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| Application for Animal Research Authority (ARA) for the use of animals in research and teaching |

**The following must be read before you proceed with the preparation of an application.**

It is the responsibility of the researchers to ensure that all facets of animal care and use meet the requirements of the Australian code of care and use of animals for scientific purposes (8th Edition 2013). This includes a responsibility to protect the welfare of animals used.

The Code embodies the principles of:

* Reduction of animal use
* Replacement of animal use
* Refinement of animal use.

And, Investigators should be familiar with:

* [Australian Code of Care and Use of Animals for Scientific Purposes, 2013 (updated 2021)](https://nhmrc.gov.au/about-us/publications/australian-code-care-and-use-animals-scientific-purposes)
* [NSW Animal Research Act 1985](https://www.legislation.nsw.gov.au/" \l "/view/act/1985/123)
* [NSW Animal Research Regulation 2005](https://www.legislation.nsw.gov.au/" \l "/view/regulation/2005/468/full)
* [Guidelines to Promote the Wellbeing of Animals used for Scientific Purposes.](https://nhmrc.gov.au/about-us/publications/guidelines-promote-wellbeing-animals-used-scientific-purposes)
* [ARRIVE Guidelines](https://arriveguidelines.org/arrive-guidelines)

It is important to consider these principles when designing and carrying out projects.

Under the NSW Animal Research Act, approval by an Animal Ethics Committee (AEC) is required for the use of any vertebrate animals for research and teaching.

The AEC must assess the impact on animals of all procedures and of the project as a whole.

The application should therefore focus on what is happening to animals and what is being done to ensure their well-being. It is important that this information is presented in a way that clearly shows what is happening to individual animals from the beginning to the completion of a project, and that the impact of procedures are clearly detailed. The researchers should provide a step by step examination of all treatments (substances, dose rates, routes, volumes, anaesthetics, surgical procedures, etc.) and the expected effects. In addition, factors that will impact on animals such as housing (type, duration, opportunity for social interaction) must be considered.

The application should also explain clearly why the use of animals is justified, why the species and number of animals have been chosen and that the qualifications of personnel are suitable for the procedures to be performed.

It is important for applicants to remember the composition of the AEC. Applications must be written primarily for an interested, intelligent person without a scientific background, and not for a specialist. The use of specialist language is not helpful to the Committee and may delay processing of an application while explanations are sought.If a UNE student is listed on this application, as part of their study requirements, but is conducting the research at CSIRO, then this application must be completed and submitted to the UNE’s AEC. CSIRO approval will not be accepted.

To submit an application to the University of New England’s AEC for approval to undertake research or teaching, you are requested to answer all questions clearly and concisely. Questions requiring a Yes/No/Other answer should be answered by selecting the relevant check box.

This document contains hidden text which will assist you in completing some of the questions by giving you more information. You will notice some questions have green numbers at the end, these relate to the relevant sections in the Australian Code as they relate to that question.

How to use hidden text in the application

Guidelines to help you respond to the questions in this form are included as **blue hidden text**.

To view the hidden text on a **PC**, select  from your toolbar, or go to your toolbar and select the paragraph option and then select ‘show/hide’. If this is not visible please contact IT Service Desk on x5000 for assistance to locate this functionality.

The hidden text will not be seen on the printed version.

To print hidden text select: File⏐Options⏐Display⏐Print hidden text.

**DO NOT submit applications with hidden text showing.**

**Submitting your application:**

* Ensure your application is complete on the most current version of the form and all questions have been answered. Incomplete applications will not be accepted.
* The application must identify all of the researchers involved with the project. This includes anyone that will be, or potentially will be, handling the animals. They must all sign the Declaration at Section F. A student is not and **cannot** be the Principal Investigator or Project Supervisor. This responsibility must be undertaken by the student’s supervisor.
* Applications should be submitted electronically either as a word document or a colour pdf. Hardcopies will be accepted but must be submitted in colour.

**Questions can be directed to:**

Animal Ethics Secretary - 02 6773 2890

Research Services

T.C Lamble Building

University of New England NSW 2351

***It is advisable to*** ***keep an electronic copy of this application, complete with signatures, for your personal records.***

**Closing time for applications:**

The closing time for applications is **12 noon** on the nominated closing date. The closing dates for all meetings can be found on the Animal Ethicsweb page under the heading [AEC Meeting Dates.](https://www.une.edu.au/research/ethics-and-grants/animal-research-ethics/aec-meeting-dates)

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| *Office use:* | **Reference Number** |  | **Date Received** |  |  |

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| Application for Animal Research Authority (ARA) for the use of animals in research and teaching |

#### SECTION A

#### A1 - PROJECT TITLE and PROJECT SUMMARY

|  |  |
| --- | --- |
| **Project Title** (this title will be used in all correspondence relating to the project) |  |

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| --- | --- |
| **Project Summary** (Provide a brief plain English snapshot of the project and provide a justification of the benefits to either animals, humans or to the environment. |  |

