



Cornell University
Cornell Center for Animal Resources and Education

CARE565.01 **Environmental Enrichment Program
for Woodchucks**

The intent of this Standard Operating Procedure (SOP) is to describe the methods to provide an environmental enrichment program for woodchucks. This SOP is intended for investigators and anyone caring for woodchucks. This procedure is approved by the Cornell Institutional Animal Care and Use Committee (IACUC) and the Cornell Center for Animal Resources and Education (CARE). Any exemption must be approved by the IACUC prior to its application.

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1. Introduction

Environmental enrichment provides woodchucks the opportunity to fulfill and express basic non-injurious behavioral needs that are typical to the species. Meeting these behavioral needs by providing a biologically relevant environment (i.e., opportunity to hide, socialize, and forage) will optimize physiologic and psychological well-being, thereby enhancing animal welfare.

2. Materials

- nest boxes / stove pipe
- hardwood block (e.g. maple)
- chain/washer
- brown paper towels or paper bags

3. Procedures

A. Social Environment

- i. Pair or group house woodchucks, except:

- a. Breeding males (a breeding male is any male that has ever been used for breeding)
- b. Incompatible animals
- c. Animals under a specific protocol for which the IACUC has approved single housing.
- ii. Single-housed animals must have at least auditory and scent contact with other woodchucks. Provide visual contact whenever possible.

B. Housing System

- i. House females and immature males in pens with contact bedding.
- ii. House breeding males and animals in experimental protocols in cages with contact bedding.
- iii. Minimal space recommendations:

Isolation cage	3 adults or a litter under five months of age.
Conventional cage	One animal at least five months of age
Pen	Up to 5 adults (6 to include the male during the breeding season). 6 unrelated pups under 5 months old or one litter with their mother

C. Dietary Enrichment

No dietary enrichment is provided routinely.

D. Objects

- i. Provide a nest box constructed of unprotected wood or stainless steel. Wooden nest boxes are preferable because they can be chewed for enrichment.

NOTE: An IACUC exemption is required every 6 months for wooden nest boxes.

- a. Sanitize wooden nest boxes as needed or when a cage of experimental animals is emptied (mechanically washed).
- b. If the nest box needs to be removed temporarily (acute condition) or permanently (chronic condition, such as if tail lesions develop), then provide extra bedding.
- ii. Provide hardwood (a piece of maple 2"x4"x5") or dental balls in each cage/pen and change whenever necessary.
- iii. Provide a chain/washer as an option.
- iv. Provide brown paper towels and brown paper bags (shavings bags with staples removed) as an option.

4. Safety

When working with animals wear appropriate PPE, and be aware of allergy, zoonosis and injury risks. Refer to appropriate references below.

5. Contingencies

- A. Post contact information for emergency assistance in a conspicuous location within the animal facility.

- B. Emergency Veterinary care is available at all times including after working hours, weekends and holidays by CARE (pager 1-800-349-2456).

6. References

- A. *Guide for the Care and Use of Laboratory Animals* (a.k.a. *The Guide*), National Research Council (NRC), National Academy Press. 1996: <http://books.nap.edu/html/labrats/contents.html>.
- B. *Enrichment Strategies for Laboratory Animals*, ILAR Journal: Vol 46(2), 2005; NRC.
- C. *Making Lives Easier for Laboratory Animals*, Animal Welfare Institute (AWI), 2007: <http://www.awionline.org/pubs/LAREF/LAREF-bk.html>.
- D. *Comfortable Quarters for Laboratory Animals*, AWI, 2002: <http://www.awionline.org/pubs/cq02/cqindex.html>
- E. Zoonosis : <http://www.research.cornell.edu/care/zoonoses.html>
- F. Allergy Prevention: <http://www.research.cornell.edu//CARE/documents/OHS/AllergypreventionFactSheet.pdf>
- G. CARE 707 Animal Related Injury: <http://www.research.cornell.edu/care/documents/SOPs/CARE707.pdf>
- H. CARE 715 Personal Protective Equipment: <http://www.research.cornell.edu/care/documents/SOPs/CARE715.pdf>

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