code of Conduct on Zoological Gardens and Aquaria and Invasive Alien Species (October 2012), which was written by EAZA and the IUCN SSC Invasive Species Specialist Group. EAZA Members must also abide by national or regional legislation on Invasive Alien Species, for example the Invasive Alien Species (IAS) Regulation that is in place in the European Union (Regulation (EU) 1143/2014 on invasive alien species).

## 4.5 EAZA Animal Transport Guideline

EAZA Members must ensure animals are fit before being transported and should ensure that the means of transport (crates, tanks, boxes, vehicles, etc.) are appropriate and guarantee the welfare of animals and the safety of staff from loading until releasing at final destination. Where appropriate, animals should be accompanied by qualified staff. EAZA Members should assess the need to exchange staff prior to and/or after the transport to reduce potential stress. All parties involved in the transport are responsible for the relevant exchange of information prior to, during and after transport. The 'EAZA guideline on Animal Transport' (see [Appendix 27: EAZA guideline on animal transport](#)), species-specific EAZA Best Practice Guidelines and the IATA Live Animal Regulations should be consulted prior to transport.

## 4.6 Ownership of animals within EAZA

In order to ensure a proper management of the animals in EAZA institutions it is essential to address the issue of ownership and responsibility. With ownership follows the right to make decisions about the animal in question whereas the responsibility for care, health and welfare lies with the holder. Often owner and holding institution will be the same, and in such cases the right to make decisions and the responsibility for the animals go hand in hand. But in cases of animals on loan, the owner and the holder are two separate institutions. In such

cases the right to make decisions still stays with the owner (unless otherwise decided in the loan contract) whereas the responsibility for the animal (care, health, welfare) is transferred to the holder that has the animal on loan.

Animals born from animals owned by the institution where the animal is born obviously belong to the owner. But in cases where animals are born by animals on loan to another institution the ownership lies with the holding institution unless otherwise described in the loan agreement.

In order to avoid confusion, it is thus essential that a loan agreement is signed by both parties in all cases of animals transferred on loan, and that ownership of any offspring is specifically addressed in this agreement.

With regards to EEP and ESB species it must be ensured that the ownership issue does not become an obstacle or a delaying factor for the recommended transfers and other associated activities. Since EEPs and ESBs are not legal entities they can not own any animals. It is therefore not enough for a loan agreement to state that any offspring must be disposed of in accordance with the EEP. Such a paragraph only addresses the decision-making process, not the ownership, so ownership of offspring must be clearly articulated in all loan agreements. The loan agreement should also specifically address decisions relating to the disposal of the offspring.

Furthermore, with regard to EEP and ESB species it must be taken into consideration that communication is between the holder and the EEP Coordinator/Studbook Keeper. EEP Coordinators and Studbook Keepers only refer recommendations to the holders, and in case the holder is not authorised to make the necessary decisions about transfers etc. it is up to the holder to clear the recommended transfers etc. with the actual owner. Ownership should be respected in the implementation of transfer recommendations.

#### **4.7 Institutional Species Planning and Demonstration animals**

EAZA has Standards in place on the use of animals in public demonstrations and ambassador animal interactions that EAZA Members must follow (refer to paragraph 1.11.2 of the EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria (2019)). In relation to population management, the section on Health (point c.) and Animal selection (point f.) are of particular importance.

Additionally, for some taxa the relevant TAGs have produced further taxon specific guidelines within the framework of these guidelines which, after

approval by the EEP Committee, are published on the open area of the EAZA website (in the Best Practice Guidelines section). All EAZA Members should follow these taxon specific guidelines on animal demonstrations, and - whenever necessary- should make improvements or adjustments within a reasonable period of time.

#### **4.8 EAZA Biobank**

The success of EAZA Ex situ Programmes relies to a large extent on intensive demographic and genetic population management. Currently, the majority of genetic management in zoos is individual, pedigree-based management. Whilst successful for some EEPs it can be problematic for others because pedigree records might be incomplete, and relatedness of founders can be built on assumptions. Furthermore, many species still have taxonomic uncertainties and for others, their natural history does not lend itself to individual pedigree-based management (e.g. group living species). DNA-analysis is a key tool to improve knowledge of a population's genetic make-up and furthermore ensure that, as far as possible, captive populations represent the genetic diversity of the wild counterparts. Thus, DNA-analysis holds great impact on animal health and welfare.

In recent years, molecular genetic techniques and tools have become readily available to the zoo and the conservation communities alike. The ongoing technological advances coupled with decreasing prices will create additional opportunities in the near future. But only if genetic samples are available can we make use of these opportunities and open up for a huge range of possibilities for the use of molecular genetics to help improve future management of EAZA Ex situ Programmes. Adding a genetic layer to a studbook will provide information such as origin and relatedness of founders, which was previously built on assumptions, and help resolve paternity issues. Genetically identifying the origin of individuals can help set up the correct breeding groups and reviewing the programme genetically using PMx will increase its chance of success.

However, before we can start using molecular genetic tools for population management it is pivotal to have a centralised EAZA-wide DNA repository, which is the EAZA Biobank. This biobank has the ambitious aim to hold DNA/tissue/genetic material from all animals in EAZA, and is designed such that samples are stored properly, securely, and are available for genetic analyses to benefit intensively managed populations. The EAZA Biobank creates interesting research opportunities ranging from being relevant for population management

(e.g. veterinary molecular diagnostics and/or adaptive processes) towards more scientifically fundamental research questions.

The EAZA Biobank aims to have four hubs for the EAZA community, each of whom having adequate facilities and staff available to support the operation of the EAZA Biobank. The general principle will be that these hubs will keep, curate and register samples of all individuals sampled. EAZA Members are encouraged to send samples to the hubs as assigned to be the relevant hub for the country the Member is located in. This will make the process of submitting samples as efficient as possible.

All EAZA Members are requested to sample their animals opportunistically and send samples to the hub as assigned for their country. Please refer to [Appendix 20: a EAZA Biobank terms of service](#) and from there on through to [Appendix 20: c- iv: EAZA Biobank terms](#) and conditions. for more detailed documents about the EAZA Biobank, which includes; EAZA Biobank Terms of Service, Standard Operating Procedures for EAZA Biobank Hubs and a number of samples collection and use related documents (including the Sampling Protocol, Material Transfer Agreements and Terms of Conditions).

The running of the EAZA Biobank is overseen by EAZA Biobanking Working Group that reports to the EAZA Research Committee. The EAZA Biobank as well as the Working Group's activities are coordinated and supported by the EAZA Biobank Coordinator at the EAZA Executive Office. An important part is maintaining appropriate records of available samples in the Zoological Information Management System (ZIMS). For further information please refer to the EAZA Biobank Working Group pages on the EAZA Member Area.

#### **4.9 Theft of (EEP) animals from EAZA Member institutions**

Illegal wildlife trade is among the biggest crimes globally and is comparable in scale with other major crimes such as human trafficking and illegal trade in drugs and weapons. Unfortunately, zoos and aquarium can become a victim of illegal wildlife trade as an increasing number of species held by EAZA Members are vulnerable to theft.

First and foremost, EAZA Members should assess the most appropriate methods and equipment to provide sufficient security to prevent animal thefts (e.g. secure enclosure construction and suitable alarm and monitoring system).

Measures may differ between species with some species like smaller primates (Callitrichids, squirrel monkeys), birds (parrots, hornbills) and reptiles (turtles) most often subject to thefts. Species related security advice can be obtained from EAZA Best Practice Guidelines or from the respective EEP Coordinator or TAG.

It is also important to have good a relationship with the local police. Depending on the institution's agreement the local police should be kept informed of all relevant security measures taken on board by your institution. In case of animal thefts institutions are requested to always report (attempted) animal thefts to the local police, and to encourage them to report thefts to Europol (Europol is the official EU's law enforcement agency and formed in 2010. One of its main tasks is to fight illegal trafficking of (endangered) animal species. More information on Europol can be found under <https://www.europol.europa.eu/>).

In addition to reporting to the local police and to Europol, all cases of an animal theft should be reported to the EAZA Ex situ Programme (if in place), TAG, EAZA Executive Office and if applicable your national zoo and aquarium association. The EAZA Executive Office will usually share the information about the theft with all EAZA Members and will ask Members to remain alert for burglars and for when they see animals appear on the market. If relevant we will also inform relevant stakeholder within the European Union (e.g. from the CITES office). The EAZA Executive Office will be able to provide input on related media enquiries if needed.

EAZA institutions should follow the same process where possible when animal parts or derivatives have been stolen.



## 5 Training/Further information

### 5.1 Population Management Training under the EAZA Academy

Newly appointed EEP Coordinators must participate in the Introduction to EAZA *Ex situ* Programme Management Course and attend at the first course that is organised after being formalised into these positions. Or if that is not possible, latest the second course organised after being formalised into the position. Established programme leaders as well as colleagues considering taking on a programme in the future are free at all times to request participation in a course if they feel that they would benefit from doing so.

#### 5.1.1 Introduction to EAZA Ex Situ Programme Management Course

The Introduction course enables participants to gain a basic understanding of the genetics and demographics behind population management. It gives a practical in-depth introduction to globally used studbook software (ZIMS for Studbooks), and a shorter introduction of specialist software designed to support effective management of populations into the future (PMx). It introduces participants to EAZA structures, working procedures and staff. The skills and understanding learnt on this course enable greater confidence and ability in appropriate decision making when managing EEPs.

The content of the Introduction course is:

- a. Why manage zoo populations?
- b. Genetic management of zoo populations;
- c. Population demographics;
- d. Factors that affect population goals;
- e. Use of specialist studbook keeping and studbook analysis software such as ZIMS for Studbooks and an introduction to PMx. Introducing web based tools;
- f. EEP working procedures and EAZA structures
- g. Practicalities of running an EEP, including common problems and how to manage them.

### **5.1.3 Further EAZA Academy courses**

Besides the two mentioned courses EAZA offers a variety of other courses under the umbrella of the EAZA Academy, for example there is a collection planning course aimed at curators and zoo managers but equally relevant for newly appointed TAG Chairs and Vice chairs. For an overview of courses and more information about the EAZA Academy please refer to the Academy pages on the EAZA website.

### **5.2 EAZA website, Zooquaria and other publications**

Programme Coordinators, TAG Chairs, Advisors and programme participants are advised to read and use the relevant sections of the subsequent editions of EAZA's quarterly magazine Zooquaria, EAZA eNews, EAZA's social media (Facebook and LinkedIn) as well as the relevant parts of the EAZA website (Member Area) ([www.eaza.net](http://www.eaza.net)). These regularly contain important information on developments in TAGs and the programmes under the TAG's remit. In order to receive a password to enter the Member Area, to get a copy of Zooquaria and to subscribe to eNews, please get in touch with the EAZA Executive Office.

An up to date overview of all TAGs and programmes including contact details of the programme managers is available from the Member Area of the EAZA website.

### **5.3 Additional questions and support**

EAZA Members, EEP Coordinators and ESB keepers are encouraged to ask for support from the EAZA Executive Office regarding specific problems in the development of programmes and in the use of computer software for studbook compilation and analyses.

The Population Management Centre at the EAZA Executive Office can support with specific problems in the development of EAZA Ex situ programmes and in the use of computer software for studbook compilation and analyses. Species-specific support can be obtained from the TAG relevant to the population management programme species, or from programme managers working with related species. Finally, useful information can also be gained by attending the EAZA Annual Conference and from discussions with colleagues.

All forms/templates are available to download on the EAZA Member Area.



## **Overview of Appendixes**

[Appendix 1: References and Recommended further reading](#)

[Appendix 2a: EAZA Regional Species Plan, standard format](#)

[Appendix 2b: Species Assessment Sheet](#)

[Appendix 2c Standard RSP role descriptions](#)

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[Appendix 3: Template for proposing a new EEP](#)

[Appendix 4: EAZA Best Practice Guidelines template](#)

[Appendix 5 a: TAG Evaluation - TAG Chair Questionnaire](#)

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[Appendix 5 c: TAG Evaluation - EEO Questionnaire](#)

[Appendix 5 d: TAG Evaluation: Standard Summary Report](#)

[Appendix 6: Proposal for new TAG](#)

[Appendix 7a: Example letter of providing institutional support to a TAG \(Vice\) Chair or EEP Coordinator](#)

[Appendix 7b: Example letter of withdrawing institutional support](#)

[Appendix 7c: Example letter for providing TAG support for EEP Coordinators /ESB keepers](#)

[Appendix 8: Decision tree EAZA EEP participation procedure](#)

[Appendix 9: Temporary Member participation in an EEP - standard format for requesting approval from the EEP Committee Application form A –Temporary Membership \[including Temporary Membership under construction\]](#)

[Appendix 10: Candidate for Membership participation in an EEP - standard format for requesting approval from the EEP Committee Application form B – Candidate for Membership](#)

[Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee Application form C –no Member of EAZA, in EAZA region](#)

All forms/templates are available to download on the EAZA Member Area.



[Appendix 12: Non-EAZA institution participation in an EEP- standard format for requesting approval from the EEP Committee Application form D – No Member of EAZA, the proposed EEP participant is located out of the EAZA region.](#)

[Appendix 13: EAZA Template contract for non-EAZA EEP participants](#)

[Appendix 14: EAZA studbook template](#)

[Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs](#)

[Appendix 16: What is a Long-term Management Planning Meeting?](#)

[Appendix 17: EAZA Evaluation of EEPs](#)

[Appendix 18: Evaluation of EEPs, standard summary report](#)

[Appendix 19: EAZA Guidelines for Animal Transfers between Regions](#)

[Appendix 20: a EAZA Biobank terms of service](#)

[Appendix 20: b Standard operating procedures for EAZA Biobank Hubs](#)

[Appendix 20: c - i EAZA Biobank sampling protocol](#)

[Appendix 20:c - ii: EAZA Biobank material transfer agreement \(Donation\)](#)

[Appendix 20: c - iii: EAZA Biobank material transfer agreement \(Loan\)](#)

[Appendix 20: c- iv: EAZA Biobank terms and conditions](#)

[Appendix 21: EAZA Statement about imports of birds and eggs from the wild](#)

[Appendix 22: EAZA Guidelines for decision making when importing EEP animals from the wild](#)

[Appendix 23: EAZA Template Programme Annual Report](#)

[Appendix 24: EAZA Fundraising Account Application](#)

[Appendix 25: Guidelines for independent EAZA-related social media managers](#)

[Appendix 26: Sanctions in the case of a violation of the EAZA Code of Ethics or EEP Procedures](#)

[Appendix 27: EAZA guideline on animal transport](#)

[Appendix 28: Position Statement on Management euthanasia/culling](#)

[Appendix 29: Guidelines for population management programme administration and handover](#)

All forms/templates are available to download on the EAZA Member Area.



[Appendix 30: Access Roles in ZIMS for Studbooks](#)

[Appendix 31: Template Non-Disclosure Agreement EAZA Studbook Data](#)

[Appendix 32: EAZA and the Nagoya Protocol](#)



## Appendix 1: References and Recommended further reading

### Reference used in text

- Baker, A., Lacy, R.C. & Traylor-Holzer, K. (2011). Intensive management of populations for conservation. *WAZA Magazine*, 12, 40-43.
- Barongi, R., Finken, F. A., Parker, M. & Gusset, M. Editors. (2015). *Committing to Conservation: The World Zoo and Aquarium Conservation Strategy*. Gland, Switzerland: WAZA Executive Office.
- Byers, O., Lees, C., Wilcken, J. & Schwitzer, C. (2013). The 'One Plan Approach': The philosophy and implementation of CBSG's approach to integrated species conservation planning. *WAZA Magazine*, 14, 2-5.
- CBSG. (2011). *Intensively Managed Populations for Conservation Workshop Report*. Apple Valley, Minnesota: IUCN SSC Conservation Breeding Specialist Group.
- de Man, D., Leus, K., & Holst, B. (2016). Creating a flexible future. *Zooquaria Spring 2016 Special Issue*, 26-27.
- IUCN SSC. (2014). *Guidelines on the Use of Ex Situ Management for Species Conservation. Version 2.0*. Gland, Switzerland: IUCN Species Survival Commission.
- Lees, C. M. and J. Wilcken. (2009). Sustaining the Ark: the challenges faced by zoos in maintaining viable populations. *International Zoo Yearbook*, 43, 6-18.
- Leus, K., Traylor-Holzer, K. and Lacy, R.C. 2011. Genetic and demographic management in zoos and aquariums: recent developments, future challenges and opportunities for scientific research. *International Zoo Yearbook* 45: 213-225.
- Leus, K., Lackey, L. B., van Lint, W., de Man, D., Riewald, S., Veldkam, A. & Wijmans, J. (2011). Sustainability of European Association of Zoos and Aquaria Bird and Mammal Populations. *WAZA Magazine*, 12, 11-14.
- Long, S., Dorsey, C. & Boyle, P. (2011). Status of Association of Zoos and Aquariums cooperatively managed populations. *WAZA Magazine*, 12, 15-18.
- Traylor-Holzer, K., Leus, K. and Bauman, K. In review. Integrated Collection Assessment and Planning (ICAP) Workshop: helping zoos adopt the One Plan Approach. *Zoo Biology special issue on sustainability*.
- McGowan, P. J. K., Traylor-Holzer, K. & Leus, K. (2016). IUCN Guidelines for determining when and how ex situ management should be used in species conservation. *Conservation Letters*, 10(3): 361-366.
- Redford, K. H., Jensen, D. B. & Breheny, J. J. (2012). Integrating the captive and the wild. *Science*, 338, 1157-1158.

All forms/templates are available to download on the EAZA Member Area.



- Redford, K. H., Jensen, D. B. & Breheny, J. J. (2014). The long overdue death of the ex situ and in situ dichotomy in species conservation. *WAZA Magazine*, 14, 19-22.
- Soulé, M., Gilpin, M., Conway, W. & Foose, T. (1986). How long a voyage, how many staterooms, how many passengers? *Zoo Biology*, 5, 101-113.
- Species360. 2018. ZIMS.Species360.org.

### Recommended further reading

- Ballou, J. D. & Lacy, R. C. (1995): Identifying genetically important individuals for management of genetic diversity in pedigreed populations. In: *Population management for survival and recovery*. Ballou, J. D., Gilpin, M. & Foose, T. J. (Eds.). New York, NY: Columbia University Press, Pp. 76-111.
- Ballou, J.D., Lees, C., Faust, L.J., Long, S., Lynch, C. Bingaman Lackey, L. & Foose, T.J. (2010). Demographic and Genetic Management of Captive Populations. In: Kleiman, D.G., Thompson, K.V. & Bear, C.K. (Eds.) *Wild Mammals in Captivity – Principles and Techniques for Zoo Management*, Second Edition. The University of Chicago Press: Chicago and London. Pp 219-252.
- Frankham, R., Ballou, J. D. & Briscoe, D. A. (2010): *Introduction to conservation genetics* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Gilpin, M. E. & Soulé, M. E. (1986). Minimum viable populations: processes of species extinction. In M. E. Soulé (Ed.), *Conservation biology: The science of scarcity and diversity* (pp. 19-34). Sunderland: Sinauer Associates.
- Lacy, R.C. (1994) Managing genetic diversity in captive populations of animals, in *Restoration of Endangered Species* (Eds. Bowles, M.L., Whelan, C.J.) (Cambridge University Press, Cambridge, U.K., Pp. 63-89.
- WAZA Magazine. (2011) – Volume 12: Towards Sustainable Population Management.



All forms/templates are available to download on the EAZA Member Area.



## Appendix 2a: EAZA Regional Species Plan, standard format

This appendix will give an overview of the standard format for the development and publication of EAZA Regional Species Plans. As we gain experience with the new population management structure this standard format will be adapted and changed as necessary over time.

### ***Contents of an RSP***

Each EAZA RSP should include the following sections:

1. Cover
2. Background information
3. Species assessment sheets
4. EEP application form
5. Summary table
6. References
7. Appendices

The following sections will provide more details regarding the various sections outlined above.

#### 1. Cover

The cover of the RSP should include the following information:

- Name of TAG
- Taxa covered by this volume (if different from total taxa covered by TAG)
- Date of publication
- Edition nr.
- EAZA logo
- Institutional logo of TAG Chair
- Potentially include TAG logo, or logos of other participating organisations if they are partners in the planning and implementation of the document

#### Inside cover

- Editors of document
- Citation
- Acknowledgements
- Photo credit for front cover

#### 2. Background information

All forms/templates are available to download on the EAZA Member Area.



- List of TAG members and their institutions, with contact information of the TAG Chair and Vice chair(s)
- TAG mission statement
- TAG definition (specifying all taxa within TAG remit)
- Taxonomic scope of this RSP volume (*if TAG is splitting total taxon in different groups to have separate RSPs*)
- Description of philosophy and outline of new EAZA population management structure

*Standardised text to be provided by EEO - including info on reasons to change from old to new system, OPA, TAGs and SGs/in situ collaboration, application of IUCN ex situ guidelines, new management categories, that each EEP can be tailored to needs, relationship between RSP, EEP application and Long-Term Management Plan content and processes etc.*

- Procedures followed in compiling the RSP

*Standardised text to be written by EEO - this then needs to be adapted to describe any changes in methodology used for this specific TAG*

### 3. Species assessment (species assessment sheets)

The species assessment sheets that are prepared ahead of the RSP workshop and finetuned and finalised during and after the RSP workshop should be included in this section. Please refer to [Appendix 2b: Species Assessment Sheet](#) for a Species Assessment Sheet template including examples.

### 4. EEP application forms for each species selected as an EEP

*The first time an RSP “New Style” is conducted for a TAG, all already existing programmes that wish to be kept will have to be “morphed” from the old style into the new style by completing the EEP application form template (that will afterwards be submitted to the EEP committee for approval). As many of the recommended programmes as possible (in the time available), will be taken through the completion of the EEP application form template at the end of the RSP workshop. At least a sufficient number will be completed so that the TAG understands how this works and can complete this for any EEPs that for time reasons could not be covered during the RSP workshop.*

*On the occasion of the first RSP New Style, the EEP application forms for all programmes (new or existing) will need to be included in the RSP document. Subsequent editions of RSPs New Style will only include EEP application forms for new programmes recommended during the RSP workshop.*

All forms/templates are available to download on the EAZA Member Area.



## 5. Summary table (standardised)

Each RSP should include a summary table that provides RSP users with a quick overview of the recommendations and selected conservation roles (direct, indirect and non- conservation) for each taxon. In addition, individual TAGs have the freedom to add additional columns of information that they feel may be relevant and/or available for their TAG (for example current population size, current population trend, desired future population trend, indications of priority, notes, etc.). When adding extra columns, the column headings should be clearly defined.

The RSP summary table should as a minimum include the following columns:

All forms/templates are available to download on the EAZA Member Area.



Species common name (Scientific name)	IUCN Red List Category	Direct conservation role(s) recommended for ex situ management (in <b>bold</b> those selected to be taken on by EAZA)	Indirect conservation role(s) recommended for ex situ management (in <b>bold</b> those selected to be taken on by EAZA)	Non-conservation role(s) recommended for ex situ management in EAZA	RSP category (EEP, Mon-T, Mon-T REPLw, Mon-T Phase out, Mon-T DNO)
Example Bali Myna ( <i>Leucopsar rothschildi</i> )	CR	<b>ARK</b> <b>Population Restoration</b> <b>Conservation research</b> <b>Education</b> <b>Research (veterinary)</b>	<b>Husbandry research</b> <b>Fundraising</b> <b>Maintaining network</b>	<b>Exhibit value</b>	EEP
Example Brown hyena ( <i>Hyaena brunnea</i> )	NT	Education (in range) Training Insurance	Education (non-range)		Mon-T REPLw

All forms/templates are available to download on the EAZA Member Area.



*RSP CATEGORY	DESCRIPTION
EEP	EAZA Ex situ Programme. The taxon needs proactive management to fulfil its specified roles. This includes programmes that require proactive management to phase out the taxon or replace it with one or more other taxa. For new EEPs or old EEPs, ESBs or Mon-Ps transferring to the new EEP format for the first time, an EEP application form should be completed specifying the characteristics of the EEP.
MON-T REPLw	The TAG will monitor the replacement of this taxon with one or more other taxa (specify which).
MON-T Phase out	The TAG will monitor the recommended disappearance of this taxon from EAZA collections.
MON-T DNO	The taxon is currently not present in EAZA collections and is not recommended to be obtained in EAZA collections. Its presence/absence will be monitored by the TAG.
MON-T	The taxon is present in EAZA collections and while there is no specific role for the taxon (with associated management), there is also no active recommendation to replace or phase out the taxon. The TAG will monitor the numbers of this taxon in EAZA collections.

## 6. References

*References used for species assessment sheets should only be included on the relevant assessment sheets. Any references used in the “Background information” session, should be listed here.*

## 7. Appendices

The following additional information should be included in appendices:

- Contact information for recommended species’ programme managers (refer to EAZA website for regularly updated information)
- List of participants (both workshop participants as well as in situ specialists that completed the pre-workshop ex situ role questionnaire)
- Workshop manual used during the RSP workshop



## Appendix 2b: Species Assessment Sheet

This appendix provides a template for the Species Assessment Sheet that are to be completed for all species that will be included in the development of the Regional Species Plan.

### Common name

#### **Latin name**

Synonyms:

### Status in the wild

Global IUCN Red List status:	
Global IUCN Red List population trend:	
Regional/National IUCN Red List status (where relevant)	
Regional/National IUCN Red List population trend (where relevant)	
Inclusion in EU Habitat or Bird Directive Appendices (if any):	
CITES listing (global and EU) (if any):	
Convention on the Conservation of Migratory Species of Wild Animals (CMS) listing (if any):	
Any other species specific listing if relevant	

### Range description

### Threats

### Ex situ status

#### **Ex situ status summary and table**

*(table columns are subject to change and defined prior to the RSP workshop)*



	«EEP_ESB» members*	Other individuals in EAZA region**	Other region 1	Other region 2	Total Global Ex situ population
<b>Population size (M.F.U)</b>					
<b># institutions</b>					
<b>Living wild-born</b>					
<b>% pedigree known</b>					
<b># Founders</b>					
<b># Potential founders</b>					
<b>GD</b>					
<b>Potential GD</b>					
<b>LTGR</b>					
<b>STGR</b>					
<b>Management level</b>					
<b>Data source</b>					

\* If this is an EAZA managed programme, this includes all the institutions that are part of the managed programme, which may include some non-EAZA institutions. A list of the non-EAZA participating institutions can be found at the end of this species assessment sheet. For ESBs, MON-Ps or non-programs this only includes EAZA Members.

\*\* If this is an EAZA RSP we will contact the other regions for existing analysis of existing programmes (e.g. studbook publications, or Breeding and Transfer plans, or annual reports, or survey reports) but we will not request datasets and do our own analysis for populations in other regions.\*\*\*\* Institutions:

## Existing and potential ex situ roles

### Prior recommendations for ex situ management for conservation (if any)

### Potential ex situ roles suggested by in situ specialists



All forms/templates are available to download on the EAZA Member Area.



## Workshop assessment of roles for EAZA ex situ management

*An overview of example roles and their definition can be found in the RSP Workshop Manual, available to all RSP workshop participants.*

### Conservation roles for ex situ management

Direct Role(s)	Programme characteristics required	Benefit	Feasibility	Risk	Role recommended by TAG?	Will EAZA contribute to deliver this role?	Notes
Indirect Role(s)	Programme characteristics required	Benefit	Feasibility	Risk	Role recommended by TAG?	Will EAZA contribute to deliver this role?	Notes

### Non-conservation roles for ex situ management

Other Role(s) (in/for EAZA)	Programme characteristics required (in EAZA)	Benefit to EAZA comm.	Feasibility in/by EAZA comm.	Risk for/within EAZA?	Role recommended in EAZA?	Notes

### Additional notes and comments

All forms/templates are available to download on the EAZA Member Area.



## **Role description for potential EEP**

### **Programme decision statement:**

Determine the EAZA RSP category and explain why this was selected

### **References used + list of non-EAZA institutions included in EEP status in ex situ status table**

List literature references used and ZIMS Mnemonics of non-EAZA institutions included in EEP status analysis



## Appendix 2c Standard RSP role descriptions

An important part of the Regional Species Planning process is defining the role(s) for *ex situ* management in EAZA (if any). This appendix provides an overview of RSP role descriptions for direct conservation, indirect conservation and non-conservation roles.

### Direct Conservation Roles for *Ex situ* Management

*Descriptions of these roles are based on a combination of the role descriptions in the [IUCN SSC Guidelines on the Use of Ex situ Management for Species Conservation](#) and those in Appendix I of the [Amphibian Ark Conservation Needs Assessment Process](#).*

#### **Ark**

Maintenance of a long-term *ex situ* population after extinction of all known wild populations and as a preparation for reintroduction or assisted colonization if and when feasible.

#### **Rescue (temporary or long term)**

A species that is in imminent danger of extinction (locally or globally) and requires *ex situ* management, as part of an integrated programme, to ensure its survival. The species may be in imminent danger because the threats cannot/will not be reversed in time to prevent likely species extinction, or the threats have no current remedy. The rescue may need to be long-term or temporary (e.g., to protect from catastrophes or predicted imminent threats that are limited in time, like extreme weather, disease, oil spill).

#### **Demographic manipulation**

Improving a demographic rate (survival or reproduction) or status (e.g., skewed sex ratio), often of a particular age, sex, or life stage. For example, head-start programmes that remove individuals from the wild to reduce high mortality during a specific life stage and then subsequently return them to the wild.

#### **Population restoration**

Source for population restoration, either to re-establish the species to part of its former range from which it has been extirpated, or to reinforce/supplement an existing population (e.g., for demographic, behavioural or genetic purposes).



### **Ecological replacement**

Re-establish a lost ecological function and/or modify habitats. This may involve species that are not themselves threatened but that contribute to the conservation of other taxa through their ecological role.

### **Assisted colonization**

Introduce the species outside of its indigenous range to avoid extinction.

### **Insurance population**

Maintaining a long-term viable *ex situ* population of the species to prevent predicted local, regional or global species extinction and preserve options for future conservation strategies. These are typically species that are threatened and for which it is unsure whether *in situ* threat mitigation will have the sufficient effect in a sufficient timeframe to prevent the extinction of the species or to prevent a dramatic decline in the numbers, populations and/or genetic diversity of the species. An *ex situ* population may be desired as an insurance population from which individuals can be extracted for genetic and/or demographic supplementation or other conservation translocations as required, but these are not yet actively planned in the foreseeable future.

### ***Ex situ* research and/or training**

*Ex situ* populations that are used for research and/or training that will directly benefit conservation of the species, or a similar species, in the wild (e.g., monitoring methods, life history information, nutritional requirements, disease transmission/ treatment). The research/training addresses specific questions essential for success of the overall conservation strategy for the species. This can include non-threatened species serving as a model for more threatened species or establishing *ex situ* populations of a threatened species to gain important species-specific husbandry and breeding expertise that is likely to be needed in the future to conserve the species.

### **Conservation Education**

The *ex situ* management forms the basis for an education and awareness programme that addresses specific threats or constraints to the conservation of the species or its habitat. The education addresses specific human behavioural changes that are essential for the success, and an integral part of, the overall conservation strategy for the species. This primarily involves *ex situ* locations visited by the intended human audience.



## Indirect Conservation Roles for *Ex situ* Management

**These are situations in which the zoo community can contribute to conservation by:**

- a. making available its expertise, knowledge, materials, staff, fund raising, etc. to help implement *in situ* conservation actions, and/or**
- b. carrying out general awareness and conservation education activities aimed at the zoo visiting public**

**Indirect conservation contributions can be made for a species regardless of whether or not it is held in captivity.**

Examples of indirect conservation roles include:

- a. Providing knowledge, experience or training to build capacity for veterinary care or handling of individuals in the field (e.g., radio collar application, transport etc.) or in the context of law enforcement (e.g., rescue centers, human wildlife conflicts etc.).
- b. Making available existing zoo education materials or education/behaviour change expertise to teams developing awareness programmes for local communities *in situ*.
- c. Carrying out education and awareness about the status of and threats to the species. Increasing interest in the species and its habitat/ecosystem.
- d. Networking and lobbying to influence opinions, legislation processes, etc.
- e. Small scale fundraising to contribute to high priority *in situ* projects or IUCN SSC Specialist Group activities.

## Non-Conservation Roles for *Ex situ* Management

Questions that can be asked to investigate non-conservation roles for *ex situ* management in zoos:

- a. Is this species required/suited to let holders gain experience in husbandry before taking on more difficult species? Specify which type of experience.
- b. Is the species important for research that is not conservation related (basic and applied research)? Specify the research fields.
- c. Is the species particularly valuable for non-conservation education (e.g., specific aspects of the species biology)? Specify the education topics.

All forms/templates are available to download on the EAZA Member Area.



- d. Does the species have an above average evolutionary distinctiveness score?
- e. Is the species colourful, distinctive, diurnal, active or particularly attractive as a zoo exhibit?
- f. Does the taxon have a special human cultural value (e.g., as a national or regional symbol, in a historic context, featuring in traditional stories etc.) or economic value (e.g., traditional medicine, tourism, hunting) within its natural range or in a wider global context, and does this give the species a particular value for education or exhibit?



## Determining characteristics and resources of the *ex situ* population needed to fulfil the identified role(s)

### 1. General characteristics

- Does the programme likely need to be long, medium or short-term?
- Is a release phase already planned for the foreseeable future?
- Is proximity to the natural habitat crucial or beneficial?
- Do the *ex situ* activities involve whole living organisms and/or live bio-samples?
- What level of human proximity or interaction is desirable?

