University of Cincinnati Animal Care and Use Program

Guidelines for Determination of USDA Field Study Exemption for Annual Reporting

Purpose

To provide criteria for determination of annual reporting exemptions for USDA field studies. These guidelines have been developed to provide UC IACUC rationale behind decisions of whether work performed in the field qualifies as a USDA field study.

Background

The USDA Animal Welfare Act (AWA) classifies a field study as not involving an invasive procedure, harm, or materially altering the behavior of an animal under study (9 CFR 1.1). While the USDA does not define the key words "invasive procedure", "harm", or "materially alter", the USDA has provided guidance on their interpretation of these terms. The USDA allows individual IACUCs the latitude to define these terms and use those definitions to determine whether a particular study qualifies as a USDA field study. Field studies, as determined by the IACUC, would be exempt from reporting.

USDA Definitions

Field studies – a study conducted on free-living wild animals in their natural habitat that involves observation/data collection without an impact on the animal and is exempt from oversight by the USDA.

Field research – a study conducted on free-living wild animals in their natural habitat that involves observation/data collection that involves invasive procedures, harms, or materially alters the behavior of an animal under study (for example: requires capture, redirection, behavior, modification, sedation). Field research is not exempt from USDA oversight.

Exemption Examples

- Live-trapping animals in traps that are designed not to injure the animal and allow for some free movement within the trap
- Short-term handling of animals at the site of capture or a nearby field processing location
- Collection of external morphometric data
- Marking the external surface of the animal via hair clipping or visible marking techniques (e.g., Sharpie pen, picric acid on fur or feathers)
- Swabbing of the mouth, nostrils, or rectum
- Injection of sterile liquids or materials (e.g., transponder tags) that are not expected to materially alter an animal's activity or behavior
- Ear punching or clipping in rodents
- Blood collection through a needle, hematocrit tube, or by way of a skin nick
- Attaching external bands, tags, or transponders to limbs, neck, feathers, or ears
- Sedation or anesthesia is used to immobilize an animal rather than to provide analgesia
- Euthanasia by inhalation, chemical injection, or commercially available kill trap (see more info in <u>Euthanasia Considerations</u>).

Field Research

Field research is NOT exempt from oversight by the USDA and meets one or more of the following:

- 1. **Invasive procedures** any procedure that exposes underlying tissues or enters a body cavity other than mouth, nostrils, or short distance into the rectum, such as: 1) studies with major operative procedures, 2) intra-cardiac blood collections, 3) arterial/venous cut downs for catheter placement, 4) surgical implantation of devices.
- 2. **Harm** more than momentary pain or distress, such as procedures in which the animals may experience: 1) death, 2) pain or distress, 3) trauma, 4) overheating or excessive cooling, 5) behavioral stress, 6) physical harm, or 7) unnecessary discomfort from handling.
- 3. **Materially altered behavior** behavior that is functionally different than pre-capture behavior, such as activities for research purposes that: 1) use hormones or pheromones to change mating or migration patterns, 2) cause repeated nest/den disturbance during breeding and rearing of young; or 3) result in relocation of migratory animals beyond their natural migration routes.

Non-Exempt Examples

- Surgical procedures that expose underlying tissues
- Endoscopic procedures
- Stomach or colonic gavage
- Toe-clipping of a digit used for digging or climbing
- Delivery of chemicals (e.g., glucocorticoids, sex steroids) via injection, patch, or implant that may alter an animal's activity or behavior
- Transport of animals away from the area of capture beyond that required to get the animal to the field processing location
- Release of an animal away from its site of capture
- Repeated disturbance during breeding and rearing of young
- Any other procedure that would reasonably be expected to cause more than slight or momentary pain or distress in a human being to which that procedure is applied

Studies Conducted in the Wild Outside the United States

Field research, even if it includes invasive procedures, harm, or material alteration of behavior, that is conducted outside the United States is exempt from USDA reporting since it is not within the jurisdiction of the USDA.

UC IACUC Oversight of Studies Conducted in the Wild

While Field Studies, as defined in the AWA, and foreign field research are exempt from USDA animal welfare regulations, AAALAC International makes no distinction between laboratory and field studies, and thus, requires all research and teaching conducted by AAALAC-accredited institutions in the field, regardless of the location, to have some degree of IACUC oversight based on risk assessment, harm/benefit analysis, and hazard identification. Furthermore, the

Office of Laboratory Animal Welfare (OLAW) requires IACUC review and approval if the fieldwork alters or influences the activity of the study animal.

Accordingly, independent of the determination of whether a study qualifies for a USDA exemption as a Field Study, any study conducted in the wild regardless of location that requires the handling of a vertebrate animal or significantly disturbs their normal behavior must receive UC IACUC approval prior to being conducted. Determination of whether a study will significantly disturb normal behavior is decided on a case-by-case basis by the IACUC and Attending Veterinarian, who may seek guidance from subject experts within and outside UC. Thus, all fieldwork requires UC IACUC review and approval and the USDA definition of Field Study mainly influences which free-ranging mammals used in research and teaching need to be reported to the USDA.

Euthanasia Considerations

The USDA, APHIS Animal Care Inspection Guide states that "animals euthanized, killed, or trapped, and collected, such as for study or museum samples, from their natural habitat via humane euthanasia" are not to be included in the USDA annual report. The AWA defines euthanasia as the "humane destruction of an animal accomplished by a method that produces rapid unconsciousness and subsequent death without evidence of pain or distress, or a method that utilizes anesthesia produced by an agent that causes painless loss of consciousness and subsequent death."²

Both chemical agents and commercially available kill traps are considered euthanasia, and, therefore, the killing of animals in the field by these methods *does not* exclude a study from being considered a "field study" for USDA purposes. Moreover, a rare accidental death during the use of live traps also does not disqualify a study from being classified as a field study. These nuances allow IACUCs to carefully evaluate and categorize field research in compliance with USDA guidelines.

References

- 1. USDA APHIS Research with Free-Living Wild Animals in Their Natural Habitat
- 2. USDA APHIS Animal Welfare Inspection Guide