ETHICAL REQUIREMENTS FOR RESEARCH ON VERTEBRATES

<u>Questionnaire to be completed by the respective institution's ethics committee</u> in respect of activities for the <u>entire duration</u> of the project (up to 5 years – rated scientists and up to 2 years – unrated scientists)

This questionnaire represents the minimum ethical requirements for research in Antarctica, and its surrounding waters within 60 degrees South, and at the Prince Edward Islands and Gough Island, and their 12-nautical mile surrounding waters. It is not intended as an alternative to the reviewing ethics committee's review process and guidelines, but as a supplement to them and as such represents a standardised format whereby the Department of Forestry, Fisheries and Environment can ensure that research conducted in Antarctica and at the Prince Edward and Gough Islands, and their surrounding waters is of a high ethical standard.

The questionnaire is based on the National Code for the handling and Use of Animals in Research, Education, Diagnosis and Testing of Drugs and Related Substances in South Africa (1990) and expects of the reviewing committee to indicate whether certain aspects of the proposed projects have been reviewed by it or not. Please note that these questions are applicable only if the proposed project affects vertebrate animals (hereafter referred to as "animals"). Where a question is not relevant, please indicate either no comment, not enough information, or not applicable. Space is provided below for comments on any of the questions. Please refer to the question number when commenting.

QUESTION	REVIEWED Indicate either Yes / No / No comment / Not enough information / Not applicable		
Part 1. Professional detail regarding applicant and co-workers			
I Applicant name and affiliation			
II Whether the following information about persons responsible for a techniques has been provided:	applying proposed research		
I. Names			
Ii. Qualifications (Academic or Technical)			
Professional registration or authorisation number (e.g., SAVC/HPCA)			
lii. Description of appropriate experience of each persons in proposed techniques f			
III Whether the following information about other co-workers has been provided:			
i. names			

ii. qualifications	
iii. affiliation	

QUESTION	REVIEWED Indicate either Yes / No / No comment / Not enough information / Not applicable
Part 2. Ethical aspects regarding the proposed research project (have these been adequately provided in the application)	
Has the project undergone a review process outside your group or	
internal review panel	
Whether the project's contribution to the relevant scientific field justifies any possible pain or discomfort caused to animals during research	
Do you intend to sample, capture, kill or harmfully interfere with	
any marine or terrestrial flora or fauna (including invertebrates)?	
Whether alternatives to animal models are necessary or available	
Whether there is justification for the use of sentient animals	
Whether proposed methods/techniques are acceptable in terms of	
the level of risk to the animal subject's life or well-being	
Whether procedures on vertebrate species that are expected to	
produce stress but no pain requiring anaesthesia.	
Whether experiments that involve significant but unavoidable	
stress or pain requiring anaesthesia or a humane endpoint.	
Whether techniques to be applied in the project has been refined	
through planning and pilot studies	
Whether the trial/survey is statistically valid (i.e., not wasteful of its	
animal subjects)	
Whether treatments and/or clinical procedures applied and/or	
surgery done to animals are justifiable and humane	
Whether the restraint of the animal's techniques is acceptable	
Whether animal capture techniques (including drugs used where	
applicable) are appropriate and humane	
Whether systems and techniques for the handling of animals during	
research are appropriate and humane	
Whether facilities for the handling and housing of restrained/	
captive animals are appropriate, adequate, and humane	
Whether there is adequate planning in the event of emergencies or in the case of unexpected results which may cause unnecessary and	
excessive pain and suffering to the animals	
Whether methods proposed to handle carcases of animals that die	
during the period they are in the care of the applicant are adequate	
and appropriate	
Whether proposed methods of euthanasia (including any proposed	
pest extermination methods) are justifiable and humane	
Whether the experience and qualifications of the researcher and	

his/her assistants are adequate and appropriate for the proposed	
techniques (including the administration of any drugs)	
Whether all drugs that are to be used in the proposed techniques	
are accompanied by the appropriate prescription forms	
Whether veterinary supervision/consultation is necessary and if so,	
adequate	
Whether the applicant and his/her co-workers and assistants are	
familiar with standard guidelines for the ethical manipulation and	
care of experimental animals and the laws governing these	
Whether Biosecurity measures and protocol is in place to avoid the	
spread of disease or any other outbreak	

ADDITIONAL COMMENTS:				

PLEASE NOTE: If not a veterinarian, a registered certificate of competence must be provided by persons/groups wishing to collect genetic samples from wildlife (e.g., draw blood).

