Mammal Instrumentation Form

(Supplementary to the AEC Internal Application Form)

Please provide the following information to assist the Animal Ethics Committee (AEC) to assess your proposal to instrument mammals. For this purpose, instrumentation refers to the external or internal attachment of electronic devices to animals, excluding passive integrated transponder identity chips (PIT tags).

If you are unable to provide any of the information requested, please explain why and provide an estimate if possible, stating how this estimate was derived.

A separate form for each animal species is required

Before filling out this form, please read the Guidelines for the Instrumentation of Mammals

TRIALS	
1. Is any proposed piece of equipment (instruments and attachments) or procedure (capture, handling and attachment methods) untried on the proposed study species?	Yes ◯ No ◯
If yes: Is your proposal a pilot study and/or captive trial?	
If no: Explain why this is not necessary.	

EXPERIENCE OF PERSONNEL WITH PROCEDURES/TECHNIQUES	
2. Describe the relevant training, skill and experience of your team to carry out each of the proposed procedures on this species	
3. Provide a brief review (about 500 words) of the literature relevant to your proposed procedures	
4. Have any of the personnel listed on this application provided applications or reports to the UTas AEC previously for a similar study?	Yes ◯ No ◯
If yes: Please provide the AEC project numbers.	

STUDY ANIMALS	
5. What species is being used? Please state scientific and common names.	
6. Is this a flying or gliding mammal?	Yes ◯ No ◯
7. Is this an aquatic mammal?	Yes ◯ No ◯
8. Does this animal inhabit or move through confined spaces?	Yes ◯ No ◯
9. How many animals of each class are being used? For example, breeding adults, non-breeding adults, juveniles, males, females etc.	

EQUIPMENT (INSTRUMENTS PLUS ATTACHMENTS)

10. Briefly describe what, how and where instruments or combinations of instruments will be attached to an animal. List each proposed scenario separately.

    Example A:

    1. VHF radio transmitter attached via a collar.
    2. GPS logger plus a VHF radio transmitter attached via the same collar.

    Example B:

    1. VHF radio transmitter glued to the midline dorsal pelage on the rump.
    2. PTT glued to the midline dorsal pelage between the scapulae.

    PTT glued to the midline dorsal pelage between the scapulae plus a VHF radio transmitter glued to the midline dorsal pelage on the rump.

Optional: It would be helpful to the AEC if you provide a clear photo or drawing showing the dimensions of the instrument, including attachments, and how it will be oriented on the mammal. If more than one instrument is to be attached to an animal, then for each combination of instruments provide a clear photo or drawing showing the dimensions of the instruments and how they will be oriented on the mammal.

Please attach any additional information including images at the end of this document

11. For each type of instrument or combination of instruments as described above, please provide the following information:

11.1 Type/s, e.g. VHF radio transmitter; PTT plus VHF radio transmitter	
11.2 Instrument mass (grams) Where multiple instruments are attached, list the mass of each separately	
11.3 Total equipment mass (grams) when attached, i.e. instrument/s plus attachments such as collar, mesh, glue, ties etc.	
11.4 For each class of mammal, provide the body mass range (grams) during deployment (not including any attached equipment)	
11.5 For each class of mammal: (total equipment mass ÷ body mass range during deployment) x 100	
11.6 Instrument dimensions, including attachments (mm: length x width x height). Where multiple instruments are attached, list the dimensions of each separately.	
11.7 Antenna/e dimensions (mm: length x width)	

EQUIPMENT (INSTRUMENTS PLUS ATTACHMENTS)	
11.8 Antenna/e position and orientation with respect to mammal	
11.9 Is/are the instrument/s, including attachments, streamlined?	Yes ◯ No ◯
11.10 Is/are the instrument/s placed close to the mammal's centre of gravity?	Yes ◯ No ◯
11.11 Buoyancy, including attachments – this question is applicable to instrumentation of aquatic mammals.	
11.12 Colour of attachment?	
11.13 Frequencies (Hz) and/or light spectra (nm) emitted	
11.14 Why did you choose this instrument or combination of instruments to answer your study questions?	

