**NRF-SAIAB Animal Ethics Committee**

**Application for the Observation, Collection, Care and Use of Live Vertebrates and Higher Invertebrates for Scientific Purposes**

***Note: ‘Higher invertebrates’ means Cephalopods and Decapods. The other SAIAB-AEC application form should be used for all other (‘lower’) invertebrates or any other research (e.g. water or sediment sampling), including the use of tissue samples.***

|  |  |
| --- | --- |
| ***For official use only*** | |
| **SAIAB-AEC-REF#:** | 25.4.1.7.5-2024-XX |
| **Name of Project** |  |
| **\*Name of Principal Investigator** |  |
| **Project start date** |  |
| **Project end date** |  |
| **Date submitted** |  |
| **Date reviewed** |  |
| **Date approved** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Total no.** | **Protocol severity category (i.e. most severe category in Section 8)** | **Fate of animals** |
|  |  |  |  |

|  |
| --- |
| **Additional comments** |
|  |

**Section A: General information**

1. **Details of Applicant, Principal Investigator and Platform Manager**

|  |  |  |  |
| --- | --- | --- | --- |
| *I acknowledge that to the best of my knowledge the information contained in this application is true and correct. I have read and understand the terms of this application, as per the Declaration – Appendix 1.* | | | |
|  | | | |
| ***Applicant email*** |  | ***Tel*** |  |
| ***Applicant name & surname*** |  | ***Affiliation*** |  |
| ***Applicant signature*** |  | ***Date*** |  |
| *\*If the applicant is* ***not*** *the Principal Investigator (PI) of the project, the PI must check and approve this application before it is submitted to the AEC for review (see Section A and Declaration - Appendix 1).* | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| *I confirm that I have reviewed and approved this application (see Declaration). I acknowledge that to the best of my knowledge the information contained in this application is true and correct. I have read and understand the terms of this application, as per the Declaration – Appendix 1.* | | | |
| ***PI email*** |  | ***Tel*** |  |
| ***PI name & surname*** |  | ***Position at SAIAB*** |  |
| ***PI signature*** |  | ***Date*** |  |
|  | | | |
| *If the proposed research falls under one of SAIAB’s research platforms, but the PI is not a SAIAB employee, the signature of the Platform Manager is required in the field below and in Appendix I.* | | | |
| *I confirm that I have reviewed and approved this application (see Declaration). I acknowledge that to the best of my knowledge the information contained in this application is true and correct. I have read and understand the terms of this application, as per the Declaration – Appendix 1.* | | | |
| ***Email*** |  | ***Tel*** |  |
| ***Platform manager’s name*** |  | ***SAIAB platform name*** |  |
| ***Platform manager signature*** |  | ***Date*** |  |

1. **General Information**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Category*** *(mark the applicable category with “YES”)* | | | |
| This is a first submission |  | | |
| This is a resubmission |  | Previous application number |  |

|  |  |
| --- | --- |
| Ethics protocol title: | |
|  | |
| ***Ethics protocol start date:*** |  |
| ***Ethics protocol end date:*** |  |

1. **Background and Motivation**

|  |
| --- |
| ***Please provide a non-technical introductory overview of the ethics protocol in no more than 300 words. Note: Must be understandable to laypersons outside the field***  *What is the ethics protocol about? Why is it important? What problems, questions, needs, observations, or new ideas have led to the conceptualisation of this study?* |
|  |

1. **Study Participants**

***Include all participants involved (i.e. Principal Investigator, Applicant, SAIAB Platform Manager, students, supervisors, other study participants, etc.) who will perform any fieldwork or associated activities on animals (including observation, capture, handling, restraint, experimental or other procedures, anaesthesia, injections, sampling, collection of tissues, surgery, identification, release, tracking, transport, welfare monitoring, euthanasia, etc.)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Name and Surname*** | ***Affiliations (for students, include university, degree, and year of study)*** | ***Responsibilities/Duties/Activities/Procedures performed on animals (see above for examples)*** | ***Associated training, experience, and competence in procedures (incl. in SAIAB SOPs)*** | ***Animal ethics training details*** | ***Date & Signature*** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1. **Approval from Other (Non-SAIAB) Animal Ethics Committee(s)**

