

**STANDARD OPERATING PROCEDURES**  
**DIVISION OF COMPARATIVE MEDICINE**  
**UNIVERSITY OF SOUTH FLORIDA**

SOP#: 406.2

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<b>TITLE:</b>	<b>Spiny Mice (<i>Acomys spp.</i>) Breeding and Colony Management</b>
<b>SCOPE:</b>	Animal Care Personnel
<b>RESPONSIBILITY:</b>	Facility Manager, Technical Staff, Veterinary Staff
<b>PURPOSE:</b>	To Outline the Proper Procedures for Breeding Colony Management of <i>Acomys spp.</i>

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**I. PURPOSE**

1. To ensure the highest quality of animal health and preclude the development of spontaneous diseases or disorders, which could compromise the integrity of studies and the interpretation of results.
2. To ensure personnel breeding spiny mice perform their duties in a manner that complies with all current governing laws, regulations and guidelines.

**II. RESPONSIBILITY**

1. The Veterinarians oversee all aspects of animal health and are assisted by all program staff.
2. Facility Managers ensure implementation of all procedures.

**III. PROCEDURES**

1. Prior to placement of breeder males and females, ensure that the appropriate caging, food, and enrichment materials are readily available and in accordance with **SOP #405 Spiny Mice (*Acomys spp.*) Husbandry**.
2. **Apply a breeder cage card to the breeding cage.**
3. Breeding cages can consist of 1 male and up to 3-4 females.
  - a. Use **CMDC #406 USDA Rodent Colony Management Form** for record keeping.
    1. Observe for fighting and if not compatible, separate. Record any comments or observations noted in their respective progress notes.
    2. Contact the veterinarian and manager regarding any issues pertaining to compatibility.
  - b. Since spiny mice do not typically have a visible vaginal plug following mating, body weights will be taken on date of mating and at cage changes to minimize excessive handling..
  - c. **The average gestation period is between 38-45d.**
    1. Non pregnant adult females weigh between 35-40g.
    2. Adult females

3. Females close to parturition can weigh up to 65g.
4. Litter sizes are normally small, averaging between 1-4 pups
  - a. When a new litter is detected, record the date of birth, number of pups and any additional comments on **CMDC #406 USDA Rodent Colony Management Form.**
  - b. **Flag the cage with the New Litter Cage Card.**
  - c. Pups are born haired with eyes open and ears unfolded and they are able to eat dry food from the second day of life.
  - d. Male spiny mice participate in infant care and do not need to be removed when litters are born. Female spiny mice exhibit alloparenting and multiple closely related, compatible females and litters can be cohoused in the large cages.
  - e. Offspring are removed from the breeding cage between 4-8 weeks of age.
  - f. **At weaning the Fiscal and Business Specialist will need to be notified of the number of pups and sex ratios for record keeping and will assign a USDA Identification number for each new pup.**
  - g. Record the USDA Identification number assigned by the Fiscal and Business Specialist on the USDA Rodent Colony Management Form.
5. Consult SOP #405 for details related to *Acomys* Husbandry.
6. Consult SOP #409 for details related to Health Surveillance.

**NOTE: If at any time there is a medical emergency, the Clinical Veterinarian must be notified immediately.**

**Approved:**

**Date:**