Title: Husbandry Care of Nonhuman Primates

I. Purpose:

The purpose of this policy is to outline the minimum standards of care for non-human primates.

II. Policy:

All units providing animal care for cats must meet or exceed these minimum requirements based on the USDA Animal Welfare Regulations (AWR), the ILAR Guide for the Care and Use of Laboratory Animals (Guide), and Public Health Service Policy (PHS). Deviations or exceptions must be approved by the Attending Veterinarian and the IACUC.

III. Procedures:

**Daily (365 days a year without exception):**

- Observe each animal and check for health concerns (AWR 2.33).
- Ensure adequate feed and potable water is available (Guide pg. 65-68).
  - Infants and juveniles should be fed as often as necessary (AWR 3.82).
- Record sick and dead animals, and report them to either Primate Medicine or Campus Veterinary Services (CVS), or designated clinical veterinarian per standard operating procedure for reporting sick or dead animals.
- Record minimum and maximum temperatures and humidity.
  - Temperature range for non-human primates depends on the species, but is generally 64°F to 84°F (AWA 3.76 & 3.78).
  - Humidity range for non-human primates is 30% to 70% (Guide pg. 44)
- Remove excreta and food waste (AWR 3.75).
- Spot clean cage, removing animals unless sufficient space is available for the animals to remain dry (AWR 3.84).
- Remove standing water (AWR 3.76).
- Remove and replace any enrichment devices that are worn, damaged, or heavily soiled (Guide pg. 72)
- Clean and organize room, anterooms, and surrounding premises (AWR 3.84).
- Record daily completion of tasks, initial, and date log sheet.
Biweekly (not to exceed every 14 days):
• Clean and disinfect primary enclosure, feed and water receptacles, and environmental enrichment (AWR 3.84).

As needed:
• Disinfect the animal room including walls, floors, and ceilings (if possible) (Guide pg. 72).
• Remove and replace worn or damaged equipment from primary enclosures and surrounding facility (Guide pg. 72).
• Chow must be discarded after 6 months of the milling date (Guide pg. 66) unless manufacturer guidelines recommend a shorter or longer expiration date.
• Clean and sanitize feed storage containers (Guide pg. 67).

Environmental Enrichment:
• Refer to the Environmental Enrichment policy.
• Nonhuman primates should be provided the opportunity to demonstrate species typical behavior (Guide pg. 52). A plan to address the social needs of nonhuman primates is also required (AWR 3.81).
• Examples of enrichment for nonhuman primates include: social grouping, perches, swings, mirrors, and other increased cage complexities, providing objects to manipulate, varied food items, using foraging or task-oriented feeding methods, and providing interaction with the care giver or other familiar and knowledgeable person (AWR 3.81).
• Devices used for environmental enrichment must be easily cleaned and disinfected or disposable (AWR 3.80).
• Devices must be checked regularly for wear and discarded when safety hazards are observed.

Facilities:
• Temperature alarms must be installed in all rooms housing nonhuman primates (Guide pg. 143).
• Adequate ventilation must be provided for the health and comfort of the animal at all times, by means of windows, doors, vents, or air conditioning and shall be ventilated so as to minimize drafts, odor, and moisture condensation (AWR 3.79).
  o A minimum of 10-15 fresh room air exchanges per hour shall be provided in animal housing areas (Guide pg. 46).
  o Auxiliary ventilation, such as exhaust fans and vents or air conditioning, shall be provided when ambient temperature is 85°F or higher (AWR 3.76 & 3.78).
  o Shelter for outdoor housed animals must safely provide heat to prevent the temperature from falling below 45°F (AWR 3.78).
• Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (Guide pg. 137). Refer to Physical Plant and Facilities Maintenance policy.
• Only acclimated animals may be housed in outdoor enclosures, and adequate shelter from the elements, large enough to comfortably provide protection to each nonhuman primate, must be provided at all times (AWR 3.78).
• Perimeter fencing, sufficient to keep unwanted species out and of sufficient distance from primary enclosure, is required (AWR 3.78).

**Housing:**
• Caging/Enclosures must be in good condition, free of any damage that may cause injury and prevent accidental opening (AWR 3.80).
• Whenever possible, social nonhuman primate species should be socially housed based on compatibility (AWR 3.81).
• Nonhuman primates that are singly housed due to experimental need or veterinary discretion must receive additional enrichment as well as positive human interactions at least daily (Guide pg. 64).
• Minimum floor space excludes food or water pans (AWR 3.80).
• Low perches and ledges that do not allow the space underneath them to be comfortably occupied by the animal count as floor space (AWR 3.80).
• Space requirements:

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Floor Area/Animal (ft²)</th>
<th>Height (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1*</td>
<td>1.6</td>
<td>20</td>
</tr>
<tr>
<td>1-3*</td>
<td>3.0</td>
<td>30</td>
</tr>
<tr>
<td>3-10*</td>
<td>4.3</td>
<td>30</td>
</tr>
<tr>
<td>10-15*</td>
<td>6.0</td>
<td>32</td>
</tr>
<tr>
<td>Up to 20‡</td>
<td>8.0</td>
<td>36</td>
</tr>
<tr>
<td>Up to 25‡</td>
<td>10.0</td>
<td>46</td>
</tr>
<tr>
<td>&gt;25*</td>
<td>25.1</td>
<td>84</td>
</tr>
</tbody>
</table>

(*AWR 3.80, ‡Guide pg. 61)

When housing this species, please also refer to the Animal Care Program’s Standards of Care Policy on Pest Control, Identification and Labeling of Cages, Environmental Enrichment, Food Storage, House-Keeping in Facilities Housing Biomedical Research Animals, Physical Plant Facilities Maintenance, as well as the IACUC’s Policy on Social Housing of Social Species.