#### A2 – PRINCIPAL RESEARCHER/PROJECT SUPERVISOR – PERSON WITH ULTIMATE RESPONSIBILITY 2.4.5 (*this is not the research student)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Title and full name** | | |  | **UNE staff no.** |  | | |
| **Work mailing address/school** | | |  | **Email** |  | | |
| **Work phone no.** | | |  | **After hours no.** |  | | |
| **Qualifications** | | |  | | | | |
| **Please detail the relevant experience you have for each procedures/technique you will be involved in throughout this project or details of training if required** | | | | | | | |
|  | | | | | | | |
| **Has this researcher ever had a research authority cancelled?** | | | | | | **YES** |  |
| **NO** |  |
| *If* ***Yes****, include the relevant details i.e. authority no., reason, etc.:* | | | | | | | |
| **Has the researcher completed an Animal Ethics course?** | | | | | | | |
| **YES** |  | UNE Animal Ethics Course no.:  *If from another institution please provide evidence of completion and you will be provided an UNE animal ethics course number.* | | | | | |
| **NO** |  | Detail when this will be obtained: | | | | | |
| **The AEC may wish to contact you during the AEC meeting to discuss your application, provide the best contact details below.** | | | | | | | |
| Telephone number: | | | | | | | |

This is the person whom the AEC will correspond with in relation to this project. If the Principal Researcher/Supervisor **is not** a UNE researcher then the researchers will be charged the current assessing fee, for an outside organisation. In the case of student research, a member of the student’s supervisory team must be listed.

#### A3 – CO-RESEARCHER/CO-SUPERVISOR/RESEARCH ASSISTANTS/TECHNICIANS ETC

List all personnel who will be involved in the care and use of animals on this project who are **not** students conducting the research or teaching as a component of their studies (this includes Co-Supervisors). **However**, if students of the University are working on the project, e.g. as research assistants, but are not using the research or teaching for their studies, they should be listed here. **CART staff** do not need to be included unless conducting tasks specific to this project.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **UNE Staff/ Student Number** | **Animal Ethics course number** | **Role in this research** | **Qualifications** | **Please detail the relevant experience you have for each procedures/technique you will be involved in throughout this project or details of training if required** |
|  |  |  | **Choose a role** |  |  |
|  |  |  | **Choose a role** |  |  |
|  |  |  | **Choose a role** |  |  |
|  |  |  | **Choose a role** |  |  |
|  |  |  | **Choose a role** |  |  |
|  |  |  | **Choose a role** |  |  |

***Insert extra rows when required***

|  |  |  |
| --- | --- | --- |
| **Have any of the above researchers ever had a research authority cancelled?** | **YES** |  |
| **NO** |  |
| *If* ***Yes****, include the relevant details i.e. authority no., reason, etc.:* | | |

#### A4 – STUDENT RESEARCHERS

List only students working on the project who **are** conducting the research as a component of their studies.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title and full name** | | |  | | | | **UNE student no**. |  | | |
| **Mailing address** | | |  | | | | **School** |  | | |
| **Email** *(UNE email only)* | | |  | | | | **Phone No**. |  | | |
| **Degree Type** | | Undergraduate | | Honours | | Postgraduate Coursework | | Postgraduate Research | | |
| **University of New England** | | | | | Yes | | Other (please specify): | | | |
| **Qualifications** | | | | |  | | | | | |
| **Please detail the relevant experience you have for each procedures/technique you will be involved in throughout this project or details of training if required** | | | | | | | | | | |
|  | | | | | | | | | | |
| **Has the student researcher ever had a research authority cancelled?** | | | | | | | | | **YES** |  |
| **NO** |  |
| *If* ***Yes****, include the relevant details i.e. authority no., reason, etc.:* | | | | | | | | | | |
| **Has the student researcher completed an Animal Ethics course?** | | | | | | | | | | |
| **YES** |  | Animal Ethics Course no.:  *If from another institution please provide evidence of completion and you will be provided an UNE animal ethics course number.* | | | | | | | | |
| **NO** |  | Detail when this will be obtained: | | | | | | | | |

**List all students working on the project who are conducting this research as a component of their studies.**

***Copy this table and repeat for each additional student***

#### SECTION B

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| --- | --- | --- | --- | --- |
| **B1** | **Start and end date of research.** *(‘Start date’ must be after meeting date)* What is the anticipated duration of the data collection/animal research phase of the project?  Approval is granted for a 12-month period for a research project. Applications for teaching or maintenance protocols may be granted for a 3 year period.  Please indicate below the expected commencement and completion dates. Commencement *cannot* be before the meeting date that this application will be tabled at. | | | |
| **Start date:** |  | **End date:** |  |

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| **B2** | **Is this a new or an ongoing protocol?** | **NEW** |  |
| **ONGOING** |  |
| *If* ***ONGOING****, please indicate the prior AEC number(s):* | | |

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| **B3** | **Has the research been approved; or is it under consideration, by another Animal Ethics Committee (AEC)?**  *If* ***Yes****, and approved, a*ttach *a copy of the approval(s).* | | **YES** | *(give details below)* |
| **NO** |  |
| Reason for simultaneous submission: | | | |
| Name of other AEC: | Reference no.: | | |