***In the table below please provide details of all other animal ethics committees, where the same ethics protocol activities have/will be submitted for review. If protocol has been approved by another committee please attach the approval letter to this application.***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Name of person*** | ***Institution*** | ***Role (e.g. student, research associate, postdoc) and/or Degree*** | ***Ethics status***  *Not submitted (NS), pending (P), approved (A)*  ***Include ethics number if approved.*** | | | |
|  |  |  | NS | P | A | ***Protocol reference no:*** |
|  |  |  | NS | P | A | ***Protocol reference no:*** |

1. **Permits**

|  |
| --- |
| Research permit number/s and issuing authority: *If no research permit number is available, what is the agreement with the local environmental authority (e.g. Nature Conservation)?* |
|  |

1. **Details of Animals**

|  |  |  |  |
| --- | --- | --- | --- |
| **Species**  **(common and scientific names)** | **Total number** | **Source** | **Fate of animals** |
|  |  |  |  |

**Section B: Severity Classification**

|  |  |  |
| --- | --- | --- |
| ***Severity Category\****  *Which severity category does this ethics protocol fall into?*  *The severity of a procedure shall be determined by the degree of pain, suffering, distress or lasting harm or other negative impacts on animal welfare expected to be experienced by an individual animal during the course of the procedure.* | | |
|  | **Observational** | Purely observational protocols that are unlikely to result in any fear, stress, disturbance, or negative welfare impacts to sentient animals, e.g. archived specimens from museums, non-interfering observation of wild animals *in situ*. |
|  | **Mild** | Procedures on animals as a result of which the animals are likely to experience short term mild pain, suffering or distress, as well as procedures with no significant impairment of the wellbeing or general condition of the animals. |
|  | **Moderate** | Procedures on animals as a result of which the animals are likely to experience short term moderate pain, suffering or distress, or long-lasting mild pain, suffering or distress as well as procedures that are likely to cause moderate impairment of the wellbeing or general condition of the animals. |
|  | **Severe** | Procedures on animals as a result of which the animals are likely to experience severe pain, suffering or distress, or long-lasting moderate pain, suffering or distress as well as procedures that are likely to cause severe impairment of the wellbeing or general condition of the animals. |
|  | **Non-recovery** | Procedures which are performed entirely under general anaesthesia from which the animal shall not recover consciousness.  Experiments on sentient animals expected to produce little or no discomfort, e.g. catch-tagging-release, blood sampling, handling animals, or applying minimally invasive examinations, depriving animals of food/water for a few hours (no longer than in nature). |

\*Definitions from Classification and reporting of severity experienced by animals used in scientific procedures: FELASA/ECLAM/ESLAV Working Group report, Laboratory Animals 2018, Vol. 52(1S) 5–57. <https://doi.org/10.1177/0023677217744587>

**Section C: Information on Animal Species**

|  |
| --- |
| C1: General classification of the animals to be used *Under which families and genera do the targeted species fall?*  *Which life-stages and sexes will be studied?* |
|  |
| C2: Provide the conservation status of the targeted species (as listed on IUCN Red List/ TOPS/ CITES etc.) |
|  |
| C3: Which non-target animal species may reasonably be affected, and what is their conservation status (e.g. bycatch) (as listed on IUCN Red List/ TOPS/ CITES etc.) |
|  |