### 2. Founders and population size

- Is the founder base of the current *ex situ* population likely already sufficient or are more founders required?
- Can additional founders or unrelated individuals be (legally and logistically) obtained? From wild? Other zoo regions? Other *ex situ* collections?
- Can the population be kept at, or grown to, the required population size?

### 3. Genetic and demographic management

- Is the taxonomy clear *in situ* and *ex situ*? What is the taxonomic scope of the *ex situ* programme?
- Will reproduction be required in the *ex situ* programme?
- Is retention of a high proportion of gene diversity of high, medium or low importance?
- Is control over the population size/growth and age/sex structure of high, medium or low importance?
- Is the species best managed at an individual or group level?
- Will breeding and transfer recommendations be necessary? If yes, how important is it that these are mandatory?
- How likely are ownership and access issues expected to impede success of the programme?

### 4. Location and scale

- What are the geographic location and scale? Is there range country involvement?
- Do (some) non-zoo association members or non-zoo institutions play a role? If yes, what level of commitment is required from them?
- If work is required across regions, is there a need for a formal framework for this or is more informal collaboration sufficient?

### 5. Catastrophes

- Are there any biosecurity needs?
- Are there specific requirements to reduce impact of other potential catastrophes?

### 6. Are **research** or **training** setup/equipment needed?

### 7. Are particular **welfare** issues to be addressed?

#### **Feasibility: High / Medium / Low**

*(existing ex situ population, husbandry challenges, technical or logistical challenges, availability of skilled staff, availability of sufficient financial and other resources, ...)*

#### **Risks: High / Medium / Low**

*(sensitivity to catastrophes, consequences for wild population, occupying ex situ space for other species that need it more, human health and safety risks, political risks, risks for social or public conflicts, ...)*



All forms/templates are available to download on the EAZA Member Area.



## Selecting from potential *ex situ* roles identified

Reaching consensus whether or not to go ahead with *ex situ* activities with these roles:

- a. **For conservation roles:** Considering
  - the relative importance/weight of the potential conservation benefit (also compared to alternative conservation actions or inaction) vs. the likelihood of success, costs and risks,
  - the general recommendations from the RSP workshop and other documents like a global collection assessmentis/are there (a) conservation role(s) for *ex situ* management of this taxon within EAZA (if any)?
  
- b. **For non-conservation roles:** Considering the relative importance/weight of the benefit of the species to the zoo community (unrelated to conservation) vs. the likelihood of success, costs and risks – ESPECIALLY the cost of occupying enclosure space for species under the TAG umbrella, or for other taxa with similar requirements, is/are there (a) non-conservation role(s) for *ex situ* management of this taxon within EAZA (if any)?

→ **Consensus on final role(s) for EEP (if any)**



## Appendix 2d: Investigating potential *ex situ* Conservation Roles

Ahead of the EAZA RSP workshop, it is important to gather input from *in situ* experts, like for example IUCN SSC Specialist Groups that will help determine whether an *ex situ* conservation role might apply to certain taxa. As it will not be feasible to get all experts present at the workshop and to prepare the workshop ahead of time, it will be important to survey the *in situ* experts to get important information on the table. This appendix provides the standard set of questions that are relevant to get the *in situ* expertise document for. Please note that throughout the below the term “zoo” refers to the “zoo and aquarium community”.

This document builds on the roles as described in Appendix 1C. The EAZA Executive Office has a template questionnaire available that includes more detail than the below.

The following information is relevant to ask:

For threatened species

(for this project, defined as EW, CR, EN, VU, NT on the global IUCN Red List)

**Direct conservation** (i.e., the individuals in the *ex situ* population play a conservation role)

- 1. Is there an existing conservation strategy/action plan for this species that calls for some form of *ex situ* management in support of conservation?**
  
- 2. Do you feel (and/or does an existing strategy/plan state) that *ex situ* management with one or more direct conservation roles would be required for this species – and if so, which roles? (*One ex situ programme may serve several conservation roles – either simultaneously or consecutively*)**
  - a. If yes, do you feel that the zoo community should help with:**
    - i. Implementing an *ex situ* programme located elsewhere than on zoo grounds (e.g., in a range country facility or another non-zoo environment)
  - b. And/or:**
    - i. Implementing an *ex situ* programme in professionally managed zoos (this can range from one, to a few zoos, to a large cooperative programme regionally or globally)



**Indirect conservation** (i.e., ways in which the expertise, knowledge, materials, staff, fund raising etc. present in the zoo community can contribute to *in situ* conservation activities). Please note that a threatened species may be eligible for indirect conservation support from the zoo community even if it is currently not held by zoos.

- 3. Do you see a specific need for expertise, knowledge, materials, staff or other in-kind support from the zoo community to help implement a particular *in situ* conservation action, or address a particular *in situ* problem?**
- 4. Is there a high priority *in situ* project for which small scale funding from the zoo community could make a lot of difference for the conservation of the species (that might perhaps have difficulty attracting funds from other sources)?**
- 5. Are there particular messages that you feel would be good for zoos to include in general conservation educational activities for the zoo visitors?**

#### **Non-conservation roles**

- 6. Do you see any important non-conservation roles for this species (see page 4)**

**PLEASE RATE** the conservation benefits of any conservation roles chosen as well as the benefit to the zoo community of any non-conservation roles chosen?

#### **For non-threatened species**

- 7. Do you have reason to believe that this taxon, which is currently not listed as either EW, CR, EN, VU or NT, might recently have run into significant trouble, such that its current threat status might be more severe than is evident from its current IUCN Red List category? If yes, please specify and answer questions 1-5 above.**
- 8. Do you think there is a need for this non-threatened species to function as a model, through *ex situ* activities, for a threatened species, for example to gain husbandry experience, for conservation-targeted research, conservation-targeted education, or “ecological replacement”?**

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**9. Do you see any important non-conservation roles for this species?**

**PLEASE RATE the conservation benefits of any conservation roles chosen as well as the benefit to the zoo community of any non-conservation roles chosen.**



## Appendix 3: Template for proposing a new EEP

*TAGs can use this Template for proposing a new EEP to the EEP Committee. As per default these applications follow from the RSP publication process and the Species Assessment Sheet should be sent along with this template. In exceptional cases new EEPs may also be proposed in between RSP editions. A separate Species Assessment Sheet should be completed if an EEP is being applied for in between RSP editions. Note that not all sections below may be relevant to each programme. Also note that 'species' represents any taxonomic unit the TAG has chosen as the unit of management in an EEP.*

### EEP Proposal for

**Common Species Name:**

**Scientific Species Name:**

### Prepared by

Name(s): TAG

Year:

#### 1. Contact information

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#### Contact details of proposed EEP Coordinator

Name:

Institution:

Email:

#### 2. Taxonomy information

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**Taxonomy of the species** (*indicate which taxa are included in this programme and why, and give an indication of the degree of confidence in the taxonomic identification of the individuals in the EEP population*)

#### 3. Identified roles

---

**Identified role(s) description** (*copy from the Species Assessment Sheet in RSP*)



#### 4. Programme participants and governance

**EAZA institutional scope** *(As a default, participation in EEPs is obligatory for EAZA Members. If you wish for an exemption, identify which institution(s) holding this species is/are not part of the EEP and explain the underlying reasons.)*

**Non-EAZA holding institutional scope** *Select one or more of the options below.*

- EAZA population/community is the dominating driver of the EEP and any non-EAZA Members will occasionally join and are not integral to the structure of the EEP.*
- In addition to EAZA, there are other structural/equal drivers of the EEP (e.g., World Pheasant Association, ...). Please describe.*
- A larger initiative exists and the EAZA population is a small part of this (e.g., GSMP, ...). Please describe.*

Additional information:

**Essential non-EAZA partners not holding animals** *(List the organisations, define their role, and how they will work with the EEP).*

**Members of the EEP core group (Species Committee + non-voting members)**

- By default, EEPs have a Species Committee (a democratically elected representation of the holders) as part of their EEP core group (information on the Species Committee and its associated default decision making process can be found in the Population Management Manual). If that will not be the case for this EEP, explain why and define the composition, structure and decision-making process for the EEP core group.*
- List the EEP core group members (names and institutions) (if already known): Species Committee members, Advisors, others.*

**Collaboration with EAZA Working Groups and Committees** *(Explain any current and/or future proposed links to existing EAZA groups and committees, such as the Animal Training Working Group, Biobanking Working Group, EAZA Reproductive Management Group (EAZA RMG), EAZA Population Management*

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*Advisory Group (EPMAG), EAZA Conservation Education Committee, EAZA Nutrition Working Group, EAZA Research Committee, Conservation Translocations Group, Transport Working Group, EAZA Veterinary Committee, EAZA Conservation Committee, Animal Welfare Working Group, Imported Deforestation and Sustainable Agriculture Working Group).*

## 5. Programme characteristics

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The detailed programme characteristics, goals, objectives and management strategies to fulfil the roles and goals of the EEP will be developed at a later stage as part of a Long-Term Management Plan (LTMP). The questions below are intended to help paint a rough view of what is currently intended/expected for the general EEP programme characteristics.

- *If there is a recent/active Long-term Management Plan for this species, list the demographic, genetic and other goals determined (if they still apply post RSP workshop).*
- *What is the anticipated duration of the programme?*
- *What is the anticipated likelihood and time scale of the use of the EEP population for restoration in the wild (reintroduction, reinforcement, etc.)?*
- *Are some or all the individuals within this EEP intended to be held in specialist ex situ centres in the species' native range? Specify.*
- *Is it expected to be necessary that the whole population, or a certain proportion thereof, will need to be held off exhibit in order to fulfil the roles of the programme? If yes, please explain. (this question does not refer to the temporary housing of individuals off exhibit for space reasons)*
- *Does a part or the whole of the EEP population need to be held in bio-secure facilities? And/or are there known diseases that have an above average effect on fulfilling the roles of the EEP?*





- *What is the expected estimated number of individuals and institutions required to fulfil the selected roles? (this question will be answered in detail during the LTMP session for the taxon, but if some indication of scale is clear already, this should be stated here)*
- *Is this EEP intended to include rearing of wild eggs/young (i.e. head-starting)?*
- *Is this EEP intended to include ex situ breeding?*
- *Is there likely sufficient expertise for this, or a model, taxon to achieve the roles of the programme and provide conditions for good welfare? Please indicate if Best Practice Guidelines already exist and if yes, include publication date.*
- *Will (non-)breeding and transfer recommendations be issued? If yes, with what frequency? (naturally problems will need to be solved throughout the year, but with what frequency will recommendations be issued for the whole population at once)*
- *Do you anticipate that the EEP population will be (largely) closed or will there be regular planned additions of individuals? In case of the latter, will this be for genetic and/or demographic reasons and what will be the source (other ex situ sources and/or from the wild)?*
- *Do you expect genetic and demographic management in this EEP to be individual and/or group-based?*
- *Do you expect genetic management in this EEP to be based on pedigree analysis, group history analysis, and/or molecular genetics?*
- *Do you anticipate, or proactively plan for, biobanking and/or assisted reproduction to be key components of this programme?*

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- *Do you anticipate certain national or international legislation to form a particular hindrance (more than average) to achieving the roles of your EEP (e.g., CITES, BALAI, governmental ownership, etc.). If so, explain how.*
- *Are there any other issues/plans related to in situ conservation support that you feel should be mentioned and are not evident from the role description of the EEP?*
- *Is there a research component/aspect to the EEP that is expected to have important consequences for the design of the EEP programme (e.g. housing and husbandry of a significant proportion of the population, etc.)? If yes, explain.*
- *Do you anticipate there to be any sizeable political, social, or public conflicts of interest related to the EEP programme and how do you plan to deal with them?*
- *Any important additional programme characteristics that you would like to mention?*

## 6. References (if any)

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## Appendix 4: EAZA Best Practice Guidelines template

### Approval procedure

A TAG (EEP/ESB) compiles and endorses EAZA Best Practice Guidelines using this template (for EEPs the respective Species Committee approval needs to be sought). TAG approved Best Practice Guidelines must be sent to EAZA Executive Office who will seek EEP Committee approval based on the publication procedure and process. After their approval, the TAG will be informed and the EAZA Best Practice Guidelines will be made publicly available through the EAZA website.

### Content

EAZA Best Practice Guidelines should include the following sections and chapters:

#### ***Cover / Title page***

The cover and title page should include the following information:

- a. Name of the TAG
- b. Applicable taxa or common name and scientific name of the species
- c. Edition
- d. Publication date
- e. Editor(s) and editor logo(s)
- f. EAZA logo
- g. EAZA Best Practice Guidelines Disclaimer (example below)
- h. Citation
- i. DOI (Digital Object Identifier) – assigned by the EAZA EO

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Because the technical information provided in the EAZA Best Practice Guidelines can easily be misread or misinterpreted unless properly analyzed, EAZA strongly recommends that users of this information consult with the editors in all matters related to data analysis and interpretation.

## **Preamble**

The following preamble should be added to EAZA Best Practice Guidelines:

Right from the very beginning it has been the concern of EAZA and the EEPs to encourage and promote the highest possible standards for husbandry of zoo and aquarium animals. For this reason, quite early on, EAZA developed the “Minimum Standards for the Accommodation and Care of Animals in Zoos and Aquaria”. These standards lay down general principles of animal keeping, to which the members of EAZA feel themselves committed. Above and beyond this, some countries have defined regulatory minimum standards for the keeping of individual species regarding the size and furnishings of enclosures etc., which, according to the opinion of authors, should definitely be fulfilled before allowing such animals to be kept within the area of the jurisdiction of those countries. These minimum standards are intended to determine the borderline of acceptable animal welfare. It is not permitted to fall short of these standards. How difficult it is to determine the standards, however, can be seen in the fact that minimum standards vary from country to country.

Above and beyond this, specialists of the EEPs and TAGs have undertaken the considerable task of laying down guidelines for keeping individual animal species. Whilst some aspects of husbandry reported in the guidelines will define minimum standards, in general, these guidelines are not to be understood as minimum requirements; they represent best practice. As such the EAZA Best Practice Guidelines for keeping animals intend rather to describe the desirable design of enclosures and prerequisites for animal keeping that are, according to the present state of knowledge, considered as being optimal for each species. They intend above all to indicate how enclosures should be designed and what conditions should be fulfilled for the optimal care of individual species.

## **Provide a summary**

All forms/templates are available to download on the EAZA Member Area.



To help and prepare readers, it is recommended to provide a short summary (maximum of 1 page) of the most important husbandry aspects that are described in the Guidelines. For instance you can highlight aspects that have a larger influence on husbandry than may be expected or sections you want readers to pay extra attention to.

## **Section 1: Biology and field data**

### Biology

#### 1.1 Taxonomy

This section is fairly straight forward, though there may be some controversy regarding exact numbers of sub-species. Any such controversy is outlined. All known living species and sub-species are listed; any extinct recent species or subspecies are listed under section 1.5 below. A number of common names may be associated with a particular species, and as many as is reasonable are included.

- Order
- Family
- Genus
- Species
- Sub-species
- Common name(s)

#### 1.2 Morphology

All measurements are stated in metric units. Measurements for adult males, adult females and newborns are stated separately if data are available. Where certain measurements are unavailable, it should be stated why and what steps should be taken to gather this information. If appropriate, the exact method of measurement is stated. Unless otherwise stated, measurements of wild specimens are given. Anatomical information, and information about the senses, is provided under "DESCRIPTION"; any physical differences between sexes or subspecies are outlined, and vocalisations are described.

It is important to standardise the measurements taken and the method of taking these measurements to ensure consistency of data.

- Height (if relevant)
- Weight

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- Length (using specific measurements as appropriate to taxa. E.g. in fish, define total length (TL) or fork length (FL))
- Coloration
- Description

### 1.3 Physiology

Information such as heart rate, respiratory rate and body temperature are included if available, indicating whether data are from wild or captive individuals. Method of measurement should also be stated if appropriate.

- Body temperature (for warm-blooded species or where appropriate)
- Heart rate
- Respiratory rate

### 1.4 Longevity

The typical longevity, or longevity records, should be stated. This allows for long-term collection planning to be carried out. There is often a difference in expected longevity for a wild as opposed to a captive specimen. Where possible, estimates are given for both. Longevity figures for *ex situ* populations are also provided in the population management plan for the species.

## Field data

### 1.5 Conservation status/Zoogeography/Ecology

This section provides information about geographical distribution of the species, including details on habitat type, other species within that habitat and seasonal environmental changes. Results of population surveys are given and, where available an estimation of population status is provided. Where relevant, the CITES Appendix and IUCN or other recognised classification code is given. Historical distribution and subsequent population trends are examined, with reference to any extinct species or sub-species.

Threats to the wild population should be outlined.

- Distribution
- Habitat
- Population
- Conservation status



## 1.6 Diet and feeding behaviour

Food sources and preferred food items should be listed from what is known from field studies. Feeding method, including daily and seasonal variations, water intake (where relevant) and other information relating to the digestive process, should be outlined. Research relating to species specific dietary requirements should be included. Specific behaviours used in the feeding biology of a particular species should be outlined so these can be encouraged in zoological collections. Where relevant, distance traveled in search of food in the wild should also be mentioned to allow for say, seasonal changes in behaviour of captive animals.

- Food preference
- Feeding

## 1.7 Reproduction

This section details the physiological aspects of the reproductive cycle. Courtship and mating behaviour are detailed in section 1.8 “Sexual Behaviour” below. The reproductive strategy (e.g. sexual/asexual reproduction, sex-changing, male pregnancy) is stated. The developmental stages of juveniles to sexual maturity are outlined, stating typical age at sexual maturity and physical signs thereof. The sub-headings included in this section will vary according to the class of the species, thus slightly different versions of the guidelines format will exist for different taxa. All sub-headings are shown below.

- Developmental stages to sexual maturity
- Age of sexual maturity
- Seasonality of cycling
- Gestation period/incubation
- Clutch/litter/brood/offspring size/number
- Birth/hatching details and seasons

Data calculated for captive populations are provided in the studbook.

## 1.8 Behaviour

Seasonal and daily variations in activity are detailed, means of locomotion outlined and wild activity budget provided where possible. Predator/prey interactions involving the species are described. “Social Behaviour” details intra-specific and inter-specific social interaction, including such aspects as social structure, territoriality, social development, dispersal of young and intra-specific

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communication. "Sexual Behaviour" outlines the physiology of reproduction and describes courtship behaviour, competition and mating. Reproductive cues e.g. temperature, chemical stimuli are described.

- Activity
- Locomotion
- Predation
- Social behaviour
- Sexual behaviour

## **Section 2: Management in Zoos and Aquariums**

Section 2 provides a brief, yet comprehensive, overview of general husbandry practices with particular attention to species specific welfare considerations. It covers all aspects of animal husbandry, though it should be noted that only specific veterinary information, relevant to everyday husbandry, is included. The guidelines are concerned with the practical rather than medical issues of animal management. Thus, whilst details of handling and restraint during a medical procedure may be provided, details of the treatment itself, of drugs used or surgical procedure will not be provided. Typical species specific veterinary complaints should be listed with methods of avoiding/dealing with the complaints explained.

### 2.1 Enclosure

Section 2.1 provides a general guide as to what has been used and found to be appropriate for a particular species without suggesting that these are the only suitable options.

#### 2.1.1 Boundary

Includes details of primary barriers, barriers between adjacent enclosures and holding pens as well as indoor partitions. Where appropriate details of additional public barriers can be given. The wattage of electric barriers needs to be standardized per taxon and provided in the guidelines. For vivaria/aquariums, any specific boundary requirements are described (otherwise this section is not applicable).

#### 2.1.2 Substrate

Includes details of topography of outdoor enclosure (natural vegetation, bare earth, etc.) and floor materials/substrate used in indoor areas, aquariums and



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vivaria (wood, concrete, sand, gravel etc.). Also includes details of any additional substrate such as sand or peat in outdoor enclosures, or bedding materials in indoor quarters or dens. Specific substrates that are not suitable for particular species need to be mentioned.

### 2.1.3 Furnishings and Maintenance

Includes details of fixtures and furnishings within outdoor and indoor enclosures, aquariums and vivaria (e.g. climbing apparatus, hiding places, caves, shelter, shade, bushes, trees, ponds, water and feeding troughs, dens, nesting boxes, partitions, electrical points, observation facilities; also includes information concerning number of dens/nests per animal). Maintenance procedures may be facilitated by certain furnishings, thus maintenance is also included in this section. Includes details of cleaning indoor and outdoor quarters, drainage and sewerage disposal, crowding gates, service corridors, keeper exits and any other furnishing designed to facilitate maintenance. For aquariums, see section 2.1.4 for maintenance of life support systems.

### 2.1.4 Environment

Both the indoor and the outdoor environment are considered. Appropriate methods of heating, lighting and ventilation for indoor quarters, and details of optimum temperatures, light intensity and humidity are suggested. Special husbandry considerations during particularly hot or cold weather, heavy rain, ice or snow, are outlined, taking the different climates in the European region into consideration.

For aquatic species, recommended water quality parameters are listed with ranges (e.g. salinity, temperature, pH, nitrate, carbonate hardness). Where appropriate, recommended life support systems are described. Lighting and photoperiod are also described. Any environmental cues and/or seasonal/reproductive changes (e.g. temperature, photoperiod, salinity) are outlined. Any specific maintenance requirements are also described.

### 2.1.5 Dimensions

This section serves to outline the optimum conditions and dimensions for that species, to which individual collections can aspire. It may also be helpful to indicate spatial density (No. individuals/m<sup>2</sup>). In the absence of systematic research, it is impossible at this stage to make specific recommendations, though Phase II and III may begin to address this issue. A range of indoor and outdoor enclosure sizes are given, including sizes of individual stalls.



## 2.2 Feeding

As well as outlining basic dietary needs, including supplementary vitamin and mineral requirements, this section considers special dietary requirements for young, breeding, pregnant or lactating individuals, for birds during the egg laying season and for species with specific feeding behaviours. In recent years it has become increasingly obvious that not only what is fed, but also how it is fed, is important in terms of animal health and welfare. Special consideration is accordingly given to “non-nutritional” aspects of the diet and to appropriate methods of feeding.

Other factors influencing feeding methods, such as hygiene, practicality and social considerations, are also acknowledged.

The software programme; Zootrition©; should be consulted where possible to analyse nutritional quality and quantity of food consumed and wasted.

### 2.2.1 Basic Diet

Individual food items and nutritional content should be specified. Quantity and quality fed per individual is outlined. Where appropriate, this section should include information on browse and forage (suitable plant species). It is appropriate here to mention any diets that have caused problems.

Vitamins, minerals and other supplements should be listed with a source provided for each product.

The use of feeding as a form of environmental enrichment, the texture of food for example or its presentation and any other considerations not directly related to nutritional value need to be outlined. Any particular ‘likes’ of that species should be mentioned as these food types are very useful in administering medication

### 2.2.2 Special Dietary Requirements

For young, breeding animals, lactating mammals, convalescent animals and due to seasonal variations or physiological intolerance.

### 2.2.3 Method of Feeding

How often where, and when (indoors, outdoors, in troughs, on floor, from poles) feeding occurs.

Also how food is presented (whole, chopped, in an enrichment device etc.).

### 2.2.4 Water

All forms/templates are available to download on the EAZA Member Area.



Details how fresh drinking water is made available within outdoor and indoor enclosures. For aquatic species, details relating to water are described in section 2.1.4 Environment.

## 2.3 Social structure

This section outlines a suitable social structure with details of intra-specific and inter-specific associations. Data from wild populations describing wild structures should be referred to here (section 1.8).

### 2.3.1 Basic Social Structure

Wild social unit including details of age and sex structure. Animal managers can then try to emulate this structure in their collections. Descriptions of experiences of successful and unsuccessful social structures in a captive environment are included. Section 1 may be referred to for details of social structure in wild.

### 2.3.2 Changing Group Structure

Primarily details the introduction or re-introduction of animals with an outline of measures to facilitate such changes. Also considerations concerning the removal of animals from a social group. Also take seasonal variation of social groups into concern. Issues associated with single sex groups are included.

### 2.3.3 Sharing Enclosure with Other Species

Appropriate species with whom the enclosure might be shared are suggested, and any associated advantages or disadvantages outlined (As with all species names, generic name should be included in the first instance).

## 2.4 Breeding

Outlines appropriate breeding techniques such as adding new birds to a flock to stimulate breeding displays, removing males from primate groups or changing temperature/photoperiod in aquariums. Where appropriate, artificial breeding techniques (e.g. AI, implants, hormonal stimuli, double clutching) are described.

### 2.4.2 Mating

All forms/templates are available to download on the EAZA Member Area.



Details the introduction and segregation of the breeding pair/group (where relevant), special enclosure modifications and appropriate male:female ratios. Courtship and mating are described with details of oestrus behaviour and any changes in behaviour associated with the period of sexual activity (e.g. increased aggression), where relevant. Any evidence of seasonality is assessed.

#### 2.4.3 Pregnancy/Egg Laying and Incubation

Details of gestation period, physical, physiological, body weight and behavioural indicators of pregnancy are given for mammals, and for birds details of nest building behaviour, numbers of eggs laid, egg size and incubation procedure. Appropriate parameters relating to the reproductive cycle of invertebrates, fish, amphibians and reptiles are given. Special husbandry considerations during pregnancy or incubation, and details of artificial incubation procedures are outlined.

2.4.4 Details on contraception possibilities are highlighted.

#### 2.4.5 Birth/Hatching

The birth or hatching process is described, specifying pre-partum behavioural indicators and usual duration, with some indication as to common problems encountered and a brief summary of solutions and/or references to such

#### 2.4.6 Development and Care of Young

The physical and behavioural development of the young is outlined with details of parental care, age at weaning/fledging and separation from parent(s) included. For many fish, invertebrates, amphibians and reptiles, eggs/young will be removed from the parents and details of incubation and rearing facilities are included. Care of the young during the early stages of development is described, including details of the period of dependence, monitoring development, access and introduction to conspecifics. Any special husbandry requirements are outlined.

Also includes details of neonatal mortality.

#### 2.4.7 Hand-Rearing

Hand-rearing may be necessary for a variety of reasons, such as rejection by the parent or the inability of some birds to incubate their own eggs. Consideration is given to why and when young should be removed, with details of initial care and subsequent rearing. The basic techniques are described and an assessment

All forms/templates are available to download on the EAZA Member Area.



made of the associated success. The outline should include information on a suitable environment and feeding regime, health care, contact with keepers and conspecifics, independency and re-introduction to the social group. References to relevant published works should be given. The hand-rearing procedure is advised against due to the high possibility of imprinting with the keeper and difficulties with future introduction back to its conspecifics. There is also the possibility of rejection by that individual of its own young in the future thus creating a cycle of keeper dependence. Any guidelines for hand-rearing should always be developed with a view to reintroducing the animal back to its own kind with the minimum of stress incurred to the animal.

#### 2.4.8 Population management

Highlights the breeding strategy of the species from a population management point of view (e.g. what is the RSP status and target population, etc.).

#### 2.5 Behavioural enrichment

Lists the variety of means for behavioural enrichment by species specific needs and the physical build of the animals

#### 2.6 Handling

The difficulties associated with identification, sexing, handling, capture, restraint and transportation are examined and ways to facilitate these procedures suggested.

##### 2.6.1 Animal Training

This section describes and recommends behaviours to train for the species. This includes behaviours useful for management, day-to-day care, and behaviours useful for cooperation in medical care. Also included in this section are undesired behaviours emitted by the species that have been frequently observed. Specific tools, props, and apparatuses that facilitate training can be described, if applicable. There may also be specific safety considerations, as it pertains to training required for the species. Ethologic/phylogenetic considerations that impact training and behaviour should also be described here.

(See the [Animal Training Working Group Best Practices Guidelines](#) for a more detailed template)

##### 2.6.2 Individual Identification and Sexing

All forms/templates are available to download on the EAZA Member Area.



Accurate sexing and individual identification (both for permanent identification as well as identification from as distance) are particularly important in breeding populations and for some species can be a difficult procedure. Appropriate techniques are described and assessed. The location and type of marker should be standardised per taxon e.g. age at which to band birds and the size and make of ring, or where in the ear to tattoo a bovid, location of physical implant tags in snakes, or elastomer marker in fish etc.

### 2.6.3 General Handling

It outlines the procedure for daily handling, suggesting appropriate precautions where necessary. Species specific adverse behaviours should be outlined to prevent injury to the keeper or the animal.

### 2.6.4 Catching/Restraining

Methods of capture that cause least stress to the animal and offer greatest protection to the keeper are suggested. Physical and chemical restraint and associated risks are outlined.

### 2.6.5 Transportation

Methods of transporting are outlined, including crates, tanks, boxes, bags etc. Includes information on container specifications (where possible, rather than reproducing diagrams, IATA's specifications for air transportation can be referred to). Detailed transportation legislation can be obtained from the 2000, IATA 'Live Animal Regulations; 27th Ed.'.

### 2.6.6 Safety

General consideration for the safety of keepers and other humans, including members of the public, are outlined. Any reported human injuries or deaths are noted. Action to be taken in the event of an escape, or an attack, may be appropriate here. Venom protocols should be included, where relevant.

## 2.7 Veterinary: Considerations for health and welfare

This section briefly outlines any physical conditions or complaints commonly associated with the species. Requirements for behavioural as well as physical well being are considered.

All forms/templates are available to download on the EAZA Member Area.



Symptoms, treatment and prevention of common diseases/conditions are outlined. Required vaccines may be specified, though the appropriate inoculation schedule should be left to the discretion of each collection's veterinary surgeon and not specified here. Common parasites, screening and treatments are outlined (again detailed information on medical procedures not included). Information on causes of adult mortality is also included.

## 2.8 Specific problems

Problems that are typical for the species, and not already part of previous paragraphs can be discussed here.

## 2.9 Recommended research

The aim of collating information into the Guidelines format is as much to highlight what information is not available as to present that which is. Additional information is required in a number of areas to fill in obvious gaps or validate existing data, particularly where there are contradictory viewpoints. Section 2.9 highlights this, indicating appropriate areas for further research. Some of the questions raised may be addressed through the use of husbandry questionnaires, with a more in depth assessment of specific aspects carried out through research programmes.

## Section 3

### References

Each of the EAZA Best Practice Guidelines is referenced throughout and accompanied by a complete reference list together with suggested readings, highlighting works of particular use or interest. All information in the text should be referenced to one of the works included in this list, or referenced as pers. comm. and attributed to a specified individual.

This will ensure that, should questions arise, all data can be checked and validated. It also enables the interested reader to investigate specific aspects in more detail.

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## Appendix 5 a: TAG Evaluation - TAG Chair Questionnaire

2nd round of TAG evaluations as approved by the EEP Committee (September 2020)

Estimated time to complete: 15 -30 minutes.

Please be sure to complete this questionnaire within a single session as you will not be able to return to it later or edit your answers after you closed your browser. Within your session, you can go back and forwards and adapt your answers if needed before submitting your final input.

If you have any questions or run into any issues while providing your input, please feel free to contact your TAGs liaison.

### General TAG information

[Completed by EEO]

Name TAG Chair:

Date into position:

Current term ends in:

Name TAG Vice chair:

Date into position:

Current term ends in:

Name TAG Vice chair:

Date into position:

Current term ends in:

- 1. Please add any comments, corrections, or questions you may have regarding the information presented above**

### TAG Meetings

- 2. Please identify during which years TAG Midyear meetings were held (online or face-to-face)**

[Check box for last five years]

- 3. Please add any comments or questions you may have regarding the TAG (midyear) meetings held**

### Published Regional Species Plans

[Completed by EEO]

Currently published:

Scope (species) / Year / Old Style or New Style



All forms/templates are available to download on the EAZA Member Area.



- 4. Please describe any problems or difficulties you think exist in relation to the TAG's published RSP(s), if any**
- 5. Please add any ideas or suggestions for improving your TAG's currently published RSP(s)**
- 6. Please add any ideas or suggestions for the development of future RSP(s) of your TAG**

## **Population Management Programmes**

[Completed by EEO]

Status:

"Old style" European Studbooks (ESBs): x

"Old style" European Endangered Species Programmes (EEPs): x

EAZA Ex situ Programmes (New style EEPs) proposed in the New Style RSP

[Name/Publication]: x

EAZA Ex Situ Programmes (New Style EEPs) established: x

- 7. Are there any specific challenges to get remaining New Style EEPs established?**

*Refers to EEPs identified in your TAGs RSP(s) that have not been yet established at the time of this evaluation*

- 8. Can you give a general indication of how well the population management programmes within your TAG can function with the currently available tools and procedures?**

*As described in the Population Management Manual  
Excellent/Good/Sufficient/Insufficient/Unacceptable*

- 9. Please provide your additional comments, suggestions, or requests for support**

To evaluate individual programmes, a new procedure for the third round of EEP evaluations will be developed by the EEP Committee. In the meantime, it is possible for the TAG to request for specific EEPs to be evaluated according to the existing procedure.

- 10. Which EEPs (Old or New Style) under your TAG's remit would potentially require an intermediate evaluation? If any, please specify**

## **Long-Term Management Plans (LTMPs)**

[Completed by the EEO]

All forms/templates are available to download on the EAZA Member Area.



Currently published on the EAZA Member Area:

Title/ year of publication

.....