DECLARATION

1. Moral Philosophy

The ethical review of proposed animal experiments is predicated upon the acceptance that non-human animals are organisms fully worthy of moral concern and as such their interests must be protected as far as possible in their use for advancement of biological knowledge and for the promotion of the health and welfare of animals and humans and protection of the environment.

2. Animal Interests

In the use of laboratory animals, animal interests obligate scientists and educators to:

- not allow animals to be used for research and/or to be killed for trivial, irrational, unjustified or inappropriate reasons;
- permit animals to live, reproduce and grow under conditions that are comfortable and reasonably natural to their species;
- keep animals free from disease, parasitism, injury and pain by prevention, rapid diagnosis and treatment;
- allow animals to be able to express normal behaviour through providing as far as possible

sufficient space, proper facilities in which to live and in the company of the animal's own kind recognising the inherent social nature and hence the necessity of a social relationship for many species;

 protect animals from fear, deprivation, stress, distress and pain by ensuring that their living conditions, handling and treatment will be such that it will either minimise or eliminate the causation of these states upon those animals, that are used for research, teaching and testing;

3. Humaneness

The principles of humane experimental technique proposed by Russell & Burch must be followed in the planning and conduct of animal experiments. These comprise:

- **Replacement** of animals with non-sentient research systems, i.e. researchers must strive to avoid using of laboratory animals if alternative methods can yield the data they need.
- **Reduction** of the numbers of animals that are to be used to a minimum by design in order to achieve only sufficient statistical power to allow the objects of the experiment to be achieved.
- Refinement of the experimental methodology to be adopted by the implementation and if necessary by the improvisation of procedures which will have the least distressing or harmful effect to the animals and when this is not avoidable to counter those effects by the use of ataractics (tranquillisers), neuroleptics (dissociative agents), anaesthetics, analgesics and other effective strategies.

4. Animal Protection

Animals should be protected from research designs that involve pain, illness, isolation, mutilation (whether by surgery or otherwise) and/or premature death until such research can be demonstrated to be imperative and related to health, welfare and environmental problems, which are potentially catastrophic in nature and for which alternative designs using non sentient systems are not feasible.

5. Relevance

Animal based teaching and research must address an important question relevant to the objectives in advancing knowledge, education, science and human and animal welfare through research, be based on plausible hypothesis and have a reasonable prospect of yielding good results.

6. **Responsibility**

It is the responsibility of everyone using animals, for experimentation, testing diagnosis, teaching, sourcing of tissues or body fluids to assure that the animals that they use are afforded the highest levels of welfare and protection from abuse.

7. Policies

This committee has several policies in place that may be relevant to the application. Your attention is specifically drawn to:

- SANS 10386: "The Care and Use of animals for Scientific Purposes" which defines responsibilities.
- Terms of reference of this committee
- Institutional policies

8. Personal Declaration

	8.1	I, , as Principal Investigator in this application, hereby declare that I am familiar with the precepts, policies and responsibilities outlined under Section E and will personally undertake to ensure that these are upheld in the conduct of this study, should it be approved.	
:	8.2	I undertake not to deviate from the approved application without obtaining prior approval by the AUCC for any desirable or necessary significant changes that may need to be made in the methods used, which may affect the welfare of the animal subjects.	
	Signa	ature of Principle investigator Date	
;	8.3	In my opinion, all persons named and working under my supervision have the appropriate training and skills needed to carry out their responsibilities for experimental procedures, care and handling of the species being used. I will ensure that this research conforms to applicable legal requirements.	
		Signature of Supervisor (When applicable) Date	
HEAD OF E	ETHIC	CS COMMITTEE DATE	