**Section D: Information on numbers of animals**

|  |
| --- |
| ***D1: Sample size*** |
| ***D1a:*** *How many animals will be used in total, in the study or activity?*  *Include the* ***total number*** *of animals to be collected/used. For biodiversity studies, provide a reasonable estimate of the number of animals to be collected and the rationale in D1c below.* |
|  |
| ***D1b:*** *How was the sample size (number of experimental units) calculated?* (Reduction)  *For hypothesis-testing studies, define the primary outcome variable that was used to determine sample size; and state the values that were used for the sample size calculation, i.e. the desired statistical power, p-value threshold, expected variability of measurements, meaningful effect size, and which statistical tests will be used to determine sample size. Show calculations where possible.* |
|  |
| ***D1c:*** *Indicate why the sample size is appropriate for this study.* |
|  |

## Section E: Study Design

***Is this project lab-based, field-based or both? (tick applicable box)***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Lab-based** *(Section D)* |  |  | **Field-based** *(Section E)* |  |  | **Both** *(Sections D+E)* |  |

|  |
| --- |
| E1: Rationale and objectives |
| E1a: Briefly explain why the study will be conducted. List the scientific question(s) that will be addressed. Do not include methods here.Word limit: 300 to 500 wordsNote: Expansion of the layman summary. |
| Number of words: |
| E1b. For hypothesis-testing studies, define the hypotheses to be tested. |
|  |
| ***E1c:*** *Argue why the study is relevant, and why live animals have to be used. (Replacement)* |
|  |
| ***E2a.*** *Describe in detail the housing and husbandry of animals.* |
|  |
| ***E2b.*** *Describe in detail all other methods that will be used during the study. Include a comprehensive overview of the methods to be used for the study. Include details about animal capture, restraint, handling, identification, measurements, tagging, administration of substances, anaesthesia, surgical procedures, analgesia, sampling, transport, release of animals, euthanasia, randomisation, blinding, and any other relevant procedures or activities that will be performed during the study.* |
|  |
| ***E3:*** *Describe the study design or the flow of the experiments to enable the reviewer to have a high level summary of the proposed experimental plan.*  *Include pilot studies, experimental treatments (including control groups where relevant), number of animals, sampling/procedure timeframes and fate of animals at end of study. Use a* ***flow diagram*** *to illustrate the study design.* |
| Example flow diagram:  Sample animals (30) -> Group 1 (15) -> Expose to condition 1 -> Sample -> Release  -> Group 2 (15) -> Expose to condition 2 -> Sample -> Release  (Day 1) (Day 5) (Day 6-13) (Day 14) (Day 15) |
| ***E4: Analysis****: Which statistical or other analyses will be performed to test hypotheses or address research questions?* |
|  |

**Section F: Harm-Benefit Analysis**

|  |
| --- |
| ***F1: Harms vs benefits:*** *Describe all harms to the animals in the study or activity, in terms of cumulative lifetime harms. Harms should include all discomfort, fear, pain, suffering, distress, loss of life, and lasting harm, and consider all impacts on welfare in terms of the Five Freedoms and Five Domains. . How might animals be harmed?*  *Explain how these harms will be practically limited. Explain which actions will be taken to limit the harms to individual animals in the study (Refinement)* |
|  |
| ***F2: Benefits:*** *Describe all benefits that will likely stem from the study or activity, in terms of benefits to society (i.e., humans, animals, and/or the environment). Benefits should include consideration of scientific benefits, knowledge gained, safety and efficacy benefits, educational benefits, socio-economic benefits, health benefits, and conservation benefits. Explain what the benefits are, who will benefit, how they will benefit (impact), and when they will benefit.*  *Explain how these benefits will be practically achieved.* |
|  |
| ***F3: Harm-benefit analysis****: Justification is needed for harm done to any animal. Explain how the overall benefits of the study or activity or outcome/s, will outweigh the overall harms of the study or activity.* |
|  |