*In press [in case possible to find out]*

**11. What percentage (approximately) of programme species under your TAG's remit have a Long-Term Management Plan available?**

**12. Please describe any challenges or benefits you feel are worth mentioning in relation to LTMP(s) for your TAG**

### **Published EAZA Best Practice Guidelines**

[Completed by the EEO]

Currently published on [www.eaza.net](http://www.eaza.net):

Title / year of publication

.....

**13. What percentage of programme species under your TAG's remit are (approximately) covered by published EAZA Best Practice Guidelines?**

**14. Please list the Best Practice Guidelines that are currently under development**

**15. Please describe any problems or difficulties you think exist in relation to the production of your TAG's EAZA Best Practice Guidelines**

### **Other TAG activities**

**16. How would you rate the TAG's involvement/progress with research activities?**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**17. How would you rate the TAG's involvement/progress with conservation activities?**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**18. Feel free to report on progress or challenges you experience concerning research or conservation activities or any of the other TAG goals or activities**

*For instance, overarching goals or activities described in your RSP(s). If there is specific support from EAZA structures you need to overcome challenges described, please specify*

All forms/templates are available to download on the EAZA Member Area.



**19. Is your TAG represented or connected to what you consider the relevant IUCN SSC Specialist Group(s)?**

*e.g. being a member (reciprocal or not), (co)chair, in regular contact, etc.*

*Yes/No*

**20. Is the TAG represented or connected to (an)other, similar group(s) with a certain conservation mandate (e.g. BirdLife)?**

*e.g. being a member (reciprocal or not), (co)chair, in regular contact, etc.*

*Yes/No*

**21. Would you like support from the EEO or EEP Committee in (further) developing the relation with IUCN SSC Specialist Groups or one or more of these conservation groups? If so, please specify**

*Which groups, why and/or what type of support?*

## **Communication**

**22. How would you rate the overall activity and communication level of the TAG members?**

*Including internal (EAZA Member-based) advisors and vice-chair(s)*

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**23. Please add any additional comments or questions you may have regarding the activity and communication levels of TAG members**

*Including internal (EAZA Member-based) advisors and vice-chair(s)*

**24. How would you rate the involvement of EAZA Members in TAG activities?**

*Following recommendation, meeting attendance, general interest and commitment*

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**25. Please add any additional comments or questions you may have regarding the involvement of EAZA Members**

**26. Are there any communication channels/methods you use to promote your TAG and its activities - next to the EAZA Member Area - that the EAZA Executive Office can potentially help promote through EAZA channels? Please specify**

*Social media pages, external websites, newsletter, etc.*



## **Suggestions and Conclusion**

**27. Do you feel you have sufficient, time, resources and skills to perform the tasks of a TAG Chair?**

*Yes/No*

**28. Feel free to provide any additional comments, questions or suggestions you have regarding fulfilling your tasks as TAG Chair**

**29. Please provide any comments/suggestions you may have for improving the TAG Working Procedures as included in the Population Management Manual (Chapter 2.1)**

**30. Please provide any suggestions on how the participants, the TAG Chair, the TAG members, EAZA Members, the EEP committee and/or the EAZA Executive office can support in improving the functioning of the TAG**

*Please be specific*

**31. Conclusion of the TAG Chair: The functioning of the TAG is rated as**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**32. Name respondent**

**33. Institution**



## Appendix 5 b: TAG evaluation - TAG member questionnaire

2nd round of TAG evaluations as approved by the EEP Committee (September 2020)

Estimated time to complete: 10 -15 minutes.

Please be sure to complete this questionnaire within a single session as you will not be able to return to it later or edit your answers after you closed your browser. Within your session, you can navigate between questions and adapt your answers if needed before submitting your final input.

If you have any questions or run into any issues while providing your input, please feel free to contact your TAGs liaison

### Communication and activity

#### 1. How would you rate the activity and communication levels of the different parties below?

TAG Chair

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

TAG members

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

*Incl. internal*

*(EAZA Member based)*

*advisors and vice chair(s)*

EAZA Executive Office

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

#### 2. Please provide your comments or suggestions for improving activity and/or communication

*Please specify which party you are referring to*

#### 3. How would you rate the quality of your TAG meetings?

Chairing

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Content

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Preparation

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Minutes

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Follow up

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Frequency

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

#### 4. Please provide your comments or suggestions for improving the TAG meetings

### Regional Species Plans (RSPs)

[Completed by EEO]



Currently published:  
Scope (species) / Year / Old Style or New Style  
.....

**5. How would you rate the quality of RSP A?**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**6. Please describe any problems or difficulties you think exist in relation to the currently published RSP(s), if any**

*Please specify if it concerns all RSPs or specific RSPs*

**Best Practice Guidelines**

[Completed by the EEO]  
Currently published on [www.eaza.net](http://www.eaza.net)  
Title / year of publication  
.....

**7. How do you rate the availability of the TAG's currently published EAZA Best Practice Guidelines?**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**8. Please provide your comments or suggestions for improving the availability of the TAG's EAZA Best Practice Guidelines**

**Conservation and Research**

**9. How would you rate the TAG's involvement/progress with the following activities?**

*Described in the Regional Species Plan for instance*

Research *Excellent/Good/Sufficient/Insufficient/Unacceptable*

Conservation *Excellent/Good/Sufficient/Insufficient/Unacceptable*

**10. Please provide your comments or suggestions for improving the TAG's involvement/progress in research and conservation**

**Conclusion and General information**

**11. Please provide any additional comments or suggestions on how participants, TAG Chair, TAG members, EAZA members, EEP committee and/or the EAZA Executive office can support in improving the functioning of the TAG**

All forms/templates are available to download on the EAZA Member Area.



## **12. Conclusion of TAG member**

**The functioning of the TAG is rated as**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

Please note - your answers and input will be anonymized for the overall Evaluation Summary Report

## **13. Name**

## **14. Institution**

## **15. What is/are your role(s) as TAG member?**

*Vice chair/Programme coordinator/Advisor/Other....*

## **16. Since (approximately) when are you active as TAG member?**

*e.g. when you took your first role within the TAG*



## Appendix 5 c: TAG Evaluation - EEO Questionnaire

2nd round of TAG evaluations as approved by the EEP Committee (September 2020)

### General information

#### 1. Name TAG Liaison

### TAG Meetings

#### 2. How do you rate the activity and communication of the TAG chair?

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

#### 3. Are online or face-to-face TAG meetings held frequently (at least once or twice a year)?

*Yes/No*

#### 4. How do you rate the quality of the TAG meetings?

Chairing *Excellent/Good/Sufficient/Insufficient/Unacceptable*

Content *Excellent/Good/Sufficient/Insufficient/Unacceptable*

Preparation *Excellent/Good/Sufficient/Insufficient/Unacceptable*

Minutes *Excellent/Good/Sufficient/Insufficient/Unacceptable*

Follow up *Excellent/Good/Sufficient/Insufficient/Unacceptable*

#### 5. Please add any suggestions for improving the quality of the TAG meetings and/or activity TAG chair

### EAZA Member Area

#### 6. Is the TAG Annual Report published annually?

*Yes/No*

#### 7. How do you rate the overall quality of the TAG Annual Reports produced?

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

#### 8. Is the TAG proactively managing the TAG Workspace on the EAZA Member Area?

*Yes/No*

#### 9. Is the basic information on the TAG Workspace available and up to date? (studbooks, meeting minutes, programme annual reports)

*Yes/No*





**10. Please provide any additional comments when relevant**

**Regional Species Plans**

**11. How do you rate the involvement and input provided by the TAG during the preparation, developing and finalising the new Style RSP(s)?**

Preparation process workshop *Excellent/Good/Sufficient/Insufficient/Unacceptable*  
Feedback/review process *Excellent/Good/Sufficient/Insufficient/Unacceptable*

**12. Please add any additional comments regarding your rating on the TAGs involvement and input during preparations, developing and finalising New Style RSPs**

**13. How do you rate the involvement and input provided by the TAG during the preparation, developing and finalising New Style EEP Applications?**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**14. Please add any additional comments regarding your rating on the TAGs involvement and input during preparations, developing and finalising New Style EEP Applications**

**Programme Management**

**15. Give a general indication of how well the population management programmes under the remit of the TAG are functioning.**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*  
(Please keep the outcomes of the second round of EEP Evaluations in mind, where relevant)

**16. Please add any additional comments regarding your rating of the general functioning of the programmes**

*A new procedure for the third round of EEP evaluations still needs to be developed. In the meantime, it is possible for the TAG to request for EEPs to be evaluated according to the existing procedure.*

**17. Which EEPs (old or new style) under the TAGs remit would potentially require an intermediate evaluation and why?**

**18. Please describe any problems or difficulties you think exist in relation to the production of the TAGs EAZA Best Practice Guidelines, if any**

**19. How would you rate the TAGs involvement/progress in the following activities?**

All forms/templates are available to download on the EAZA Member Area.



Research            *Excellent/Good/Sufficient/Insufficient/Unacceptable*  
Conservation      *Excellent/Good/Sufficient/Insufficient/Unacceptable*

## **Conclusion and suggestions for improvement**

### **20. Conclusion of the EAZA Executive Office**

*Excellent/Good/Sufficient/Insufficient/Unacceptable*

**21. Please provide an overview of special achievements of this TAG (not mentioned already by the TAG chair or TAG members)**

**22. Please provide general suggestions or remarks for improvement of the functioning of the TAG**

**23. Where relevant, how can participants, TAG Chair, TAG members, EAZA Members, EEP committee and/or the EAZA Executive office support in making those improvements? (please be specific about which suggestions relates to which group of people)**



## Appendix 5 d: TAG Evaluation: Standard Summary Report

### General information – [NAME TAG]

TAG evaluation launched:                      Date  
TAG evaluation closed:                      Date  
Response rate TAG members:              x %

Name TAG Chair:  
Date into position:  
Current term ends in:

Name TAG Vice chair:  
Date into position:  
Current term ends in:

Name TAG Vice chair:  
Date into position:  
Current term ends in:

RSPs published / scheduled

- Scope (species) / Year / Old Style or New Style
- ....

EAZA Best Practice Guidelines published

- Title / year of publication
- .....

Midyear meetings last five years:

- Month/Year
- Month/Year
- Month/Year
- Month/Year
- Month/Year

All forms/templates are available to download on the EAZA Member Area.



Activity of programmes [copy table of decisions from RSP + additional columns]  
 (example below, summary tables may differ slightly in format)

Common name species <i>(Scientific name)</i>	Direct Conservation role(s)	Indirect Conservation role(s)	Non-conservation role(s)	RSP category	New Style	LMTP / Check-In	BPGs available	EEP Pages [since 2021]	ZIMS for Studbooks dataset (last edited vs currentness)
Banteng	<b><u>Insurance.</u></b> <b><u>Conservation education</u></b>	<b><u>Conservation education.</u></b> <b><u>Fundraising.</u></b> <b><u>Expertise</u></b>	N/A	EEP	Approved	GSMP			Nov2021 / March2021
<b>Total</b>				<b>x EEPs</b>	<b>x Approved</b>	<b>x LTMPs (incl. x GSMPs)</b>	<b>x BPGs</b>	<b>x EEP page</b>	

All forms/templates are available to download on the EAZA Member Area.



## Functioning of the TAG



4.00 Average Rating

### Midyear Meetings

*Text box for comments on meetings held*

### Population Management

#### Regional Species Plans

*Text box for summary and suggestions given to improve current and/or future RSPs*

#### Functioning of Population Management Programmes is rated as:

Excellent/good/sufficient/insufficient/unacceptable

*Textbox for additional comments*

#### Challenges identified in the functioning or establishing of programmes

*Text box for challenges identified in the functioning or establishing of programmes*

#### Programmes identified for intermediate evaluation

*Text box for suggestions and argumentation*

#### EAZA Best Practice Guidelines

*Text box for comments and challenges identified with the production of BPGs*

#### Other TAG activities

*Text box for progress or challenges with conservation, research or other TAG activities*

#### Connections with external conservation groups

*Text box for suggestions or requests for improving or establishing connections*

#### Communication and activity

**TAG Members**                      Excellent/good/sufficient/insufficient/unacceptable

**EAZA Members**                    Excellent/good/sufficient/insufficient/unacceptable

*Text box for suggestions and comments*

#### Communication/promotion channels used by the TAG

(excl. EAZA Member Area, eNews or ZooQuaria and EAZA Social Media)

*Text box for listing and potential requests for support*

All forms/templates are available to download on the EAZA Member Area.



## **Fulfilling the TAG Chair position**

*Textbox for suggestions, comments and remarks regarding the tasks of TAG Chair, TAG Working Procedures or requests for support*

## **General conclusions and suggestions from the TAG Chair**

*Textbox for summary of suggestions for improving the functioning of the TAG and other remarks*

All forms/templates are available to download on the EAZA Member Area.



## EXAMPLE TAG SUMMARY REPORT

### Functioning of the TAG

Number of TAG members: 5  
 Response rate: 4/5 (80 %)

★★★★☆  
 3.25 Average Rating

### Profile of respondents (multiple answers possible):

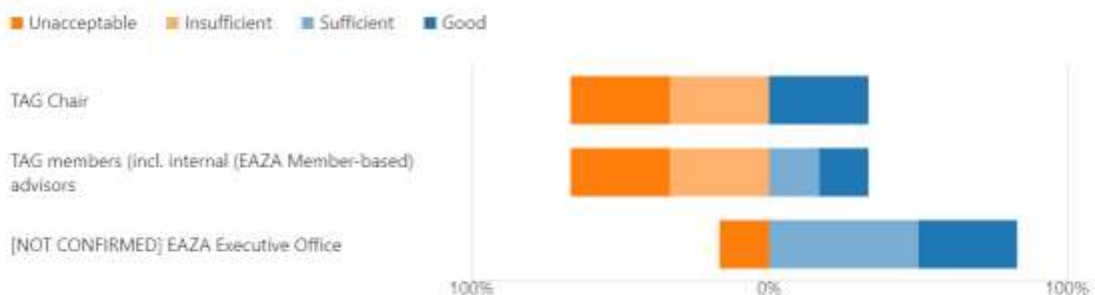


## Population Management

### Regional Collection Plans

*Text box for summary and suggestions given to improve current and future RCPs*

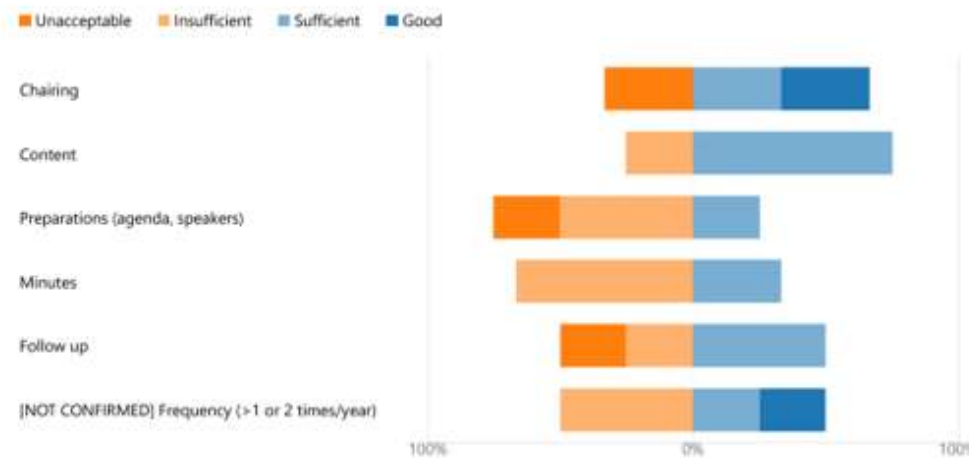
## Communication



*Text box for summary and suggestions given to improve the TAG meetings*



### Frequency and quality TAG meetings



*Text box for summary and suggestions given to improve TAG meetings*

### EAZA Best Practice Guidelines

*Text box for summary and suggestions given to improve production of EAZA Best Practice Guidelines*

### Activity and progress on research and conservation



*Text box for summary and suggestions given on activity and progress research and conservation*

### General conclusions and suggestions from the TAG members

*Textbox for summary of suggestions for improving the functioning of the TAG and other remark*



All forms/templates are available to download on the EAZA Member Area.



## Functioning of the TAG



3.50 Average Rating

### Population Management

---

#### Involvement in developing Regional Species Plans

Preparation                          Excellent/good/sufficient/insufficient/unacceptable

Review process                      Excellent/good/sufficient/insufficient/unacceptable

Establishing New Style EEP  
  Excellent/good/sufficient/insufficient/unacceptable

*Text box for comments and challenges identified*

#### Functioning of Population Management Programmes

*Text box for comments and suggestions for intermediate EEP evaluations*

### Communication

---

#### Activity and communication TAG Chair

*Text box for comments and challenges identified*

#### Quality TAG meetings

*Text box for comments and challenges identified*

#### Use of and quality of material on EAZA Member Area

*Text box for comments and challenges identified*

#### EAZA Best Practice Guidelines

*Text box for comments and challenges identified*

#### Other TAG activities

---

#### Involvement/progress in conservation and research activities

*Text box for comments and challenges identified*

#### Reflection on results first round TAG Evaluation [YEAR]

*Text box to highlight any priorities from last rounds evaluation*

#### Special achievements

All forms/templates are available to download on the EAZA Member Area.



*Text box to highlight any special achievements not highlighted by Chair or TAG members*

## **General conclusions and suggestions from the EEO**

*Textbox for summary of suggestions for improving the functioning of the TAG and other remarks*



## Appendix 6: Proposal for new TAG

*Standard format for a proposal for a new TAG*

---

Proposal to establish an  
EAZA [TAXONOMIC GROUP] TAG

Prepared by

[NAME]  
[POSITION]  
[INSTITUTION]

### STRUCTURE OF THE TAG

*Contact details of the proposed TAG Chair (and when applicable also Vice chair(s)):*

[NAME]  
[POSITION]  
[INSTITUTION]  
[ADDRESS]  
[PHONE]  
[FAX]  
[EMAIL]

Suggested TAG name:

.....

Proposed TAG members:

[NAMES & INSTITUTION]

Proposed TAG Advisors:

[NAMES & INSTITUTION]

Current EEPs:

.....

Current ESBs:

.....

TAG Chairs in other regions:

All forms/templates are available to download on the EAZA Member Area.



.....

Taxonomic group that will fall under the umbrella of the TAG:

.....

.....

.....

**RATIONALE FOR THE ESTABLISHMENT OF THIS TAG**

.....

.....

.....

**GOALS OF THE TAG**

.....

.....

.....

**REFERENCES**

.....

.....

.....

All forms/templates are available to download on the EAZA Member Area.



## Appendix 7a: Example letter of providing institutional support to a TAG (Vice) Chair or EEP Coordinator

*This example letter of institutional support includes all the necessary details and can be used to declare support for TAG (Vice-) Chairs or EEP Coordinators. The letter must be printed on the letter head of the institution and must be signed by the (zoological) director or CEO.*

### **EAZA Executive Office**

Chairman EAZA EEP Committee  
C/o Amsterdam Zoo  
PO Box 20164  
1000 HD Amsterdam  
The Netherlands

[DATE], [PLACE]

Dear colleagues,

With this letter I would like to confirm that [INSTITUTION] will support [COLLEAGUE'S NAME] for carrying out the tasks as [POSITION] for the [NAME OF EEP/TAG] as laid down in the EAZA Population Management Manual. This will include:

1. Sufficient allocation of time to carry out the required work.
2. Funding to attend the relevant meetings, at least once a year.
3. Funding for publication and distribution of studbooks, EAZA Best Practice Guidelines, Regional Species Plans and other relevant materials.
4. Funding for attending the **Introduction to EAZA Ex situ Programme Management Course**.
5. Access to e-mail communication.
6. Taking responsibility for the access to and use of community-restricted information as for example included on the EAZA website Member Area and data collected as part of this role.
7. Access to Species360 software and data by our institution's Species360 membership.

[FOLLOWING SENTENCE ONLY APPLICABLE IN CASE OF EEP] We acknowledge that studbook data that are gathered, compiled and analysed as part of this EEP will not be our institutional or personal possession and its contents will be available to the EAZA zoo and aquarium community.

Yours sincerely,

All forms/templates are available to download on the EAZA Member Area.



[SIGNATURE]

[NAME DIRECTOR OR CEO] [POSITION]

All forms/templates are available to download on the EAZA Member Area.



## Appendix 7b: Example letter of withdrawing institutional support

This example letter for the withdrawal of institutional support includes all the necessary details and can be used to withdraw institutional support to an EEP or ESB managed by the institution. The letter should be printed on the letter head of the institution and must be signed by the (zoological) director or CEO.

### **EAZA Executive Office**

Chairman EAZA EEP Committee  
C/o Amsterdam Zoo  
PO Box 20164  
1000 HD Amsterdam  
The Netherlands

[DATE], [PLACE]

Dear colleagues,

With this letter I would like to confirm that [INSTITUTION] is willing to withdraw its institutional support for the following EAZA Ex situ Programme:

- [NAME OF PROGRAMME]

We will make sure that all (studbook) data will be made available to the new EEP Coordinator, or in case the position will not be taken over directly, to the relevant TAG as well as the EAZA Executive Office.

Yours sincerely,

[SIGNATURE]

[NAME DIRECTOR OR CEO]  
[POSITION]

All forms/templates are available to download on the EAZA Member Area.



## Appendix 7c: Example letter for providing TAG support for EEP Coordinators /ESB keepers

This example letter of TAG support can be used as a basis to declare support for new EEP Coordinators or ESB keepers. The text can be sent to the EAZA Executive Office by email with TAG Vice chair(s) and the person it is concerning copied in.

Dear colleagues,

With this letter I would like to confirm that the [TAG name] TAG supports [COLLEAGUE'S NAME] nomination for [POSITION] for the [NAME OF EEP/ESB].

- *Please briefly describe the history leading to the nomination of a new Coordinator or keeper: reason(s) for need of new Coordinator or keeper, steps the TAG has taken to find the person, if someone volunteered or was chosen from a number of other potential candidates.*
- *If relevant, please briefly describe any other aspects you find important to mention to the EEP committee members on why this person is nominated (e.g. skills, experience).*
- *Please briefly describe the intended steps for a successful handover or start-up of the programme/studbook (e.g. period, manner, lending of support).*

Yours sincerely,

[NAME TAG Chair] [TAG name]

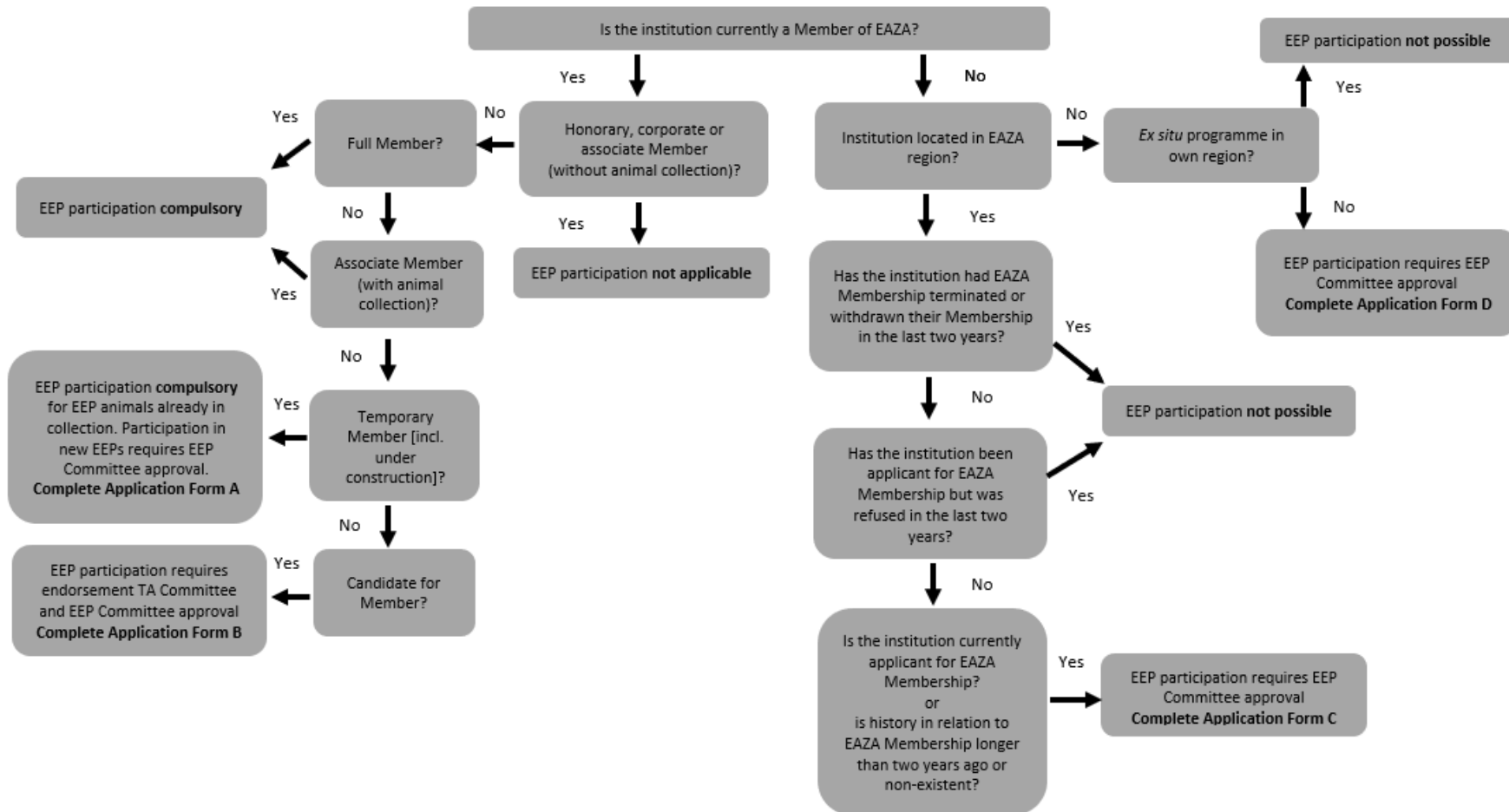
cc. [NAME TAG Vice chair (s)], [COLLEAGUE'S NAME]



All forms/templates are available to download on the EAZA Member Area.



## Appendix 8: Decision tree EAZA EEP participation procedure





## Appendix 9: Temporary Member participation in an EEP - standard format for requesting approval from the EEP Committee

### Application form A –Temporary Membership [including Temporary Membership under construction]

#### 1. Contact details

**Name of the EEP**  
**EEP Coordinator**

**Requested EEP Participant:**

**Institution name**

**Street + number**

**Zip code**

**City**

**Country**

**Phone number**

**Name Contact Person**

**Email**

#### 2. Motivation

**Describe why** the participation of above mentioned institution/person would be important/ for the long-term management/ benefit of the EEP.

Please provide information on:

- **Holding space**  (e.g. Would the proposed participant make holding or breeding space available that is essential to the EEP?)
- **Genetics**  (e.g. Does the proposed participant hold animals that would make a valuable genetic contribution to the EEP?)
- **Other**

**Please describe:**

**Please add** the relevant part of the RSP (e.g. relevant programme role(s)) and/or LTMP (if existing; programme goals):



In case of a shortage of holding space, was the species, or were these individuals, advertised among the full EAZA membership by:

- ZIMS Available and Wanted list
- EAZA News (eNews, Zooquaria)
- Other:

**3. Did you receive information about the (to be constructed) housing and husbandry conditions for the EEP animals, and are you satisfied with the quality of these? Please elaborate on these answers below the tick boxes**

- Yes  No

If yes please elaborate

**4. Has the Species Committee approved the proposed participant?**

- Yes- done
- No – no Species Committee in place
- No – because

**5. Do you propose a participation for a fixed number of years or for an unlimited time?**

- Fixed number of years, namely years
- Long-term (a review of non-EAZA EEP participants needs to be carried out at least once every five years)

**6. In case of transfers, will animals be sent on loan basis?**

- Yes  No

The EEP fee is part of the Temporary Membership fee and hence does not apply to Temporary Members.

Date:

Place:

All forms/templates are available to download on the EAZA Member Area.



**Please submit your request to the EEP Committee via your TAG liaison at the EAZA Executive Office or otherwise via [info@eaza.net](mailto:info@eaza.net).**



## Appendix 10: Candidate for Membership participation in an EEP - standard format for requesting approval from the EEP Committee Application form B – Candidate for Membership

### 1. Contact details

**Name of the EEP**  
**EEP Coordinator**

**Requested CfM EEP Participant:**  
**Institution name**  
**Street + number**  
**Zip code**  
**City**  
**Country**  
**Phone number**  
**Name Contact Person**  
**Email**

### 2. Motivation

**Describe why** the participation of above mentioned institution/person would be important for the long-term management of the EEP and/or the CfM process of the institution.

Please provide information on:

- **Holding space** (e.g. Would the proposed participant make holding or breeding space available that is essential to the EEP?)
- **Genetics** (e.g. Does the proposed participant hold animals that would make a valuable genetic contribution to the EEP?)
- **Other**

**Please describe:**

**Please add** the relevant part of the RSP (e.g. relevant programme role(s)) and/or LTMP (if existing; programme goals):



In case of a shortage of holding space was the species, or were these individuals, advertised within the full EAZA membership by:

- ZIMS Available and Wanted list
- EAZA News (eNews, Zooquaria...)
- Other:

**3. Did you send the proposed participant the EAZA Population Management Manual, and particular [chapter 3 Working procedures for EEPs and ESBs](#), or did you otherwise explain the functioning of EEPs and the requirements of the participant?**

- Yes     No

**4. Are you confident that the proposed participant will adhere to the requirements of EEP participation?**

- Yes     No

**5. Did you receive a letter in support of EEP participation from the Technical Assistance Committee mentor?**

- Yes     No > *arrange the support letter from the Technical Assistance Committee mentor before handing in your application.*

**If yes**, please attach the support letter to this form.

**6. Has the Species Committee approved the proposed participant?**

- Yes - done
- No - no Species Committee in place
- No - because

**7. Did you receive information about the housing and husbandry conditions for the EEP animals, and are you satisfied with the quality of these?**

- Yes                       No

If yes please elaborate

All forms/templates are available to download on the EAZA Member Area.



**8. Does the proposed participant currently hold animals of the EEP species in question?**

Yes

Number of EEP animals currently held:

Male

Female

No    Unknown

**9. Does the institution to your knowledge participate in other EEPs?**

Yes     No

**If yes**, participation in the following EEPs:

**10. Do you propose a participation for a fixed number of years or for an unlimited time?**

Fixed number of years, namely years.

Long-term (a review of non-EAZA EEP participants needs to be carried out at least once every five years)

The EEP fee is part of the Candidate for Membership fee (max 5 EEPs) and hence not applicable.

**11. In case of transfers, will animals be sent on loan basis?**

Yes     No

**Date:**

**Place:**

**Please submit your request to the EEP Committee via your TAG liaison at the EAZA Executive Office or otherwise via [info@eaza.net](mailto:info@eaza.net).**



## Appendix 11: Non-EAZA institution participation in an EEP – standard format for requesting approval from the EEP Committee

### Application form C –no Member of EAZA, in EAZA region

#### 1. Contact details

<p><b>Name of the EEP</b> <b>EEP Coordinator</b></p> <p><b>Requested non-EAZA Participant:</b> <b>Institution name</b> <b>Street + number</b> <b>Zip code</b> <b>City</b> <b>Country</b> <b>Phone number</b> <b>Name Contact Person</b> <b>Email</b></p>
<p><b>Does this institution have a history with EAZA Membership?</b></p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p><b>If yes:</b></p> <p><input type="checkbox"/> The zoo is somewhere in the accreditation procedure. <input type="checkbox"/> The zoo has been screened more than two years ago and Membership was refused. <input type="checkbox"/> The zoo voluntarily left the EAZA Membership more than two years ago. <input type="checkbox"/> The zoo has been a Member of EAZA and Membership has been terminated more than two years ago. <input type="checkbox"/> No history with EAZA known</p> <p>Why is this non-EAZA institution not a Member of EAZA?</p>





## 2. Motivation

**Describe why** the participation of above mentioned institution/person would be important for the long-term management of the EEP.

Please provide information on:

- **Holding space** (e.g. Would the proposed participant make holding or breeding space available that is essential to the EEP?)
- **Genetics** (e.g. Does the proposed participant hold animals that would make a valuable genetic contribution to the EEP?)
- **Other**

**Please describe:**

**Please add** the relevant part of the RSP (e.g. relevant programme role(s)) and/or LTMP (if existing; programme goals):

**In case of a shortage of holding space was the species, or were these individuals, advertised within the EAZA Membership by:**

- ZIMS Available and Wanted list
- EAZA News (eNews, Zooquaria...)
- Other:

**3. Did you send the proposed participant the EAZA Population Management Manual, in particular [chapter 3 Working procedures for EEPs and ESBs](#), or did you otherwise explain the functioning of EEPs and the requirements of the participant?**

- Yes     No

**4. Are you confident that the proposed participant will adhere to the requirements of EEP participation and demonstrate an appropriate level of commitment to the goals of the programme similar to what is expected from EAZA Members participating in the EEP?**

- Yes     No



**5. Has the Species Committee approved the proposed participant?**

- Yes - done
- No - no Species Committee in place
- No – because

**6. Did you receive information about the housing and husbandry conditions for the EEP animals, and are you satisfied with the quality of these?**

- Yes
- No

If yes please elaborate

**7. Does the proposed participant currently hold animals of the EEP species in question?**

- Yes
  - Number of EEP animals currently held:
    - Male
    - Female
- No    Unknown

**8. Does the institution to your knowledge participate in other EEPs?**

- Yes     No

**If yes**, participation in the following EEPs:

**9. Do you propose a participation for a fixed number of years or for an unlimited time?**

- Fixed number of years, namely years.
- Long-term (a review of non-EAZA EEP participants needs to be carried out at least once every five years)

**10. In case of transfers, will animals be sent on loan basis?**

- Yes     No

All forms/templates are available to download on the EAZA Member Area.



