



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 guidelines¹.
- 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 guidelines² and EAZA rules and procedures¹.
- 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 management⁴.
- 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.

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

¹ EAZA Population Management Manual, www.eaza.net

² <https://portals.iucn.org/library/efiles/documents/2013-009.pdf>

⁴ IUCN/SSC (2013). Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.

as details of proper handling, labeling and transportation have been developed and are accessible online. (See Sampling Protocol in Appendix I or visit <https://www.eaza.net/biobank-resources/>)

To increase visibility of samples collected by EAZA institutions and stored in EAZA Biobank, and prove the involvement of the EAZA community to conservation research, information about samples will be shared on Global Genome Biodiversity Network (GGBN) database with full confidentiality of the samples providers and minimum data (species name, sex, sample type, volume, collection date).

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. With 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.

The Biobank reserves the right to retain up to 200µl sample volume (XXmg) for future use on critical samples/ particularly important samples-evaluated on a case-by-case basis.

If requesting access to sample use, the applicant(s) will need to:

- 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 and Sample Release 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 sample use in any publications, mentioning the EAZA Biobank, Zoos and Aquariums contributing samples, and where relevant, any other appropriate sample contributor(s) and/or the TAGs/EEPs. Acknowledgement may not always be appropriate, e.g. issues surrounding data sensitivity.
- 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.

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), 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 application for review in the first week of the following month. The proposal will also be shared with the appropriate EEP coordinator(s) and/or TAG chair(s) for consultation. In the case of multi-species projects (more than 10 species?) applying for a small number of samples per species, consultation will not be conducted; however, only samples with sufficient backup (0.5 ml) will be made available for this scientific research. In other cases, the EEP Coordinator will be asked for consultation.
- A decision regarding submitted research proposals will be reached within one month, as determined by at least three reviewers from the EAZA Biobank Working Group.