



HOUSING OF AQUATIC AND SEMI-AQUATIC SPECIES

Overview/Purpose

The eighth edition of the *Guide for the Care and Use of Laboratory Animals* addresses terrestrial and aquatic animals in separate sections, reflecting the growing role of aquatic animals in research. The Ohio State University is committed to observing all federal guidelines and AAALAC International policies for the humane care and use of animals. Due to the unique features of aquatic species, the IACUC has created dedicated policies related to their care and use. For detailed information regarding specific species of fish or amphibians, please contact the office of the attending veterinarian. All experimental procedures and agents must be incorporated into your protocol and approved by the IACUC before being implemented. The housing of animals used in biomedical research and teaching is addressed in IACUC Policy Housing Requirements for Animals.

Definitions

1. **Aquatic species** – organisms that live solely or chiefly in or on the water.
2. **Semi-Aquatic species** – organisms that are partly aquatic; growing or living in or close to water, or carrying out part of their life cycle in water.

Requirements

Written Standard Operating Procedures or Standard Management Plans for Aquatic and Semi-Aquatic Species

Investigators who house aquatic animals in satellite (non-ULAR) areas must establish written standard operating procedures (SOPs) or standard management plans to ensure compliance with *The Guide*. The scope and complexity of the SOP/SMP may vary greatly depending on the species and type of housing. In some cases, additional information may be necessary; in others, only a few of the points below may need to be addressed.

Documentation on a work schedule/log sheet of tasks completed as part of the SOP/SMP is required unless otherwise noted

1. Daily observation of all animals for general health (including weekends and holidays)
2. Documentation and reporting processes for abnormal health conditions, including behaviors
 - a. Unexpected illness requiring medical treatment must be reported to veterinary personnel
3. Diet and general feeding plan including frequency of feeding
4. Daily measurement of room level current air temperature (outdoor tanks excluded)
5. Daily measurement of current temperature of water for each tank or tank system
6. Frequency (minimum monthly) of measuring room level percent relative humidity for semi-aquatic species (increased recordings may be appropriate for certain species or facilities)

7. Water Management:
 - o Method of conditioning and/or treatment of water
 - o Frequency of water quality monitoring (e.g., pH, dissolved oxygen, ammonia, nitrites, nitrates, etc.)
 - o Water change rate (if applicable)
 - o Method of filter maintenance (if applicable)
8. Method and frequency of primary enclosure (e.g., tanks) and housing accessories sanitization (e.g., environmental enrichment, feeding/water bowls, isolation tanks, nets)
9. Method and frequency of secondary enclosure (countertops, racks, floors, etc.) sanitization and general housekeeping (sweeping floor, trash removal, etc.)
10. Process for disposal of fish and water waste including location (labeling documentation required on carcass storage bags/containers if applicable)
11. Description of lighting schedule and frequency (minimum monthly) for light schedule verification

A comprehensive emergency plan is required and is a separate document from the standard operating procedures

Applicable Regulations

1. National Research Council *Guide for the Care and Use of Laboratory Animals*, Eighth Edition. National Academy of Sciences, 2011
2. The Federation of Animal Science Societies *Guide for the Care and Use of Agricultural Animals in Research and Teaching*

Additional Information/Guidance

1. [Investigator Guidance](#) (ORRP Website)
2. [Guide for the Care and Use of Laboratory Animals](#)
3. [Guidelines for Use of Fishes in Field Research](#)
4. [Guidelines for Health and Welfare Monitoring of Fish Used in Research](#)

History of Revisions

039-00 - new policy approved 03/18/11

039-01 - added information regarding food expiration, approved 08/19/2011

039-02 - Complete rewrite of policy including removal of Part II: Veterinary Care Section approved 06/19/2015