

THE BIODIVERSITY CRISIS

Global biodiversity is declining at an overwhelming speed, with many species on the path to extinction as a direct consequence of human activities. This not only compromises the survival of the other species that share the planet with us, but also reduces our quality of life and endangers our own future. With each species that disappears, vast amounts of information about their biology, ecology and evolutionary history is irreplaceably lost.

THE FROZEN ARK PROJECT

The Frozen Ark is a biobanking charity, with headquarters at the University of Nottingham. The charity was founded in 2004 by Professor Bryan Clarke FRS, Dr Ann Clarke, and Anne McLaren FRS, with the help of the three founding partner organisations: (i) the University of Nottingham, (ii) the Natural History Museum (NHM), and (iii) the Zoological Society of London (ZSL).



All photos kindly provided by © Tim Flach

HOW YOU CAN HELP



- Spread the word
- Connect with us via social media
- Do a research project with us
- Collaborate with us
- Donate or fundraise for us
- Encourage others to do the same


VISIT


WWW.FROZENARK.ORG

AND FIND OUT MORE ABOUT US


#FROZENARK #ENDANGEREDSPECIES #BIOBANKING
#CONSERVATION #RESEARCH


The Frozen Ark Project is registered as a private company limited by guarantee in England and Wales (No 5932945) and as a registered charity (No 1118044).

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THE FROZEN ARK PROJECT

Saving the DNA and viable cells of the world's endangered species



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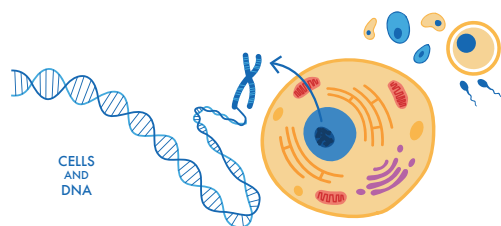
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OUR WORLD NEEDS THE FROZEN ARK

The Frozen Ark is one of the many organisations that are working hard to halt the loss of biodiversity, by ensuring that all biological material that has been collected from endangered animal species is properly curated, and used responsibly and sustainably in conservation management and research.



We aim to achieve this goal by: i) coordinating global efforts in biobanking for endangered animal species; ii) sharing expertise; iii) offering help to organisations and governments that wish to set up biobanks in their own countries; iv) providing the physical and informatics infrastructure that will allow conservationists and researchers to search for, locate, and use this material wherever possible, without having to resample from wild populations.

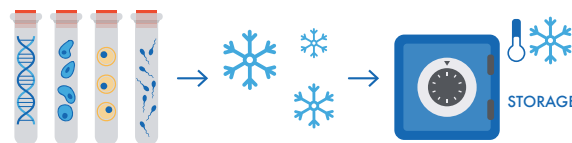
The four key areas we are currently working on are:

PARTNERSHIPS CONNECTING THE WORLD'S ANIMAL BIOBANKS

The Frozen Ark operates as a federated model, building partnerships with organisations worldwide that share the same vision and goals. The Frozen Ark consortium comprises research and conservation bodies, including zoos, aquaria, natural history museums, and research laboratories, distributed across five continents. The consortium has grown steadily since the project's launch, with new national and international organisations joining every year.

BIOBANKING PRESERVING GENETIC MATERIAL FOR THE PRESENT AND FUTURE

While preserved genetic material from endangered species is already available at UK institutions, we are still lacking a central reference point to link these often isolated biobanking efforts. We are working with our UK partners to connect and improve the general state of the national frozen collections for endangered animal taxa. The resulting infrastructure will harness existing samples, create common quality standards among partners and collaborators, develop protocols for sample collection, transport and storage, and increase the visibility of the samples available for conservation and research.



DATABASE MAKING SAMPLES AVAILABLE TO THE CONSERVATION AND RESEARCH COMMUNITIES

With our UK partners, we are currently developing a comprehensive web-enabled sample database. This bioinformatics resource will provide a user-friendly web environment for sample requests, sample-use monitoring, reporting, updating, and gathering of statistical information on how genetic material is being used. It will also allow us to identify where genetic material from endangered species is already stored in institutions around the world and determine which gene pools need to be prioritised for collection and preservation.



RESEARCH DNA DEGRADATION IN THE FIELD AND IN THE ARK

Our main research interest is to understand the best methods for collection, transport, storage and curation of different types of biological samples from a large variety of animal species, each one carrying out their own specific technical challenges. Appropriate preservation of biological material is vital to isolate good-quality DNA, so we are currently running a series of experiments looking at DNA degradation under field conditions and how different storage methods affect DNA quality and integrity.