**11. Do you wish to request an exemption for paying the required non-EAZA EEP participation fee (not applicable to a licensed zoo or aquarium in the EAZA region)?**

Exemption participation fee requested:

Yes     No

**12. If yes to question 11, please explain why this proposed participant should be granted exemption.**

**Date:**

**Place:**

**Please submit your request to the EEP Committee via your TAG liaison at the EAZA Executive Office or otherwise via [info@eaza.net](mailto:info@eaza.net).**

**Please ensure that in order for the GDPR compliance – (see section [3.6.6 Forwarding non-EAZA EEP participation requests](#)).the form is filled out by the non EAZA institution and returned to the EEO together with this Application Form. The form can be found [here](#)**



## Appendix 12: Non-EAZA institution participation in an EEP- standard format for requesting approval from the EEP Committee

### Application form D – No Member of EAZA, the proposed EEP participant is located out of the EAZA region.

#### 1. Contact details

<p><b>Name of the EEP</b> <b>EEP Coordinator</b></p> <p><b>Requested non-EAZA Participant:</b> <b>Institution name</b> <b>Street + number</b> <b>Zip code</b> <b>City</b> <b>Country</b> <b>Phone number</b> <b>Name Contact Person</b> <b>Email</b></p>
<p><b>Is the institution a member of a regional or national association in their region or country that is an Association Member of WAZA (for example AZA, ALPZA, PAAZA, etc)?</b></p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p><b>If yes</b>, which regional or national association(s):</p> <p><input type="checkbox"/> Please specify:</p> <p><b>Does this region have a population management programme for the above mentioned species?</b></p> <p><input type="checkbox"/> Yes &gt; <i>it is not possible for the above mentioned institution to participate in this EEP, unless agreements are in place between EAZA and that regional association.</i></p>



No  
**Does participation of the institution are in support of/ do not go against existing collection plans in the respective region?**

Yes

No

## 2. Motivation

**Describe why** the participation of above mentioned institution/person would be important for the long-term management of the EEP.

Please provide information on:

- **Holding space** (e.g. Would the proposed participant make holding or breeding space available that is essential to the EEP?)
- **Genetics** (e.g. Does the proposed participant hold animals that would make a valuable genetic contribution to the EEP?)
- **Other**

**Please describe:**

**Please add** the relevant part of the RSP (e.g. relevant programme role(s)) and/or LTMP (if existing; programme goals):

**In case of a shortage of holding space was the species, or were these individuals, advertised within EAZA Membership by:**

- ZIMS Available and Wanted list
- EAZA News (eNews, Zooquaria...)
- Other:

All forms/templates are available to download on the EAZA Member Area.



**3. Did you send the proposed participant the EAZA Population Management Manual, in particular [chapter 3 Working procedures for EEPs and ESBs](#), or did you otherwise explain the functioning of EEPs and the requirements of the participant?**

Yes     No

**4. Are you confident that the proposed participant will adhere to the requirements of EEP participation?**

Yes     No

**5. Has the Species Committee approved the proposed participant?**

- Yes - done
- No - no Species Committee in place
- No - because

**6. Did you receive information about the housing and husbandry conditions for the EEP animals, and are you satisfied with the quality of these?**

Yes                                       No

If yes please elaborate

**7. Does the proposed participant currently hold animals of the EEP species in question?**

- Yes  
Number of EEP animals currently held:  
Male  
Female
- No    Unknown

**8. Does the institution to your knowledge participate in other EEPs?**

Yes     No

**If yes**, participation in the following EEPs:

All forms/templates are available to download on the EAZA Member Area.



**9. Do you propose a participation for a fixed number of years or for an unlimited time?**

- Fixed number of years, namely years.
- Long-term (a review of non-EAZA EEP participants needs to be carried out at least once every five years)

**10. In case of transfers, will animals be sent on loan basis?**

- Yes     No

**11. Do you wish to request an exemption for paying the required non-EAZA EEP participation fee?**

Exemption participation fee requested:

- Yes                       No

**12. If yes to question 11, please explain why this proposed participant should be granted exemption.**

**Date:**

**Place:**

**Please submit your request to the EEP Committee via your TAG liaison at the EAZA Executive Office or otherwise via [info@eaza.net](mailto:info@eaza.net).**

**Please ensure that in order for the GDPR compliance – (see section [3.6.6 Forwarding non-EAZA EEP participation requests](#)).the form is filled out by the non EAZA institution and returned to the EEO together with this Application Form. The form can be found [here](#)**

All forms/templates are available to download on the EAZA Member Area.



## **Appendix 13: EAZA Template contract for non-EAZA EEP participants**

Agreement of participation in the EEP (template)

Agreement of participation in the EEP of the

---

*(species; English plus scientific name)*

The Undersigned,

---

*(name of institution or private person),*

declare their willingness to participate in the EAZA Ex situ Programme (EEP) of the above mentioned species and to abide with the rules of joint population management in the EEP as laid down in the EAZA Population Management Manual.

The participant agrees to put a minimum of .... enclosure spaces for the responsible keeping of the species at the disposal of this EEP. Sufficient notice must be given when this commitment is ended.

The participant designates

---

*(name and position of staff member of the institution, or in case of private participant, the participant him/herself)*

as its representative for the species. The EEP Coordinator will be duly informed of a possible future change of the species' representative.

Signature plus date

*(name; in case of institution name of person in charge)  
(full address plus telephone & fax number and e-mail address)*





## Appendix 14: EAZA studbook template

The template below can be used as guidance for making an EEP or ESB studbook.

The template gives an overview of all the topics that should be covered every three years. In between an update of the most relevant information will be sufficient.

- Cover
  - Common name and scientific name
  - Edition
  - Publication date
  - Currentness date of data
  - Studbook Keeper details (name, institution, address, email)
  - EEP or ESB logo
  - EAZA logo
  - Institution logo
  - Picture
  - Scope of studbook (International, EEP or ESB)
- Table of contents
- Introduction
- Studbook disclaimer (see draft example below)
- Acknowledgements
- Summary
- Contents:

### ***Geographic scope of regional studbook***

- Which countries, institutions are included?
- What (sub)species have been included?
- Data current through (date)?

### ***General information on the species from the wild (first report only; or relevant updates since first report)***

- Taxonomy
- Distribution and habitat
- Social system/ mating system and behavioural peculiarities
- Reproductive and life cycle characteristics (e.g. sexual/asexual reproduction; sequence and duration of life stages; age of first reproduction, litter/clutch size, number of progeny per year, seasonality, oestrus cycle/fertile period, incubation/gestation length, sex ratio at birth, etc.)
- Longevity

All forms/templates are available to download on the EAZA Member Area.



- Diet
- Conservation status (IUCN Red Listing (if any), remaining populations, population, main threats and others)
- Bibliography (literature sources consulted)

***Publications of interest (references and EAZA Best Practice Guidelines)  
Studbook data analysis reports (including explanatory paragraphs)***

Data permitting, the following should be included at the minimum:

- Roles of the EEP (in case of new style EEP: as stated in the RSP/EEP application form)
- Genetic and demographic goals for the population
- Important outstanding data validation issues (where relevant)
- Details of any demographic or genetic assumptions made in an analytical overlay
- Genetic analysis
  - % of pedigree known (this should be **at least about 85%** in order for the genetic summary statistics to be reliable; if it is less, EEP coordinators/ESB keepers can contact the EEO PMC to discuss how best to proceed)
  - current and potential
    - #founders, gene diversity retained, founder genome equivalents, population mean kinship, mean inbreeding coefficient
- Current population size and census graph (by sex and by birth type)
- Age/life stage pyramid
- Number of captive births per year over last five years
- Number of captive deaths per year over last five years
- Age Specific Fecundity (Mx) (table and graph) (stipulate which filter settings were used in SPARKs; whether or not the data were smoothed; whether or not the data were adjusted for sample size effects)
- Age Specific Mortality (Qx) (table and graph) (stipulate which filter settings were used in SPARKs; whether or not the data were smoothed; whether or not the data were adjusted for sample size effects)
- Summary of changes in population status since last studbook
- Special issues/problems

***Studbook data***

- Data field descriptions (explanation of column headings, where relevant, especially when using User Defined Fields)
- Definitions of abbreviations used (where relevant)
- Conventions and assumptions, for example
  - What does hatch date represent?

All forms/templates are available to download on the EAZA Member Area.



How did you enter data for wild caught animals with unknown birth and capture date?

Parental assumptions, etc.

- Living population listing (by institution)
- Births since last studbook (by birth date)
- Deaths since last studbook (by death date)
- Transfers since last studbook (by transfer date)
- Historical population listing (by studbook number, once every 3 yrs.)

***Location glossary (EAZA short name for institution, full name of institution, institutional contact person, address, telephone, email)***

***Studbooks in other regions (institution name, Studbook Keeper name, address, email)***

Note: For fish, amphibians and invertebrates, present what you can and where possible provide suitable/relevant alternatives

#### Example studbook disclaimer

Copyright (publication date) by (Studbook Keeper's institution name). All rights reserved. No part of this publication may be reproduced in hard copy, machine-readable or other forms without advance written permission from the (Studbook Keeper's institution name). Members of the European Association of Zoos and Aquaria (EAZA) may copy this information for their own use as needed. The information contained in this studbook has been obtained from numerous sources believed to be reliable. EAZA and the (Studbook Keeper's institution name) make a diligent effort to provide a complete and accurate representation of the data in its reports, publications, and services. However, EAZA and the (Studbook Keeper's institution name) do not guarantee the accuracy, adequacy, or completeness of any information. Correctness of the data depends on the quality of data submitted by the holders to a high degree. EAZA and the (Studbook Keeper's institution name) disclaim all liability for errors or omissions that may exist and shall not be liable for any incidental, consequential, or other damages (whether resulting from negligence or otherwise) including, without limitation, exemplary damages or lost profits arising out of or in connection with the use of this publication. Because the technical information provided in the studbook can easily be misread or misinterpreted unless properly analysed, EAZA and (Studbook Keeper's institution name) strongly recommend that users of this information consult with the Studbook Keeper in all matters related to data analysis and interpretation.

All forms/templates are available to download on the EAZA Member Area.



## Appendix 15: Guidelines for Veterinary Advisors appointed to EAZA TAGs and EEPs

(Revised version November 2021)

EAZA leads in animal management and care across Member zoos and aquariums by maintaining healthy populations and individuals with positive animal welfare.

EAZA approved Veterinary Advisors (VAs) to EAZA Taxon Advisory Groups (TAGs) and EAZA Ex situ Programmes (EEPs) have a significant role to play in this. They serve as part of the TAGs and EEP Species Committees by advising on issues concerning individual and population health, contributing to best practice guidelines and providing information and clinical advice to collections and their veterinarians as required.

All EAZA TAGs and EEPs should appoint at least one (or more) Veterinary Advisor(s). The TAG Chair or the EEP Coordinator has a responsibility to ensure that the VA has access to all the relevant information. All EAZA approved VAs will be allowed access to the EAZA Member Area either directly via their EAZA Member employer, or indirectly by way of their EAZWV membership and their supporting EAZA institution.

More information on the VA role, how VAs get appointed, what tools are available to VAs, and how the EAZA Veterinary Committee and joint EAZA/EAZWV subgroups support this can be found below and (in more detail) in the [EAZA Vet Advisor Resource Manual](#).

### **Different types of Veterinary Advisors**

Veterinary Advisors can be appointed at EEP-level (i.e. advising on or more individual species) and at TAG-level (i.e. advising on the respective taxonomic group as a whole and not advising on individual species). All VAs working on species belonging to a particular TAG form part of the TAG Vet Advisor team. The TAG VA team works together to find consistent approaches to managing issues that may be relevant to a number of different species within the TAG. The TAG VA team appoints one spokesperson (the TAG VA Representative or Rep.) for communication and coordination with the TAG chair. TAG and EEP VAs have slightly different duties and responsibilities.

### **The role and duties of a Taxonomic Advisory Group (TAG) Veterinary Advisor**

Roles and duties of the TAG VA team:

All forms/templates are available to download on the EAZA Member Area.



- TAG VA team members are required to liaise with each other and achieve consensus on how to manage health issues that impact multiple species within the TAG.
- TAG VA team members will be involved in producing TAG level veterinary guidelines and protocols and ensuring that these are disseminated to veterinarians working with these species. Approval processes for EAZA veterinary guidelines and documents are outlined in the [EAZA Vet Advisor Resource Manual](#).

Roles and duties of the TAG VA Rep.:

- The TAG VA Reps are strongly encouraged to join the TAG mid-year meetings (or appoint a deputy from the relevant TAG VA team if they cannot attend).

Roles and duties of a TAG VA:

- Act as a link between the TAG and the TAG VA team to ensure effective communication.
- Coordinate the production of TAG level veterinary guidelines and protocols and their dissemination to practitioners working with these species (via EAZA and EAZWV).
- Coordinate the general activities of the Veterinary Advisor team.

### **The role and duties of an EEP Veterinary Advisor**

The appointed EEP Veterinary Advisor(s) is by default a non-voting member of the EEP Species Committee (when in place). Please note that as part of the Species Committee, the VA recommendations should take account of collective species management priorities that are linked to the roles and goals that are set for each EEP. The duties of an EEP VA include (but are not limited to):

1. Producing the veterinary section in the EAZA Best Practice Guidelines and keep it updated.
2. Identifying and regularly reviewing the major health issues impacting the EEP they advise (via review of Post-mortem reports and other medical records).
3. Providing recommendations as to how best monitor and manage health issues identified as priorities in the species (these may include diagnostic protocols, therapeutic protocols, and preventative measures such as

All forms/templates are available to download on the EAZA Member Area.



quarantine, nutrition, vaccination etc.) and assisting with dissemination of these recommendations to veterinarians working with the species.

4. Producing a brief Annual Veterinary report on issues pertaining to the species (to be incorporated into EEP Annual Report; that will be published by the EEP Coordinator on the TAG page on the EAZA Member Area and be made available to EAZWV members.
5. Providing advice to veterinarians working with the species as required.
6. Liaising with other TAG VA team members and achieving consensus on how to manage health issues that impact multiple species within the TAG.
7. Contributing to producing TAG level veterinary guidelines and protocols and ensuring that they are disseminated to veterinarians working with these species.
8. Proactively encouraging peers at EAZA Member facilities to sample blood, tissue and/or serum from all EEP individuals for storage in the EAZA Biobank.
9. Disseminating information and recommendations pertaining to the health of the species via conferences and publications (e.g. EAZA and EAZWV conferences, publications: JZAR and JZWM, Zooquaria, EAZWV and EAZA newsletters and the websites of both EAZA and EAZWV).
10. Liaising with Veterinary Advisors in other regions (e.g. American Zoo Association, Zoo Association of Australasia etc.) especially where populations are managed across regions.

### **Approval procedure of Veterinary Advisors**

The VA position is based on personal expertise and does need institutional support from an EAZA Member. EEP Veterinary Advisors are nominated by the EEP Coordinator and approved by the EEP Species Committee (when in place). Veterinary Advisors working only at TAG level are appointed by the TAG Chair with approval by the TAG members.

A VA advert form and application (i.e. 'expression of interest') form, as well as more details on the application procedure, can be found in the [EAZA Vet Advisor Resource Manual](#).

All forms/templates are available to download on the EAZA Member Area.



Upon appointment, all Veterinary Advisors must confirm to the relevant EEP Coordinator and/or TAG Chair that they understand the commitment and duties required by them. They should confirm institutional support from a Full, Temporary or Associate EAZA Member (also if not working for an EAZA Member institution) to ensure ~~and~~ that they have access to ZIMS and other data and documentation for the relevant species. A template letter for providing institutional support to a VA is provided in the [EAZA Vet Advisor Manual](#). GDPR consent to EAZA and EAZWV for storing contact details and agreement to abide by the data confidentiality and ownership clauses (see below) is also needed. Once an EEP Veterinary Advisor or TAG Vet Advisor's appointment is confirmed, the EEP Coordinator or TAG Chair informs the EAZA Executive Office (EEO) TAG liaison.

The EAZA Executive Office (EEO) will add the contact details of the Veterinary Advisor to the Veterinary Advisor directory and EAZA Vet Advisor emailing list. The Veterinary Advisor directory can be accessed via the EAZA Veterinary Committee workspace and via the EAZWV website. The EAZA Executive Office can assist with providing access to the Veterinary Committee Member Area pages of the EAZA website. The full procedure of VA appointment is displayed in Figure 2 below.

The EAZA Veterinary Committee will assist in matching suitable candidates with vacant VA positions. The EAZA Veterinary Committee also provides general oversight of the Veterinary Advisors, regularly reviews and updates the-VA role description and guidelines, and provides advice on cross taxonomic issues.

All forms/templates are available to download on the EAZA Member Area.



### Procedure for appointing EEP and TAG Vet Advisor

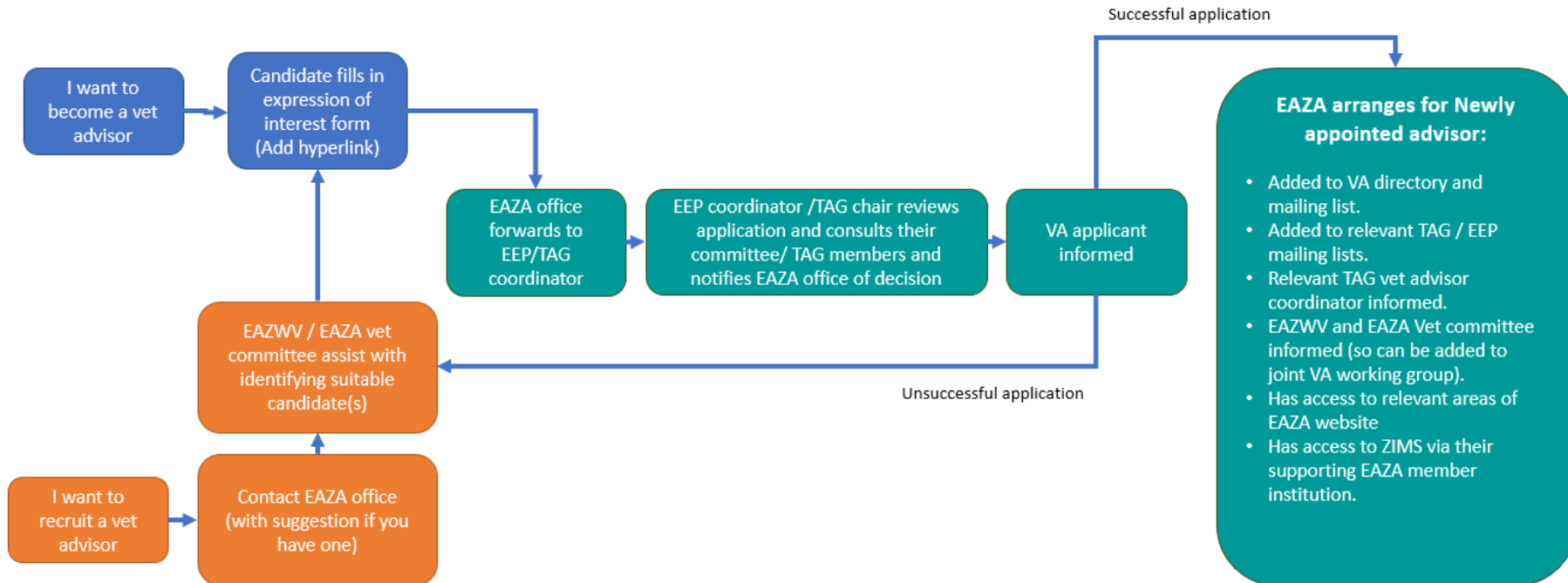


Figure 2 Procedure for appointing EEP and TAG Veterinary Advisors



All forms/templates are available to download on the EAZA Member Area.



### **The TAG/ EEP Veterinary Advisor and medical information**

In order to successfully perform their duties, EEP and TAG VAs must have access to relevant medical information pertaining to the animals that are managed under the umbrella of the TAG or EEP. Without access to such data, Veterinary Advisors cannot contribute to the overall aim of healthy population of individuals with positive animal welfare within the EAZA community. EAZA has set out rules and procedures about the ownership, confidentiality and use of data obtained by TAG and EEP Veterinary Advisors. These rules are outlined in [3.9.5 Veterinary Advisors](#)

### **Vet Guidelines Directory**

A directory of veterinary guidelines and documents has been set up to increase the dissemination of guidelines and documents among veterinarians on the ground. The Vet Guidelines Directory can be accessed [here](#).

### **More information on EAZA Veterinary Advisors**

More information on the VA role, how VAs get appointed, what tools are available to VAs, and how the EAZA Veterinary Committee and joint EAZA/ EAZWV subgroups support this can be found in more detail in the [EAZA Vet Advisor Resource Manual](#).



## Appendix 16: What is a Long-term Management Planning Meeting?

One of the major tasks of the EEP Coordinator and EEP Species Committee is to consider the roles and goals for the population as set into RSP process and to ensure that the EEP is on track to reaching these. This means that the status and trends of the EEP population need to be monitored at regular intervals as a basis for the formulation of management measures. For more information about this, see also [section 3.10 Long-Term Management Plan \(LTMP\)](#) in the EAZA Population Management Manual.

Population biologists from the Population Management Centre (PMC) team at the EAZA Executive Office are available (schedule allowing) to assist EEP coordinators with producing a Long-Term Management Plan by facilitating a meeting for your EEP. We recommend meeting with the EEP Coordinator, EEP Species Committee, TAG Chair, EEO TAG Liaison, and any other EEP advisors, *in situ* representatives or institutional representatives that may be relevant. Size and format of the meeting will depend on the roles and goals of the EEP and the needs of the population, EEP participants and relevant other stakeholders when applicable.

### Default meeting agenda (to be adjusted as required):

1. Presentation introducing the LTMP process
2. Presentation(s) on the *in situ* status of, and threats to, the species
3. Presentation(s) on the *ex situ* status of the species
  - a. The history of the EEP (by the EEP Coordinator)
  - b. Overview of species holdings in different zoo regions (where relevant)
  - c. Defining the EEP population
  - d. Clean up and data quality issues for the EEP population/pedigree assumptions/last minute updates
  - e. Taxonomic issues (in and/or *ex situ*)
  - f. Demographic status of EEP population
  - g. Genetic status of EEP population
4. Determine, or confirm from RSP, the role of *ex situ* management for the EEP
5. Determine the genetic and demographic goals for the EEP
6. Strategies and actions for the EEP to reach its genetic and demographic goals
  - a. Reproductive planning

All forms/templates are available to download on the EAZA Member Area.



- b. Overcoming current challenges: husbandry, veterinary, socio-behavioural, veterinary, research and data collection etc.
7. Strategies and actions to fulfil other roles of the EEP (education, training, fundraising, other *in situ* support, etc).
8. Working relationships among partner organisations within the EEP (where relevant, in case of non-EAZA partner organisations)
9. (Non-)Breeding and Transfer recommendations for individuals/individual groups (where relevant)
10. Post-workshop follow up

#### Post-meeting process:

1. The PMC team at the EEO will write draft and send to EEP Coordinator for review within one month after the LTMP meeting.
2. Draft will be reviewed by the EEP Coordinator and Species Committee and any other meeting attendees if relevant, to be completed within one month after receiving the draft LTMP. The PMC team at the EEO and EEP coordinator will work on the comments received during the draft comment period to create a final version of the LTMP.
3. Following from the review process, the approved version will be shared with all programme participants and placed on the TAG section of the EAZA member website.

#### **Preparing for a Long-term Population Management Planning Meeting**

1. Contact the EAZA Population Management Centre (PMC) Manager to request a meeting.
2. EAZA PMC contacts you if a LTMP can be scheduled for your programme in the following year.
3. Send in your studbook, or agree to PMC accessing your ZIMS studbook, for help with data validation and plan a date for a first call with the PMC
4. First call with the PMC to determine LTMP process, aims and scope of the meeting, attendees, etc.
5. Review your data validation packet received, containing a list of data issues that may need to be addressed. If your population has a partially unknown pedigree, investigate the list of individuals with unknown pedigree included in your validation packet.
  - a. For all individuals with UNK parents – consider whether any of these unknown parents may have been wild caught or potentially related to any other animals in the population.
  - b. With the help of the PMC, create a list of pedigree assumptions to be made and create a ZIMS analytical overlay or, in case of a SPARKS studbook, an analytical sparks dataset.

All forms/templates are available to download on the EAZA Member Area.



6. Where relevant, collect wants and needs from every EAZA institution (and non-EAZA EEP participants) holding your species and share these two weeks before the meeting with the PMC.
  - a. Ask each institution what they want or need in the coming years, as far as breeding, holding, transferring out, or receiving animals (the PMC can provide a template survey form).
  - b. Create a list of all animals that are unable to breed (e.g., due to old age, sterilization, health issues, etc.).
  - c. Gather information about the exhibits, social groups, or other species-specific information that may be helpful to you.
7. One month before the meeting:
  - a. Have your studbook database updated (based on the validation packet) for a preliminary analysis.
  - b. Provide PMC with
    - i. A list of all institutional wants and needs.
    - ii. A list of all animals to be excluded from the genetic analysis because they are unable to breed (again) (e.g., due to old age, sterilization, health issues, etc.). Include the studbook number, current institutional mnemonic, and reason for exclusion.
    - iii. A list of all EEP participants, including their name, mnemonic, institutional name, and email address. This will be included in the plan as a contact list.
    - iv. A list of the expected meeting attendees.
8. At meeting, bring along with you any last-minute updates for the studbook database.

All forms/templates are available to download on the EAZA Member Area.



## **Appendix 17: EAZA Evaluation of EEPs**

## **Appendix 18: Evaluation of EEPs, standard summary report**

Appendix 17 and Appendix 18 will be added as soon as the new EEP evaluation procedure has been developed. See comments in [chapter.3.17 EEP evaluations.](#)



## Appendix 19: EAZA Guidelines for Animal Transfers between Regions

The guidelines in this appendix are based on agreements made by the WAZA Committee for Population Management (at that time called CIRCC). Whilst the guidance is meanwhile somewhat dated, these still provide good general principles to consider when transferring animals between different regions. More intensively managed species across two or more regions and the one plan approach were not considered yet when these guidelines were developed. The rules and procedures for EAZA Coordinators, EEP Species Committees and EEP participants on the importation and exportation of EEP animals into/out of the programme are laid down in [chapter 3.15.4 Placement of animals out of the EEP](#) or for EAZA Members in case of non-EEP species in [chapter 4 Institutional population management](#) of the Population Management Manual.

Prior to the transfer of an animal from one region\* to another:

Both sending and receiving institutions are responsible for ensuring:

- That the transfer is endorsed by the Coordinator of the relevant species management programme\*\* operating in their own region, where such a programme exists
- That the proposed transaction is not counter to recommendations made by the relevant Advisory body\*\*\* in their own region (for example, a Taxon Advisory Group)
- That the counterpart institution has confirmed the same for its own region.

Prior to endorsing the transfer of an animal out of or into a species management programme, the Coordinator of the species management program is responsible for determining:

- That the transfer of the animal is not detrimental to the species management program.
- That the transfer of the animal is endorsed by the Coordinator of the relevant species management program in the other region, where such a program exists.

\* A 'region' is a geographic area represented by a WAZA-recognised regional zoo and aquarium association.

\*\* A species management programme is a programme for the coordinated management of the taxon across the relevant region, endorsed by the relevant regional association.

\*\*\* An Advisory body is one run under the auspices of, or endorsed by, the relevant regional association.



## **Practical implications of the Inter-Regional Acquisition & Disposition Policy Institution in Region A – sender Institution in Region B – receiver**

### Scenario 1: No programme / Programme

#### Sending institution:

- checks with relevant TAG, RSP, Association that the move is not contrary to regionally agreed strategy.
- seeks assurance from receiving institution that the transfer is endorsed by program in receiving region.

#### Receiving institution:

- seeks endorsement from programme Coordinator in receiving region.

### Scenario 2: Programme / Programme

#### Sending institution:

- seeks endorsement from programme in sending region.
- seeks assurance that receiving institution has done same.

#### Programme Coordinator in sending region:

- informs both sending institution and programme Coordinator in receiving region of endorsement of the transfer.

#### Receiving institution:

- seeks endorsement from programme Coordinator in receiving region
- seeks assurance that sending institution has done same.

#### Programme Coordinator in receiving region:

- informs both receiving institution and programme Coordinator in sending region of endorsement of the transfer.

### Scenario 3 Programme / No Programme

#### Sending institution:

- seeks endorsement from program Coordinator in sending region.

#### Receiving institution:

- checks with relevant TAG, RSP, Association that the transfer is not contrary to regionally agreed strategy
- seeks assurance from sending institution that the transfer is endorsed by program in sending region.

All forms/templates are available to download on the EAZA Member Area.



#### Scenario 4 No Programme / No Programme

Sending institution:

- checks with relevant TAG, RSP, Association that the move is not contrary to regionally agreed strategy
- seeks assurance that receiving institution has done same.

Receiving institution:

- checks with relevant TAG, RSP, Association that the transfer is not contrary to regionally agreed strategy seeks assurance that sending institution has done same





## Appendix 20: a EAZA Biobank terms of service

The EAZA membership has established dedicated biobanking facilities for the European and Middle Eastern zoo and aquarium community. The core focus of the EAZA Biobank is on population management and conservation research including:

- Generation of molecular genetic data to improve management of an *ex situ* management programme under a regional zoo and aquaria association (i.e. EAZA Ex situ Programmes (EEPs) or equivalent), in line with recognized population management guidelines<sup>1</sup>.
- Generation of molecular genetic data to improve management of other *ex situ* populations where those data will benefit established regional *ex-situ* management programmes, or global *ex situ* management of the species (e.g. via a “One Plan approach”).
- Generation of molecular genetic data to assist with translocation and reintroduction activities for a species where those activities are conducted according to (IUCN) best practice guidelines<sup>2</sup> and EAZA rules and procedures<sup>1</sup>.
- Generation of molecular data to assist with *in situ* conservation management, where genetic data from *ex situ* animals will provide a valuable contribution to conservation management of the species in the wild.
- Generation of molecular genetic data to assist with the clarification of taxonomy in cases where this is required to improve *ex situ*, *in situ* or reintroduction management<sup>4</sup>.
- Development of genetic tools, markers and reference genomes in cases where this will improve *ex situ* and *in situ* management or conservation translocations.
- Disease investigations.

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<sup>1</sup> Population Management Manual <https://www.eaza.net/about-us/eazadocuments/>

<sup>2</sup> <https://portals.iucn.org/library/efiles/documents/2013-009.pdf>

<sup>3</sup> IUCN/SSC (2013). Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.

All forms/templates are available to download on the EAZA Member Area.



## Sample submission

The main priority of the EAZA Biobank is to increase the proportion of samples submitted from the community as these samples can be a valuable resource for the management of extant populations as well as conservation related research. Ultimately, the aim is to collect samples from all individuals in EAZA Member institutions, with a strong focus on securing samples from EEP populations and species which are under consideration for a programme. Samples must be of sufficient quality and quantity to allow a wide range of genetic analysis techniques to be employed over the long-term. To increase participation in these biobanking efforts, a secondary priority is increased education surrounding the abilities and importance of DNA-analysis for use in management, health and welfare practices for collections.

The goal of the EAZA Biobank is to have every animal be sampled at least once during routine veterinary practices, or upon death, for submission to the Biobank. Specific protocols for sampling techniques, as well as details of proper handling, labeling and transportation have been developed and are accessible online. (See Sampling Protocol in [Appendix 20: c - i EAZA Biobank sampling protocol](#) or visit [www.eaza.net/conservation/research](http://www.eaza.net/conservation/research))

## Use of samples

If an institution has chosen to donate or provide a sample on loan to the EAZA Biobank, EAZA assumes that the institution has the authorised permission to do so. Upon submission, the institution gives permission for the sample and its relevant data to be used for the focus stated above. The relevant data of the sample will be released only upon approval by the EAZA Biobank Working Group on an individual case-by-case basis. In regards to disease investigations, individual and institutional identification information will be blinded, unless prior consent has been obtained from the contributing institution in question.

Samples donated to EAZA for submission to the Biobank can be used for any research objective reviewed and approved by the Biobank Working Group. For samples on loan to EAZA for submission to the Biobank, approval for their use will be sought from the contributor prior to releasing samples if desired for a research objective outside of the focus mentioned above.

Credit acknowledging sample use in any publications will be to the EAZA Biobank, the Biobank Hubs involved, the appropriate sample contributor(s) and the TAGs/EEPs where relevant.

If requesting access to sample use, the applicant(s) will need to:

All forms/templates are available to download on the EAZA Member Area.