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| **B4** | **Provide the exact location(s) of where the animals will be captured or housed from the time of entry into the experiment until the time of its completion: 2.7.4 (xii).**  *If animals are not being housed or captured for this project please include the location where they will be observed in their natural habitat.* | | | | | |
| **Site/Property Name** (if at UNE include building name/no. and Room no.)**:** | | | | | |
| **Address:** |  | | | | |
| **State:** |  | **Postcode:** |  | | |
| If the proposed property is managed by UNE CART or SMART farms do you permit the UNE AEC officer to include CART and SMART farms in project correspondence (e.g. variations) | | | | **YES** |  |
| **NO** |  |
| **N/A** |  |

***Copy this table for each location that will be used in this project***

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| --- | --- | --- | --- | --- |
| **B5** | **Please select the primary** [**purpose**](https://www.une.edu.au/__data/assets/word_doc/0016/20482/purposelist.doc) **(one only) of this research/teaching project.**  Please **bold** the appropriate **number** and **description**: **1.6** | | | |
| A1 | Stock breeding Breeding protocols to produce new teaching or research stock. Include the animals used to produce progeny and any breeders or progeny culled in the process, NOT the final progeny themselves (as these will be counted under the protocol in which they go on to be used) | A6 | Research: Animal management or production Research projects which aim to produce improvements in domestic or captive animal management or production |
| A2 | Stock maintenance Holding protocols for animals’ maintained for use in other protocols. These animals may be maintained under the ethics authority because they require special management. If they are not held under an authority (e.g. Normal stock animals kept mainly for commercial production, but occasionally used in research) then they are only counted in the protocol where they are used for teaching/research | A7 | Research: Environmental study Research protocols which aim to increase the understanding of the animals’ environment or its role in it, or aim to manage wild or feral populations. These will include studies to determine population levels and diversity and may involve techniques such as observation, radio tracking or capture and release. |
| A3 | Education Projects carried out for the achievement of educational objectives. The purpose of the project is not to acquire new knowledge, rather to pass on established knowledge to others. This would include interactive or demonstration classes in methods of animal husbandry, management, examination and treatment | A8 | Production of biological productsUsing animals to produce products other than milk, meat, eggs, leather, fur, etc. |
| A4 | Research: Human or animal biology Research protocols which aim to increase the basic understanding of the structure, function and behaviour of animals, including humans, and processes involved in physiology, biochemistry and pathology | A9 | Diagnostic proceduresUsing animals directly as part of a diagnostic process. |
| A5 | Research: Human or animal health and welfare Research protocols which aim to produce improvements in the health and welfare of animals, including humans. | A10 | Regulatory product testing Protocols for the testing of products required by regulatory authorities, such as the APVMA. **If the product testing is not a regulatory requirement, e.g. It is part of a quality assurance system only; those animals should be included in the appropriate category selected from above.** (This would be normally be category 8 in the case of QA testing) |

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| B6If lambs are being used then they must be either over 5 months of age, fully weaned with a fully functioning rumen or their mothers must be included on the application as well. If calves are being used then they must be over 80kgs with a fully functioning rumen or, like the lambs, their mothers will need to be added to the application. | List all the different types of animals to be used in this project. | |
| Total number of animals required (must include expected mortality): |  |
| Species Category No. & Name:  *If the animal you are intending to conduct research on is not listed in the dropdown box, contact* [*animalethics@une.edu.au*](mailto:animalethics@une.edu.au) *before proceeding further.* | Select a species |
| Common name of Species**:** |  |
| Breed/Strain: |  |
| Age: |  |
| Sex: |  |
| Source: Under the legislation, non-exempt animals must be obtained from a licenced animal supplier. Issue such as capture of wild animals or obtaining animals from remote sources that will necessitate prolonged transport will also need to be considered by the Committee and the answer should be as complete as possible. |  |
| Conservation status (if applicable): |  |

*Copy and paste this section again if more than one species is used*

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| **B7** | Indicate each of the [procedures](https://www.une.edu.au/__data/assets/word_doc/0019/14266/procedureslist.doc) that will be involved for each cohort of animals involved in this project. *A cohort is defined as animals that will undergo the same procedure(s). For example, Cohort 1 may include 150 animals that were weighed and their blood was collected. Cohort 2 (n = 450 animals) may have also been weighed but blood was not sampled. Cohorts should be described on a separate line.*  *If you select P4 or P5 you must complete both the* [*Intensive Observation*](https://www.une.edu.au/__data/assets/word_doc/0005/228848/AEC-Monitoring-Sheet-Template-with-Instructions-Intensive-Observation.docx) *and* [*Anaesthetic/Surgical*](https://www.une.edu.au/__data/assets/word_doc/0003/228846/AEC-Monitoring-Sheet-Template-with-Instructions-AnaestheticSurgical.docx) *Monitoring Sheets. If you select P7 you must complete the* [*Intensive Observation*](https://www.une.edu.au/__data/assets/word_doc/0005/228848/AEC-Monitoring-Sheet-Template-with-Instructions-Intensive-Observation.docx) *Monitoring Sheet:* | | | |
| **Species**  **No.** | **Procedure No**.  Choose all that apply | **Number of animals in cohort** | **Provide details on why you have selected this experimental procedure.** |
| Select a species | Select a Procedure |  |  |
| Select a species | Select a Procedure |  |  |
| Select a species | Select a Procedure |  |  |
| Select a species | Select a Procedure |  |  |
| Select a species | Select a Procedure |  |  |
| Select a species | Select a Procedure |  |  |

