

GUIDELINES FOR THE USE OF ANIMALS IN RESEARCH

Research involving animals should be conducted for the purpose of advancing knowledge in the field of biology. When designing research projects, investigators should take into consideration the species to be studied and their appropriateness as research animals, and should limit the number of animals used to the minimum necessary to conduct the research.

Researchers should be aware of and comply with all national and local laws regulating the use of animals that are relevant to the research activities. When working in a foreign country researchers should become familiar with and comply with applicable statutes of the host countries, international agreements, and laws regulating international areas. Researchers should further be aware of CITES requirements and regulations for declaring importations of wildlife, and comply with these. When animals are collected from populations considered to be threatened or endangered, additional care must be taken to justify the need, to obtain support from the scientific and public communities, and to observe conservation and regulation goals; in general, some benefit to the population should result. When obtaining animals from commercial sources, every effort should be made to insure that the specimens were collected under legal authority, and were transported and maintained under humane conditions. Dealing with reputable suppliers should minimize the chances of supporting irresponsible or illegal activities by animal dealers.

Animals in captivity should be maintained and cared for in a manner consistent with the minimum standards established in the Guide for the Care and Use of Laboratory Animals (NIH Publication No. 80-12 or later revisions) or the Guide to the Care and Use of Experimental Animals, Vols. 1 and 2 (Canadian Council on Animal Care). Behavioral factors should be taken into consideration when maintaining animals. For example, providing nest boxes and exercise facilities for many species may decrease stress. Handling and restraint of animals and surgical procedures should be conducted in a manner that will minimize pain, trauma, and stress and when appropriate, proper anesthetics and/or tranquilizers should be administered. Researchers should be aware of currently acceptable forms of anesthetic drugs for the species in question. The capture, handling, maintenance, and use of animals by students should be strictly supervised.

Where possible, collaborative research studies should be conducted in order to maximize the use of available animals and decrease the number necessary for research. If field-collected animals are to be released after completion of the study, this should be done only at the exact site of capture, only if the animals pose no health or ecological threat to existing populations, and only if the animals' chances of survival are likely to be similar to those of other members of the population. If studies require the death of the animals, euthanization must be by humane methods. If studies do not require the euthanization of the animals and release is not practical, an attempt should be made to make the animals available to other investigators. When wild-caught animals are used in research, voucher specimens should be deposited in an appropriate scientific collection.

Results of investigations should be published in order to avoid unnecessary duplication of research effort and use of additional animals. The complete and correct scientific name of animals studied should always be used in reporting results of research.

Persons active in research involving animals or in the care of animals should be aware of points of view and attitudes of individuals or groups who oppose animal research. The researcher should be prepared to give reasonable explanations for research activities. Researchers should remember that public support for research involving animals will be greatest when (a) it can be shown to be helpful to animals or humans; (b) it is conducted in an enlightened and open manner; and (c) the persons involved maintain a genuine concern for their research animals. Each scientist should be responsible for cultivating these attitudes.

The American Society of Mammalogists expects that scientists will maintain proper standards for animal research when designing projects and collecting data that form the basis for reports published in the *Journal of Mammalogy*.

Prepared by the *ad hoc* Committee for Animal Care Guidelines, Robert J. Baker, *chairman*; Committee members, Robert C. Dowler; John F. Eisenberg; Murray L. Johnson; Gail R. Michener; Kimberlyn Nelson; John Vandenbergh. These Guidelines are the official policy of the American Society of Mammalogists on animal use in research on mammals. These Guidelines, in this form, were approved by the Board of Directors on 19 June 1985 at their annual meeting in Orono, Maine.