***Western Carolina University***

***Institutional Animal Care and Use Committee***

**Animal Use Protocol**

**for Wildlife Field Studies**

This form is used for studies which involve free-living vertebrate wildlife if studies involve more than unobtrusive observation of animals in their natural habitats. Examples include invasive studies and studies with potential to cause harm or materially alter the behavior of animals.

**The Principal Investigator must be a full-time faculty or staff member.**

Return the completed form and any necessary permits to IACUC@wcu.edu

**PLEASE SINGLE CLICK ON SHADED BOXES TO TYPE**

1. **Administrative Information**

|  |
| --- |
| Project Title: |
| Type of Project: Field Research  Teaching |
| Activity dates (period cannot exceed 3 years): Start date:  End date: |

|  |  |
| --- | --- |
| Principal Investigator: | Work phone:  Lab phone: |
| Title: | Department: |
| Email: | Office location: |

1. **Project Funding, if applicable**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agency** | **Grant No.** | **Start Date** | **End Date** | **PI** |
|  |  |  |  |  |
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1. **Project Summary for Lay Person (not to exceed 500 words):**

In lay language, briefly summarize the overall intent/objectives of the study. The target audience for this summary is a non-scientist.

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**Harm/Benefit Analysis**: In 2-3 sentences and using lay language, compare the potential harm to participating animals with the potential benefits of the research for humans, animals and/or the advancement of science.

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1. **Experience and Training**

List all persons working on this protocol. All individuals listed must obtain training from Laboratory Animal Resources personnel BEFORE beginning work with animals. Please include years of experience conducting techniques and working with species proposed in his proposal.

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| --- | --- |
| Name:  Title:  Department:  Office Location:  Email: | Check (XX) if: PI  Office phone:  Lab phone:  Training approval dates: |

Experience:

|  |  |
| --- | --- |
| Name:  Title:  Department:  Office Location:  Email: | Check (XX) if: Co-PI Contact Person  Office phone:  Lab phone:  Training approval dates: |

Experience:

|  |  |
| --- | --- |
| Name:  Title:  Department:  Office Location:  Email: | Check (XX) if: Co-PI Contact Person  Office phone:  Lab phone:  Training approval dates: |

Experience:

1. **Study Objectives**
   1. In scientific language, provide a project summary describing the purpose of the experiments(s). If this is a triennial resubmission, include summaries of findings during the previous 3 years of work and how these data will be expanded upon in the next 3 years.

* 1. List the specific aims or objectives for the project:

* 1. Please check (XX) the applicable boxes below and follow related instructions:

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| --- | --- | --- |
| **Yes** | **Procedure** | **Instructions** |
|  | Target species | List the target species including, sex and age , when applicable, in **part 5d** below |
|  | Location of study | Identify the field site location (i.e. country, state, county, city, address, land owner) in **part 5d** below |
|  | Field site supervision | Name personnel who will be in charge at the field site(s) supervising seasonal workers in **part 5d** below |
|  | Personal protective equipment | List personal protective equipment and safety procedures specific to projects involving potential exposure of personnel to zoonotic diseases in **part 5d** below |
|  | Capture techniques | Describe equipment used, bait, frequency of trap checks in hours, maximum duration animals may be held in traps, expected non-target species and numbers, provisions for inclement weather, etc. in **part 5d** below |
|  | Animal Identification methods | Describe details of PIT tags, elastomers, collars, etc. (including needle gauges) in **part 5d** below |
|  | Non-invasive manipulations | Describe non-invasive manipulations such as weighing and measuring and the type and duration of restraint necessary in  **part 5d** below |
|  | Injections | Describe injected substances, volume, doses, injections sites, needle size and schedules in **part 5d** below |
|  | Blood and tissue collection | Describe volume, frequency, collection site, needle size, methodology, protective equipment, etc. in **part 5d** below |
|  | Anesthesia | Describe **briefly in part 5d** below and provide **details in part 6** |
|  | Non-survival surgery | Describe procedures in detail in **part 5d** below |
|  | Animal pain or distress | Describe briefly the expected adverse effects on animals in **part 5d** below and provide details in **part 9** |
|  | Animals held in traps for more than 12 hours | Describe in detail in **part 5d** below |
|  | Historical animal injury and mortality | Describe historical animal injury and mortality rates associated with your capture and animal handling methods. In the unlikely event that serious injury or illness should occur in remote field conditions, specify your plan for providing veterinary care or humane euthanasia and for final disposition of the animal in **part 5d** below |
|  | Collaborating State or wildlife agencies | List any State or wildlife agencies collaborating on this research and their level of involvement. If they are primarily responsible for animal handling and care, include documentation of their level of training and the procedures which they will follow for animal care in **part 5e** below |
|  | Animal work done at another institution | Describe how the work at the other institution fits into the project in **part 5d** below. Include the Animal Welfare Assurance Number for the other institution. Attach the completed protocol form and IACUC approval number from the other institution |