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| **B8** | **Does this project involve the use of any animals that have been the subject of previous research or teaching? If animals are to be re-used, individual records must be kept for each animal and this must be indicated in the final report. 1.22:** | | **YES** | *(give details below)* |
| **NO** |  |
| If **Yes**, Project Name and AEC approval number(s): |  | | |
| What has previously been done to the animals: |  | | |
| Justify the re-use of the animals, in relation to the potential welfare implications for their re-use: |  | | |

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| **B9** | **Are animals specifically bred for scientific purposes during the period of the protocol? 3.2.2**  *If* ***‘Yes’*** *Provide a full description of the proposed breeding program* ***below****. Your answer should include detail on the management of the breeding program to ensure current best practice to ensure the wellbeing of the colony, herd, or flock. Detail should also be given on the effects of conducting wildlife research in the breeding season. A monitoring sheet must be included in your answer. This must include data relevant to fertility, fecundity, morbidity, and mortality.* | **YES** |  |
| **NO** |  |
| **UNKNOWN** |  |
| *When animals are specifically bred for scientific purposes, the breeding program must be managed in accordance with current best practice to ensure the wellbeing of the colony, herd or flock, and all animals involved.* | | |

#### SECTION C

**The Animal Ethics Committee, comprises both scientists and lay representatives, hence all answers in this section must be written in plain English so a lay person can fully understand your answers. 2.4.12 Researchers must use plain English in the application to ensure that all AEC members are provided with sufficient information to participate effectively with the assessment of the application.**

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| **C1.1** | **Provide a list of keywords, technical terms,** **acronyms or abbreviations to assist the AEC to understand the technical aspects of the study** | |
| Term/Acronym/Abbrev./ Procedures | Plain English Explanation |
| *E.g.: Cervical dislocation* | *Breaking the neck or snapping the spine by applying pressure to the neck and dislocating the spinal column from the skull or brain* |
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| **C1.2** | **In ‘plain English’, state the aims of the experiment and the experimental design specifying the anticipated outcomes. Justify the benefits to either humans, animals or to the environment. 2.4.12Researchers must use plain English in the application to ensure that all AEC members are provided with sufficient information to participate effectively in the assessment of the application.** | | | |
| Aim: |  | | |
| Experimental design:  *Where relevant, include a table showing the number of animals to be used in treatments (and controls).* |  | | |
| Benefits to either human, animals or environment in the short and long term: *(select all that are appropriate and explain*) | Human | Animal | Environment |
|  | | |
| Anticipated outcomes: |  | | |

**It is important to present this section so that it is clear what is happening to the animals from the beginning to the end of the project and over what time. Where several groups of animals are receiving different treatments, listing them in separate tables may assist.**

|  |  |  |
| --- | --- | --- |
| **C1.3** | **Provide a full sequential description of exactly what happens to each animal or group of animals from the time you obtain them to the time the experiment is completed including fate of the animals at the conclusion of their use. This should include all methods, measurements, dose rates, frequency, volume etc. 2.7.4 (xiv) (a) and names of personnel conducting the procedures,. If available, name any relevant** [**SOP(s)**](https://www.une.edu.au/staff-current/staff-services/research-services/resources) **that will be used.** | |
| Study Day | Activity/Procedures |
| E.g.: -15 | *Sheep transported to facility via licenced carrier* |
| *E.g.: -14 to -1* | *All sheep acclimatise to paddock. 50 sheep drenched (with BZ+LV anthelmintic) and vaccinated.* |
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| **C2** | **Provide the methods and means by which animals will be monitored and housed during the protocol. 2.7.4 (xv)** | |
| **Type of housing** (*building, cage, pen or paddock*)**:** |  |
| **Dimensions:** |  |
| **Min. and max. animals per housing unit:** |  |
| **Bedding/Shelter:** |  |
| **Food/Water containers:** |  |
| **What will they be fed?** |  |
| **Other features:** |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **C3** | **Show frequency** of tasks and list **all people** who will be responsible for the monitoring, care, feeding and cleaning during the experimental phase of the project? | | | | | | |
|  | **Monitoring/Care** | | **Feeding** | | **Cleaning** | |
| **Weekday:** | ***Frequency:*** |  | ***Frequency:*** |  | ***Frequency:*** |  |
|  | ***By whom:*** |  | ***By whom:*** |  | ***By whom:*** |  |
| **Weekend:** | ***Frequency:*** |  | ***Frequency:*** |  | ***Frequency:*** |  |
|  | ***By whom:*** |  | ***By whom:*** |  | ***By whom:*** |  |

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| **C4** | **Nominate the initial contact person in the case of an emergency and up to 2 alternate contact persons. Please include relevant phone numbers including after hours.**  *These personnel are listed on the authority as the emergency contact.* This is the personnel that anyone can ring should they notice a problem with an animal or animals in your research trial. The personnel listed would be expected to take the appropriate action to remedy the situation. |
|  |