EXPECTED EFFECTS OF EQUIPMENT	
12. Could any component or property of the equipment, including the device, collar, glue, straps, emissions etc., harm the animal?	Yes ◯ No ◯
If yes: Name the components and describe how each of these could harm the animal. Explain how each of these risks will be minimised.	
13. How long do you expect the equipment to remain on the mammals?	
14. Describe the expected effects of carrying the equipment for this length of time on each of the following, and explain why each of these effects is acceptable.	
14.1 Instrumented mammals	
14.2 Offspring of instrumented mammals	
14.3 Conspecifics of instrumented mammals	

PROCEDURES: CAPTURE, HANDLING AND ATTACHMENT	
15. Detail and justify how the mammals will be selected, captured and handled for attachment of equipment.	
16. Detail and justify how the equipment will be attached to the mammal.	
17. How long will it take from capture to release of the mammal?	
18. Will it be necessary to capture the mammals to remove the equipment?	Yes ◯ No ◯
If yes: Detail and justify how the mammals will be captured and handled for removal of equipment.	
19. Detail and justify how the equipment will be removed.	
20. How long will it take from capture to release of the mammal?	
21. What is the expected recapture rate? Explain how this was estimated.	
22. How long would the equipment remain on the animal if it is not recaptured?	
23. What is the expected fate of the animal if it is not recaptured for device removal?	
If No: Will the equipment be removed from the mammal by some other means?	Yes ◯ No ◯
If yes: how will the equipment be removed from the mammal?	
24. What is the expected fate of the animal if the equipment is not removed?	

PROCEDURES: CAPTURE, HANDLING AND ATTACHMENT	
25. Will these animals be captured or disturbed at any other times, e.g. for data download or to check the instruments or attachments?	Yes ◯ No ◯
If yes: describe the procedures carried out and how often each of these is expected to occur.	

EXPECTED EFFECTS OF PROCEDURES

26. What is/are the physiological status/es of the mammals at the time of instrumentation, for example, juvenile gaining condition, breeding adult losing condition, pregnant, lactating, hibernating, moulting etc?

27. Would any of the proposed procedures at any of these times be likely to cause a critical negative energy balance to this species or its offspring? If yes, state which times. Explain why this risk is acceptable and how this risk will be minimised.

28. Is this species likely to abandon its offspring if disturbed at any of these times?	Yes ◯ No ◯

If yes: state which times. Explain why this risk is acceptable and how this risk will be minimised.

29. What is/are the physiological status/es of the mammals when the equipment is removed?

30. Would any of the proposed procedures at any of these times be likely to cause a critical negative energy balance to this species or its offspring?.	Yes ◯ No ◯

If yes: state which times. Explain why this risk is acceptable and how this risk will be minimised

31. Is this species likely to abandon its offspring if disturbed at any of these times?	Yes ◯ No ◯

If yes: state which times. Explain why this risk is acceptable and how this risk will be minimised.

32. What risks are the proposed procedures likely to pose to handled animals or other animals?

33. How will each of these risks be mitigated?

34. Are you aware of any adverse effects on animals in a similar study?	Yes ◯ No ◯

If yes: what were these effects and how will they be mitigated in this study?

CONTROLS AND MONITORING	
35. Are you using controls?	Yes ◯ No ◯
If yes: please explain why?	
If No: Please ignore the remaining questions and continue to the Declaration	
36. How many animals of each class are being used as controls?	
37. How will controls differ from experimental mammals?	
38. How will treatment of controls differ from treatment of experimental mammals?	
39. What parameters are being compared between experimental and control groups?	
40. Are these parameters likely to demonstrate any effects of instrumentation?	
41. Are your sample sizes likely to demonstrate any effects of instrumentation?	
42. How will your use of controls as described above be useful?	
43. Describe any other forms of monitoring you are using.	

Please Complete The Following Declaration

Name of person responsible for the content and submission of this form: .....

Role within the approved protocol (eg PhD candidate, responsible investigator etc) .....

Signature: .....

Date: .....

Name of responsible investigator (if not the person completing this form): .....

Signature: .....

Date: .....

End of Form

Use this button to reset ALL of the form's contents if required

Reset