

Type your answers, with additional space/pages as necessary, in the same order that they appear with the appropriate reference (i.e. Question A: answer) Answer all questions in sufficient detail so that the IACUC can conduct an adequate review. For the benefits of non-scientist members of the IACUC, your answers should be presented in lay terms that are understandable by a well-educated reader.

A. Describe the overall objectives and methods of the research, especially as they relate to your proposed use of animals. The proposal should provide a brief review of the literature pertinent to this research with animals. Include citations within the review, and list the referenced in section E. below.

B. Could your objectives be achieved by use of a non-animal methodology? Your answer should be in sufficient detail so that reviewers may understand the entire research plan.

C. Please provide a detailed description of the proposed research methodology, and plans for the care of the animals being used in the project; include a justification for the number of animals to be used and the particular species chosen.

D. Could this work be done on a lower species? If applicable, why is it necessary to sacrifice the animals? Please provide a brief review of the literature regarding the use of this species, including citations, and list the reference in section E below.

E. References. Provide sources for citations in sections A and B.

F. From what source will be animals be obtained and where they be housed?

G. List the personnel who will be involved with this study. Include students and technicians for each person, indicate the nature of the individual's responsibilities and qualifications. If individuals are yet to be recruited, specify the nature of the training that they will have had, or will receive.

I have attached CITI training(s) and facility orientation forms for personnel listed

H. For **yourself**, indicate the nature of your previous experience with the particular species and techniques to be used in this protocol.

I. What provisions have been made for the weekend, holiday and emergency care of animals?

J. Indicate the "chain of command" for people to be called in an emergency. Include their telephone numbers.

IF YOU DID NOT ANSWER YES TO ANY QUESTIONS ON PAGE 1, PLEASE SKIP TO SIGNING AND SUBMIT. FOR ANY QUESTIONS ON PAGE 1 TO WHICH YOU ANSWERED "YES" PLEASE ANSWER THE CORRESPONDING QUESTION ON THIS PAGE. (Please **type** your answers on separate pages in the order that they appear; i.e Question 1: answer)

1. Why is the use of this endangered species necessary?

a) Specify the type of the surgical procedure.

b. Specify the type, dosage(s) and duration of anesthetic(s) and/or analgesic(s) to be used. List any possible side effects of the anesthesia.

c. What measure will be taken to provide postoperative monitoring and care? Please provide information such as whom will be responsible for postoperative care and details on how frequently and by what methods will the animals be checked?

d. Specify the type of non-surgical procedure. Will the procedure involve more than slight momentary pain? If yes, please justify and answer question (b)

e. What analgesic(s) will be used? If none, explain why not. If any, list any possible side effects.

4. Specify the type, duration and justification for the restraint. What deleterious effects if any, may result from using this type and duration of restraint in this species of animal?

5. Specify the location, nature and duration of the housing condition. What deleterious effects, if any, may result from using this type and duration of housing with this species of animal?

6. Specify the nature, frequency and duration of the deprivation. What deleterious effects, if any, may be expected to results from using these parameters of deprivation with this species of animals?

7. Please give details on the type of environmental manipulations that will be used. How frequent will changes be made and for how long? Specify the nature, frequency, and duration of the manipulation(s). What deleterious effects, if any, may be expected to result from using these conditions in this species of animal?

8. Describe and justify the method to be used to euthanize the animals.

9. What will be done with the animals that survive (placed in zoo or kept for breeding) or how will they be euthanized and then disposed of? Is this method for euthanatizing the animal appropriate and humane? Please provide sufficient justification (i.e. is the method AVMA approved?)

10. Detail the nature of the bio-hazard, and the steps that will be taken to minimize or obviate it. Please provide a plan for disposal of the waste and measure to protect personnel.

I certify the answers to all the above questions and that all statements submitted to the QC IACUC are true. I understand that the QC IACUC must approve this protocol before any work may begin. Any changes to this protocol must be submitted and approved by the QC IACUC prior to implementing them.

Principal Investigator Signature

Responsible Investigator (if applicable)