#### SECTION D

**Addressing the THREE R’s – All 3 sections must be completed**

Replacement, reduction and refinement (the 3Rs) are the key strategies to provide a systemic framework to achieve the goal of humane experimental techniques. The [Australian code](https://www.nhmrc.gov.au/about-us/publications/australian-code-care-and-use-animals-scientific-purposes) states that (the 3Rs) are to be applied at all stages of research. **1.18 – 1.30**

|  |  |
| --- | --- |
| **D1** | **REPLACEMENT** *is defined as the substitution for conscious living higher animals or insentient material for part of or all of your project.*  **Describe the alternatives to animal use that you have considered and/or adopted.**  **More information can be found at the** [**Animal Ethics Infolink**](https://www.animalethics.org.au/three-rs/replacement)**Before the use of animals is considered, alternatives to using animals must be investigated and used wherever possible. The Australian code states that: “Methods that replace or partially replace the use of animals must be investigated, considered and, where possible, implemented”**  The AEC must be informed of alternatives that exist and why these cannot be used. All existing information relevant to the proposed aim/s including existing databases, must be examined. Replacement techniques that must be considered include the use of epidemiological data; physical and chemical analysis; computer, mathematical and inanimate synthetic models; simulations; in vitro systems; non-sentient organisms; cadavers; and clinical cases. |
|  |

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| **D2** | **REDUCTION** *is to reduce the number of animals used to obtain statistically valid research outcomes.*  **The AEC encourages researchers to consult the 3Rs website for information on Experimental design and statistics:** [**https://www.nc3rs.org.uk/3rs-resources**](https://www.nc3rs.org.uk/3rs-resources) | | |
| **A. Justify how the number of animals used is appropriate for the level of significance required, the minimum difference expected and the variability existing for the trait measured. Indicate the planned statistical analysis for each outcome measure (E.g. T test, ANOVA).**  *You may wish to consult with a bio-statistician.* | | |
|  | | |
| **B. Do you expect any mortality?** (this does **not** include animals that have been listed under ‘P2 – animal unconscious without recovery’ in the answer to question B7).  *If* ***yes****, provide the expected mortality* ***percentage****, the expected* ***total number*** *of animals this would be and* ***explain*** *why this percentage was selected. If your trial goes above this percentage you will automatically need to report this to the AEC.*  *All unexpected adverse events must be reported to the AEC.* | **YES** | *(give details below)* |
| **NO** |  |
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| **D3** | **REFINEMENT** *refers to methods that alleviate or minimise potential pain and distress, and enhance animal wellbeing.*  **Describe below the actions to procedures and conditions that will be taken in your research to minimise suffering, distress, negative effects, and those procedures that promote positive animal welfare.** | | |
| **A. With regard to the experimental procedures outlined in question C1.3 provide the specific effects on the animals’ welfare and how these will be minimised.**  *E.g. stress of animal handling, pain associated with blood sampling, physiological challenges.* | | |
| **Procedure** *(as described in B7 and C1.3)* | *What will be the* ***effects*** *and* ***level of impact*** *on the animals?* | *How will negative effects be minimised?*  ***(This must include early intervention points where appropriate)*** |
| *E.g.: Observation, weighing* | *Minor stress during observation/procedure. Low impact* | *Observations occur from outside pens as to not disrupt the animals. The animals will likely become habituated to the presence of the observers (within 1-2 days). During weighing and selection of birds for sample collection, three trained and approved personnel will handle and weigh birds using low stress handling methods. One person will catch the birds, one will weigh and the third person will record the body weight. The birds will be collected with minimal distress and released as soon as the body weight is recorded.* |
| *E.g.: Bleeding* | *Discomfort during procedure.*  *Short term impact* | *Experienced staff using low stress stock handling techniques with sharp new needles will bleed animals quickly, taking approximately 30 seconds. Slight pressure on the needle site after removing the needle will ensure no further bleeding will occur.* |
| *E.g.: Oral administration of worm eggs* | *Induce minor fear and stress associated with handling with potential for more significant physiological stress due to infection or worm burden.*  *Medium-high impact* | *Trained and approved personnel will be handling birds. Daily monitoring of chickens to check for any adverse effects, and early intervention points will be in accordance with the intensive observation sheet. Should worm-associated illness* *(diarrhoea, depression, weight loss) be observed, the infection will be terminated by administering anthelmintic to the affected birds.* |
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| ***Add more boxes until all procedures have been considered*** | | |
| **B. Describe the suitability of species being used**  *E.g. Behaviour, genetic attributes, nutritional, microbiological, health status, provide**justification as to why either one or both sexes will be used.* | | |
|  | | |
| **C. How well does the design and management of housing meet the specific needs for the species being used?**  *This must include the enrichment that will be provided for the animals (if no enrichment is provided valid reasoning must be given). For more information about enrichment visit* [*Animal Ethics Infolink – Animal Care*](https://www.animalethics.org.au/policies-and-guidelines/animal-care)*. If the animal/animals you are using are not included in the Animal Ethics Infolink visit* [*Appendix A of the European Convention for the protection of Vertebrates Animals used for Experimental and other scientific purposes (ETS No. 123)*](https://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/laboratory_animals/2006/Cons123(2006)3AppendixA_en.pdf) | | |
|  | | |
| **D. How will the impacts of transportation on the animals be minimised?** | | |
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#### SECTION E

