

**Title:** The Deep Research and Conservation Strategy  
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### **Introduction**

The Deep is a charitable organisation and its key aims are Education, Research and Conservation.

In addition to offering scientifically accurate and validated information on the world's oceans to the visiting public, The Deep is also committed to carrying out and supporting high quality research and conservation initiatives in relation to the Marine Environment. All research that is carried out or supported by The Deep will be published openly for the advancement of our understanding of the world's oceans and specifically the husbandry of Marine Animals.

The Deep will always implement the highest standards of animal husbandry and is opposed to the keeping of marine mammals in captivity.

Specifically The Deep will take part in one of the following which will also comply with the requirements of The Zoo Licensing Act 1981:

- Research which benefits the conservation of wild animals
- Training in relevant conservation skills exchanging information about the conservation of wild animals and breeding of wild animals in captivity
- Repopulating an area with animals, or re-introducing wild animals

Due to the restrictions imposed by the IUCN on re-introduction of animals to the wild it will be practicably impossible to take part in a re-introduction of marine species due to the risks of introducing foreign diseases to an area, the very difficult task of establishing a resident population of animals, and, if the factors causing the initial decline of the habitat or threats such as commercial fishing have not been addressed.

Therefore it is very unlikely that The Deep will be able to contribute to research or conservation via the third option as listed by The Zoo Licensing Act 1981.

This document will therefore focus on how The Deep intends to meet the requirements of the other two options. The primary focus being research benefiting the conservation of wild animals.

### **Budgets and Review Process**

Diary of meeting for co-ordination of research and conservation:

- Feb-March** 1<sup>st</sup> annual Ethics committee meeting.  
Ethics review of company and Review of on-going research and conservation projects and goal setting of upcoming research following authorisation from board of directors.
- April-May** 1<sup>st</sup> annual Research Review  
Review of Research and Conservation projects, progress reports.
- August-September** 2<sup>nd</sup> annual ethics meeting

Ethical review of company progress reports on research and conservation projects.

**Oct-Nov**     **2<sup>nd</sup> annual research meeting**  
Review of research and conservation progress for year and proposals for new research projects for coming financial year for presentation to Board of Directors for budget allocation.

Annual budgets for research and conservation will be allocated at the start of The Deep's financial year (1<sup>st</sup> of February) following recommendations from the Ethics/Research Committee.

The budget will be divided between in-house projects coordinated by the Husbandry Dept and collaborative projects with external agencies.

Research projects shall be reviewed primarily at the twice-yearly Ethical Review Committee meetings and also during regular research and conservation meetings according to the above programme. Attendees at the research meetings will be composed of members of the Ethics Committee but it is not required that all of the Ethics Committee attends.

All meetings will be minuted and the minutes stored on file.

Proposals for new projects will be tabled at these meetings and appraised by the Ethical Review Committee before implementation.

Committee members include: Dr. David Gibson (Director of Husbandry and Operations), Colin Brown MBA (Chief Executive), Katy Rigby BSc (Assistant Curator), Graham Hill BSc, MSc (Science Officer), Dr. Martin Walker MIBIOL CIBIOL (Lifelong Learning Manager), Mark Geach BVSc MIBiol CIBiol MRCVS (Contracted Vet) and Dr. Andrew Lawrence (University of Hull).

## **Research Benefiting Conservation of Wild Animals**

As The Deep focuses entirely on the Marine Environment our research will also focus on this.

We have an obligation to take part in both in-situ and ex-situ research and conservation, therefore our research will have elements of both.

### **Captive Breeding**

Animals will only be bred at The Deep for sound scientific, educational or conservational reasons.

Non-threatened or endangered species will only be bred to enhance our understanding of animal husbandry or to supply a need for display animals either by The Deep itself or by other aquaria.

Threatened or endangered species will be bred to enhance our understanding of their biology, to supply display requirements for either The Deep or other facilities or as part of a conservation based research programme.

Wherever possible, captive breeding effort will be coordinated through an appropriate TAG initiative or similar joint research project.

### **Ex-Situ Conservation**

The principal focus of ex-situ conservation work will be research enhancing the understanding of the husbandry requirements of endangered or threatened species. This will include fundamental data collection on dietary needs, growth rates, behavioural interaction and adaptation and veterinary care. This work is carried out for all the species at The Deep and is especially detailed for our individually identifiable animals and threatened or endangered species.

Data collected in this way will be openly disseminated throughout the industry via national and international conferences and also, where appropriate, peer reviewed publication.

In addition to this The Deep shall actively support and champion marine related issues providing staff and resources to work in conjunction with established marine charities and organisations to raise public awareness on key issues such as Shark Finning.

The Director of Husbandry and Operations is an active member of the EUAC Elasmobranch ASP and plays an important role in the coordination of research and conservation of Elasmobranchs in European aquariums.

### **In-Situ Conservation**

The Deep will actively participate in relevant In-Situ conservation projects that fit the remit of The Deep.

These projects will either be in conjunction with the University of Hull or EUAC TAG programmes.

These projects must have a sound, scientific basis, able to produce publishable results and fulfil the following criteria:

- Projects must provide a positive contribution to the present or future conservation of wild animals.
- Projects must have an element of human impact.
- Projects must be relevant to the aims and objectives of The Deep and be related to the marine environment.

### **Training in relevant conservation skills, exchanging information about the conservation of wild animals and breeding of wild animals in captivity.**

The Deep will openly exchange information with other reputable institutions with regards to the husbandry and welfare of the animals in its collection. This may take the form of actively participating in conferences and E-mail listservers but will also involve acting as host to staff or students from other reputable institutions.

In addition to this The Deep will continue to offer public talks to visitors focusing on issues such as Shark Conservation, Threats to the Oceans, Marine Parks and Marine Pollution.

The Deep has a commitment to running a full educational programme focused on the National Curriculum. It also is committed to taking an active part in further and adult education in the area.