University faculty and students use fish as a research animal, to feed other research animals, for teaching and display, and for research in the field of aquaculture. This requires a broad policy that provides humane and legal care but allows flexibility to operate in many different fields such as research, teaching and the food market.

1. The Institutional Animal Care and Use Committee (IACUC) has the responsibility of ensuring that all animals are humanely and legally cared for when used for research or teaching at the University. In pursuit of that responsibility, the IACUC sets this policy for the use of fish.

2. The primary document for guidance in the use of fish will be the Guidelines for the Use of Fishes in Research, 2004, compiled by the American Fisheries Society, American Institute of Fishery Research Biologists and the American Society of Ichthyologists and Herpetologists. (hereafter referred to as “The Guidelines.”)

3. The use of fish at the University varies greatly requiring the IACUC to evaluate each protocol by the type of work to be performed.

3.1. Types of research include aquaculture, wildlife/ecological, biomedical, and teaching/display.

3.2. In most cases, the Guidelines will provide the guidance required. In some cases, other documents may come into play such as for aquaculture research where the research is looking at a food for consumption. In those cases, while humane care of the animal and safety of personnel has to be a high priority, practicality will also come into play with the high number of animals used.

4. In following the Institute for Laboratory Animal Research (ILAR) Guidelines, the estimate of numbers becomes difficult when dealing with wildlife or aquaculture. Only in those situations where pain or distress may be encountered as part of the experiment will numbers be required to be reported with a degree of accuracy. Most wildlife captures can not be predetermined, only an estimate of what might be desired to meet the experimental goals.

5. With aquaculture, the numbers are often too numerous to count without causing undue stress on the animals so only a fairly accurate estimate will be used by an experienced researcher.
5.1. Daily counts and census records are not required where large holding tanks are used and it is impractical to perform a count without undue stress to the animals. Unusual number of deaths not discussed in the protocol should be recorded with an estimate only.

6. While the American Veterinary Medical Association (AVMA) recommendations for euthanasia are in keeping with the most humane methods of death, it is not acceptable for fish when used as food. However, the IACUC will adhere to the most humane method of euthanasia which is one that renders the animal unconscious rapidly as possible followed by some other action to ensure the animal never recovers from the state of unconsciousness.

6.1. In keeping with the AVMA’s suggestion of some form of anesthesia to render the animal unconscious, a cold slurry may be used to provide some possible analgesia/anesthesia. (Not directly on ice since this may cause harm to the skin.) Animals not used for food source should be euthanized using a method more closely adhering to the AVMA’s recommendations of an anesthetic such as MS 222.

6.2. The Guidelines offer suggestions on disposal of both live and dead animals. They should be followed. Animals that receive MS 222 can not be left for food but have to be disposed of according to Environmental Health and Safety (EH&S) policies. Where large numbers of fish are to be disposed of, such as in aquaculture studies, a pit with lime added may be used according to local laws.

7. An SOP has to be approved for daily care by the Attending Veterinarian. A chart for recording daily activity is to be filled out and submitted to Veterinary Services at the end of each month.

** This IACUC policy was compiled using facts and opinions from various resources, including the American Veterinary Medical Association, National Institutes of Health, Animal Welfare Act, American Fisheries Society, U.S. Department of Agriculture, and other references. This material is on file in the IACUC office and with the Attending Veterinarian.