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| **E1** | **Will anaesthesia and/or surgery be performed on the animal(s)?** | | **YES** | *(give details below)* |
| **NO** | *(go to* ***E4****)* |
| Describe the procedures and who will perform the anaesthesia and/or surgery: |  | | |
| Will it be performed under general anaesthesia, under local anaesthesia or without anaesthesia (quote standard operating procedure (SOP) if applicable): |  | | |

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| **E2** | **Give details of any anaesthesia process. This should include who will administer any drugs used in this process**. |
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| **E3** | **What post-operative care will be given, post-operative monitoring will take place and what analgesia will be used? *Include a copy of the monitoring and anaesthetic record sheet to be used.*** |
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| **E4** | **Indicate from the ‘Fate of animal’ list provided those categories that apply to this protocol. Please bold the appropriate number(s) and description(s):** | | | |
| F1 | Retained in project This is where the project is ongoing and the animal will remain in the project in the next reporting year. | F6 | Euthanised or died related to the project This is where the animal is required to be euthanased as an integral part of the research project, or is euthanased or dies during the project as a consequence of the project procedures. |
| F2 | Retained for use in other projects or supplied to another establishment/individual for research This is where the animal is kept by the establishment / individual for use in other research projects or supplied to another establishment / individual for use in research | F7 | Euthanised or died unrelated to the project This is where the animal is euthanased or dies during the project for reasons unrelated to the project.  *Example:*   * *Animal in long-term food palatability trial euthanased due to unmanageable osteoarthritis* |
| F3 | Retired from research and kept by the establishment/individual  This is where the animal is kept by the establishment / individual in retirement with no further plans for use in research. | F8 | Euthanised because unsuitable to be rehomed  This is where the animal is no longer required for research and is euthanased on the basis of an assessment that the animal is unsuitable for rehoming. Reasons the animal is unsuitable for rehoming may include physical, behavioural and biosecurity factors.  *Examples:*   * *Animals with unmanageable health conditions causing discomfort or distress* * *Animals that have problem behaviours that are unable to be addressed through rehabilitation* * *Animals that could pose a biosecurity risk to other animals, people or the environment* * *Animals that are genetically modified* |
| F4 | Privately (non-research) owned and remained with owner This is where the animal is privately owned and remains with the owner.  *Examples:*   * *Animal presented to veterinary clinic for treatment and participates in clinical trial* * *Behavioural study with privately owned companion animals* | F9 | Euthanised because unable to find a suitable home This is where the animal is no longer required for research and is assessed as suitable for rehoming, but is euthanased because a suitable home is unable to be found. |
| F5 | Rehomed (as companion animal to private (non-research) home or rehoming organisation This is where the animal is rehomed as a companion animal to a private (non-research) home or to a rehoming organisation with the consent of the rehoming organisation. | F10 | Remain free-living in the wild or released to the wildThis is wherethe animal is free living and remains in the wild (including where the animal is captured and released) and where the animal is released to the wild.*Examples:*   * *Wildlife fauna surveys* * *Native animal captive breeding and monitored release programs* |

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| **E5** | **If animals are to be released into the wild, outline the methods for ensuring maximum success and indicate how the site of capture/release has been considered. 3.3.39** Procedures for any release of wildlife must ensure that; release occurs at the site of capture, unless otherwise approved by the AEC; the timing of release coincides with the period of usual activity for the species, unless safety of the animals is assured by other means, such as release into appropriate cover; animals are protected from injury and predation at the time of their release and animals that have been sedated or anaesthetised have recovered to full consciousness before their release. During their recovery, animals should be held in an appropriate area where they can maintain normal body temperature and are protected from injury and predation |
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| **E6.1A** | **What procedures are in place if illness, accidental injury or any other unexpected adverse event occurs that compromises animal welfare.**  This may include details of a species-specific veterinarian |
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| **E6.1B** | **If as a result of serious illness, serious accidental injury or order to fulfil any other ethical requirements, animals need to be euthanised please provide details of:** | |
| The method of euthanasia: |  |
| Name of person(s) carrying out euthanasia: |  |
| Qualifications or relevant experience to carry out the euthanasia: |  |
| Where will the euthanasia will be carried out: |  |
| How will the carcases be disposed of: |  |

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| **E6.2** | **Is humane killing part of this protocol?** | | **YES** | *(give details below)* |
| **NO** | *(go to* ***E7****)* |
| If **Yes**, will the people, location and the methods be the same as in the answer to question **E6.1**. | | **YES** | *(go to* ***E7****)* |
| **NO** | *(give details below)* |
| The method of humane killing: |  | | |
| Name of person(s) carrying out humane killing: |  | | |
| Qualifications or relevant experience to carry out humane killing: |  | | |
| Where will the humane killing be carried out: |  | | |
| How will the carcases be disposed of: |  | | |

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| **E7** | **Are any drugs, chemicals, ionising or non-ionising radiation, toxins or biological agents to be used?** | **YES** | *(go to* ***E8****)* |
| **NO** | *(go to* ***E9)*** |

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| **E8** | **List all drugs, chemicals, toxins, ionising or non-ionising radiation or biological agents to be used.** | |
| Name of agent: |  |
| Dose of agent: |  |
| Route of administration: |  |
| Likely effects of agent: |  |
| Duration of effects: |  |
| Method of determining effectiveness of agent: |  |
| Method of determining pain responses occurring during neuromuscular blockage: |  |
| Availability of reversing agent(s): |  |
| Availability of cardio-respiratory support facilities: |  |
| Possible side-effects of or toxicity reactions to the agent: |  |

