

UNIVERSITY OF KWAZULU-NATAL: ANIMAL RESEARCH ETHICS COMMITTEE (AREC)

GUIDELINES & STANDARD OPERATING PROCEDURES (SOP)

WHEN AND WHY DO I NEED ANIMAL ETHICS CLEARANCE?

Why apply for animal ethics clearance?

UKZN subscribes to strict national and international norms concerning the ethical use of animals in teaching and research. The Animal Research Ethics Committee (AREC) resides in the University of KwaZulu-Natal Research office and is tasked with ensuring that scientific research and teaching activities involving animals (here defined as cephalopods, decapods and vertebrates) at the University of KwaZulu-Natal comply contextually with the relevant provisions of the **South African National Standard SANS 10386:2008** (*The care and use of animals for scientific purposes* - hereafter named the SANS code) and UKZN policies for animal use (Research Policy V: Research Ethics-CO/06/2906/07), incorporating the core principles of:

- **Replacement** of the use of animals with alternative models where feasible
- **Reduction** of the number of individual animals used
- **Refinement** of experimental design, procedures, care and husbandry, to minimize or eliminate the impact on individual animals in terms of actual or potential pain, suffering, stress, and lasting harm.

The main role of the AREC is thus to ensure that activities involving the use of animals undergo a prior, rigorous and scientifically-informed ethical review process. During this process, the committee evaluates applications, *inter-alia* to:

- ensure that animal experimentation takes place only where scientifically and ethically justifiable;
- confirm that researchers/teachers are adequately qualified/trained to perform the research or activities involving animals, and that these activities are legal under South African law;
- assess the **benefits** (scientific\educational quality and outcomes) of a proposed animal usage activity against the **costs** (stress\discomfort that target animals will suffer).

Failure of applicants to supply the required information in sufficient detail or to adequately motivate the benefits of the proposed animal usage activity will inevitably result in delays or refusal of ethical clearance.

Which animals required ethical approval before use in research & teaching and which do not?

Following international best practice AREC approval is required for all live, sentient non-human vertebrates including eggs, fetuses and embryos, that is fish, amphibians, reptiles, birds, mammals, and encompassing domestic animals, purpose-bred animals, farm animals, wildlife, and higher class

invertebrates such as members of *Cephalopoda* and *Decapoda* including free living and reproducing larval forms. Any other animals outside these categories do not need ethical approval to use for research and teaching or any other experiments.

Who must apply?

All academic staff, visiting academics, researchers (including Research Associates, Honorary Appointments) undergraduate/postgraduate students and postdoctoral fellows using animals (including specimens acquired from other parties outside University of KwaZulu-Natal) for research, teaching or experiments as an activity of University of KwaZulu-Natal must submit a protocol (application) for ethical approval. This includes work done by University of KwaZulu-Natal staff elsewhere. Should animal work be conducted at an institution with its own AREC, the approval letter issued by that AREC must be furnished to the UKZN AREC.

The Principal Investigator (PI) listed in applications should be the researcher, undergraduate/Honours module coordinator or postgraduate supervisor who assumes overall responsibility for the ethical care and/or use of animals targeted by the proposed activity/project.

- For undergraduate teaching involving the use of animals, the Module Coordinator must submit an application covering all animal usage in the module, listing individual lecturers, technical staff and student demonstrators (tutors) that may run practicals as participants.
- For Postgraduate (Honours) teaching involving the use of animals, the Module Coordinator must submit an application covering all animal usage in the module, listing Supervisors/Co-Supervisors, students and technical staff involved in the practical.

Must I apply for ethics clearance if the proposed activity uses dead animals?

Ethical approval is required to use the remains of an animal that is killed for a scientific purpose (remains include cadavers, tissue samples, genetic material, body fluids, excreta, bones etc.). This means that if an animal is killed specifically so that parts of the animal can be used for scientific purposes, then the use of that animal, including killing it, requires ethical approval.

Although no formal ethical approval is required to use the remains of an animal if no aspect of the animal's life and death were altered for the scientific purpose, i.e. if the animal's life and death would have been exactly the same whether or not the scientific purpose occurred, the source of sample must be declared via a designated form (**AREC Form D: Disclosure of sample source**) available in the animal ethics webpage under research office website. The UKZN encourages the sharing of tissues or remains of animals in additional research activities, providing the initial use and death of the animal was approved as required, as this maximizes the potential benefit from the original use of the animal with no additional welfare impact. Examples of when ethical approval is not required but disclosure form must be submitted to AREC office, are:

- Use of organs or other material from animals killed as part of routine commercial food and fibre production; e.g. sourced from butchers, fish shops or abattoirs.
- Use of carcasses or samples from animals killed at veterinary clinics, animal shelters or game reserves for other (veterinary or management) reasons.
- Use of samples from animals killed as part of a routine, unmodified pest animal control program.
- Use of carcasses or samples from animals found dead (e. g. "road kill").

- Use of tissue samples stored in laboratories from animals whose care and euthanasia has already been approved and monitored as part of an earlier ethically-approved activity.
- Use of specimens housed in museums and research collections.

Is ethical approval needed for animal observational activities?

The term 'observational' means different things to different people. Some activities that people call 'observational' do require ethical approval; others do not. Ethical approval is not required for the following activities, providing that such activities do not involve abnormal disruption of habitat and relevant authorization is obtained from conservation agencies and/or landowners:

- Observing visually, not including spotlighting, e.g. bird watching and whale watching from a public beach using the naked eye or binoculars, providing that such observation will not stress the animals.
- Recording observations, note taking.
- Making photographic, sound or digital recordings.
- Collecting faeces (scats) and shed feathers.
- Searching for and recording animal tracks.
- Recording animal tracks through the use of shallow sand pans.
- Using hair follicles to detect presence of animals.

