

**1. PURPOSE**

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The intent of this Standard Operating Procedure (SOP) is to describe an appropriate environmental enrichment program for cats.

**2. RESPONSIBILITY**

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Facility Animal Care Committees (FACC), veterinarians, principal investigators (PIs), animal care staff

**3. CONSIDERATIONS**

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- 3.1. The purpose of environmental enrichment is to provide cats with opportunities to express basic behavior needs, to promote species-typical, non-injurious behavior and to promote physical and mental health thus enhancing animal welfare. Environmental enrichment should be biologically relevant, i.e., allow for climbing, running, jumping, hiding, socializing, searching, so that it does not lose its enriching value over time.
- 3.2. The environmental enrichment program must be approved by a veterinarian. This includes enrichment provided within the animal facility, provided as part of an Animal Use Protocol (AUP), or provided in Alternative Locations for Procedures and Housing of Animals (ALPHA) locations.
- 3.3. Deviation or exemption from this environmental enrichment program must be scientifically justified in the AUP and approved by the FACC, or prescribed for medical reasons by a veterinarian.

**4. PROCEDURES**

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**4.1. Social Contact:**

- 4.1.1. Pair- or group-house cats. In aggressive situations, any means of reducing aggression must have been provided before isolation, e.g., altering the environment, adding food/enrichment, etc.
- 4.1.2. When animals are removed from social housing for a particular component of an experimental protocol (e.g., behavioral testing), it should be for the minimum duration required; the animals should be returned to their housing promptly following completion of the session. Such procedures must be described in the AUP and approved by the FACC.
- 4.1.3. Cats may be singly housed with strong scientific, welfare, or medical justification:
  - 4.1.3.1. Incompatibility
  - 4.1.3.2. Medical reasons
  - 4.1.3.3. Specific protocol approved by the FACC
- 4.1.4. If cats must be singly housed, allow for as much tactile, auditory, visual, or olfactory contact with conspecifics as possible.

**4.2. Housing System:**

- 4.2.1. Animals should be housed with the goal of maximizing species-specific behaviors, minimizing stress-induced behaviors, providing opportunity for social contact and locomotor and exploratory behaviors.
- 4.2.2. House cats in enclosures with adequate vertical space.
- 4.2.3. Provide complexity in the enclosures with various structures such as towers, raised walkways, platforms, shelves, and scratching surfaces.
- 4.2.4. Provide sufficient resting and hiding places with soft substrates, such as pillows or fleece beds and materials that maintain a constant temperature.
- 4.2.5. Housing system should meet or exceed the most recent minimal space recommendations established by the Canadian Council on Animal Care (CCAC).

#### 4.3. Dietary Enrichment:

- 4.3.1. Feed animals to meet current National Research Council (USA) and CCAC recommendations for cat nutrition.
- 4.3.2. Increase time spent feeding by using puzzle feeders or food-dispensing devices that must be manipulated.
- 4.3.3. Provide sufficient food bowls to discourage conflict. Disperse food bowls throughout the enclosure, on raised surfaces and the floor.

#### 4.4. Environmental enrichment devices:

- 4.4.1. All objects must be safe and non-toxic.
- 4.4.2. Any object or structure should be sanitized or replaced regularly to minimize risks associated with physical injury and microbiological burden.
- 4.4.3. Objects provided should link to strong natural behaviors, such as scratching, grooming, scent marking, chasing or hunting behaviors. Toys that are small and mobile and have complex surface textures (e.g., fur, feathers) often elicit play as do simple objects like large paper bags or cardboard boxes.
- 4.4.4. Introduce new objects regularly, rotating according to a schedule, to maintain interest. A broad selection of toys, such as balls, fishing rods, cardboard boxes, shredded paper, play tunnels, hammocks, or swings should be offered.

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## 5. REFERENCES

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