- Agree that the samples will only be used for the research proposal submitted to, and approved by, the EAZA Biobank Working Group.
- Demonstrate they have the resources and competency to complete the work.
- Publish the results within a reasonable time and report back to the EAZA Biobank Working Group annually with an update of research, as well as prior to publication.
- Adhere to the terms and conditions detailed in the Material Transfer Agreement.
- Return excess samples and DNA extract (if any) at the conclusion of the study. Additionally, during the course of the study, if aliquots of the sample are requested, they will be shared with any third parties as deemed appropriate by the EAZA Biobank.
- Provide proper access to any resulting molecular data, e.g. NCBI, Genbank or equivalent, or on an external hard drive.
- Acknowledge the EAZA Biobank in any publications.
- Send the EAZA Biobank a copy of all publications resulting from sample use.
- Acknowledge and demonstrate (where necessary) due diligence with Access and Benefit Sharing protocols (See [Appendix 31: Template Non-Disclosure Agreement EAZA Studbook Data](#))

## EAZA STUDBOOK DATA NON-DISCLOSURE AGREEMENT

This Agreement is made and entered into by and between **the European Association of Zoos and Aquaria (EAZA)** ("the Discloser") and \_\_\_\_\_ ("Recipient") for the purpose of receiving EAZA Studbook Data from the Discloser to enable the Recipient to undertake the project described at the end of this Agreement ("Project").

Discloser and Recipient hereby agree as follows:

1. "Confidential Information" means any data or proprietary information of the Discloser that is not generally known to the public or has not yet been revealed, whether in tangible or intangible form, whenever and however disclosed. For the purposes of this Agreement, EAZA Studbook Data provided by the Discloser is considered confidential and shall hereafter be referred to as "Confidential Information." This is including, but not limited to: animal data (including births, death and transfers), pedigree records, information linked to present and historic holders, notes, and any other materials or information

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- provided or shown to the Recipient irrespective of the form or medium, and includes all documents, records, notes, or other material containing or based on information included in the foregoing.
2. No information will be Confidential Information that:
    - i. is already known to Recipient, or
    - ii. is or becomes publicly known through no wrongful act of Recipient, or
    - iii. is received by Recipient from a third party without similar restrictions and without breach of this Agreement.
  3. Recipient acknowledges and agrees that the Confidential Information is and shall remain the exclusive, valuable property of the Discloser. Recipient will not use any Confidential Information other than in connection with the Project.
  4. Recipient agrees not to disclose Confidential Information to any third party (individual, Discloser, corporation, or other entity) or to use Confidential Information for any purpose other than the reasons mentioned in the Project in the section 'Description of the Project' below.
  5. Recipient may disclose Confidential Information
    - i. to other Recipients who have executed non-disclosure agreements with Discloser,
    - ii. in response to the lawful request or requirement of a governmental agency or by requirement of law, and
    - iii. where applicable to the Recipient's Project supervisor, provided that supervisor has signed a non-disclosure agreement with Discloser.
  6. Discloser [agrees /does not agree] for the Recipient to give a substantive presentation concerning the Project to an audience that will not have signed non-disclosure agreements, and that such presentation will include information about the Discloser. When agreed Discloser will work with Recipient to prevent the inclusion of Confidential Information in the presentation and any written materials prepared by the Recipient.
  7. If peer-reviewed publication is (part of) the purpose as described in the 'Description of the Project', Recipient may publish material relating to the conduct and conclusions of the Research, including the Deliverables, provided that Discloser is acknowledged in the publication and provided prior to publishing any such material the Recipient will:
    - i. not publish any data is traceable to individual animals or institutions unless there is explicit written approval from the Discloser to do so.
    - ii. provide a copy of all proposed publication material, together with details of how, when and to whom it is proposed to be published, for

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- the approval of Discloser at least 30 days prior to the proposed submission date for publication (“Approval Period”).
8. If, during the Approval Period, Discloser reasonably requests that the material not be published or submitted for publication in the form provided, the Recipient will:
    - i. where Discloser requests that the material be amended to remove any of their Confidential Information, use all reasonable efforts to amend the proposed publication material to remove all such Confidential Information in which case Discloser will be deemed to have approved publication or submission of the amended material by the Recipient; and
    - ii. if requested, delay publication of the material or submission of the material for publication for a period not exceeding 90 days.
  9. If Discloser withholds approval or requests changes under this clause it must provide reasons. Discloser will be deemed to have approved the publication or submission of material if the Discloser does not communicate to the Recipient its decision regarding approval of the publication, with reasons if applicable, within the Approval Period.
  10. All Confidential Information delivered by Discloser to Recipient will be and remain property of Discloser. All Confidential Information, and any copies thereof, will be promptly returned to Discloser or destroyed by Recipient upon Discloser's request.
  11. The obligations of Recipient under this Agreement shall terminate on \_\_\_\_\_.
  12. This Agreement may not be modified except by written instrument signed on behalf of each party. Either party may assign this Agreement to a parent corporation, to a wholly owned subsidiary or a successor of substantially all of the business or assets of the party. This Agreement embodies the entire agreement and understanding of the parties and terminates and supersedes all prior independent agreements and understandings between the parties. The provisions of this Agreement shall be construed in accordance with the laws of The Netherlands. All notices, requests or consents given in connection with this Agreement shall be given in writing and sent by first class mail, postage prepaid, telegram, teletype, telex, cable or email to the addresses listed at the end of this Agreement, unless either party notifies the other party of a different address.

Description of Project:

All forms/templates are available to download on the EAZA Member Area.



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Executed as of the date and year first above written:

Discloser's Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Print Name \_\_\_\_\_

Recipient's Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Print Name \_\_\_\_\_

### [Appendix 32: EAZA and the Nagoya Protocol](#)

#### **Access to samples and approval process**

- The Applicant is required to complete a project proposal and request forms and submit to the Biobank Coordinator ([biobank@eaza.net](mailto:biobank@eaza.net)), who will conduct an initial screening for completeness. Any applications that are not complete will be rejected.
- Completed project proposals will be shared with the EAZA Biobank Working Group and the appropriate EEP coordinator(s) and/or TAG chair for review within five working days.
- A decision regarding submitted research proposals will be reached within two weeks, as determined by at least three reviewers from the EAZA Biobank Working Group.

## Appendix 20: b Standard operating procedures for EAZA Biobank Hubs

### Introduction

The purpose of the EAZA Biobank is to be a primary resource for genetically supporting population management and conservation research. The EAZA Biobank Hubs will provide a storage repository ensuring the keeping, curating and registering of samples under optimal and long-term storage, supporting the aim of the EAZA Biobank. The EAZA Biobank will work towards a centralization of samples, to ensure smooth operating procedures and logistics, and as such, the number of designated Hubs will be kept to a minimum. The addition of a new Hub will only take place following review by the EAZA Biobank Working Group, which will occur periodically or in the event of a demonstrated need, and subsequent approval by the EAZA Research Committee and EAZA Executive Committee. Designation of a new EAZA Biobank Hub will be in accordance with the protocol provided below. At the inception of the EAZA Biobank, approved EAZA Biobank Hubs include the Royal Zoological Society of Scotland Edinburgh Zoo (RZSS), The Royal Zoological Society of Antwerp (RZSA), The Leibniz Institute for Zoo and Wildlife Research (IZW) and Copenhagen Zoo.

### Required Hub credentials

An approved EAZA Biobank Hub must have a demonstrated track record of servicing the EAZA community and meet the required conditions as laid down below. A Memorandum of Understanding (MOU) between EAZA and any EAZA Biobank Hub must be in place following the agreed 'EAZA Biobank MOU' template, the contents of which should be reviewed and revised as necessary, on an annual basis by the EAZA Biobank Working Group. The MOU will automatically be renewed every 10 years, unless a one-year written notice of termination has been submitted.

An approved EAZA Biobank Hub must:

- Make a long-term commitment to be an EAZA Biobank Hub.
- Make qualified staff and facilities available for the long-term curation of biological samples submitted to the EAZA Biobank.
- Agree to accept donated and loaned samples on behalf of EAZA.
- Agree to comply with sample storage, archive and database protocols produced by the EAZA Biobank Working Group.
- Have and present an emergency strategy for rapid transferral to a back-up facility in the case of a freezer failure (including transfer to an alternative facility if the whole Hub is affected).
- Agree to review their Hub contents once a year in January and arrange for



the transfer of duplicate samples between Hubs, for storage safety reasons.

- Have access to the ZIMS Biobank module.
- Share sample record keeping.
- Be registered as a Scientific Institution by CITES and entitled to use the CITES exemption.
- Have qualified staff that:
  - Have experience in molecular biology
  - Have appropriate research qualifications demonstrated through peer-reviewed publications
  - Have experience in curating a biological sample collection
  - Are trained and updated on state-of-the-art techniques for storing and curating samples
  - Are familiar with, and strive to, implement best practices in accordance with international recommendations (e.g. ISBER).
- Have genetic laboratory facilities in place that, at a minimum, includes:
  - A means of monitoring environmental and freezer temperatures
  - An alarm system to alert when a freezer goes out of temperature range
  - Curatorial standards that meets the requirements set out by the EAZA Biobank Working Group
  - Have space available for EAZA Biobank samples in a minimum of two -80-degree Celsius freezers
  - Have expertise in DNA extraction

Once a year in January, the EAZA Hubs will transfer duplicates of samples to a designated partner Hub for sample security reasons. The partner Hubs to exchange duplicates of samples are the RZSS and Copenhagen Zoo and the RZSA and IZW.

### **Future consideration**

- Addition of a new Hub will only take place in the event of lack of freezer space in existing Hubs and by agreement from the EAZA Biobank Working Group and EAZA Research Committee.
- For logistical reasons, the number of Hubs should be kept to a minimum and this number will be reviewed periodically.
- An MOU is signed between EAZA and the Hubs, who by signing commit to provide biobanking services to the EAZA community until the end of their commitment period.
- If a Hub wishes to step down before the end of their signed commitment period, the Hub will transfer all samples to a Hub that is not its designated partner and with which it has not exchanged samples previously.



**EAZA  
BIOBANK**

All forms/templates are available to download on the EAZA Member Area



Alternatively, if another EAZA member institution that meets the Hub criteria state above wishes to take on the commitment, that institution can be appointed as a replacement for the exiting Hub. The same plan is followed in case of disaster (the zoo closes, leaves EAZA, or sustains major damage etc.).

## Appendix 20: c - i EAZA Biobank sampling protocol

### Live animals

Samples should be taken in accordance with national legislation.

**Whole blood** (max 5 ml), in plastic EDTA or PAXgene blood collection tubes. Invert 15 times to mix.

Or

**Tissue** (max 1 cubic centimeter) from e.g. skin, muscle, or umbilical cord. Placed in a plastic tube (2ml screw cap) containing 70% ethanol or frozen in a plastic bag.

*Do not use formalin or methylated alcohol.*

**Serum** (1-10 ml) in plastic tubes. Must be spun and separated. *Should only be provided if it is accompanied by a blood or tissue sample.*

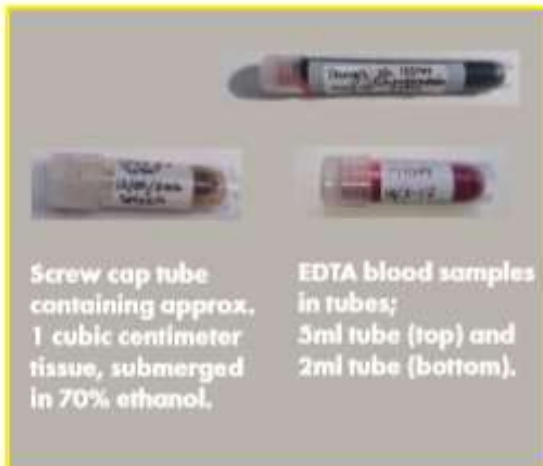
### Dead animals

Samples should be taken in accordance with national legislation.

**Tissue** (max 1 cubic centimeter) from internal organ, skin or muscle. Placed in a plastic tube (2ml screw cap) containing 70% ethanol or frozen in a plastic bag.

*Do not use formalin or methylated alcohol.*

**Serum** (1-10 ml) in plastic tubes. Must be spun and separated. *Should only be provided if it is accompanied by a tissue sample.*



### CITES

Samples from some species will require CITES permits.

**Within EU**, according to CITES regulations there is no need for CITES export and import permits.\*

**Outside EU**, then CITES export permits must be applied for at the national CITES office. *Remember to apply for CITES export permits in due time before sending the samples.*

**CITES exemption** is possible for scientific institutions (see article VII, §6 of the CITES convention). Your institution may apply. All four EAZA Biobank hubs have the CITES exemption.

When CITES export permits are obtained, please send a scanned copy to the contact person of the receiving Biobank hub, who will proceed to obtain CITES import permits.

\* Exemptions may apply.

# Shipping



## Labeling

Label the sample with **animal identifiers** (transponder, ring, GAN or local ID), **species name**, **tissue type** and **date** when sample was taken.

Enclose the animal's ZIMS specimen report and contact details of sender, **otherwise your sample will not be processed.**

If you do not have a ZIMS report, then please include typed identification, species name, date of sampling and institution.

## Storage

If you cannot ship the samples within 12 hours, then store them in the freezer until shipment is possible. Please ship the samples as soon as possible and please avoid arrival at the hub on a weekend.

## Packaging



- 1 Primary package**  
The samples in tubes



- 2 Secondary package**  
Plastic container or bag for the samples with enough material within to absorb the total sample content.



- 3 Tertiary package**  
Reinforced envelope or cardboard box with ZIMS specimen report. Enclose an icepack in the envelope or box if the tissue samples are frozen.



## Shipping

The package should be labeled on the outside with the diamond 'UN3373' logo and the text "Exempt animal specimen" and **"refrigerate upon arrival"**.

The 'UN3373' label can be provided by one of the biobank hubs.



## Biobank addresses

If you would like to send us your samples then please send them to the biobank hub relevant for your country.



Shipping country: **UK, Ireland, Qatar, UAE, Kuwait**

### Edinburgh hub

ATT: **Dr. Helen Senn**  
Address: Royal Zoological Society of Scotland  
WildGenes Laboratory  
134 Corstorphine Road  
Edinburgh EH12 6TS, UK  
E-mail: [HSenn@rzss.org.uk](mailto:HSenn@rzss.org.uk)



Leibniz Institute for Zoo  
and Wildlife Research  
IN THE FEDERAL GOVERNMENT OF BERLIN

Shipping country: **Germany, Austria, Croatia, Czech Republic, Hungary, Poland, Russia, Slovakia, Slovenia, Switzerland, Ukraine**

### Berlin hub

ATT: **Dr. Jörns Fickel**  
Address: Department of Evolutionary Genetics  
Leibniz Institute for Zoo and Wildlife Research (IZW)  
Alfred-Kowalke Strasse 17  
10315 Berlin, Germany  
E-mail: [fickel@izw-berlin.de](mailto:fickel@izw-berlin.de)



Shipping country: **Belgium, Luxembourg, The Netherlands, France, Greece, Israel, Italy, Turkey**

### Antwerp hub

ATT: **Dr. Philippe Helsen**  
Address: Centre for Research and Conservation  
Royal Zoological Society of Antwerp  
Koningin Astridplein 20-26  
2018 Antwerp, Belgium  
E-mail: [Philippe.Helsen@kmda.org](mailto:Philippe.Helsen@kmda.org)



Shipping country: **Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Sweden, Portugal, Spain**

### Copenhagen hub

ATT: **Dr. Christina Hvilsom**  
Address: Copenhagen Zoo  
Roskildevej 38  
2000 Frederiksberg, Denmark  
[ch@zoo.dk](mailto:ch@zoo.dk)  
E-mail:

It is the responsibility of the lending institution to keep the biobank informed with their most up to date contact details.

## Appendix 20:c - ii: EAZA Biobank material transfer agreement (Donation)

The EAZA Biobank vision is to establish dedicated biobanking facilities for the European and Middle Eastern zoo and aquarium community. This biobank aims to be a primary resource for genetically supporting population management and conservation research. Sample(s)/data submitted to the EAZA Biobank may be used for population management and conservation research approved by the EAZA Biobank Working Group and appropriate EEP and TAG. Details of the type of research this might include is provided in the EAZA Biobank Terms of Service ([www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)).

### Part 1: Sample information and consent for use

---

How many samples are being submitted under this MTA? \_\_\_\_\_

Please complete the following information for each sample submitted under this MTA.

Check box if more than four samples are being submitted. Attach all required information as a separate file (a template can be downloaded from [www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)).



	<b>Example</b>	<b>Sample 1</b>	<b>Sample 2</b>	<b>Sample 3</b>	<b>Sample 4</b>
<b>Scientific name</b>	<i>Pygoscelis papua</i>				
<b>Common name</b>	<i>Gentoo penguin</i>				
<b>Identifier (transponder, band, etc.)</b>	250228719000003				
<b>]Local ID</b>	<i>PEN11/0317</i>				
<b>Studbook number (EAZA when multiple)</b>	373				
<b>GAN number (ZIMS number)</b>	<i>MIG12-2345674</i>				
<b>Sample type</b>	<i>EDTA blood</i>				
<b>Approx. amount of sample</b>	<i>0.5 ml</i>				
<b>Date of sampling (dd/mm/yyyy)</b>	<i>26/03/2019</i>				

**The Contributor acknowledges that this/these sample(s) is/are hereby donated to EAZA upon receipt by the Biobank Hub.**

If the Contributor wishes to submit the sample(s) on loan, please contact EAZA Biobank ([biobank@eaza.net](mailto:biobank@eaza.net)) or complete the Material Transfer Agreement for Sample Loan ([Appendix 20: c - iii: EAZA Biobank material transfer agreement \(Loan\)](#)).

**By submitting this/these sample(s), permission is granted for the sample(s) and any relevant data to be used for project(s) approved by the EAZA Biobank Working Group as per the process described in the EAZA Biobank Terms of Service ([www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)).**

## Part 2: Submission and authorisation

---

The sample(s) listed in Part 1 are being sent to the EAZA Biobank selected below:

- Royal Zoological Society of Scotland Edinburgh Zoo (RZSS)
- The Royal Zoological Society of Antwerp (RZSA)
- The Leibniz Institute for Zoo and Wildlife Research (IZW)
- Copenhagen Zoo

from the following Contributor:

Contributor's Name	
Contributor's address	
Contributor's contact (phone/ email)	

By sending the sample(s) and this completed Agreement, the **Contributor** is acknowledging:

1. The sample(s) provided and described is (are), to the best of their knowledge from the individual animal(s) indicated in the accompanying information.
2. A reasonable effort has been made to ensure the sample(s) is/are contributed in compliance with national legislations (CITES, Nagoya, etc.).
3. They are authorised to submit these samples.
4. They agree to the Terms and Conditions detailed here ([Appendix 20: c - iv: EAZA Biobank terms and conditions](#)).





**EAZA  
BIOBANK**

All forms/templates are available to download on the EAZA Member Area



5. The sample(s) and data listed in Part 1 are legally held by the Contributor named above.

This completed Material Transfer Agreement can be sent electronically to [biobank@eaza.net](mailto:biobank@eaza.net), or as a hard copy submitted along with the sample(s) to the designated Hub. Upon receiving and confirming the sample(s) submitted, the receiving Biobank Hub accepts this donation on behalf of EAZA.

## Appendix 20: c - iii: EAZA Biobank material transfer agreement (Loan)

The EAZA Biobank vision is to establish dedicated biobanking facilities for the European and Middle Eastern zoo and aquarium community. This biobank aims to be a primary resource for genetically supporting population management and conservation research. Sample(s)/data submitted to the EAZA Biobank may be used for population management and conservation research approved by the EAZA Biobank Working Group and appropriate EEP and TAG. Details of the type of research this might include is provided in the EAZA Biobank Terms of Service ([www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)) ([Appendix 20: a EAZA Biobank terms of service.](#))

### **Part 1: Sample information and consent for use**

---

How many samples are being submitted under this MTA? \_\_\_\_\_

Please complete the following information for each sample submitted under this MTA.

Check box if more than four samples are being submitted. Attach all required information as a separate file (a template can be downloaded from [www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)).

	<b>Example</b>	<b>Sample 1</b>	<b>Sample 2</b>	<b>Sample 3</b>	<b>Sample 4</b>
<b>Scientific name</b>	<i>Pygoscelis papua</i>				
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<b>Identifier (transponder, band, etc.)</b>	250228719000003				
<b>Local ID</b>	PEN11/0317				
<b>Studbook number (EAZA when multiple)</b>	373				
<b>GAN number (ZIMS number)</b>	MIG12-2345674				
<b>Sample type</b>	EDTA blood				
<b>Approx. amount of sample</b>	0.5 ml				
<b>Date of sampling (dd/mm/yyyy)</b>	26/03/2019				

**The Contributor acknowledges that this/these sample(s) is/are hereby loaned to be held by EAZA upon receipt by the Biobank Hub.**

As a loaned sample, the ownership of the samples is retained with the Contributor. Return of the sample(s) will be completed upon request to the EAZA Biobank ([biobank@eaza.net](mailto:biobank@eaza.net)) and within a reasonable time.

**By submitting this/these sample(s), permission is granted for the sample(s) and any relevant data to be used for project(s) approved by the EAZA Biobank Working Group as per the process described in the EAZA Biobank Terms of Service ([www.eaza.net/conservation/research](http://www.eaza.net/conservation/research)). As a loaned sample, research projects outside of the scope of the EAZA Biobank will require additional permissions from the Contributor.**

## Part 2: Submission and authorisation

---

The sample(s) listed in Part 1 are being sent to the EAZA Biobank selected below:

- Royal Zoological Society of Scotland Edinburgh Zoo (RZSS)
- The Royal Zoological Society of Antwerp (RZSA)
- The Leibniz Institute for Zoo and Wildlife Research (IZW)
- Copenhagen Zoo

from the following Contributor:

Contributor's Name	
Contributor's address	
Contributor's contact (phone/ email)	

By sending the sample(s) and this completed Agreement, the **Contributor** is acknowledging:

1. The sample(s) provided and described is (are), to the best of their knowledge from the individual animal(s) indicated in the accompanying information.
2. A reasonable effort has been made to ensure the sample(s) is/are contributed in compliance with national legislations (CITES, Nagoya, etc.).
3. They are authorised to submit these samples.
4. They agree to the Terms and Conditions detailed here ([Appendix 20: a EAZA Biobank terms of service](#)).



All forms/templates are available to download on the EZA Member Area



5. The sample(s) and data listed in Part 1 are legally held by the Contributor named above.

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This completed Material Transfer Agreement can be sent electronically to [biobank@eaza.net](mailto:biobank@eaza.net), or as a hard copy submitted along with the sample(s) to the designated Hub. Upon receiving and confirming the sample(s) submitted, the receiving Biobank Hub accepts this loan on behalf of EZA.

## Appendix 20: c- iv: EAZA Biobank terms and conditions

### Terms and conditions for sample submission

Obligations of the contributor and warranties of submitted samples:

1. For donated/loaned sample(s), the Contributor of the sample(s) warrants to be the legal holder of the sample(s), and to have the authority to transfer ownership/holding of the sample(s) to EAZA.
2. When donating/loaning sample(s), the Contributor transfers the title of ownership/holding to EAZA upon receipt of the sample(s) and completed Material Transfer Agreement by the receiving Biobank Hub, on behalf of EAZA.
3. The Contributor warrants that the sample(s) have not been:
  - a. stolen or looted from their rightful owners or country of origin;
  - b. obtained by violent means;
  - c. obtained in violation of the legislation of their country of origin (i.e. obtained without the necessary permits);
  - d. exported illegally or illicitly from their country of origin; or
  - e. imported illegally or illicitly into the Contributor's country.
4. So far as possible, the Contributor warrants that the sample(s) was/were collected under the relevant permits and licenses required by national law at the time of collection.
5. So far as possible, the Contributor warrants that any suspected or confirmed infectious, transmissible disease(s) affecting the specimen from which the sample(s) originate has been reported to the receiving Biobank Hub, and any reportable infectious diseases have been reported to the relevant authorities prior to sample transfer.
6. In the event a sample donated/on loan is found to be positive for a reportable infectious disease, EAZA will inform the Contributor of the sample, who is responsible for ensuring national reportable disease requirements are adhered to. EAZA is not responsible for the reporting of said disease, or any consequences to the Contributing institution resultant from the reporting of such diseases.
7. When donating sample(s), the Contributor warrants that it will make no subsequent claim to ownership of the sample(s) following the execution of this Material Transfer Agreement.
8. The Contributor will assume the costs of shipping the sample(s) to the appropriate EAZA Biobank Hub.
9. EAZA acknowledges that unless otherwise stated, the Contributor makes no warranty as to the condition of the sample(s).

#### Obligations of EAZA and acceptance of the samples

10. EAZA undertakes that it will accept the donation or loan of the sample(s) from the Contributor upon receipt of the samples and completed Material Transfer Agreement by the receiving Biobank Hub, on behalf of EAZA, and will use and manage the items in accordance with the agreed conditions in the EAZA Biobank Terms of Service, which are subject to change.
11. As a loaned sample, use of sample for research projects outside of the scope of the EAZA Biobank Terms of Service will require additional permissions from the Contributor.
12. For donated sample(s) and on loan sample(s), EAZA, through the EAZA Biobank Hubs, will assume all costs of storage and preservation for the items from the date of delivery to EAZA.
13. Transport of the sample(s) from the Contributor to the receiving EAZA Biobank Hub should be scheduled and agreed to in writing between the parties prior to shipment of the sample(s).
14. EAZA acknowledges that sample(s) on loan are still owned by the Contributor and the Contributor is entitled to request those sample(s) be returned. Return of sample(s) will be completed within a reasonable period of time and at the cost of the Contributor.
15. If the Contributor of any loaned sample(s) ceases to exist, the sample(s) will default to EAZA property. It is the Contributor's responsibility to claim the sample(s) back within a period of 3 months from cessation of activity.

#### Conditions of acceptance

16. It is a condition of acceptance of the sample(s) that:
  - a. the basic sample(s) data is/are provided to the EAZA Biobank in a format as defined in this Material Transfer Agreement; and
  - b. the basic data meets the minimum required standards as defined in this Material Transfer Agreement.
17. The sample data will be processed into the appropriate EAZA Biobank database format by the Contributor and/or the EAZA Biobank.
18. If any restrictions apply to any sample(s) or sample data, as indicated by the Contributor, the EAZA Biobank shall comply with such restrictions.

#### Information and Data

19. Unless otherwise agreed to, in writing, between the Contributor and EAZA, EAZA and any subsidiary of EAZA shall be entitled to refer to the Contributor by name as the donor of the items, including but not limited to in response to enquiries. EAZA shall comply with its obligations under the Data Protection Act 1998 and GDPR 2018 in processing personal data.

### Intellectual Property

20. To the extent that the Contributor owns the intellectual property rights in the sample(s), the Contributor assigns such rights to EAZA.
21. Unless otherwise agreed to in writing between the parties, the Contributor hereby assigns to EAZA, the copyright and any other intellectual property rights in the item data.

### Amendments

22. EAZA is authorised to update these Terms and Conditions at any time and will publish any such changes through existing EAZA communication channels.

### Law and Jurisdiction

23. This Material Transfer Agreement shall be governed by and interpreted in accordance with the laws of The Netherlands and the parties hereby submit to the exclusive jurisdiction of the Dutch courts.





## Appendix 21: EAZA Statement about imports of birds and eggs from the wild

Although zoos should strive at having the creation of self-sustaining bird populations, it seems clear that for the foreseeable future the importation of wild birds from different parts of the world cannot be completely avoided if self-sustaining populations are to be maintained or established. The EU wild bird import ban of July 2007 placed population management of captive bird populations in a different context. The fact that zoos are exempted from the EU wild bird import ban of July 2007 puts a strong responsibility on our shoulders to act carefully and responsibly when such imports are conducted.

The EEP Committee therefore strongly recommends that before undertaking **such bird imports or imports of eggs an EAZA Member institution should get in touch with the relevant EAZA TAG Chair and ask for advice. The proposal should take the current RSP into account and work towards creating or maintaining a sustainable population for the species in question.** Furthermore, it is strongly recommended to undertake such imports in cooperation with other institutions willing to hold a given species and to make all possible efforts to bring in a viable number of founders.

In case of EEP species please get in touch with the relevant EEP Coordinator for approval. For ESB species, contact the ESB Studbook Keeper to get a recommendation. See also [Appendix 22: EAZA Guidelines for decision making when importing EEP animals from the wild](#)

*Initiated by the Bird TAGs (Jerusalem, March 2008).*

*Approved by the EEP Committee, March 2009 (and revised by the EEP Committee September 2009).*



## **Appendix 22: EAZA Guidelines for decision making when importing EEP animals from the wild**

### ***Introduction***

Over the last years the EEP Committee received questions/requests for advice from different EEP Coordinators who had to deal with EAZA Members who were planning to import wild caught EEP animals. Based on those recent cases, and given the fact it considers wild caught animals, the EEP Committee felt that it was time to give some guidance to EEP Coordinators (and EAZA institutions) that have to deal with the importation of wild caught EEP species.

### ***Official approval***

First of all, it must be clear, that based on existing EAZA policies, EAZA institutions need approval of the EEP Coordinator for importing a wild caught EEP animal into the EEP. The EEP Coordinator together with the Species Committee decides on the import, whether or not to import is hence an EEP decision and not solely an institutional decision.



**Box 1** Quotes of relevant policies and statements

**Population Management Manual (2011)**

**Rules of joint population management in the EEP**

(4) The participant will always request the EEP approval prior to each and every animal transfer (to and from its own collection) not specifically recommended in the species' management plan. This is a particularly delicate matter when transfers in and out of the EEP population (from and to non-EEP participants) are involved.

**Conditions of animal transfers and the role of the EEP coordinator in transfers**

Transfers of animals from non-participants to participants also need approval by the EEP. Who will grant permission only if such animals are considered valuable to the EEP population.

**Transfers suggested by the participants**

Participants may suggest additional transfers, not specifically recommended for population management. In such cases they will always contact the EEP coordinator, who will study the effects of these transfers on population structure. The coordinator will grant permission if there are no negative effects; alternative transfers will be proposed if negative effects are expected.

“For the benefit of the future viability of EAZA/EEP populations, all transfers of EEP animals must be arranged in full consultation with, and the agreement of, the EEP coordinator. In order to ensure the non-commercial status of EEPs any selling of EEP animals must be avoided”

“The World Zoo and Aquarium Conservation Strategy states that imports of animals from the wild should preferably be restricted to special cases with clear conservation objectives.”

**(WZACS, 2005).**

Wild caught refers in this guideline to all animals which are (originally) caught in the natural habitat of the species such as:

- Wild caught animals kept in zoos in the range of distribution;
- Wild caught animals kept in rehabilitation centres in the range of distribution;
- Wild caught animals kept in other (recognised) *ex situ* institutions such as breeding centres;
- Wild caught animals to be imported via a dealer;
- Wild caught animals to be imported from a game farm.

This means that EAZA institutions who are thinking about importing a wild caught EEP species always should get in touch with the relevant EEP Coordinator

first (see the references to [chapter 3 Working procedures for EEPs and ESBs](#) of the Population Management Manual). The EEP Coordinator should, after an analysis of the EEP population and after consultation of his/her Species Committee, come up with a clear recommendation for that EAZA institution (in a timely fashion).

If an institution decides to import, against the recommendation of the EEP Coordinator, the EEP Committee will refer to the official complaint procedure.

### ***Reflection on import***

There are different reasons to start thinking about the importation of wild caught EEP species. The EEP population is for example genetically very poor so additional founders are needed or would be very welcome. Or there are no EEP animals available for your institute and you are desperately waiting for animals. It may be clear that some of the reasons are more beneficial for the EEP population than others (see box 3). It is good to realise that each import has different interests and/or aspect to consider such as the sustainability of the EEP population, space issues, the functioning of an EEP, the conservation value, the expectations of the public, commercial reasons, attitude institutions, CITES, etc. but for EAZA Member institutions the functioning of an EEP should have priority.

#### **Box 2** Potential benefits and drawbacks for EEPs

(Potential) benefits:

- Genetically unrelated animals are added to the EEP population (potential founders).
- Known origin (species, subspecies) (pure animals).
- In compliance with official recommendations (IUCN Recommendations or similar) to establish an *ex situ* population.
- Support to national parks/local communities/rescue centres etc.
- Attention for this species.

(Potential) drawbacks:

- Unknown origin of the animal.
- Causes space problems for the rest of the EEP population or other species.
- Risk of bad press (is not an argument to say no to an importation. There can be good arguments to import wild caught EEP specimens and it can be done in the right framework, but it can still lead to bad press).
- Risk of (new) diseases.
- May stimulate the animal trade locally.

All forms/templates are available to download on the EAZA Member Area



The fact that it is hard/impossible to get a specific EEP species via an EEP is for some institutions reason to decide to import. However, as it is the duty of Members of EAZA to contribute to the joined collection planning efforts, each institute should follow the recommendations of the EEP Coordinator and the EEP Species Committee.

Further guidance and a decision tree follow on the next pages.



### **Guidance by decision tree**

As there are different interests, scenarios and different parties involved the EEP Committee offers the included decision tree to give guidance to this decision making process for the EEP Coordinator and the Species Committee.