Activities that 'use' animals for which ethical approval is required include:

- Observational activities that require such close physical proximity to animals that the animals may suffer stress (e.g. monitoring of seabird nesting sites or cave-dwelling bat populations).
- Spotlighting or using light sources more powerful than a domestic torch for the purposes of visual observation to collect scientific data.
- Trapping of animals (Elliot, pitfall, cage/box traps, foot-loops, mist nets etc.).
- Catching and ringing birds or bats for scientific use or as part of ecological research programs or surveys
- Using call playback to stimulate responses by animals.
- Identifying animals by means of marking or placing on or in the animal any form of identifying mark or object, e.g. including paint or other external marker, micro-chipping, trimming hair, banding and tagging, toe clipping, ear punching.
- Conducting surveys where animals are caught by hand, examined and released.

These lists are not exhaustive, but provide some examples of when animal ethics clearance is/not needed. Principal Investigators should contact the Chair or Deputy Chair of the Animal Research Ethics Committee (Animaethics@ukzn.ac.za) for advice if doubts exist concerning the need for animal ethics clearance.

Is ethical approval needed for displays and demonstrations using animals?

Displaying or demonstrating an animal does 'use' the animal, and animals used in educational displays or demonstrations may suffer discomfort and stress. Ethical clearance is, therefore, required for the use of animals used for educational displays or demonstration purposes (e.g. wildlife displays at schools, open days and school outreach activities in the field) conducted under the auspices of the University of KwaZulu-Natal. Displays of animals for purposes other than scientific or teaching do not require ethical approval (e.g. fish tank in a departmental foyer).

PROCEDURES

How to apply for animal ethics clearance?

Applications must be submitted to the AREC using the form available on the Research office website under Ethics <http://research.ukzn.ac.za/Research-Ethics/Animal-Ethics.aspx> at least 2 months before the planned animal usage is to commence, but preferably even earlier.

- A signed electronic copy of the application form should be submitted to animaethics@ukzn.ac.za and a hard copy with **original signatures of all participants** posted / hand delivered to the AREC Administrator, Research Office, Govan Mbeki Building, Westville Campus. Fully signed scanned or PDF copies of applications will be considered only under exceptional circumstances.

Review and approval of applications

Acknowledgement of receipt that includes a Reference number is sent to the applicant within one week of receiving applications by the AREC administrator. The Chair or Deputy Chair will assign at least two expert committee members as reviewers, where at least one will be from the National Society for the Prevention of Cruelty to Animals (NSPCA) and other an expert in the area of that particular research to ensure rapid review. A third member may be appointed if necessary. The turn-around time for finalization of applications is usually 8 weeks, however a longer turnaround time may be required depending on the complexity of the application and review report, submission of required documents, revised application (if necessary) and availability of the designated committee members.

The Committee will authorize only those studies for which animals are essential and that conform to current standards and guidelines, taking into consideration ethical and welfare aspects as well as the scientific and educational value of the proposed research. In the case of proposals for research using Non-Human Primates, the review process includes ratification of the proposal by the full AREC and only once this has been received may the research be initiated.

Each application/protocol is evaluated by the committee and may be:

- **Approved with/without conditions**, whereupon the Chair of AREC provides the PI with a Letter of Approval and note any special conditions;
- **Revision needed** – if revision is needed; resubmission of a revised protocol with alternative procedures may be allowed. Usually 2-4 weeks are given for revision based on the nature of the comments and questions raised by reviewers. However, the submission of a revised version of an application does not guarantee its acceptance and approval.
- **Rejected** - if proposed procedures are deemed ethically unacceptable then the application will be referred back to applicant and any future submission with revised protocol will be deemed as a new submission.

Any ethical approval is applicable only to the number and types of animals, and the proposed activities that are detailed in a protocol. Approval is valid for a period of 1 year, after which a renewal application / protocol (with a copy of original approval letter) must be submitted for review.

Ethical approval is also subject to the submission of relevant permits from conservation authorities within 60 days, if not already provided. Should any permits expire and be renewed during the execution of the project, PI's are required to submit a copy thereof to the AREC administrator. Should there be any changes to the numbers and types of animals to be used, participants and/or procedures to be followed, PI's must obtain further written approval from AREC (see [Protocol Amendments](#) below).

Should an applicant be dissatisfied with a decision regarding the proposed usage of animals, s\he may appeal this decision.

Protocol amendments

In the case of minor modifications to protocols, or deviations, **necessitated by emergencies** that could impact on animal health and wellbeing, the PI needs not obtain additional authorization (but the Chair of AREC must be informed). However, for major deviations and/or modified protocols, additional authorization is required and the [Protocol Amendment Form](#) on the Research Office website should be used.

Reporting on authorized animal usage

Although the PI needs to submit a progress report at the end of an approved research protocol, the University AREC has the right to request progress reports at any point on any teaching or research related activities that have been approved if this is deemed necessary. These reports may include details of animal usage, animal welfare observations, adherence to protocol-outlined procedures and results achieved compared to animal usage.

Protocol deviations and animal ethics violations

The AREC is obliged to respond to any complaints relating to animal welfare from staff of students of UKZN or the general public, or problems identified during occasional and unannounced inspection of animal housing facilities by the NSPCA/AREC and/or operational procedures. In the event of deviations from protocols that are deemed to be serious, the UKZN may withdraw approval, order the immediate cessation of the teaching or research activity involving animals, and refer the matter to Legal Services via the DVC (Research) for further investigation.

References:

1. South African National Standard SANS 10386:2008
2. Rhodes University Department of Zoology and Entomology Animal Ethics Committee, Guidelines & Standard Operating Procedures.
3. University of Cape Town Science Faculty Animal Ethics Committee
4. Animal Ethics Committee, University of Sydney, Australia