### **Oversight of Research Involving Wildlife**

#### Robert Sikes, PhD

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OLAW Online Seminar March 20, 2014





#### **Collaborators**

- Ellen Paul The Ornithological Council
- John A. Bryan, DVM The National Park Service
- Stephen J. Beaupre American Society of Ichthyologists and Herpetologists, University of Arkansas

## **OLAW Education Resources**

You can find a copy of the sample IACUC protocol for wildlife activities developed by Ellen Paul, John Bryan, Stephen Beaupre and myself on the OLAW website at this URL:

# <u>http://grants.nih.gov/grants/olaw/edu</u> <u>cational\_resources.htm</u>

IACUCs may download and modify this document for use at their institutions.

# ASM Animal Care and Use Committee

Resources for investigators and oversight personnel

- IACUC protocol form specific to wildlife research activities (2014)
- Article on appropriate standards for wildlife research (Sikes et al., 2012, BioScience)
- <u>Recommendations for citing taxon-specific guidelines for wildlife research</u>
- ASM Animal Care and Use Guidelines Document (2011)
- ASM guidelines for protection from hantavirus pulmonary syndrome (2010)
- Addendum #1 to 2007 ASM guidelines regarding thoracic compression (2008)
- Addendum #3 to 2007 ASM guidelines and ASM position regarding USDA categorization of procedures with wild mammals (2010)
- Addendum #2 to 2007 ASM guidelines regarding release of captive animals (2010)
- <u>ASM position regarding Trap Neuter Release of feral cats (2010)</u>
- <u>Summary of procedures and requirements from CDC regarding importation of scientific research specimens (by M.S. Hafner)</u>



#### **Ornithological Council**



Guidelines to the Use of Wild Birds in Research Special publication, 1997





### **Additional Education Opportunities**

- Panel discussion and workshop on oversight of wildlife research PRIM&R (Denver, CO - April 1-2, 2014)
- Presentation and breakout session at the SCAW Annual IACUC Conference (San Antonio, TX, December 2014)
- CITI wildlife course (available to CITI subscribers at CITIprogram.org)







Institutions should include one or more individuals with wildlife expertise on the IACUC. Where appropriate expertise is not locally available, IACUCs should consult outside sources familiar with the taxa and questions posed.



#### CONTACTS

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- Understanding the scope of applicability of an institution's Animal Welfare Assurance is essential for compliance with PHS policy.
- All activities funded by the PHS must be conducted in a manner that is consistent with the ILAR Guide for the Care and Use of Laboratory Animals.
- If the Assurance is written such that it covers activities regardless of funding source, then <u>all</u> activities with covered animals must be conducted in a manner consistent with the *Guide*.
- However, if the Assurance is written such that it does not extend to non PHS-funded activities, then other documents, such as taxon-specific guidelines or the Ag Guide, may serve as primary references for details involving the species under consideration.

#### **OLAW Useful Links**

http://grants.nih.gov/grants/olaw/links.htm

# NIH National Institutes of Health Office of Laboratory Animal Welfare

- Critical review of protocols involving wildlife research requires appropriate tools.
- Standards and protocol forms not developed for wild animals cover many topics not pertinent to wildlife studies and omit topics central to field work.
- To conduct a biologically appropriate review and achieve a greater level of meaningful welfare for the study animals, IACUCs should ensure that protocol forms, standards, and reference materials are appropriate for the type of study under consideration, be it biomedical, agricultural, or wildlife.

### **Taxon-specific Guidelines**

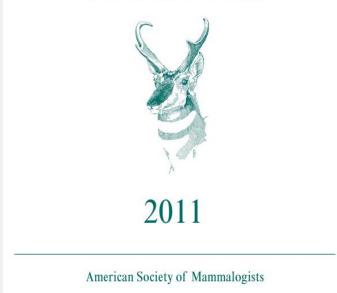
- <u>Guidelines of the American Society of Mammalogists for</u> <u>the Use of Wild Mammals In Research</u>
- Ornithological Council Guidelines to the Use of Wild Birds in Research
- <u>American Fisheries Society, American Institute</u> of Fishery Research Biologists, and <u>American Society of Ichthyologists and Herpetologists</u> <u>Guidelines to the Use of Fishes in Research</u>
- <u>American Society of Ichthyologists and Herpetologists</u> <u>Guidelines to the Use of Amphibians and Reptiles in</u> <u>Research</u>

