

Information Required in Standard Operating Procedures for Principal Investigators Performing Animal Husbandry on Reptile, Fish, and Amphibian Colonies

Refer to the ACUC website for specific guidance when writing standard operating procedures to cover housing and husbandry practices for fish, reptiles or amphibians:
(http://www.virginia.edu/vprgs/iacuc/docs/policy_AquaticAmphibs.pdf)

General Information

1. Cage card identification must include species (scientific name and/or common name); sources or suppliers (approved-to minimize disease risk), protocol number, date of birth or acquisition:
2. Room numbers/building locations where housed.
3. Date of last SOP update.
4. Emergency contacts, phone numbers (work and home), email address (optional).
5. Population density limit and rationale for the density maximum selected, (animals per volume for aquatics, animals per surface area for terrestrials).
6. Primary containment description: size, composition (glass, polycarbonate, etc.), covered, volume, photoperiod, substrates, hides, environmental enrichment, humidity (terrestrials), water flow rate (aquatics) and temperature (water; air ranges and gradient range extremes).
7. Husbandry description: frequency and procedure for cleaning primary enclosure, frequency and procedure for cleaning secondary enclosure (or room); sanitation agents; Rodac plate (or equivalent) validation of sanitation efficacy of secondary enclosure.
8. Emergency procedures to be performed during short-term (hours) power or HVAC loss.
9. Acclimation procedures for acquisitions of unknown health status: quarantine length, diagnostic testing and preventive treatments.
10. Special accommodations for particular life stages: special requirements for breeding or hibernation.
11. Handling and restraint practices, including practices between animals to minimize disease spread.

12. Procedures employed during disease outbreaks or deaths in colony, and while in quarantine.
 - a. Isolation procedures during disease outbreaks in the main colony.
13. Records of results for routine necropsy, diagnostic work-ups.
14. Data on weekly mortality by enclosure as a percentage of the enclosure population should be available at semi-annual facility inspections for animals undergoing survival procedures and housed over 3 months (long-term).
15. Facility Disaster Plan and procedures to provide suitable housing and husbandry for up to 2 weeks in the event of loss of one of the following: power, water and environmental controls (temperature and humidity).

Aquatic Species (fish and amphibian) Information

1. Normal diet to feed (storage requirements); diet supplementation if required (sources).
 - a. How will disease introduction be prevented if live food is used?
2. Aquatic and terrestrial species water provision, frequency of changes, means of provision, quantity, quality; water source.
3. Aquatic species: water-conditioning method to remove chlorine/chloramine/toxic compounds (e.g. heavy metals, etc.) in the incoming water source.
4. Aquatics species: Water change/turnover, aeration and filtration methods: chemical, particulate, biological (brand and sized for what maximum volume or species density); if aquatic frogs, how will you handle excess fecal organic load?
5. Frequency and method of monitoring water quality and parameters monitored (e.g. most populous tank vs all tanks).
6. Aquatic species: UV bulbs (if used) wattage, replacement frequency, brand, frequency quartz sleeves are cleaned.
7. Personal protective clothing and procedures required preventing disease transmission between humans and animals based on a risk assessment (gloves, hand washing etc.).
 - b. Safety precautions for potentially over-powering (e. g. 2 personnel if > 8 ft boid snake), toxic (gloves, nets), poisonous (double containment) or electric fish species.

8. Precautions for allergic risk from invertebrates used as feed (e. g. separate cricket raising room, respirator mask, etc.).
9. Procedures for capture and treatment of escaped animals.
10. Copies of collection or possession permits (on file in the ACUC office) and a approved animal protocol

Terrestrial Species of Reptiles and Amphibians

1. Terrestrial species maximum allowable distance to UV lights (Vit D), wattage, replacement frequency, brand.
2. Normal diet to feed (storage requirements); diet supplementation if required (sources).
 - a. How will disease introduction be prevented if live food is used?
3. Personal protective clothing and procedures required preventing disease transmission between humans and animals based on a risk assessment (gloves, hand washing etc.).
4. Safety precautions for potentially over-powering (e. g. 2 personnel if > 8 ft boid snake), toxic (gloves, nets), poisonous (double containment)
5. Halide lighting to support invertebrates or plant/algae, wattage, replacement frequency, bulb source.

Note: All electrical circuits in aquatic areas must be on ground fault interrupter circuits locally at outlets or at breaker. All electrical outlets should have waterproof covers.