***Copy and paste this section again if more than one agent is used***

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| **E9** | **Are any imported biological products or their derivatives to be used in any of the animals?** | | **YES** |  |
| **NO** |  |
| If **Yes**, give the AQIS approval numbers: |  | | |

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| **E10** | **Are there any anticipated health risks to staff?** | | **YES** |  |
| **NO** |  |
| If **Yes**, describe how these will be minimised: |  | | |

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| --- | --- | --- | --- | --- |
| **E11** | **Are there any anticipated health risks to other animals?** | | **YES** |  |
| **NO** |  |
| If **Yes**, describe how these will be minimised: |  | | |

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| **E12** | **Do the proposed waste disposal procedures comply with the** [**Protection of the Environment Administration Act (1991)**](http://www.austlii.edu.au/au/legis/nsw/consol_act/poteaa1991485/) **the** [**Occupational Health and Safety Act (2000)**](http://classic.austlii.edu.au/au/legis/nsw/repealed_act/ohasa2000273/) **and** [**Radiation Control Act (2003)**](https://legislation.nsw.gov.au/view/html/repealed/current/sl-2003-0615)**?** | **YES** |  |
| **NO** |  |
| **N/A** |  |

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| **E13** | **For experiments involving Native wildlife, is a licence or permit from the relevant state wildlife authority (e.g. NPWS, NSW Agriculture) required?**  A copy of this permit is required to be provided with this application.  ***It is important to ensure that the relevant permit included consultation with the appropriate Local Aborginal Lands Council, or equivalent, to ensure that species of cultural signtifance/land has been considered and it is being managed in a culturally appropriate manner.*** | | **YES** | *(give details below)* |
| **NO** |  |
| **N/A** |  |
| Name of Investigator? |  | | |
| Name of Licensing Body/Organisation: |  | | |
| Licence Class/Descriptions(s) and Number(s): |  | | |
| Expiry Date of Licence(s): |  | | |
| If **No**, explain why a licence or permit is not required. |  | | |

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| **E14** | **Is the research funded by an internal or external grant body or sponsor?** | | **YES** | *(give details below)* |
| **NO** | *(go to* ***E16****)* |
| Organisation or Funding Body: |  | | |
| Project title on contract or funding application: |  | | |
| First named investigator: |  | | |
| Administering institution: |  | | |
| If the funding body has ownership of or control over the dissemination of results provide the relevant details: |  | | |

***Copy this table and repeat for each contract or grant***

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| --- | --- | --- | --- |
| **E15** | **Does the funding constitute a conflict of interest for either the researcher(s) or provider(s) of the funding?** | **YES** | *(give details below)* |
| **NO** | *(go to* ***E16****)* |
|  | | |

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| **E16** | **Research Data Management**  [*http://www.une.edu.au/research/digital-research-support/research-data-management*](http://www.une.edu.au/research/digital-research-support/research-data-management)  *This section is not relevant to external organisations who have engaged the UNE AEC to act as their nominated ethics committee. However, all researchers are encouraged to follow good data management practices.* |
|
|
| All active project research data must be stored on [Cloud.UNE](http://www.une.edu.au/research/digital-research-support/research-data-management/cloud.une-classes), UNE’s data storage platform. |
| Researchers are encouraged to create a Research Data Management Plan ([RDMP](https://une.au.libguides.com/RDM)) and update it throughout the project. RDMPs should be stored in Cloud.UNE with active research data. |
| UNE Researchers are encouraged to archive their research data in UNE’s institutional repository, [Research UNE (RUNE)](https://rune.une.edu.au/web/index.jsp), or an appropriate external repository in accordance with UNE’s [Management and Storage of Research Data and Materials Procedures](https://policies.une.edu.au/view.current.php?id=00375).  Research data can be submitted to RUNE via the completion of the online submission form.  For assistance, please contact the Library via [librarians@une.edu.au](mailto:librarians@une.edu.au).  If research data are stored at another institution, also see UNE’s [Collaborative Research Rule](https://policies.une.edu.au/view.current.php?id=00030). |
| Researchers should be aware of and adhere to the minimum retention period applicable to their research as imposed by the NSW Government State Archives and Records (see Education: Higher & further education and research records (GA47), section [3.5.0 Research data](https://arp.nsw.gov.au/assets/ars/attachments/GA0047-Higher-and-further-education-August-2019_1.pdf)) and UNE’s [Management and Storage of Research Data and Materials Procedures](https://policies.une.edu.au/view.current.php?id=00375).  Disposal of research data must considered in accordance with UNE’s [Management and Storage of Research Data and Materials Procedures](https://policies.une.edu.au/view.current.php?id=00375). |

#### SECTION F –

**Declaration made by the person(s) responsible:**

**It is expected that you will comply with the conditions of this declaration, please read carefully before signing.**

**(a)** **I acknowledge that:**

**1.** The care and maintenance of all animals is the responsibility of the Principal Researcher/Supervisor though the work may be delegated to suitably trained or experienced staff or students listed on this application;

**2.** The *Australian code for the care and use of animals* for *scientific purposes (8th Edition 2013)* requires an autopsy to be performed when any animals die unexpectedly; and

**3.** I may proceed with the experiment only when UNE has issued an Animal Research Authority, which names all suitably qualified and/or experienced persons who are to be involved in the described project and listed on this application.