* 1. Provide a **detailed description** of the use of animals (similar to Section F “vertebrate animals” for NIH/PHS 398, Section D5 of NSF or similar). This description should allow the IACUC to understand the experimental course of an animal from its entry into the experiment to the endpoint of the study. Cover all items checked above as instructed in the table.

1. **Anesthesia and Euthanasia**
   1. Specify in the table below the anesthetic agent for each procedure. Where anesthetic combinations are called for, list each drug separately.

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| --- | --- | --- | --- | --- |
| **Experiment or**  **Procedure** | **Drug** | **Dose** | **Route** | **Expected Duration**  **of Anesthesia** |
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* 1. Volatile (gas) anesthetic agents.
     1. Are you using a volatile anesthetic (e.g. isoflurane)? **Yes**  **No**
     2. If used indoors how will this be vented (e.g., fume hood) or scavenged (e.g. charcoal canister)?

* 1. List who will administer the anesthesia and the qualifications of each person listed.

1. **Animals**

Complete a separate column for each species or rodent strain to be used. If more than 3 species or strains are to be used, duplicate this page and insert appropriately. Please include all information that applies to the animals you propose to use in this proposal.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **A** | **B** | **C** |
| 1. Species (common name) |  |  |  |
| 1. Gender | M  Both  F | M  Both  F | M  Both  F |
| 1. Age range |  |  |  |
| 1. Number of animals/year |  |  |  |

1. Will the animals be held in a housing facility for an extended period of time? **Yes**  **No**
2. If yes, describe the housing and period of time they will be housed, how they will be cared for, and the intent for housing them at this location.

1. If transportation to the facility is required, how will they be transported? Describe caging, vehicles used, provisions for food, water, and access/interaction/sight of other animals during transportation.

1. **Justification for Animal Use**
   1. Describe the number of animals to be used for each experiment in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Experiment or  Procedure** | **Animals/ Group** | **Groups/ Experiment** | **Experiments/ Year** | **Animals/ Year** |
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* 1. You arrived at these numbers by (check [XX] all that apply).

The outcome measures or phenomena being measured are variable and large sample sizes are necessary for statistically valid sampling.

Differences from controls are expected to be small, and large sample sizes are necessary to distinguish differences reliably.

The experiments are technically difficult and multiple attempts will be needed to obtain satisfactory data from each experiment.

Other (explain):

* 1. What is the rationale for using animals in this study? Check (XX) all that apply.

This research requires behavioral measurements from living animals.

This research requires biological measurements or tissue samples from living animals.

Other (explain):

1. **Experimental Stress and Pain**
   1. Indicate the appropriate pain and distress category(ies) and the number of animals in each. Sums should equal the total animals from Part 7 above.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pain and Distress Category   (based on USDA categories)** | |  |  |  |  | | --- | --- | --- | --- | | Number of animals per year | | |  | | Year 1 | Year 2 | Year 3 | TOTALS | | | | |
| Pain and distress category **C** – minimal, transient, or no pain or distress |  |  |  |  |
| Pain and distress category **D** – pain or distress relieved by appropriate measures |  |  |  |  |
| Pain and distress category **E\*** - unrelieved pain or  distress |  |  |  |  |

\*For **category E** animals, a scientific justification is required to explain why the use of anesthetics, analgesics, sedatives or tranquilizers during and/or following painful or distressful procedures is contraindicated.

For **category D and E animals**, the results of a **targeted literature** search **for alternatives to painful and distressful procedures** must be provided below and you will be requested to provide detailed search results.

* + 1. List a minimum of 2 data bases consulted (e.g., PubMed, Agricola, Toxline, Biological Abstracts, etc.).