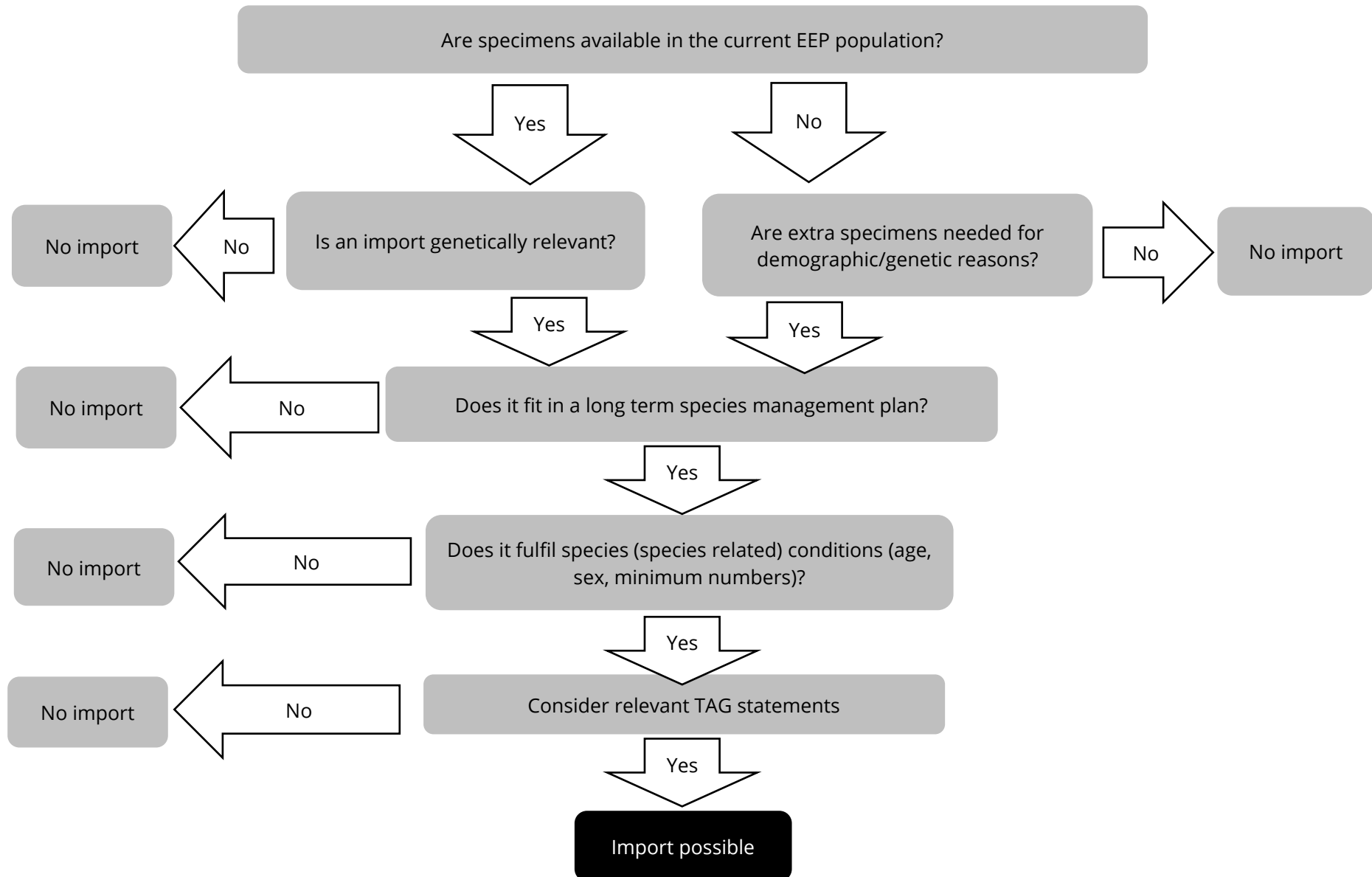
Issues to keep in mind in the decision making process:

<b>Issue</b>	<b>Problem</b>	<b>Solution</b>
Demographics	- space competition	- do not import, unless there are special reasons for this, see EEP recommendation
	- wrong age/sex/numbers	- import only requested age/sex/numbers
	- not socialized	- find more socialized animals or do not import
Genetics	- unknown origin	- make sure that you import animals of known origin
Ethical reasons	- direct from the wild	- make sure the import is well founded and approved by the EEP or do not import
	- age animal (socialized/independent)	- keep the biology of the animal in mind
Conservation	- consequences for the wild population	- sustainable harvesting, financial contribution to <i>in situ</i> conservation or do not import
Reliability (institution/association)	- dealer involvement	- find a reliable partner/source/intermediary
	- bad press	- make sure this is a well-founded decision, approved by EAZA (EEP coordinator/species committee)
Commercial reasons	- bad press (animals from the wild, dealer involvement, .)	- make sure the import is well founded and approved by the EEP, in this way you can create positive press
Veterinary reasons	- introduction of new disease	Carry out necessary veterinary screenings in accordance with official protocols

All forms/templates are available to download on the EAZA Member Area



Decision tree for importation of wild caught EEP species – (For EEP Coordinators and Species Committee Members)





## Appendix 23: EAZA Template Programme Annual Report

[Common Name (*Scientific name*)]

**Programme annual report** YYYY

**Programme Coordinator:** (name and institution of Coordinator.)

**Date of last species committee election:** (YYYY-MM-DD) (Not applicable for ESB.)

**Species committee members:** (list of names and institutions of committee members, Not applicable for ESB.)

**Programme Advisors:** (list names and institutions of appointed programme Advisors e.g. Veterinary Advisor, conservation Advisor etc.)

**Meetings during the year:** (YYYY-MM-DD and location)

**Latest Long-term management plan published:** (YYYY)

**Latest studbook version published:** (YYYY)

**EAZA Best Practice Guidelines:** (last name, first name initials of author (YYYY): title. *journal*. volume. pages.)

**Publications:** (last name, first name initials of author (YYYY): title. *journal*. volume. pages.)

**Programme (EEP) evaluation:** (please indicate when the last evaluation of your EEP took place. Not applicable for ESB.)

**Veterinary activities:** (to be filled in together with the Veterinary Advisor; information on relevant activities, outcome of undertaken studies, current diseases and medical issues of attention.)



All forms/templates are available to download on the EAZA Member Area



**Conservation activities:** (information on recent activities, collaboration with conservation organisations and useful links.)

**Research activities:** (information on recent activities, collaboration with research bodies and useful links.)

All forms/templates are available to download on the EAZA Member Area



**Status and developments in the programme population in YYYY:**

(Excel version available on EAZA Member Area includes formulas for cross check. Availability for direct download from ZIMS for Studbooks is expected for 2019)

Institution	Status (YYYY-MM-DD)			Births			Did Not Survive (DNS)			Transfer EAZA in			Transfer EAZA out			Transfer Non-EAZA in			Transfer Non-EAZA out			Deaths			Status (YYYY-MM-DD)		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
Zoo A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo J*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>Total</b>		
																									<b>0</b>	<b>0</b>	<b>0</b>
																									Cross-check		
																								0	0	0	

\*Non- EAZA participants should be marked with \*

All forms/templates are available to download on the EAZA Member Area



**Programme Summary:** (summary of programme activities during the year incl. achievements, progress in actions linked to LTMP, problems and recommendation for the next year(s)).

**Notes:** (Additional notes)

**Status and developments in the ESB population in YYYY:** please see the Excel template or use the table below

Institution	Status (YYYY-MM-DD)			Births			Did Not Survive (DNS)			Transfer EAZA in			Transfer EAZA out			Transfer Non-EAZA in			Transfer Non-EAZA out			Deaths			Status (YYYY-MM-DD)		
	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U
Zoo A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Zoo J	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>Total</b>	
																									<b>0</b>	<b>0</b>	<b>0</b>
																									Cross-check		
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All forms/templates are available to download on the EAZA Member Area



**Summary:** (summary of programme activities during the year incl. achievements, problems and recommendation for the next year(s))

**Notes:** (Additional notes)



## Appendix 24: EAZA Fundraising Account Application

### Introduction

This application is for use when TAGs are looking to raise and distribute funds to relevant conservation, research and /or education projects and would like these funds to be 'housed' within the EAZA accounts and administrated by the Executive Office. It is the responsibility of the TAG to discuss this possibility with their Executive Office liaison and complete this application form. The liaison has the responsibility to send agreed applications and any supporting documentation to the Executive Director for consideration. The Executive Director will consider applications in the light of other funds, expected workload for the Office Manager, and overall EAZA financial set-up.

In applying to set up a fund using EAZA accounts, and to satisfy audit requirements, the TAG agree to provide EAZA with an annual overview of:

- Project application format
- Project selection criteria
- Grant agreement between TAG and selected project/institution
- Project update(s)
- Project evaluation criteria and/or project evaluation report
- Confirmation that the supported projects are entered into the EAZA Conservation Database

The EAZA Executive Office agrees to:

- Provide an annual overview of projects/institutions that have been awarded grants to and the associated amount
- Provide fund totals, up to 12 times per year as requested
- On request, provide a template invoice for use when requesting donations
- Make payments to projects as directed by the TAG identified main contact person

All forms/templates are available to download on the EAZA Member Area



## Application

**Name of applying TAG:**

**Date of application:**

**Name of main contact person:**

*(Payable grants can only be requested by contact person)*

**Email of main contact person:**

**Fund name:**

**Fund start date (mm/yyyy):**

**Fund end date (mm/yyyy):**

**What is the purpose of the fund?**

*(Approximately 500 words)*

**Estimated total amount of donations to fund per year (Euro):**

**Estimated total amount of grants given out per year (Euro):**

**Frequency of update about the account balance needed:**

*(Tick appropriate option)*

*(Tick appropriate option)*

<input type="checkbox"/>	1x per month
<input type="checkbox"/>	1 x per quarter
<input type="checkbox"/>	1 x per year
<input type="checkbox"/>	On request of the contact person (maximum 12 requests per year)

**Signature main contact person:**

**Date:**

All forms/templates are available to download on the EAZA Member Area



**Signature EAZA Executive Director:**

**Date:**

*Signed copies to be held by contact person and EAZA Executive Director.*



## Appendix 25: Guidelines for independent EAZA-related social media managers

Communications Committee, January 2018

### Introduction

Social media is a powerful tool for communicating between groups and to the public. As such, it can be used by groups such as TAGs to share important information and news stories among themselves, or to inform the public about aspects of their work. Conversely, social media can also be problematic, as it provides an interface for the public and organisations to contact and criticize the page owner, potentially causing controversy and wasting time and resources. These guidelines are aimed at providing assistance to EEPs, TAGs, Committees, and similar EAZA groups aiming to run their own social media pages successfully.

### Social media channels

Social media is increasing in scope, and there will always be new platforms to explore and utilize. Each major channel has its own characteristics and uses; while each are valid for different uses, **EAZA recommends** Facebook as the main platform suitable for EAZA-related groups. Some basic guidelines for Twitter and LinkedIn are also included below:

### Facebook Strategy: some basics

Facebook provides several options for page owners. Selecting the right option for you depends on what you want the page to achieve. **EAZA recommends** you to select “Create a Page” rather than “Create a Group”. Pages allow for much more control of the content and who can see it.

**BEFORE SETTING UP YOUR PAGE, PLEASE INFORM THE EAZA COMMUNICATIONS MANAGER THAT YOU INTEND TO DO SO, VIA [info@eaza.net](mailto:info@eaza.net)**

### Setting your objectives

All communications should have a clear goal in mind. Before setting up your new page, you should review carefully who you want to speak to and why. The purpose and target audience for your communications determine whether you set up a public or private page, and what kind of content you publish.

### Examples:

EAZA runs an Animal Welfare Training page on Facebook to continue the relationship between the Animal Welfare Working Group, the Technical Assistance Committee and the alumni of the animal welfare courses run by the EAZA Academy.



All forms/templates are available to download on the EAZA Member Area



This space is designed to allow alumni to talk to their tutors in a secure space, where they won't face criticism of current welfare practices as they seek practical advice. The page is therefore "closed" to the public, and you can only join the group by applying to the administrator.

The Felid TAG runs a page aimed at raising awareness of the different species of felids and informing the public about the conservation work done by members of the TAG and the conservationists they work with. The page is therefore set to "Public", and anyone can see it at any time.

If there is no clear reason to set up a page, or if you cannot generate enough content to keep your audience's attention, **EAZA recommends** using existing channels including Zooquaria articles or the EAZA Facebook page. Remember that administering a Facebook page takes time and energy.

#### Settings for your page:

Once you have selected the correct public/closed option for your page, you also need to look at other options for interacting with your audience, which can be accessed via "Settings" after you have hit (drop down menu/create a page):

#### **Settings/General**

Is your idea to create a dialogue space where your audience can leave comments for you to reply to?

**If so**, set your page to allow commenting by page subscribers, or members of the public.

**If not**, turn off this option.

Would you like to allow any page subscriber to add content?

**If so**, enable "Visitor Posts" on the settings page. **EAZA does not recommend** this option except for closed pages.

**EAZA strongly suggests** that you set terms for the Page Moderation and Profanity Filter options under "settings". This allows you to avoid constant attention from animal rights activists and trolls. You can do this later, tailoring your moderation terms to exclude any comments you don't want to appear.

Once you have set up the page to your liking, you can add **administrators and editors**. This is done via "Settings/Page Roles".

**Administrators** can add and remove content, add editors and so on – this role is for the person appointed by your group to be in charge of the page.

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**Editors** can add and remove content but cannot add further editors.

**EAZA strongly suggests** no more than 2 administrators and 4 additional editors. Remember, the more people who can add to your page, the less control you have. While other options exist for the page settings, these should not cause any issues: If they do, please contact the EAZA Executive Office for further guidance.

### **Page Identity**

**Be clear about the name of your group:** If you are the Terrestrial Invertebrate TAG, call your page “EAZA Terrestrial Invertebrate TAG” to avoid confusion.

**Select a profile picture** that best reflects the identity of your group and page. If your group has a logo, use it here.

**Select a cover image** which is attractive to visitors while leaving no doubt of the subject of your page – if you work with old world monkeys, use a nice image of an old world monkey.

**Make sure your image is not subject to copyright, or that you have been given permission to use it.**

**Write a description:** create a short text that describes not only your group, but also the purpose of the page, e.g. “The EAZA Great Ape TAG page is the forum for EAZA holders of great apes to discuss husbandry and welfare practice. This is a closed page for EAZA great ape holders only”

Once your page is set up, you can start posting. Here are some dos and don'ts:

1. **Do:** remember your objective and only post content if it supports your mission.
2. **Don't:** post too often or too rarely. As administrator of your page, you are the best person to decide how often your audience would welcome your content. For a large page such as the EAZA main page, we tend to post two to three times a week.
3. **Do:** be prepared to interact with your audience (more on this below). If you put information in front of other people, prepare to be challenged on it.
4. **Don't:** post intentionally provocative material unless you want to start a discussion, or if you have the agreement of your group that the material is important. **Ensure that no controversial viewpoint is represented as the official viewpoint of EAZA.**
5. **Do:** answer any comments on your page that ask for one. It is likely that you will be challenged by people who do not agree with you and your mission. Remember that your group should speak scientifically, so any response from you should be respectful, even if the comment is not.

All forms/templates are available to download on the EAZA Member Area



6. **Do:** delete or hide any **abusive** comments. If there are **hostile** comments against the post, answer them respectfully if you can. You may delete the comment when the discussion is over.
7. **Don't:** create personalities for your page. Your mission is not about who is Chair of the TAG – it is about all of the people who work in the TAG, and the animals you work with.
8. **Do:** remember that you represent EAZA and are therefore one of the voices of ALL progressive zoos and aquariums in Europe and the Middle East. If you have any doubt as to whether or not your post is appropriate for EAZA, please contact the EAZA Communications lead via [info@eaza.net](mailto:info@eaza.net).
9. **Do:** contact the Communications lead if your page is getting constant abuse, trolling or similar negative activity. Do so as well if your page is gaining attention from animal dealers or being shared by anyone you believe may be involved in the illegal wildlife trade.
10. **Do:** remember that you have an opportunity to build a good relationship with your audience and fulfil some important communications objectives. Be interesting, be fun, be friendly.
11. **Do:** Consider posting “house rules” for your page. Please see the EAZA template for this at the end of this document.
12. **Don't:** use the channel to advertise services other than those provided by EAZA itself – if people have something to sell, they should use their own private channel - however relevant their services may be; your page is affiliated to EAZA, and you therefore have a responsibility to ensure that the integrity of the Association is respected and upheld.

Using Facebook is not especially challenging, but the most effective communication on social media, as on any channel, results from good strategic thinking, target audience identification and the willingness to be exposed. If you need further guidance on setting up and running a page, contact the EAZA Communications lead via [info@eaza.net](mailto:info@eaza.net) or +31 20 5200750.

### **Twitter:**

Twitter can provide an excellent support for other channels, particularly for building a network to drive traffic to your Facebook or web page. While the channel thrives on controversy (usually arguments or strongly held and simplistic opinions shared), there is no reason why it cannot also be used successfully to build a network for your group. In short, unless you have a reason to cause controversy (and we would strongly advise against this), your group should aim to use it for headline announcements with a link that leads to something more substantial.

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In some cases, you can also build a network that includes journalists or other more visible users. By liking a user's feed, you can get access to their tweets, which allows for your group to retweet and bring important news to your followers; and if you are successful in this, the user may also follow your feed, and retweet your posts. In summary, handle with care!

### **LinkedIn:**

LinkedIn is the business platform that is roughly analogous to private Facebook groups and pages in terms of usage and guidance. It provides the opportunity to build a network of users with a strong interest in what you do while maintaining a certain amount of control over the distribution of the message. It is more unlikely that users of LinkedIn will be anti-zoo activists or cause trouble to your group's communications. It is also more unlikely that the media will pick up on your posts, as these are usually kept more or less within the network of users in your group. As such, LinkedIn provides an excellent forum for discussion that includes interested parties outside of your working group.

As a rule of thumb, review carefully applications to join the group, and approve only users that you believe not to have an agenda that will disrupt your group. You should, as with a Facebook page, apply house rules to the page, and follow the Dos and Don'ts outlined in this document above.

### **PLEASE NOTE CAREFULLY:**

**Any information on the EAZA Member Area website is, by definition, confidential and for the use of Members of EAZA only. You may not share any such information on any channel without the express permission of the Executive Director of EAZA.**

### **Advertising animals via Social Media groups**

For the benefit of the future viability of EEP populations, all transfers of EEP animals **must** and in case of ESB animals **should preferably**, be arranged in full consultation with, and the agreement of, the EEP/ESB. In order to ensure the non-commercial status of EAZA breeding programmes (EEPs and ESBs) any selling of EEP and ESB animals must be avoided (See also EAZA Population Management Manual [chapter 3.8 Rules of joint population management](#) ).

Social Media groups such as Facebook groups overseen by a TAG/EEP/ESB, are not considered by EAZA as an appropriate tool to advertise animals, irrespective of whether they are part of an EEP/ESB.

EAZA institutions can and should enter their (surplus) animals on the by EAZA officially recognized ZIMS Available and Wanted tool (See also EAZA Population

All forms/templates are available to download on the EAZA Member Area



Management Manual [chapter 4.2.6 ZIMS Available and Wanted tool](#)). Before listing EEP and ESB animals on the ZIMS Available and Wanted tool EAZA institutions should get in touch with the EEP Coordinator/ ESB keeper first.



## Appendix 26: Sanctions in the case of a violation of the EAZA Code of Ethics or EEP Procedures

Approved by EAZA Annual General

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Meeting 7 April 2022

In the case of a violation of the EAZA Code of Ethics, EAZA Standards, or the EEP procedures as laid down in the EAZA Population Management Manual, three levels of sanction can be imposed by the responsible bodies of EAZA:

- Warning
- Restricted status
- Termination

### I. Warning

A warning can be given to an EAZA Member institution by the EEP Committee, Membership and Ethics Committee, or Conservation Committee for one or more of the following reasons:

1. Not following recommendations from EEP coordinators for animal transfer between officially approved EEP participants, also including non-EAZA EEP participants;
2. Claiming for money for an EEP or ESB animal;
3. Transferring, importing or releasing an animal from the EEP population without the knowledge and approval of the EEP Coordinator;
4. Repeatedly not responding to relevant requests from the EEP coordinator within a time period of six months;
5. Categorically and/or repeatedly not following EEP breeding recommendations, EEP non-breeding recommendations or EEP husbandry recommendations;



6. Other violations of EEP rules;
7. Not keeping appropriate records as designated in the EAZA Standards for the Accommodation and Care of Animals in Zoos and Aquaria; non-participation in ZIMS (and/or Species360 membership) or not updating ZIMS data in the preceding six months;
8. Non-fulfilment of the role and duties as the responsible EEP Coordinator;
9. Violations of the Code of Ethics or EAZA Standards e.g. issues which harm the community's common interests regarding animal care, EEPs, or conservation activities and reporting, or animal exchanges, or harm other Members or their image or the image of EAZA.

Warnings are registered by the EAZA Executive Office (EEO) and Council is notified about each warning. The warning comes into effect on the date indicated in the communication from the EEO to the Member. Furthermore, warnings are subsequently communicated to the whole Membership i.e. via mailing to Coordinators and in the next eNews.

If possible, the problem(s) that led to the warning shall be rectified or settled with the respective committees by the Member institution within six months of the warning being issued. The respective Committee liaisons will follow up with the Member prior to the six-month requirement and bring the response to the next meeting of the Committee. The respective Committee will then discuss whether a new warning should be imposed due to the problem(s) not being rectified or settled.

Warnings are automatically purged five years after they have been issued. The exception to this is if Restricted status is imposed on a Member; in which case the warnings are purged at the end of the Restricted status period.

### Restricted status



Restricted status can be imposed on an EAZA Member institution by the Executive Committee for the following reasons:

10. Following three official warnings from the EEP and/or the Membership and Ethics Committee;
11. Severe violations of the EAZA Code of Ethics, or EEP rules (examples of severe violations are actions which are not in line with animal welfare or nature conservation regulations or irresponsible dealing with “surplus” animals).

Restricted status lasts for two years and is registered by the EEO and communicated to the EAZA membership as well as to Coordinators. Relevant partner organisations are also notified.

Members with Restricted status cannot be Council members and cannot have any other functional roles in EAZA (e.g. members of EAZA committees, EEP Species Committees, TAGs, etc.). Members with Restricted status cannot attend any EAZA meetings with the exception of the Annual General Meeting, and do not have access to the Member Area of the EAZA website.

Members with Restricted status are still required to follow all EEP/ESB rules for the EEP/ESB animals they have already but, cannot acquire new EEP species and lose recommendations for any new EEP species that might have been made prior to the Restricted status that have not yet been transferred.

Restricted status will be lifted after two years if the Member cooperates fully with the EEP(s) and does not receive any new warnings. In order for the restricted status to be lifted:

- The Member provides written confirmation that they commit to following EAZA Codes and Standards and are not aware of any incidences where these may be in violation;
- Both the EEP and Membership and Ethics Committee need to recommend to the Executive Committee that the Member should be brought back to Full Member status and confirm they have no other





- warnings or ongoing complaints against them;
- If either Committee does not support the reinstatement of the Restricted Member to Full Member, the Committee Chair will submit a detailed report on why this is the case. The final decision to change the membership status stays with the Executive Committee;
  - The Executive Committee considers the recommendations in the meeting prior to the deadline of Restricted status ending and in principal decides if the Restricted status can be lifted as per the two-year deadline date;
  - If there is a complaint against the Member under investigation, then the Executive Committee can decide to extend the Restricted status for an appropriate time until the complaint is resolved;
  - A letter will be sent to the Member with Restricted status to say that they will be reinstated by date X provided no new concerns arise by that date;
  - The Executive Director monitors the situation and if no further concerns are raised between the meeting and the deadline then a letter is written from the EAZA Chair to the Member to confirm that the Restricted status is lifted and the Member is returned to Full Member status.
  - After the Member has been informed, the EAZA Executive Office leads on communicating with Coordinators, the EAZA membership and any relevant partner organisations who were previously notified of the change in status.

If the Member continues to violate EEP rules or receives further warnings the Executive Committee will recommend the Member to Council for termination of membership.

## Termination

The Executive Committee can propose termination of membership to Council in the following cases:



1. Cancellation: When the Member has ceased to comply with the requirements for membership set out in the articles of the association, if they fail to fulfil their obligations towards the association or if the association cannot reasonably be required to allow the membership to continue;
2. Disqualification: When the Member acts in violation of the articles of association, bylaws or resolutions of the association or unreasonably disadvantages the association;

Specific examples would be (but are not limited to):

- Members with Restricted status who have not fully cooperated with EAZA committees, or have not abided by the EAZA Code of Ethics, EAZA Standards, or EEP procedures in the preceding two years;
- Very severe violations of the EAZA Code of Ethics or EEP procedures.

A termination is communicated to the whole membership and Coordinators. EAZA also informs the relevant EAZA Associate Member national zoo federation and requests that the federation informs the relevant national authorities. In case there is no EAZA Associate Member national federation, or no national federation, in the country concerned, EAZA shall request the relevant EAZA Council member(s) to inform the relevant national authorities. Terminated Members can apply for new membership after five years and must go through the full accreditation procedure.

## Appeal

Members have the opportunity to appeal decisions. Please see the relevant section(s) in the EAZA Membership and Accreditation Manual for further detail. Filing an appeal does not delay the imposition of the sanction, nor does it delay the communication of the sanction.

All forms/templates are available to download on the EAZA Member Area





## Appendix 27: EAZA guideline on animal transport

The EEP Committee developed this 'EAZA guideline on animal transport' to provide the EAZA Membership with practical advice related to the transport of animals from, to and between zoos, in addition to existing EAZA policy documents such as the 'EAZA Code of Ethics' and the 'EAZA minimum standards for the care and accommodation of animal in zoos and aquaria'.

### Guidelines

#### 1. Fitness

Animals should only be transported when fit, which includes having a good health condition and at an appropriate age to be transported (e.g. after weaning in case of mammals). Any species that is close to giving birth/laying eggs should not be transported.

#### 2. Crates and means of transport

Appropriate crates, tanks, boxes, etc. that are suitable for the species (thereby taking individual characteristics into consideration) must be used. The transport system should be strong enough to contain the animals during the entire transport. The transport system should be designed to minimise stress and prevent any potential injury to the animal (such as inappropriate water buckets in the crate, screws and nails protruding into the crate, etc.). Appropriate bedding or other substrates should be provided when relevant and appropriate and contamination risks should be reduced as far as possible. Water quality needs to be considered for fish transports, e.g. addition of nitrate reducing solutions or life support systems, which should be designed for the species and length of transport. Staff involved in the animal transfers must be able to handle the transport containers safely. A wild animal notice and other appropriate labels e.g. for dangerous or hazardous animals, must be attached to all transport containers.

Although beneficial for some species, loading more individuals into one transport container is generally likely to increase stress as well the risk of injuries related to aggression of one or more animals, and should therefore be avoided unless the benefits clearly outweigh the potential risks.

The same conditions apply to the transport means (vehicle). If natural enemies (e.g. prey-predator species) are being transported in the same vehicle, the vehicle should have different compartments to avoid potential stress on either species.



### 3. Conditions during transport

Depending on the species' needs and the means and distance of transport feeding and watering procedures should be considered. When necessary, feed and water should be applicable to the animal in a sufficient quantity, thereby taking potential delays into account on long distance transports. For other species e.g. fish, withholding food prior to transport is the appropriate strategy to avoid waste decreasing water quality.

The climatic and ventilation conditions during transport must meet the biological needs of the species as much as possible and at least guarantee the welfare of the animal(s) throughout the entire transport.

The zoo sending the animal(s) has to take care that the duration of the transfer is justifiable and that an adequate supply with food and water is guaranteed (where appropriate), even on longer trips. The transport route should be as direct as possible.

### 4. Loading and handling

Safety of both species and staff needs to be considered when loading animals into or release them from the crate, tank, box or vehicle. Capture and restraint equipment should be appropriate for the species.

Crate training is recommended for species that are easily stressed during loading and/or transport. Also, large animals (such as hippos or rhinos) that are not easily loaded into a crate or animals for which immobilisation is a high risk (for example okapis) might benefit from crate training.

### 5. Staff

Appropriate staff should be involved in preparing and (when relevant) accompanying the transport. All necessary permits (e.g. CITES) and other official paperwork need to be arranged prior to departure and copies need to be in possession of the transporter. The transporter must comply with any national legislation on licensing, speed limits, rest times, etc.

### 6. Responsibility

The zoo sending the animal is responsible for choosing the right means for transport from "A to B". In case a third party is involved in the transport the sending zoo is responsible for the professional transportation of the animal. The sending zoo should also be informed about the route and the time table of the transport.

All forms/templates are available to download on the EAZA Member Area



#### 7. Communication

Communication with all relevant parties prior to, during, and after the transport is of crucial importance and all parties involved in the transport need to be aware of this and act accordingly.

#### 8. Species-specific-guidelines

Further species-specific transport guidelines can be obtained from the IATA Live Animal Regulations and the transport procedures adopted by the Animal Transport Association (ATA), OIE and CITES. EAZA Best Practice Guidelines should also be referred to or the relevant EEP/ESB co-ordinator consulted for advice on more complex transports.



## **Appendix 28: Position Statement on Management euthanasia/culling**

Update approved by EAZA Council 26 April 2023

### Preamble

For the purpose of this document EAZA defines management euthanasia/culling as the removal of animals from a population in human care, for non-medical reasons, by humane killing carried out by appropriately qualified and experienced staff. In case of medical reasons, the term medical euthanasia is referred to.

EAZA defines humane killing as the absolute minimisation of suffering of the animal during the process of ending its life within the limits of the technology available and the opinion of recognised welfare science. Any management euthanasia/culling or medical euthanasia procedure by an EAZA Member must conform to the national legislation of the country in which it is located.

EAZA Members represent a broad range of cultures, legislative systems and opinions, and so it is recognised that population management techniques will differ across the EAZA region. Despite these differences, EAZA Members recognise that a common statement on management euthanasia/culling of animals is desirable, even if the practice is not currently open to some Members for legislative or cultural reasons.

This common statement in no way obliges any Member to undertake management euthanasia/culling; nevertheless, EAZA Members must take seriously their obligations to population management, and must take full and sole responsibility for any decision which damages the viability and health of the overall population of the species both within the institution and across the region under administration by the relevant breeding programme.

EAZA Members take seriously the responsibility for their animals' wellbeing while they are under their direct care, and every reasonable effort is made to ensure that when an animal moves to a different institution, this same level of responsibility is maintained by the receiving collection. EAZA Members will

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review the suitability of institutions to receive animals on a case by case basis according to relevant EAZA policies.

EAZA Members strive to ensure that their animals are held in appropriate, species specific circumstances that ideally enable the expression of as wide a range of

normal behaviours as possible. It is therefore important that they should be able to exercise the full range of normal and regular breeding behaviours on a natural cycle where rearing of juveniles forms part of that behaviour.

While EAZA Members are ethically obliged to maximise the physical and psychological wellbeing of individual animals in their care, their responsibility for the fulfilment of defined conservation goals and the viability of the overall population may, under certain conditions, take precedence over the right to life of specific individual animals. This reflects recognised in situ conservation practice, and notes that modern welfare science regards lack of life as a neutral position.

EAZA recognizes the challenges posed by discussion of management euthanasia/culling, even among scientifically educated experts; the Association also recognises the challenges of explaining best practice and the role of management euthanasia/culling in conservation to the public (see Methodology and Responsibilities below).

EAZA considers management euthanasia/culling to be standard operating procedure where:

The animal poses a serious and unavoidable threat to human safety, e.g. escaped animals

EAZA considers medical euthanasia to be standard operating procedure where:

1. In the opinion of the veterinary staff responsible for the individual animal's health and welfare, the animal is suffering from a disease, detrimental psychological state or severe pain and/or stress which cannot be adequately alleviated.





EAZA considers that management euthanasia/culling may be appropriate where:

The only alternative is permanent transfer to accommodation which cannot assure a proper level of welfare for the animal, and which cannot be improved within a short interval agreed by the responsible EAZA authority.

The continued presence of an individual animal is unreasonably disruptive to a functioning social group within an individual collection.

The maintenance of a population's demographic or genetic viability is at risk through the continued presence of one or more individual animals .

Management euthanasia/culling as a management tool

The application of a considered management euthanasia/culling policy is appropriate on welfare grounds, at an individual and group level, and helps to mirror species specific population structures . Members are ethically obliged to strike an informed balance between the life of an individual and maintaining the long term viability of a managed population, and where these obligations are in conflict, the welfare and genetic health of the population both locally and regionally over the long term must

take precedence. EAZA considers management euthanasia/culling to be one of several appropriate methods for maintaining this precedence.

Management euthanasia/culling for maintaining welfare and normal and natural behaviours

If a female's opportunity to breed and rear offspring regularly is limited, this may in some species result in the premature and permanent cessation of her reproductive cycle and/or abnormalities within her reproductive tract, all of which can compromise the health of that individual. In addition, limiting the opportunity to breed in species which display nurturing parental behaviour, by definition, reduces an individual animal's opportunity to express one of the most important and complex set of natural behaviours and can thus lead to a decrease in welfare.



EAZA considers management euthanasia/culling of offspring an appropriate tool for maintaining the welfare of parent animals provided that the procedure does not in itself compromise that welfare.

In addition, management euthanasia/culling is an appropriate measure where offspring numbers are unpredictable and large populations develop; where these numbers compromise the individual welfare of breeding programme precedent animals within the enclosure; and where animals may not be reasonably rehoused without negative consequences to the viability of the overall population.

Management euthanasia/culling for maintaining long term population viability EAZA and approved non-EAZA institutions can only provide a finite number of suitable enclosure spaces for the rehousing of animals not required for breeding. This therefore limits the number of offspring Members are able to suitably house without risk to the viability of the breeding programme. Priority for housing within enclosures should always be given to animals which can play a positive role in the success of the breeding programme, according to the goals set by Regional Species Plans and/or the EEP Coordinator.