### **Taxon-specific Guidelines**

- Current editions total 333 printed pages
- 875 referenced articles
- 35 authors or editors with more than 1400 indexed publications
- Publications focus on the biology of wild species



R.S. Sikes, W.L. Gannon, and the Animal Care and Use Committee of the American Society of Mammalogists



#### Permits

If your research requires federal or state permits, it is unlawful to begin work until all permits have been obtained.

You may not start the work for which permits are required until the permits are issued, even if your protocol has been approved.





#### **OLAW FAQ A6**

- If the activities are PHS-supported and involve vertebrate animals, the IACUC is responsible for oversight in accord with PHS Policy.
- IACUCs must know where field studies will be located, what procedures will be involved, and be sufficiently familiar with the nature of the habitat to assess the potential impact on the animal subjects.
- If the activity alters or influences the activities of the animal(s) that are being studied, the activity must be reviewed and approved by the IACUC (e.g., capture and release, banding).

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 If the activity does not alter or influence the activity of the animal(s), IACUC review and approval is not required (e.g.,observational, photographs, collection of feces).

#### **Field Studies**

The AWA exclusion for field studies applies to those activities conducted in the animal's natural environment that do not involve invasive procedures, harm, or materially alter the behavior of an animal under study.



#### **Animal Capture**

Considerations:

- Capture technique
- Number of animals likely to be taken
- Capture of non-target species
- Handling requirements
- Options for euthanasia or humane killing
- Final disposition of animals





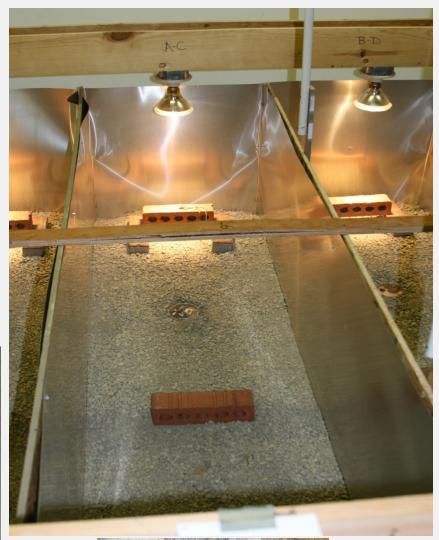
### **Use of Chemical Agents**

- To relieve pain or distress or to facilitate handling?
- Legal requirements for use of the agent?
- Probability of the agent entering the food chain?











# **AVMA Guidelines**

"This section of the Guidelines updates and expands upon previous editions by recognizing an inherent lack of control over free-ranging wildlife, accepting that firearms may be the most appropriate approach to their euthanasia, and acknowledging that the quickest and most humane means of terminating the life of free-ranging wildlife in a given situation may not always meet all criteria established for euthanasia (ie, distinguishes between euthanasia and methods that are more accurately characterized as humane killing)."

•AVMA Guidelines, pg 81

Whether euthanasia or humane killing, it is expected that investigators will use the most humane technique feasible that is also consistent with study objectives.