(1)

(2)

Additional databases:

1. Date of search:
2. Years covered by search:
3. Key words or search strategies used (e.g., analgesics, reduce pain, non-invasive, training):

1. Provide a brief summary of your search results:

1. **Euthanasia and Final Disposition of Animals**
2. If animals **will not** be euthanized, check (XX) disposition:

Return to wild

Other:

1. If animals **will be** euthanized, check (XX) method(s) of euthanasia:

General anesthesia followed by KCl injection – Specify anesthesia in Anesthesia Table (part 6)

Overdose of inhalant anesthesia - Specify anesthesia in Anesthesia Table (part 6).

Exsanguination under anesthesia - Specify anesthesia in [Anesthesia Table (part 6)](http://www.umt.edu/iacuc/docs/forms/Supplemental%20Sections.doc).

Barbiturate overdose IV or IP - Specify agent and dosage in [Anesthesia Table (part 6)](http://www.umt.edu/iacuc/docs/forms/Supplemental%20Sections.doc).

Decapitation - If used without prior anesthesia, you must provide scientific justification below\*

Cervical dislocation. If used without prior anesthesia, you must provide scientific justification below\*

Kill traps

Thoracic compression (only small free-ranging birds)

Immersion in tricaine methane sulfonate (MS222), benzocaine HCl, or 2-phenoxyethanol. Specify concentration and any buffers used in Anesthesia Table (part 6).

General anesthesia followed by gunshot to head

Other method of euthanasia. Please specify:

\*Provide scientific justification for decapitation or cervical dislocation without anesthesia here:

1. Who will be responsible for carrying out the final disposition of the animals?

1. Where will the final disposition take place?
2. **Use of Drug Enforcement Agency (DEA) Regulated Controlled Substances**
   1. Will this project involve any DEA regulated controlled Substance? **Yes**  **No**

If you answered **YES**:

1. The PI will have a DEA license (or have applied for a license) BEFORE use of controlled substances under this AUP.   
   Provide name on license and license number or the application confirmation number.

1. The PI will include the proposed use of controlled substances at appropriate doses.
2. The PI will provide appropriate security (anchored cabinet with a minimum of 2 separately keyed doors and limited access to keys or lock combinations) for controlled substances.
3. The PI will be responsible for keeping records of controlled substance use on forms provided by WCU.
   1. Are the controlled substances to be used listed in either the anesthesia, euthanasia, or analgesia sections of this AUP? **Yes**    **No**

**Note:** You must be individually licensed or have applied for a license with the DEA to use controlled substances at Western Carolina University. By signing this animal use proposal (AUP) you agree to abide by all WCU policies and procedures for use of controlled substances. Unauthorized use of DEA controlled substances may result in suspension of the AUP.

1. **Federal and State Permits**
   1. Are federal, state or international permits required? **Yes**  **No**
   2. Do permits cover all personnel involved in this project and listed on the protocol? **Yes**  **No**

If “NO”, please explain.

* 1. Please attach copies of all permits as an email attachment.
  2. List all permits

Federal Permits

Agency Type of Permit Permit Number

|  |  |  |
| --- | --- | --- |
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State Permits

Agency Type of Permit Permit Number

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1. **Principal Investigator’s Statement**

I certify (check [XX] box) that the statements made in this request are accurate and complete and that the animal usage in this proposal does not unnecessarily duplicate previous experiments.

If I receive approval for this project, I agree to inform the IACUC in writing of any emergent problems. I further agree not to proceed with the project until the problems have been resolved.

I will not make significant procedural changes to procedures involving animals without submitting a written amendment to the IACUC and will not undertake such changes until the IACUC has reviewed and approved them.

All photographs and videotapes of research animals and/or personnel will be for documentation of my research and for scientific purposes only.

It is my responsibility to ensure that every person working with animals is appropriately trained.

I will not begin work on the procedures described in this proposal until I receive notice of approval from the IACUC.

I will keep a copy of this proposal and all subsequent correspondence.

*By submitting this request, the Principal Investigator (and responsible faculty member if the PI is a student) I declare that I have reviewed this report which provides a complete and accurate description of the event and that upon receipt of the IACUC’s review, I will fully and immediately implement any corrective actions required by the IRB.*

*The parties (the IACUC, the Principal Investigator, and responsible faculty member if the PI is a student) have agreed to conduct this application process by electronic means, and this application is signed electronically by the Principal Investigator and by the responsible faculty member if a student is the PI.*

*My name and email address together constitute the symbol and/or process I have adopted with the intent to sign this application, and my name and email address, set out below, thus constitute my electronic signature to this application.*

Date

     

PI Name PI Email Address

     

Responsible Faculty Name if PI is a Student Responsible Faculty Email Address if PI is a Student