**Section G: Study Area**

|  |
| --- |
| G1: Where and how will the research animals be studied? (Mention appropriate permitting, and maps may be provided or appended) |
|  |
| ***G2: Is it possible that the study may have any negative effects on the environment?***  *If so please explain what these could be, and what will be done to prevent/mitigate such negative effects?* |
|  |

|  |  |  |
| --- | --- | --- |
| G3: Which methods and/or gear will be used to collect study species?Supply support documentation if relevant (e.g. SOPs) | | |
| NOTE: In all instances, fieldwork needs to be undertaken responsibly and damage to the environment needs to be minimised at all times. | | |
| Select | Gear type | Details |
|  | E.g. Netting | Seine nets and fyke nets |
|  | Netting |  |
|  | Electrofishing |  |
|  | Observation |  |
|  | Angling |  |
|  | Piscicides |  |

|  |
| --- |
| ***G3a: COLLECTION – Describe how each gear type will be used.*** |
|  |
| G3b: COLLECTION – How selective are the collection methods and how will the researcher/s deal with by-catch? |
|  |
| G3c: COLLECTION – What steps will be taken to mitigate potentially harmful effects of the selected collection methods? |
|  |

**Section H: Fate of the Experimental Animals**

|  |  |  |
| --- | --- | --- |
| H1a: Fate | | H1b: Provide details |
|  | Release to the wild |  |
|  | Return to captive stocks |  |
|  | Kept in captivity |  |
|  | Euthanasia |  |
|  | Animal carcasses to be preserved/ disposed of |  |
|  | Remain in wild/natural environment |  |

**APPENDIX 1: DECLARATION**

|  |
| --- |
|  |

* I hereby declare that I am familiar with the precepts, policies and responsibilities outlined above, that I am familiar with the minimum standards for the care and use of animals for scientific purposes as outlined in SANS 10386: 2021 and the NRF-SAIAB Animal Ethics Policy, and shall personally undertake to see that these are upheld in the conduct of this protocol.
* All of the information provided in this application is complete and accurate.
* This project will not proceed before ethical approval is obtained from the NRF-SAIAB AEC.
* This project will not proceed before all required permits and other legal requirements are in place.
* The information collected will only be used for the purposes for which approval has been obtained.
* This research project will only be conducted if funding is adequate to enable it to be carried out according to good research practice and in an ethical manner.
* Any and all additional information required by the NRF-SAIAB AEC either before approval is obtained or as the research progresses, will be provided immediately upon request.
* An Amendment Request will be submitted to the NRF-SAIAB AEC on the appropriate form for any proposed change to the approved project, and the PI and research participants will await written approval from the NRF\_SAIAB AEC before proceeding with the proposed change.
* The NRF-SAIAB AEC will be notified immediately in writing of any proposed change to the researchers involved in the project and will be provided the names and contact details of new and/or departing researchers.
* The NRF-SAIAB AEC will be notified in writing as soon as possible after any serious adverse event that may occur during the course of the research or activity.
* Participants involved in the project will adhere to all relevant NRF-SAIAB policies and codes of conduct whilst conducting the research.
* Reporting:
  + I undertake to request renewal of this protocol annually through submission of an annual progress report to the NRF-SAIAB AEC. Upon expiry of the protocol approval period as communicated by the NRF-SAIAB AEC, a new application for ongoing activities will be submitted to the NRF-SAIAB AEC.
  + At the conclusion of the protocol, I undertake to report on its outcome to the NRF-SAIAB AEC by submitting a final report.

|  |  |
| --- | --- |
| I, **applicant name**, confirm that I have read and understand the terms of this **Declaration**. | |
|  |  |
| Signature | Date |

|  |  |
| --- | --- |
| **If the applicant is not the PI:** I, **PI name**, confirm that I **and all researchers listed** on this project have read and understand the terms of this **Declaration**. | |
|  |  |
| Signature | Date |
| **If the application falls under one of SAIAB’s research platforms (but the PI is not a SAIAB employee):** I, **Platform Manager name**, confirm that I **and all researchers listed** on this project have read and understand the terms of this **Declaration**. | |
|  |  |
| Signature | Date |