**4.**  I have read and understood UNE’s data management [policy](https://policies.une.edu.au/document/view-current.php?id=208) and [procedures](https://policies.une.edu.au/view.current.php?id=00375) as well as the recommendations in E16 of this application and will ensure compliance (this excludes external organisations who have engaged the UNE AEC to act as their nominated ethics committee).

**(b)** **I certify that:**

**1.** My Animal Research Authority will be displayed where the animals are housed and where animal experimentation is to occur, and the AEC will be notified immediately should any changes in participating personnel occur;

**2.**Where appropriate I am the holder of a current permit from the relevant state wildlife authority to capture and hold Australian native fauna;

**3.** All personnel involved in the described animal experiment have appropriate and adequate qualifications and skills and/or they will be under suitably close supervision to enable them to competently carry out the necessary tasks;

**4.** All unexpected adverse events must be reported to the AEC in writing, via the Animal Ethics Officer, within 24 hours and a formal unexpected adverse event report form submitted within 72 hours of the event. Additionally, if the unexpected adverse event resulted in the death of a research or teaching animal, a post mortem report must also be completed and submitted with the unexpected adverse event report form;

**5.** Any information required to facilitate the maintenance of animals will be sought from suitably informed personnel;

**6.** The care of animals during the proposed experiment will conform with the principles and regulations of: the *Animal Research Act 1985,* the *Australian code for the care and use of animals for scientific purposes 2013*, the *Animal Research Regulation 2010; and*

**7.** That all personnel listed below have read this application and have agreed to comply with procedures described and any conditions imposed by the AEC.

**All investigators named at** [**A2**](#B2)**,** [**A3**](#_A3_–_CO-RESEARCHER/CO-SUPERVISOR/RE) **and** [**A4**](#_PART_B4_–) **are required to sign this declaration.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Print Name*** | ***Signature*** | ***Date*** |
| Principal Researcher/ Project Supervisor – **Person with ultimate responsibility** |  |  |  |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians etc. or Student researcher |  |  |  |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians etc. or Student researcher |  |  |  |
| Co-Researcher, Co-Supervisor, Research Assistants, Technicians etc. or Student researcher |  |  |  |

|  |
| --- |
| **Comments**  You are invited to add comments to supplement your application if you think something has not been covered, or to provide feedback on this form. |
|  |

**Checklist**

* What is happening to the animals?
* What will be the effects?
* How will the effects be minimised?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Anaesthesia** | **Diet/Water Modifications** | **Housing** | Sterile technique: instruments, drapes, surgeon | **Transport** |
| Fasting | Type | Location | Location of and housing in post-operative recovery area | Type |
| Induction & drug, dose, route | Amount | Isolation | Post-operative management | Duration |
| Methods of monitoring anaesthesia and recovery | Effects | Group housing: stocking rates, sexes | Post-operative monitoring: methods, frequency, means of determining necessity of use | Confinement |
| Additional support during anaesthesia and recovery (e.g. heat, intravenous fluids) | Measurement of intake | Shelter | Expertise | Numbers of animals |
| Location of induction and recovery areas | Animal monitoring | Bedding |  | Air conditioning |
|  |  | Hiding areas | **Teaching** |  |
| **Anaesthesia or analgesia** | **Drug Treatments** | Environmental enrichment | Source of animals | **Tumour/neoplasia induction** |
| Possible side effects | Substance | Duration held | Housing | Method |
| Restraint | Volume | Conditioning period | Duration held | Site |
|  | Frequency/total number per animal |  | Method of disposal | Endpoint |
| **Behaviour Modification** | Local and systemic effects | **In-vitro Studies** |  | Animal monitoring: methods, frequency |
| Stimulus: type, duration, frequency |  | Source of animals | **Toxicology** |  |
|  | **Euthanasia** | Duration held | Substance | **Wildlife Studies** |
| **Blood/Body Fluid Collection** | Method | Euthanasia | Volume | Location |
| Volume | Location: where procedure will be performed |  | Route | Methods |
| Route | Expertise of personnel | **Surgery** | Frequency of treatments/total number per animal | Capture methods |
| Frequency |  | Anaesthesia | Local and systemic effects | Handling/restraint |
| Anaesthesia or analgesia | **Genetic Manipulation** | Location of pre-operative preparation area | Anaesthesia or analgesia | Housing |
| Restraint | Methods | Pre-operative preparation | Restraint | Monitoring |
| Animal monitoring: methods, frequency | Potential effects | Surgical procedure: site, technique | Animal monitoring: methods, frequency | Release |
|  |  |  | Endpoint/duration | Effects on population |

**APPENDIX 1: Schedule of practical classes**  **Course Code:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Lecturer** | **Title/Description of Unit/Course** | **Species** | **No. of Animals** | Purpose No. | **ProcedureNo.** |
|  |  |  |  |  |  |  |
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**APPENDIX2: Example of cumulative effects flow chart**