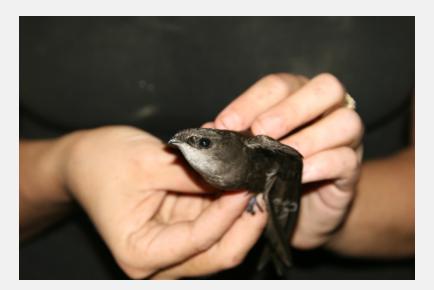


### **Additional Resources for Zoonoses**

- USGS Zoonotic Diseases (Mammalian): Work Smart, Stay Safe <u>www.nwhc.usgs.gov/outreach/MammalianZoonoticDiseases2009b.pdf</u>
- USGS Zoonoses and Travel<u>www.nwhc.usgs.gov/publications/disease\_emergence/Chapter4.pdf</u>
- USGS Field Manual of Wildlife Disease: General Field Procedures and Diseases of Birds - <u>http://www.nwhc.usgs.gov/publications/field\_manual/</u>
- AVMA Disease Precautions for Hunters<u>www.avma.org/public/Health/Pages/Disease-Precautions-for-Hunters.aspx</u>
- UC Davis Working with Marine Mammals and Your Health <u>www.vetmed.ucdavis.edu/whc/mmz/images/Zoonoses\_Brochure.pdf</u>

#### **Occupational Health**

#### Personnel should inform health care providers of contact with wild animals and field conditions should they become ill.





#### **Useful Publications**

#### **Oversight of Wildlife Research**

•<u>Sikes, R.S., E. Paul, and S. Beaupre. 2012. Standards for Wildlife Research:</u> <u>Taxon-Specific Guidelines Versus US Public Health Services Policy. BioScience</u> <u>62(9):830-834.</u>

•<u>Sikes, R.S. and E. Paul. 2013. Fundamental differences between wildlife and biomedical research. ILAR Journal 54(1):5-13</u>.

•Paul, E. and R.S. Sikes. 2013. Wildlife researchers running the permit maze. ILAR Journal 54(1):14-23.

•<u>Nisbet, I.C.T. and E. Paul. 2000. Ethical issues concerning animal research</u> outside the laboratory. ILAR Journal 45(3):375-377.

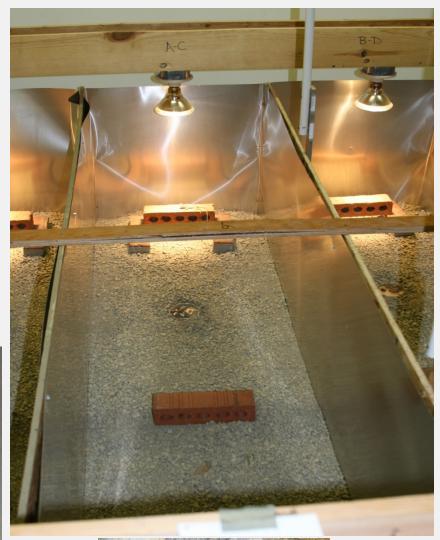
•NOTE – The <u>first issue of the ILAR Journal in 2013</u> was devoted to matters involving wildlife and is a particularly valuable reference.

# Please send questions to OLAW via the question box on your screen











Is it OK for the IACUC to approve a protocol for research with wildlife when some permits are approved but others are pending?

Do some wildlife permitting agencies require proof of IACUC approval before they will issue a permit?

Is wildlife research often an issue for OLAW?

How many Assurances with OLAW specify that all vertebrate animal research will be conducted according to the standards of the PHS Policy, regardless of funding source?

Since you do not know how many organisms of the species of interest you will catch, how do you determine animal numbers to request in the animal use protocol?

How do you account for species of fish caught that are not of interest and not listed on the animal use protocol?

Targeted species	Injured by trapping	Injured but NOT by trapping
Non targeted species	Injured by trapping	Injured but by NOT by trapping

- How do you handle species of interest organisms that are caught and are injured but not as a result of the trapping activity?
- And species of interest organisms that are injured as a result of trapping?
- And the same questions again but this time for non target species, that is, how do you handle non target species that are caught and are injured but not as a result of the trapping activity?
- And non target species that are injured as a result of trapping?

If a scientist provides a scientific justification for using a method of euthanasia that is not permitted in the AVMA Guidelines and the IACUC approves that scientific justification, does this have to be reported to the IO as a deviation from the *Guide*?

# **Upcoming Webinars: 2014**

June 26 – Alternative Searches Kathleen Gregory September 18 – *Optimizing IACUC Effectiveness* Jerry Collins December 4 – *IACUC Review of Aquatics* Monte Matthews Previous webinars can be reviewed at: http://grants.nih.gov/grants/olaw/educational re sources.htm