#### Methodology and responsibilities

All options for disposition of animals not required for a breeding programme or collection must be reasonably considered on a case by case basis and a decision to carry out a cull will be taken by the relevant managers in the Member institution.

Responsibility for this decision, even after consultation with external agents (e.g. EEP coordinators) lies exclusively with the Member institution. If the decision to management euthanize/cull an animal is taken, every institution must ensure that it will be carried out humanely as per the definition above.

Management euthanasia/culling is influenced by local customs and subject to local laws but should always be considered in preference to keeping animals under conditions which compromise animal welfare. Where the local culture

All forms/templates are available to download on the EAZA Member Area



and legislation do not allow the use of culling as an ex situ population management tool, EAZA

Members commit to plan the breeding of their animals according to the EEP coordinator's recommendations, and in case of surplus, to maintain their animals in good welfare conditions until an alternative and permanent appropriate solution is found. This must be done without jeopardising the work of EEPs and without using space that should be devoted to priority animals. Any decision to cull an animal belonging to an EEP must follow the relevant procedures outlined in the EAZA Population Management Manual.

In accordance with EAZA Standards, post-mortem examination should be performed and biological material preserved for research and gene conservation. The results of the post - mortem examination should also be passed to the relevant programme coordinator, and full records of any results and outcomes should be archived. Where local legislation allows, the culled animal can also provide enrichment for the institution's carnivores by being fed to them and increasing their welfare.

EAZA zoos will act judiciously according to the above principles and within their local laws and customs. Members commit to providing a full explanation and justification of these principles to the public and the media, whenever an inquiry is received (IE not only when there are high levels of media or public interest in a specific case).

Members undertaking culling for management purposes have a responsibility to explain the practice to the public in terms that are both scientifically correct and reflective of public sensibilities. Members not undertaking culling for population management also share the responsibility to explain the scientific basis for the practice within the terms of this policy, regardless of national legislation or local cultural sensibilities.

Management euthanasia/culling of animals which can reasonably be expected to cause a strong public or media reaction should be communicated by the Member responsible and/or the EEP coordinator to the EAZA Executive Office using [info@eaza.net](mailto:info@eaza.net) and indicating 'Management euthanasia/culling as the subject line.

## Appendix 29: Guidelines for population management programme administration and handover

### Introduction

Any EEP Coordinator or ESB keeper (from here on abbreviated as Coordinator) will spend a lot of time collecting information and gathering knowledge on his or her breeding programme. All this information can also be lost again due to a lack of administration and inadequate handovers. By duplicating efforts, some of this information may be retrievable, but some essential information may be irretrievably lost. Consequences range from a significant waste of time “reinventing the wheel” to structurally undermining the breeding programme’s goals. An important task of any Coordinator is therefore to make sure that, even in worst-case scenarios, all essential administration remains available to the hosting institution and successor. This document was developed to help Coordinators determine whether all essential administration is saved. This is done by providing general tips and a checklist with the most important topics to consider. It is useful for Coordinators to check this list periodically at any time during their breeding programme career and especially while starting with a new programme or stepping down.

**In case of a handover** from the previous Coordinator to the new, ideally, there is a period of overlap during which the two work together, gradually passing on information and allowing time for this information to be assimilated by the new Coordinator. Despite this overlap, a Coordinator will generally still receive a large amount of information at once, of which a portion may be forgotten again if it is not written down. Written information will be even more essential if there is no opportunity for a period of overlap. As departing Coordinator, it is therefore extremely important to determine whether information on at least all topics included in the check-list below are documented, easily interpretable and available to a successor. In some cases, overlap between a previous and new Coordinator will not be possible. In this case, these documents should be shared with the TAG Chair and the EAZA Executive Office (EEO) TAG liaison.

**At any time during their breeding programme career**, Coordinators should be ready for a handover of their breeding programme because practice shows that the departure of a Coordinator is often sudden, e.g. upon changing employment or illness. This means that at least all information included in the checklist provided below is documented and easy to interpret by others. Also, copies of this information should be available to the hosting institution. The ability to access the relevant files is not sufficient. The relevant people at the

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institution also need to be aware of how they can access them. So far unmentioned, but equally important, are regular backups of all this information.

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## Guidelines for breeding programme administration and handover

### General programme information

Programme	
Name of current Coordinator	
Current supporting EAZA institution	
General comments on transition	
Previous Studbook keepers/Coordinators	Date Span
Were there any gaps where the programme was not managed? If so, please explain when and why	Date Span

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## Checklist

Recording all relevant information in written form avoids it getting lost. Even if there is the chance for a face-to-face handover, complementing this with written notes is much more effective and will be appreciated. Creating these documents will therefore eventually be necessary anyway. It is equally important that it is available to relevant others in case of unexpected events. You can use this checklist to determine whether all essential administration is saved.

General comments on the location or availability of the information

## Studbook

Comments ( <i>status and location of information or other</i> )	
<input type="checkbox"/> <b>ZIMS Saved Filters available</b> used to select the managed population <i>e.g. Date span, geographic regions, associations, selection of institutions</i>	
<input type="checkbox"/> <b>Published studbooks, Annual Reports</b>	
<input type="checkbox"/> <b>SPARKS dataset used for migration (if lost, can be requested from Species360)</b>	
<input type="checkbox"/> <b>People currently assigned access to the studbook and reasons why</b>	

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## Institutions

		Comments <i>(status and location of information or other)</i>
<input type="checkbox"/>	List of <b>previous, current and potential holding institutions</b> with contact information <i>List officially approved non-EAZA participants</i>	
<input type="checkbox"/>	Cooperation with <b>non-EAZA Members</b> <i>current, future, potential and yet to be formalised</i>	
<input type="checkbox"/>	<b>Other partners</b> of the programme <i>e.g. in situ partnerships, universities</i>	
<input type="checkbox"/>	All relevant <b>communication</b> with holding institutions, potential holding institutions and other partners <i>e.g. transfer and breeding recommendations, emails, institutional wishes, interests, ideas, meetings</i>	
<input type="checkbox"/>	<b>Agreements</b> with partners <i>e.g. on future recommendations, practical, political challenges</i>	
<input type="checkbox"/>	<b>Cooperation</b> with holding institutions <i>e.g. compliance, language, challenges</i>	



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## Management and husbandry

Comments <i>(status and location of information or other)</i>	
<input type="checkbox"/> <b>Long-Term Population Management Plan(s)</b> <i>Progress towards set goals, outstanding actions</i>	
<input type="checkbox"/> <b>Questionnaires and surveys</b> <i>template and results, e.g. yearly data gathering questionnaires, space surveys, nutrition, husbandry etc.</i>	
<input type="checkbox"/> <b>Best Practice Guidelines/Husbandry guidelines</b> <i>including protocols, e.g. autopsy, genome resource banking, DNA sampling, research, etc.</i>	
<input type="checkbox"/> <b>Demographic and genetic management strategies</b> <i>historic and current</i>	
<input type="checkbox"/> Important <b>social or behavioural considerations</b> <i>at population level and (if relevant) individual level</i>	
<input type="checkbox"/> Individuals potentially permanently <b>excluded from breeding</b> <i>e.g. permanently sterilised, physically unable</i>	
<input type="checkbox"/> <b>Historic management decisions</b> made, to help understand the development of the population <i>e.g. stop breeding, breed, cull, etc.</i>	

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<input type="checkbox"/> <b>Institutional husbandry differences</b> affecting management <i>e.g. on holdings areas, enclosures, breeding success, plans for future</i>	
<input type="checkbox"/> <b>Legislation challenges</b> <i>e.g. affecting transport, ownership, MOUs, culling or breeding in country of holding institutions, etc.</i>	
<input type="checkbox"/> <b>Relevant research activities, material or articles</b>	

#### Date entry conventions

We all differ in the ways we enter data, consciously or unconsciously. You and your successors will be able to interpret the data you entered more accurately and easily if these data entry conventions are documented. If data conventions are already explained in an existing document, please refer to this document in the questions below.

- If you make use of User Defined Fields (UDFs), please explain what they mean, how they are/were used and how they were determined.

UDF	Explanation

- Are all data true/factual in the dataset or have any pedigree assumptions been entered?

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- 
- Are there any additional data conventions that a new coordinator needs to be aware of (e.g. related to date of birth/death, pouch/joey date, overall assumptions/rules used on these dates or periods, etc.)? If there have been any deviations from these or other general data conventions, structurally or occasionally, please explain when and how.
  
  - If there are any conventions for the use of studbook numbers or recording of social groups, please provide them.
- 

## Assumptions

### Hypothetical pedigrees or parentage

For all assumptions it needs to be clear on what they are based on. This can be done by adding notes to each assumption within the software or in a separate document. Please make sure to explain where assumption notes can be found or if these do not exist or are incomplete.

- If there are any existing assumptions used for genetic (or demographic) analyses, how and where have these been recorded?**
  - ***If in a ZIMS for Studbooks Overlay, please note the name of Overlay.***
  - ***if assumptions have been made in the true studbook (not recommended), please elaborately explain which they are and why assumptions have been made.***

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## Contact information

- If there are any existing assumptions used for genetic (or demographic) analyses, how and where have these been recorded?
  - *If in a ZIMS for Studbooks Overlay, please note the name of Overlay.*
  - *if assumptions have been made in the true studbook (not recommended), please elaborately explain which they are and why assumptions have been made.*

- 
- After leaving, any successor may need additional information or explanation. It will be truly appreciated to remain in contact with the new coordinator when possible, so please provide your contact information (*email, phone, etc.*).

Email:

Phone:

---



### Appendix 30: Access Roles in ZIMS for Studbooks

The type of access that a user has to a studbook in ZIMS depends on the Access Role that a user has been assigned for that studbook. Different Access Roles offer different data viewing and editing rights. Access Roles for EAZA based studbooks can be assigned by the EAZA Executive Office to other ZIMS users. In the future it is envisaged that some Access Roles could also be assigned by the Studbook keeper, provided Species360 would indeed develop and launch the functionality to do so.

The EAZA Executive Office has the responsibility for creating Access Roles in ZIMS for Studbooks for datasets held under the EAZA umbrella and the exact type of viewing/editing access that it provides.

Access Role	View Studbook (incl. export to Excel)	Analytical and validation tools	Export to PMx	View Notes	Edit	Assign person Access to studbook	Assigned by
Read only	✓	✗	✗	✗	✗	✗	Studbook keeper
Analytical	✓	✓	✓	✓	✗	✗	
Editing	✓	✓	✓	✓	✓	✗	EAZA Executive Office
Studbook keeper	✓	✓	✓	✓	✓	✓	

The EAZA Executive Office can assign users an Access Role with editing rights (see table). This includes the ‘Studbook keeper Access Role’. This role, that grants all editing rights to a studbook, is only assigned to EEP Coordinators and ESB Keepers that are officially approved in this role by the EAZA EEP Committee. The only exception are ‘monitor studbooks’ (Mon-P) as described in the introduction of [chapter 3.12 The studbook](#).

EAZA (and hopefully in the future also Studbook keepers) can assign two additional roles to others, namely; A ‘Read Only Role’ and an ‘Analytical Role’ (see table). These two Access Roles then cater for two different types of users: The ‘Read Only Role’ provides access for those that are interested in individual or institutional data. The ‘Analytical Role’ provides access to tools that are useful for analysis of the population. There is a strict procedure who can and cannot be granted access to the data in ZIMS for Studbook and under what conditions. For instructions please read section [3.12.7 Sharing studbook data within and outside EAZA](#).

An additional editing role that the EAZA Executive Office can assign on request of the Studbook keeper, is that of Editing Access Role, which is similar to the

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Studbook keeper Access Role, but without the ability to assign Read Only and Access Roles to others.

If you would like to add an Access Role with editing rights to your studbook, this can be done by sending an email to the relevant TAG liaison at the EAZA Executive Office mentioning the name and institution of the person involved and clarifying whether this is a permanent or temporary assignment. If it is a temporary assignment the proposed start and end dates should be included in the request to the EAZA Executive Office.

It is important to stress here that anyone that has the 'Read Only' access role could export the entire studbook to Excel and share it in this form with others. Importantly, only the Studbook keeper and the EEO may share data with others as described in section [3.12.7 Sharing studbook data within and outside EAZA](#).

It is also important to realise that people who will be given access without an end-date, will remain having access permanently.

Access roles can only be assigned to those persons that have their own ZIMS login from Species360. One must never share the log in information to your personal ZIMS account.

#### Tailormade access roles

To cater for exceptional situations, a Studbook keeper can request for the EAZA Executive Office to create an alternative, tailor-made, Access Role and assign this to a person when appropriate. There are 36 different access rights for which viewing/editing rights can be set on or off, so potentially the number of different Access Roles that could be created is enormous. If you would like a specific role made where certain features have been switched on or off, please contact the relevant TAG liaison at the EAZA Executive Office.



## Appendix 31: Template Non-Disclosure Agreement EAZA Studbook Data

### EAZA STUDBOOK DATA NON-DISCLOSURE AGREEMENT

This Agreement is made and entered into by and between **the European Association of Zoos and Aquaria (EAZA)** ("the Discloser") and \_\_\_\_\_ ("Recipient") for the purpose of receiving EAZA Studbook Data from the Discloser to enable the Recipient to undertake the project described at the end of this Agreement ("Project").

Discloser and Recipient hereby agree as follows:

13. "Confidential Information" means any data or proprietary information of the Discloser that is not generally known to the public or has not yet been revealed, whether in tangible or intangible form, whenever and however disclosed. For the purposes of this Agreement, EAZA Studbook Data provided by the Discloser is considered confidential and shall hereafter be referred to as "Confidential Information." This is including, but not limited to: animal data (including births, death and transfers), pedigree records, information linked to present and historic holders, notes, and any other materials or information provided or shown to the Recipient irrespective of the form or medium, and includes all documents, records, notes, or other material containing or based on information included in the foregoing.
14. No information will be Confidential Information that:
  - i. is already known to Recipient, or
  - ii. is or becomes publicly known through no wrongful act of Recipient, or
  - iii. is received by Recipient from a third party without similar restrictions and without breach of this Agreement.
15. Recipient acknowledges and agrees that the Confidential Information is and shall remain the exclusive, valuable property of the Discloser. Recipient will not use any Confidential Information other than in connection with the Project.
16. Recipient agrees not to disclose Confidential Information to any third party (individual, Discloser, corporation, or other entity) or to use Confidential Information for any purpose other than the reasons mentioned in the Project in the section 'Description of the Project' below.



17. Recipient may disclose Confidential Information
  - i. to other Recipients who have executed non-disclosure agreements with Discloser,
  - ii. in response to the lawful request or requirement of a governmental agency or by requirement of law, and
  - iii. where applicable to the Recipient's Project supervisor, provided that supervisor has signed a non-disclosure agreement with Discloser.
18. Discloser [agrees /does not agree] for the Recipient to give a substantive presentation concerning the Project to an audience that will not have signed non-disclosure agreements, and that such presentation will include information about the Discloser. When agreed Discloser will work with Recipient to prevent the inclusion of Confidential Information in the presentation and any written materials prepared by the Recipient.
19. If peer-reviewed publication is (part of) the purpose as described in the 'Description of the Project', Recipient may publish material relating to the conduct and conclusions of the Research, including the Deliverables, provided that Discloser is acknowledged in the publication and provided prior to publishing any such material the Recipient will:
  - i. not publish any data is traceable to individual animals or institutions unless there is explicit written approval from the Discloser to do so.
  - ii. provide a copy of all proposed publication material, together with details of how, when and to whom it is proposed to be published, for the approval of Discloser at least 30 days prior to the proposed submission date for publication ("Approval Period").
20. If, during the Approval Period, Discloser reasonably requests that the material not be published or submitted for publication in the form provided, the Recipient will:
  - i. where Discloser requests that the material be amended to remove any of their Confidential Information, use all reasonable efforts to amend the proposed publication material to remove all such Confidential Information in which case Discloser will be deemed to have approved publication or submission of the amended material by the Recipient; and
  - ii. if requested, delay publication of the material or submission of the material for publication for a period not exceeding 90 days.
21. If Discloser withholds approval or requests changes under this clause it must provide reasons. Discloser will be deemed to have approved the publication or submission of material if the Discloser does not communicate to the





Recipient its decision regarding approval of the publication, with reasons if applicable, within the Approval Period.

22. All Confidential Information delivered by Discloser to Recipient will be and remain property of Discloser. All Confidential Information, and any copies thereof, will be promptly returned to Discloser or destroyed by Recipient upon Discloser's request.

23. The obligations of Recipient under this Agreement shall terminate on \_\_\_\_\_.

24. This Agreement may not be modified except by written instrument signed on behalf of each party. Either party may assign this Agreement to a parent corporation, to a wholly owned subsidiary or a successor of substantially all of the business or assets of the party. This Agreement embodies the entire agreement and understanding of the parties and terminates and supersedes all prior independent agreements and undertakings between the parties. The provisions of this Agreement shall be construed in accordance with the laws of The Netherlands. All notices, requests or consents given in connection with this Agreement shall be given in writing and sent by first class mail, postage prepaid, telegram, teletype, telex, cable or email to the addresses listed at the end of this Agreement, unless either party notifies the other party of a different address.

Description of Project:

---

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Executed as of the date and year first above written:

Discloser's Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Print Name \_\_\_\_\_

Recipient's Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Print Name \_\_\_\_\_

## Appendix 32: EAZA and the Nagoya Protocol



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### EAZA and the Nagoya Protocol: A guidance document for Members

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## Executive Summary

**This document provides guidance for EAZA Member zoos and aquariums about the compliance with the Nagoya Protocol in relation to the *ex situ* conservation work undertaken by our community. Specifically, it will guide you through the rules that the European Union has adopted for compliance with the Nagoya Protocol. These EU compliance rules are obligatory to follow if your institution is based in the EU and can be a useful point of reference if you are located outside the EU.**

The [Nagoya Protocol](#) is an international agreement that supplements the [Convention on Biological Diversity \(CBD\)](#). Adopted on 29 October 2010 in Nagoya, Japan and in force since 12 October 2014, it creates the legal framework for the implementation of the third objective of the CBD: the fair and equitable sharing of benefits arising from the utilisation of genetic resources.

In the European Union, individual Member States develop the rules of access and benefit sharing for genetic resources. What exists on the joint EU level are rules about how users must comply with access and benefit-sharing, i.e. what permits and documents must be in place. These compliance rules are enacted through the [EU ABS Regulation](#), also known as Regulation (EU) No 511/2014.

The obligation for zoos to undertake *ex situ* conservation work is mandated by [Article 9 of the CBD](#). In the EU, it is legislated by Article 3 of the [EU Zoos Directive](#), also known as Council Directive 1999/22/EC.

In general, in EAZA's view, *ex situ* management programmes for the maintenance of genetic diversity, e.g. EAZA Ex Situ Programmes (EEPs) alongside the cryopreservation and "biobanking" of genetic materials, are outside the scope of the EU ABS Regulation. However, there are instances where we would consider that genetic research undertaken on genetic material of certain individual animals or populations is inside the scope of the EU ABS Regulation.

Even if an area of work with a genetic resource is outside the scope of the EU ABS Regulation, it may be subject to national ABS legislation. Implementation of the Nagoya Protocol varies from country to country, and in some countries the national laws may go beyond the minimum standards required by the Protocol. Therefore, we recommend that users always check the national rules that are in place.

The sector-specific flowchart on page 4 (and explanatory details in case studies specific to zoos and aquariums from page 13 onwards) will allow you to quickly assess which areas of your work with genetic resources are, in our opinion, inside or outside the scope of the EU ABS Regulation.

The EU ABS Regulation also makes provision for utilisation of traditional or indigenous knowledge. Whilst this is not a key focus of our *ex situ* conservation

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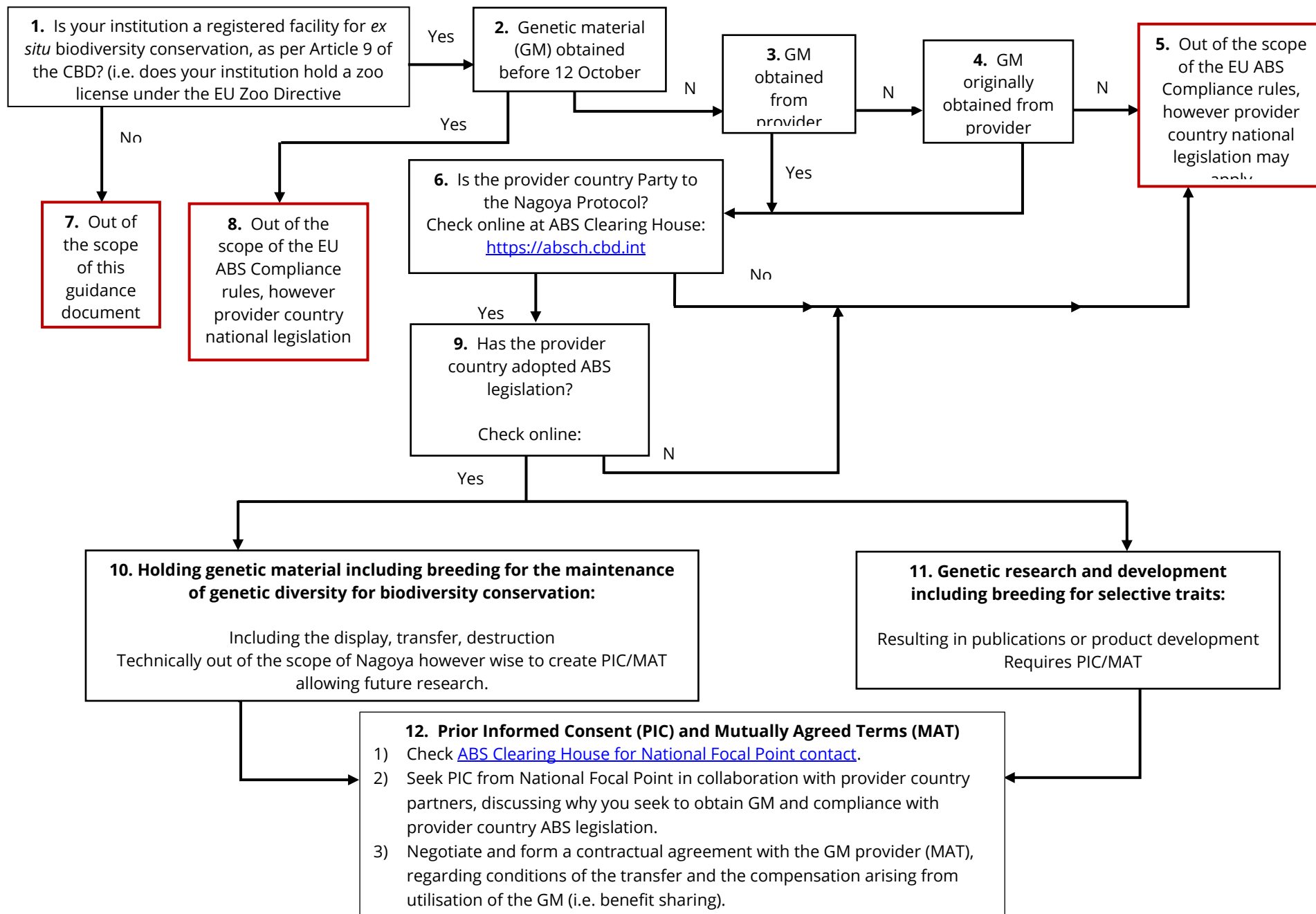


work, if traditional knowledge associated with genetic resources were to be utilised, the same flowchart could be used.

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Flowchart







## Definitions

Access: acquisition of genetic resources or traditional knowledge associated with genetic resources in a country that is a Party to the Nagoya Protocol

Ex situ: conditions under which individuals are spatially restricted with respect to their natural spatial patterns or those of their progeny, are removed from many of their natural ecological processes, and are managed on some level by humans<sup>1</sup>

Ex situ management programme: programme formally designated by a particular organisation/authority for the ex situ breeding and/or other management of individuals (or live bio-samples) of any species (or other taxonomic unit) for conservation and/or non-conservation purposes

EAZA Ex situ Programme: population management activities that are endorsed by EAZA for species that are managed by EAZA Members aiming towards (maintaining) healthy populations of healthy animals within EAZA Members or beyond

EU ABS Compliance rules: obligations resulting from the EU ABS Regulation 511/2014/EU and further implementing laws of the EU

Genetic material: any material (including whole organisms) of plant, animal, microbial or other origin containing functional units of heredity

Genetic resources: genetic material (including whole organisms) with actual or potential value

Mutually Agreed Terms: contract concluded between a provider of genetic resources, or of traditional knowledge associated with genetic resources, and a user, that sets out specific conditions for the fair and equitable sharing of benefits arising from the utilisation of genetic resources or of traditional knowledge associated with genetic resources, and that may also include further conditions and terms for such utilisation as well as subsequent applications and commercialization

Parties: countries which have signed and entered into force the Nagoya Protocol

Prior Informed Consent: administrative permit given by the competent national authority of a provider country to a user, prior to accessing genetic resources. However, the term is also used in relation to the right of indigenous and local communities to take a free and informed choice on whether they wish to give access to genetic resources or traditional knowledge associated with genetic resources.

Provider country: country providing genetic resources or associated traditional knowledge. If the country is Party to the Nagoya Protocol and exercises sovereign rights over the resource that it is providing, users in the EU should comply with the EU ABS Compliance Rules.





Sovereign rights (within the context of the CBD): Article 15 recognises the sovereignty of Parties over their genetic resources and recognizes the authority of States to determine access to those resources. While the Convention addresses sovereignty over resources, it does not address their ownership, which remains to be determined at national level in accordance with national legislation or practice.

The Convention: The Convention on Biological Diversity

The Protocol: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation; an instrument of the Convention on Biological Diversity

User: natural or legal person accessing the genetic resources or associated traditional knowledge for the utilisation

Utilisation of genetic resources: to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology as defined in Article 2 of the Convention

### **Acronyms used in this document**

ABS: Access and Benefit Sharing

CBD: Convention on Biological Diversity

EAZA: European Association of Zoos and Aquaria

EU: European Union

IRCC: Internationally Recognised Certificates of Compliance

MAT: Mutually Agreed Terms

NFP: National Focal Point

PIC: Prior Informed Consent

R&D: Research and Development



## Introduction

This document has been created to guide EAZA Members on whether and how they should comply with the EU ABS compliance rules, i.e. the EU ABS Regulation, the abbreviated name of *Regulation (EU) No 511/2014 of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union*, and further implementing laws of the EU related to the Nagoya Protocol.

The EU ABS Regulation implements, in the European Union, the rules of the Nagoya Protocol. The Protocol is an instrument of the Convention on Biological Diversity (CBD) that lays down rules for a fair and equitable sharing – with the provider country – of the benefits arising from the utilisation of genetic resources. The EU rules are obligatory for entities located in the EU. They can be a useful point of reference if your institution is based outside the EU.

In general, the collaborative *ex situ* conservation work undertaken by the EAZA community falls outside the remit of the Nagoya Protocol and the EU ABS Regulation. Their main focus is the commercial use of genetic resources which leads to the creation of marketable products (e.g. pharmaceuticals). However, the EU ABS Regulation does refer more broadly to genetic resources as having ‘*a significant role in the implementation of strategies designed to restore damaged ecosystems and safeguard endangered species*’. This guidance document should explain in more detail which areas of our community’s *ex situ* conservation work are within the scope of the EU ABS Regulation. However, this document doesn’t constitute legal advice.

The obligation for zoos to undertake *ex situ* conservation is mandated by Article 9 of the Convention on Biological Diversity and subsequently legislated at EU level by Article 3 of the EU Zoos Directive (*Council Directive 1999/22/EC of 29 March 1999 relating to the keeping of wild animals in zoos*). This *ex situ* conservation work undertaken by EAZA zoos and aquariums can take many forms<sup>1,2</sup> including *ex situ* management programmes, biobanking and cryopreservation, genetic research, all of which involve working with genetic resources, which may originate or be descended from imports from provider countries. Indeed, in the preamble of the EU ABS Regulation (recital 5), reference is made to the relationship between genetic resources and such conservation actions: ‘genetic resources play a significant role in the implementation of strategies designed to restore damaged ecosystems and safeguard endangered species’.

The implementation of the Nagoya Protocol varies from country to country. In some countries the national laws may go beyond the minimum standards required by the Protocol. Therefore, we recommend that users always check the national rules that are in place. This guidance document should not be

considered in isolation, but in conjunction with the EU ABS Regulation and any other applicable national ABS rules.

## **Which areas of EAZA work are outside of the scope of the EU ABS Regulation?**

### **Ex situ management or breeding programmes? Outside**

In a population, genetic diversity makes natural selection possible and therefore represents the evolutionary potential of a species or population. Hence, saving threatened species includes saving the highest possible levels of their genetic diversity. *Ex situ* breeding programmes for conservation that are intended to a) rescue species/genetic diversity that has gone, or will go, extinct in the wild; b) provide insurance for declining wild populations/ genetic diversity; or c) function as a source of individuals/genetic diversity for wild population restoration, are thus managed to maximise retention of wild source gene diversity<sup>1,2</sup>.

Populations with higher genetic diversity also tend to have higher fitness<sup>3</sup>.

Therefore, also *ex situ* breeding programmes/activities in zoos and aquariums that have alternative conservation roles (e.g. conservation education<sup>1</sup>) or no conservation roles (e.g. general biological education or exhibit) attempt to maximise retention of wild gene diversity – regardless of whether they are the subject of an official *ex situ* programme or not. *Ex situ* breeding programmes are therefore founded upon the principals of inter-institutional cooperation and the movement and breeding of animals between institutions for the benefit of the genetic and demographic health of the population. Within EAZA, organised and coordinated EAZA Ex-Situ Programmes (EEPs), exist for over 400 different animal species, in which animals are bred and transferred on a strictly non-commercial basis<sup>4</sup>.

While discouraged, individuals in EAZA institutions that are not included in EEPs may occasionally be exchanged in a trade dynamic. Trade may also be the basis of interchanges between non-EAZA zoos and aquariums in Europe. Trade and exchange of genetic resources as commodities fall outside the scope of the EU ABS Regulation. The Nagoya Protocol does not regulate issues related to trade but is applicable only to utilisation of genetic resources. The EU ABS Regulation does not apply so long as there is no research and development on genetic resources (thus no utilisation in the sense of the Protocol).

'Utilisation of genetic resources' is defined in the Regulation, exactly as in the Protocol, as 'to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology, as defined in Article 2 of the Convention' (Article 3(5) of the Regulation). With reference to this definition, EAZA views *ex situ* management where the primary aim is the retention of genetic diversity as being outside the scope of the EU ABS Regulation. This would be in alignment with the conclusions

of a 2016 European Commission Consultancy on 'Utilisation' and the ABS Regulation<sup>5</sup>.

*Ex situ* management that intends to enhance or select for specific genetic traits or develop new genetic traits; (commercial or otherwise) would be subject to the EU ABS Regulation. EAZA does not support *ex situ* management with such intent (for example EAZA Position Statement on Intentional Breeding for the Expression of Rare Recessive Alleles<sup>6</sup>) unless there is a demonstrable conservation benefit to the species involved.

### **Importation of founder animals? Outside**

In rare cases, it may be necessary to import wild caught animals to establish or augment populations within EAZA, as described in Appendix 22 of the EAZA Population Management Manual (PMM).

In the PMM, wild caught refers to any animals which are (originally) caught in the natural habitat of the species such as:

- Wild caught animals kept in zoos in the range of distribution;
- Wild caught animals kept in rehabilitation centres in the range of distribution;
- Wild caught animals kept in other (recognised) *ex situ* institutions such as breeding centres;
- Wild caught animals to be imported via a dealer;
- Wild caught animals to be imported from a game farm.

Mere importation of animals is not *per se* subject to the EU ABS Compliance Rules. It may however fall under domestic ABS legislation of provider countries and may therefore require a PIC and a MAT. This can be checked at the ABS Clearing House, please see the flowchart on p. 4 for further guidance.

### **Biobanking and cryopreservation of genetic material? Outside**

Institutions specialised in biodiversity conservation, including zoos and aquariums, typically collect and store frozen biomaterials, including DNA, somatic cells, tissues, blood products, germplasm (spermatozoa and ova) and embryos from a wide range of wildlife species, in so-called "Biobanks"<sup>7,8</sup>.

Biobanks are gaining increasing focus as a fundamental component of animal conservation programmes for both captive and free-living wild animal populations<sup>9,10</sup>. Biobanks are contributing to conservation by for example providing material for use in assisted reproduction technologies, cryopreserving genetic material for future use, regenerating individuals in the future and by allowing genetic research to inform conservation management decisions *in situ* and *ex situ*<sup>7,8,10</sup>.

EAZA views the acts of establishing and maintaining biobanks as being outside of the scope of the EU ABS Regulation and the Nagoya Protocol. In these instances, the genetic material contained within the biobank is being “held” in a (frozen) depository and not necessarily associated with active research or utilisation.

**However**, in instances of wild animal genetic material (from captive or free-living individuals) entering European biobanks from provider countries, EAZA recommends the formation of PIC and MATs, with the relevant authorities at the time of entry, to preserve the option for potential future research and outputs (e.g. scientific publications) on said genetic materials. Additionally, when using the guidance flowchart for biobanking cases, the genetic material is the source animal and not the sample itself.

### **Veterinary diagnostics? Outside**

Article 3 of the EU Zoos Directive requires licensed EU zoos to provide both preventative and curative veterinary medicine for the animals kept in their institution. Veterinary diagnostic tests that merely serve health surveillance and disease diagnosis and do not create any potential commercial benefit from product development fall outside the scope<sup>11</sup> of the EU ABS Compliance Rules. This includes such tests performed on animals imported into the EU from provider countries after October 2014.

The movement of veterinary samples of genetic material, sourced from provider countries may be subject to ABS<sup>12</sup>. Further information is available in the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals<sup>13</sup>.

## **What areas of EAZA work are inside the scope of the EU ABS Regulation?**

### **Genetic research? Potentially inside**

How the terms of research and development (R&D) and utilisation should be understood, in the context of the EU ABS Regulation, can be derived from the OECD’s 2015 Frascati Manual<sup>14</sup>.

The Frascati Manual defines three types of R&D:

- a) **Basic research**: experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.
- b) **Applied research**: also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective.
- c) **Experimental development**: systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, to installing new processes,

systems and services, or to improving substantially those already produced or installed.

Article 7 of the EU ABS Regulation and Articles 5.4, 8(a) and 17 of the Nagoya Protocol indicate that each of the three types of R&D is considered to constitute utilisation.

Genetic research in EAZA zoos and aquariums is increasingly being undertaken to analyse the relationships between individuals, populations and taxa. Such research aims to inform our understanding and practices relating to gene flow, maintenance of genetic diversity and mate selection<sup>9,15</sup>. These forms of genetic research undertaken by zoos have primary non-commercial roles of further informing applicable conservation actions (both *ex situ* and *in situ*). Additionally, further definable end products may result, such as peer-reviewed scientific literature, which could be viewed as utilisation under the EU ABS Regulation, despite also being created with non-commercial intent.

Both Paragraph 18 of the Regulation and Article 8(a) of the Protocol reference to the promotion and encouragement of “*non-commercial research which contributes to the conservation and sustainable use of biological diversity*”. Such wording reaffirms that the aim of the Nagoya Protocol is not to prevent or hinder the actions of conservationists and the necessary procedures and administration applied by Parties to the Protocol should not be excessively restrictive when the benefits of the research are to the ecosystems and species of the provider country.

In instances where genetic research is undertaken on animals or other genetic material which entered into the EU from provider countries after 14 October 2014 (the date the EU became signatory to The Protocol), would be subject to the EU ABS Regulation. Such research on genetic resources would need to be undertaken following the development of an Internationally Recognised Certificate of Compliance (IRCC) between the provider country and the user (in this case the institution and project partners involved).

In the cases where it is not possible to establish the provider country (e.g. confiscated animals)- the horizontal guidance issued by the European Commission suggests the user “document this fact and provide reasons why this was not possible to obtain that information and pass this record further in the user chain”. With documentation of such cases due diligence compliance will be considered sufficient<sup>11</sup>.

## **Due diligence requirements of EAZA Member zoos and aquariums**

### **1. Are PIC and MAT required?**





An activity only comes under the scope of the EU ABS Regulation if it involves the utilisation of genetic resources acquired from a country that is a Contracting Party to the Nagoya Protocol and the associated geographic, temporal, and material conditions have been met. In short, it means that:

- a) The providing state must have sovereign rights over the genetic resources, must have ratified the Protocol and established ABS rules.
- b) The genetic resources were obtained after the EU ABS Regulation entered into force.
- c) The genetic resources are utilised for the purpose of Research and Development inside of the EU Territory.

## 2. Exercising due diligence

When the activity comes under the scope of the Regulation, the users are obliged to 'exercise due diligence to ascertain that the genetic resources [...] which they utilise **have been accessed in accordance with the applicable access and benefit-sharing legislation** or regulatory requirements' of the provider countries of these genetic resources, 'and that **benefits are fairly and equitably shared upon mutually agreed terms**, in accordance with any applicable legislation or regulatory requirements' (Article 4(1) of the Regulation). The due diligence obligations for users are described in Chapter 3.3 of [the European Commission's guidance document](#), and include the requirement to submit a due diligence declaration as well as the requirement for users to seek certain information, keep it and transfer it to subsequent users.

Users need to be aware that when the intended use of a genetic resource changes, it might be necessary to seek new (or modify the previous) Prior Informed Consent from the provider country and establish Mutually Agreed Terms for the new use. Whenever a genetic resource is transferred, this should be done in accordance with the MAT.

If a user has exercised due diligence but it turns out that a genetic resource utilised was illegally acquired in a provider country by an earlier actor in the chain, this would not be a breach of the due diligence obligation by the user. Nonetheless, if the genetic resource was not accessed in accordance with applicable access legislation, the user is required to obtain a PIC or its equivalent and establish a MAT or discontinue utilisation (Article 4(5) of the Regulation).

## 3. IRCC and movement of the IRCC and MAT

When PIC and MAT are established, the provider country notifies the fact to the ABS Clearing House in the form of an **Internationally Recognised Certificate of Compliance** (IRCC).

All forms/templates are available to download on the EAZA Member Area



If an IRCC is not available, users must acquire relevant documents listed in Article 4(3) (b) of the Regulation and seek the following information:

- the date and place of access to genetic resources (or associated traditional knowledge);
- the description of the genetic resources (or associated traditional knowledge);
- the source from which the genetic resources (or associated traditional knowledge) were directly obtained;
- the presence or absence of rights and obligations relating to access and benefit-sharing (including rights and obligations regarding subsequent applications and commercialisations)
- access permits, where applicable;
- mutually agreed terms, where applicable.

Once the user is in possession of an IRCC, this document should be kept and transferred to subsequent users of the genetic materials it refers to. This IRCC transfer should also accompany the transfer of information concerning the content of the MAT (Article 4(3)(a) of the Regulation). Users are obliged to keep any information relevant for access and benefit-sharing for 20 years after the end of the period of utilisation (Article 4(6) of the Regulation).

## Case Studies

The aim of the following cases studies is to give specific context and illustrate EAZA Member work within and outside the scope of the EU ABS Regulation. The examples used are purely hypothetical cases which have been created to highlight sector-specific pathways, as illustrated on the accompanying coloured flowcharts.

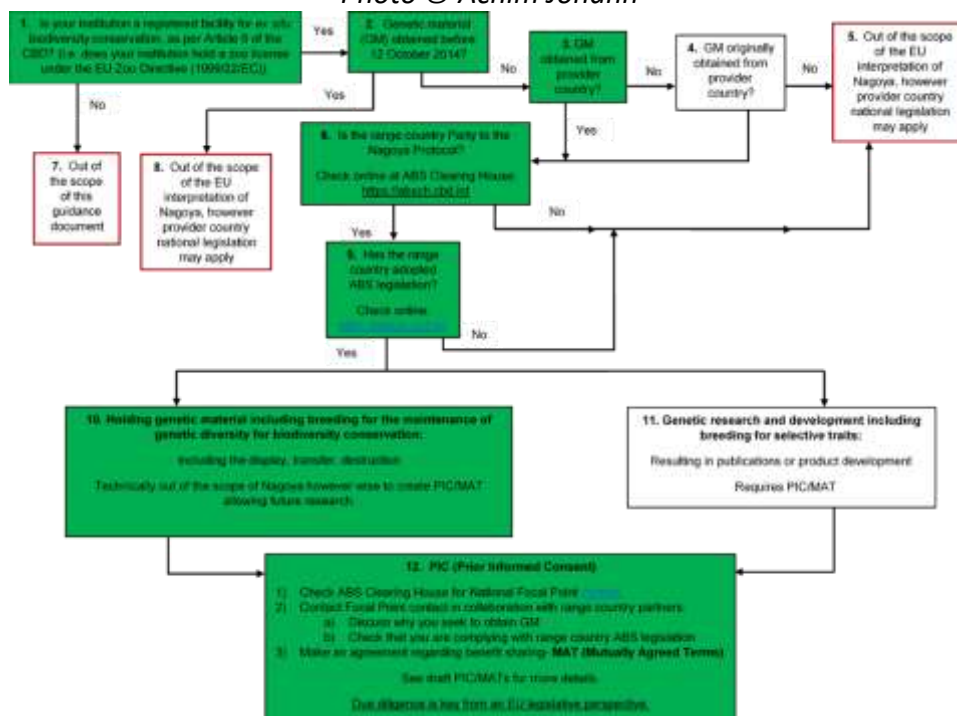


### Case Study 1: Augmenting an *ex situ* management programme

In 2019, a group of Greater bamboo lemurs (*Prolemur simus*) were imported from an *ex situ* facility in Madagascar to an EAZA Member zoo, located in the EU.  
 This import was undertaken with the aim of augmenting the pre-existing Greater bamboo lemur EEP with fresh bloodlines and increasing the European *ex situ* population's genetic diversity.



Photo © Achim Johann



- **Box 1:** The importing zoo is a licensed zoo as per EU Zoo Directive (1999/22/EC).



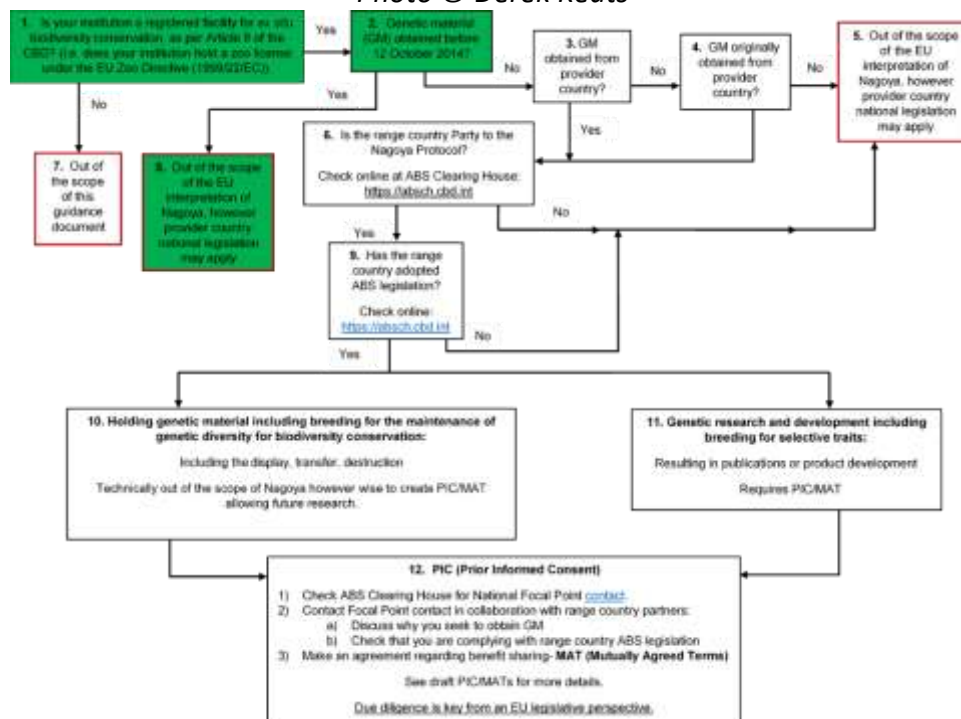
- **Box 2:** The import of the Greater bamboo lemurs was undertaken after October 2015, therefore EU ABS Compliance Rules may apply.
  - **Box 3:** The genetic material (i.e. the live primates) was obtained from a provider country.
  - **Box 6:** Madagascar is a Party to the Nagoya Protocol since 12 October 2014.
  - **Box 9:** Madagascar has developed and adopted ABS legislation:  
<https://absch.cbd.int/pdf/documents/absNationalReport/ABSCH-NR-MG-238714/1>
  - **Box 10:** Although we view ex situ management programmes as falling outside the scope of the EU ABS Regulation, we would recommend that the importing institution, in communication with the relevant EAZA TAG and EEP coordinator, seek PIC and MATs prior to the import of the lemurs, via contact with the National Focal Point for Madagascar (Box 12). The MAT developed should allow for the potential for future genetic research on the imported animals and allow for the sharing of benefits arising from such research.
-

## Case Study 2: A species maintained long-term in captivity, with no formalised management programme

In 2018, an EAZA Member institution receives a group of meerkats that were bred in human care in Europe and are derived from founders that came into non-range country zoos many generations ago. Meerkats (*Suricata suricatta*) are a popular exhibit species within EAZA zoos. The species has been bred and maintained in captivity for decades and is not subject to an *ex situ* management programme at national or European regional level (e.g. EEP).



Photo © Derek Keats



- **Box 1:** The zoos which this document concerns are all licenced as per EU Zoo Directive (1999/22/EC).

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- **Box 2:** The genetic material (i.e. live meerkats) were originally imported into European zoological collections pre-October 2014 and then have been successfully bred and maintained in captivity for decades.
- **Box 8:** The genetic material is outside the scope of the EU ABS Compliance Rules.

Although meerkats are not part of an organised EAZA management programme, we would consider that those zoos which do keep this species, would be breeding them at institutional or regional level to maintain group genetic diversity, rather than for the selection of specific genetic traits. Therefore, such animal breeding is excluded from the definition of 'utilisation'.

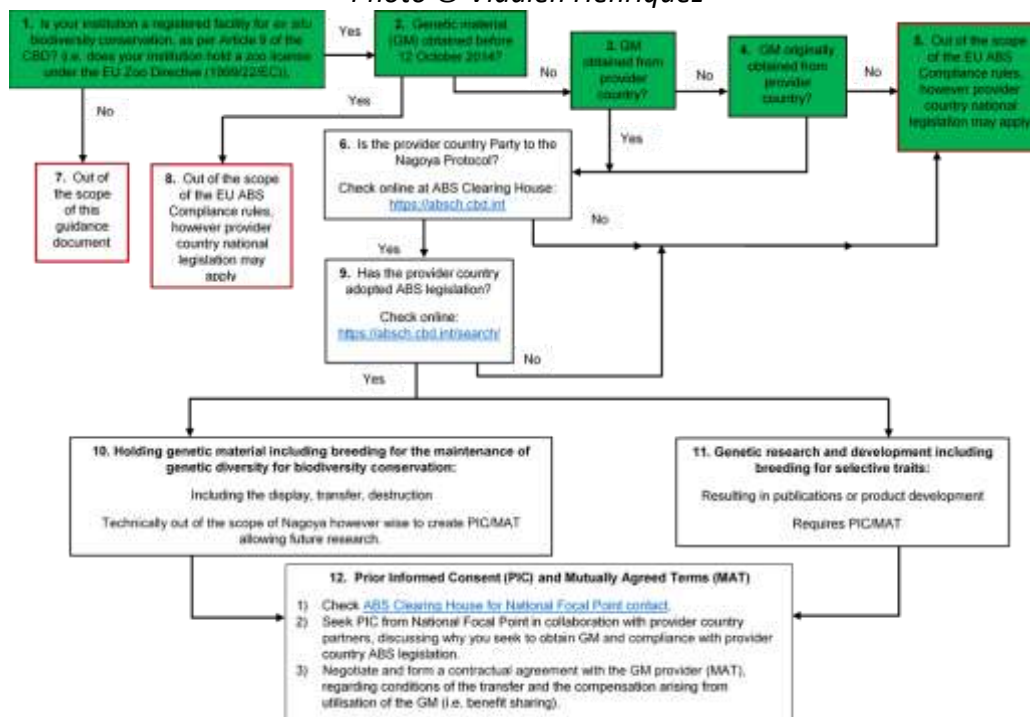
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### Case Study 3a: A species bred in EAZA region and then exported to non-EAZA region, non-EU facility

A group of Critically Endangered Morelet’s leaf frogs (*Agalychnis moreletii*) are being exported from an EAZA Member zoo in France to a zoo outside the EAZA region, in South Africa. The frogs in this group all descend from founder animals imported from Mexico in 2015. The flowchart below concerns the movement of the Morelet’s leaf frogs to South Africa.



Photo © Vladlen Henríquez



- **Box 1:** The zoos which this document concerns are all licenced as per EU Zoo Directive (1999/22/EC).



- **Box 2:** The genetic material (i.e. the frogs) were imported into European zoological collections after October 2014.
- **Box 3/4:** The genetic material was not obtained from a provider country, as the frogs were bred in France.
- **Box 5:** This case is outside of the scope of the EU ABS Regulation (unless it was agreed in the MAT that it should also apply to the descendants). Despite this, the importing South African zoo would have to comply with any relevant national ABS legislation in force and undertake appropriate due-diligence actions as required.

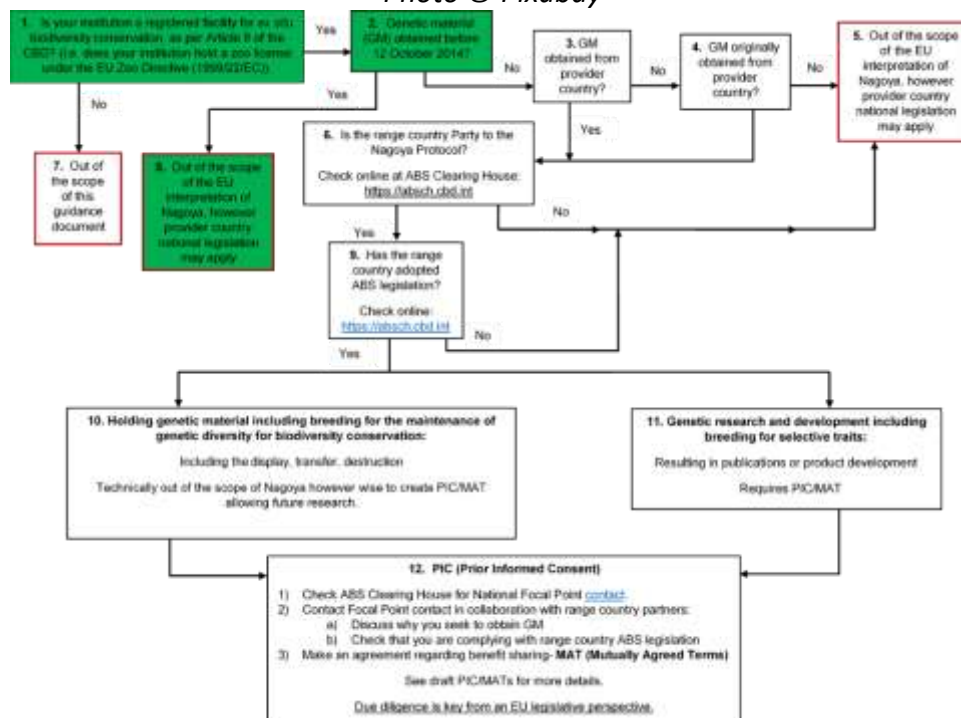


## Case Study 3b: A species bred in EAZA region and then exported to an EAZA Member, non-EU facility

A pair of captive bred Endangered okapi (*Okapia johnstoni*) are being exported from an EAZA Member zoo in Germany to an EAZA Member zoo in Singapore. The pair being exported are descendants from founder animals brought into Europe from the Democratic Republic of Congo, pre-2014. The flowchart below concerns the movement of the okapi to Singapore.



Photo © Pixabay



- **Box 1:** The zoos which this document concerns are all licenced as per EU Zoo Directive (1999/22/EC).



- **Box 2:** The genetic material (i.e. the founders of the *ex situ* okapi population) were imported into European zoological collections before October 2014.
  - **Box 8:** This case is outside of the scope of the EU ABS Regulation as the okapi founders were imported prior to the formation of the Nagoya Protocol and the EU ABS Regulation. Despite this, the importing Singaporean zoo would have to comply with any relevant national ABS legislation in force and undertake appropriate due-diligence actions as required.
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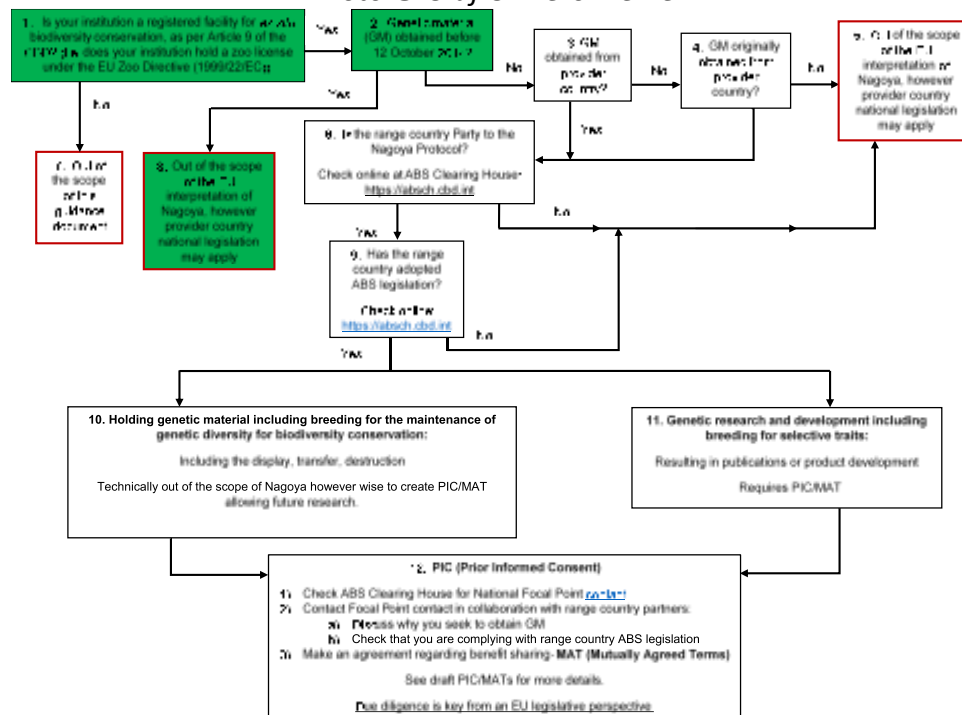
## Case Study 4a: Bio-banked genetic material, imported before October 2014

A blood sample has been taken from a male Sulawesi wrinkled hornbill (*Rhyticeros cassidix*) for cryopreservation in the EAZA Biobank in 2019. The hornbill was imported to the EU legally from Indonesia in 1988.

In biobanking cases, the genetic material is the source animal (i.e. the hornbill) and not the blood sample.



Photo © Olaf Oliviero Riemer



- **Box 1:** The hornbill is kept at a licenced zoo as per EU Zoo Directive (1999/22/EC).

All forms/templates are available to download on the EAZA Member Area



- **Box 2:** The genetic material (i.e. the hornbill) was imported before October 2014.
  - **Box 8:** Due to being imported before the EU being signatory to The Protocol, this case would be outside of the scope of the EU ABS Compliance Rules.
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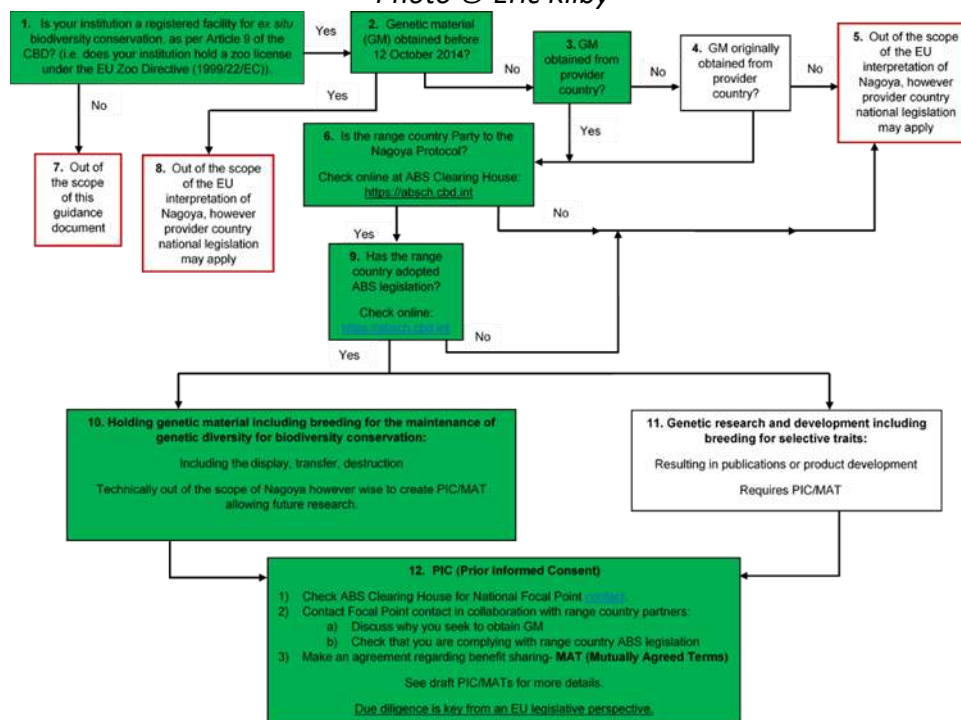
## Case Study 4b: Bio-banked genetic material, imported after October 2014

Blood samples are being taken from a group of babirusa (*Babyrusa babyrussa*) at an EAZA zoo in 2019. These samples are to be sent for cryopreservation in the EAZA Biobank. The animals in the group were imported into Europe from Indonesia in 2019 as part of the Global Species Management Plan.

No current plans exist for research on these samples within the EAZA Biobank.



Photo © Eric Kilby



- **Box 1:** The importing zoo is a licensed zoo as per EU Zoo Directive (1999/22/EC).
- **Box 2:** The import of the genetic material was undertaken after October 2014, therefore ABS Compliance Rules may apply.



- **Box 3:** The genetic material (i.e. the babirusa) was obtained from a provider country.
- **Box 6:** Indonesia is a Party to the Nagoya Protocol since 12 October 2014: <https://www.cbd.int/countries/?country=id>
- **Box 9:** Indonesia has partially adopted ABS principals through existing national legislation and the government is preparing a draft ABS law according to Nagoya Protocol: <https://absch.cbd.int/pdf/documents/absNationalReport/ABSCH-NR-ID-239223/1>
- **Box 11:** Although biobanking (as well as conservation breeding) falls outside the scope of the EU ABS Regulation, we would recommend that PIC and MATs are established prior to the import of the live animals, via contact with the National Focal Point for Indonesia (Box 12). The MAT should ideally allow holding institutions in Europe to retain the ability, under specified conditions, to undertake (certain types of) future genetic research on the genetic material imported and any subsequent progeny produced. It may be beneficial for the application/negotiation for the PIC and MAT at the time of importation to be carried out by the importing institution in consultation with the relevant EAZA TAG and EEP coordinator.

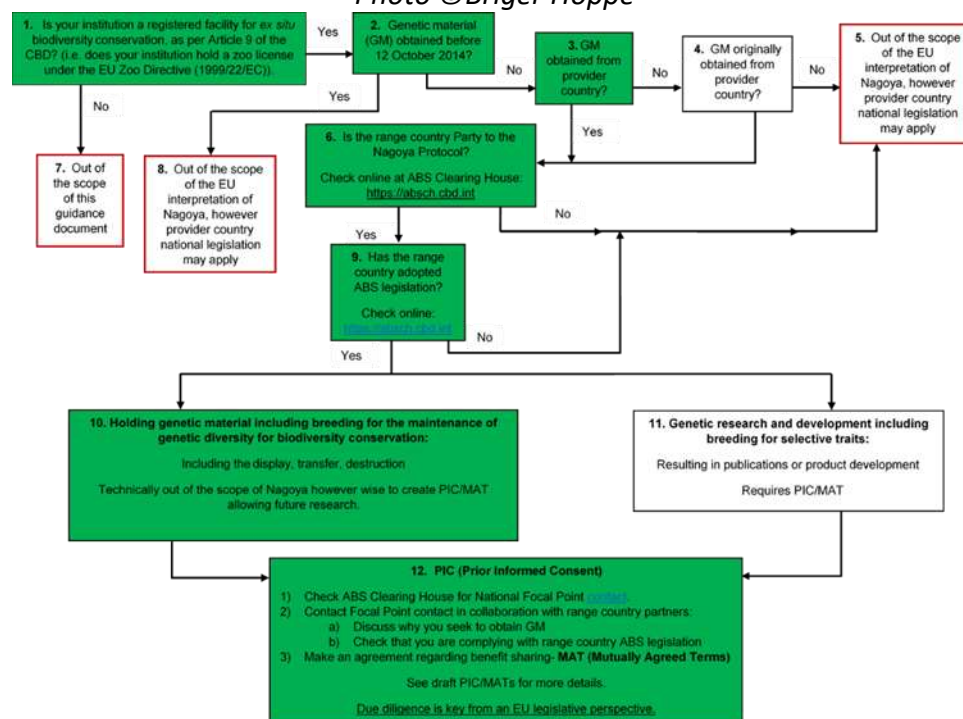
## Case Study 5: Gametes and assisted reproduction

Artificial insemination and assisted reproductive techniques are increasingly being used across a number of zoo species<sup>16,17</sup>.

In 2020, a trial import of frozen semen originating from a bull Mishmi takin (*Budorcas taxicolor taxicolor*) kept in *ex situ* facilities in Bhutan will be undertaken by an EAZA zoo to increase the genetic diversity in the herd held at the zoo and the wider EEP population.



Photo ©Briger Hoppe



- **Box 1:** The importing zoo is a licensed zoo as per EU Zoo Directive (1999/22/EC).



- **Box 2:** The import of the genetic material was undertaken after October 2014, therefore EU ABS Compliance Rules may be applicable.
  - **Box 3:** The genetic material was obtained from a provider country.
  - **Box 6:** Bhutan is a Party to the Nagoya Protocol since 12 October 2014: <https://absch.cbd.int/countries/BT>
  - **Box 9:** Bhutan has adopted ABS principals through the formation of the ABS Policy of Bhutan 2015, with PIC being required prior to accessing in range genetic materials: <https://absch.cbd.int/pdf/documents/absNationalReport/ABSCH-NR-BT-238700/1>
  - **Box 11:** Although the aim of this project is related to breeding and *ex situ* management and therefore falls outside the scope of the EU ABS Regulation, we would recommend that PIC and MATs are sought prior to the import, via contact with the National Focal Point for Bhutan (Box 12). The MAT developed should, ideally, allow holding institutions in Europe to, under specified conditions, retain the ability to undertake (certain types of) future genetic research on the genetic material imported and any subsequent progeny produced. It may thus be beneficial for the application/negotiation for the PIC and MAT at the time of importation to be carried out by the importing institution together with the relevant EAZA TAG and EEP coordinator.
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## References

1. IUCN/SSC. IUCN Species Survival Commission Guidelines on the Use of Ex Situ Management for Species Conservation. Version 2. 1–15 (2014).
2. McGowan, P. J. K., Traylor-Holzer, K. & Leus, K. IUCN Guidelines for Determining When and How Ex Situ Management Should Be Used in Species Conservation. *Conserv. Lett.* **10**, 361–366 (2017).
3. Reed, D. H. & Frankham, R. Correlation between Fitness and Genetic Diversity. **17**, 230–237 (2003).
4. European Association of Zoos and Aquaria. *EAZA Population Management Manual version 2.0* (2019).
5. Geelhoed, M. . M. E. *Consultancy on the Notion of ' Utilisation ' in the Nagoya Protocol and the EU ABS Regulation for the Upstream Actors. Service Contract No. 07.0202/2015/710095/SER/ENV.E.2 NP.* (2016).
6. EAZA. *EAZA Position on Intentional Breeding for the Expression of Rare Recessive Alleles.* (2013).
7. Wildt, D. E. *et al.* Genome Resource Banks Living collections for biodiversity conservation. *Bioscience* **47**, 689–698 (1997).
8. Hvilsom, C., Pereboom, Z. & Schad, K. Banking on our future – a new centrally organised biobank will be an invaluable resource for the EAZA community. *Zooquaria* **94**, 34 (2016).
9. Hainaut, P. & Vaught, J. Cryobanking Biomaterials from Wild Animal Species to Conserve Genes and Biodiversity: Relevance to Human Biobanking and Biomedical Research. in *Biobanking of Human Biospecimens: Principles and Practice.* Springer, Cham 217–235 (2017). doi:10.1007/978-3-319-55120-3
10. Amato, G., Desalle, R., Ryder, O.A. & Rosenbaum, H. C. (Eds). *Conservation genetics in the age of genomics.* (Columbia University Press: New York, 2009).
11. Jong, P. D. E. & Muyldermans, D. The EU Regulatory Framework for Compliance With Rules on Benefit- Sharing of Genetic Resources. *Bio-Science Law Rev.* **15**, 83–110 (2015).
12. Walzer, C. International Sample Movement: Overview of Convention on International Trade in Endangered Species of Wild Fauna and Flora and Selected National Regulations. in *Fowler's Zoo and Wildlife Medicine Current Therapy* 16–20 (2018).
13. OIE. Transport of Biological Materials. in *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* 23–47 (2018).
14. Frascati Manual. Concepts and definitions for identifying R & D. 43–80



(2015).

15. Fienieg, E. S. & Galbusera, P. The use and integration of molecular DNA information in conservation breeding programmes : a review. *J. Zoo Aquarium Res.* **1**, 44–51 (2013).
16. Hermes, R., Göritz, F., Streich, W. & Hildebrandt, T. Assisted reproduction in female rhinoceros and elephants--current status and future perspective. *Reprod. Domest. Anim.* **42 Suppl 2**, 33–44 (2007).
17. Andrabi, S. M. H. & Maxwell, W. M. C. A review on reproductive biotechnologies for conservation of endangered mammalian species. *Anim. Reprod. Sci.* **99**, 223–243 (2007).