

Overcrowded Rodent Cages

1 PURPOSE

The purpose of this policy is to describe the standards and procedures employed by Animal Care Services (ACS) on behalf of the University of Florida to ensure compliance with the “Guide for Care and Use of Laboratory Animals” as it applies to the breeding and overcrowding of rodents; and the steps to be taken when such conditions are observed.

2 SCOPE

This policy applies to Principal Investigators (PIs) housing animals in ACS areas.

3 RESPONSIBILITIES

It is the responsibility of ACS personnel and UF research staff members to follow these procedures. It is the responsibility of supervisory personnel to ensure compliance with these procedures and to train employees responsible for performing these procedures.

4 REFERENCES

NRC Guide – Guide for the care and Use of Laboratory Animals, 1996

5 DEFINITIONS





ACUP: Animal Care and Use Protocol (UF Animal Use for Research Approval Request Form)

IACUC: Institutional Animal Care and Use Committee

NRC Guide: Guide for the Care and Use of Laboratory Animals

OC: Overcrowded Cage

SOP: Standard Operating Procedure

Symbols:  = male  = female  = pregnant  = female w/ litter

6 POLICY

- 6.1. Any exceptions to this Policy will need specific IACUC approval.
- 6.2. The housing density of rodents must not exceed those recommended by the 1996 NRC “Guide for the Care and Use of Laboratory Animals”.
- 6.3. All breeding schemes and practices must be described in the Animal Care and Use Protocol (ACUP).
- 6.4. Any breeding schemes other than monogamous non-continuous (1 male + 1 female, with the male removed when the female is visibly pregnant) must be justified and described in the ACUP.

6.4.1. Other Breeding Schemes

- Monogamous continuous - male and female left in cage with pups: pups must be weaned on a timely basis (19 to 21 days) to prevent overcrowding, which occurs with 2 litters of different age in the cage with the parents.
- Harem - One male and up to 4 females: females must be separated when visibly pregnant

6.5. During AM health checks, ACS Husbandry technicians look for overcrowding.

6.6. Overcrowding exists in a mouse cage when:


6.6.1. More than five mice over 21 days of age are present.

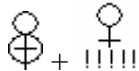
6.6.1.1. Unless extended weaning has been approved by IACUC, and cages have been identified as such. If extended weaning has been approved, the male must be removed before the litter is born.

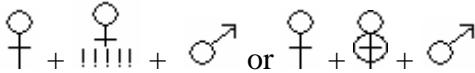
6.6.2. Multiple litters are present.

6.6.3. More than one mouse is in a box labeled for single housed; with the exception of temporary paired housing (2 days or less) for breeding purposes.

6.6.4. Any of the following breeding conditions occur:

 - action required, separate each into individual cage

 - Action required, separate pregnant female

 - action required

- separate male and non-pregnant female (they may continue breeding in a separate cage)
- or separate male (only if 2nd female is not visibly pregnant)
- or separate non-pregnant female (if approved for continuous breeding)

6.6.5. Multiple litters constitute an overcrowded cage. If approved for continuous breeding, pups must be weaned promptly (19 to 21 days of age) to avoid having multiple litters.

- 6.6.5.1.** Multiple litters for foster purposes will need IACUC approval (for reoccurring cases) or veterinary approval (for individual cases).
- 6.7.** Overcrowding exists in a rat cage when:
- 6.7.1.** There are more than two rats over 21 days of age per cage.
 - 6.7.1.1.** If more than 2 rats are to be housed to a cage the investigator must contact ACS to arrange for non-standard housing.
 - 6.7.2.** There are two rats weighing > 500 grams housed together. These animals must be single housed.
 - 6.7.3.** Multiple litters are present.
 - 6.7.4.** More than one rat in a box labeled for single housed.
 - 6.7.5.** A male is housed with a visibly pregnant female. Pregnant females must be single housed.
- 6.8.** For other species of rodents check with the facility supervisor.
- 6.9.** Investigators are responsible for checking their breeding colonies daily and recording the date of birth for new pups.
- 6.9.1.** DOB's must be recorded on the back of the cage card unless PI has provided separate breeding logs attached to the cage card.
 - 6.9.2.** If an ACS Husbandry technician discovers a litter with no recorded DOB they will estimate the date to the best of their knowledge and record it on the back of the cage card or indicated area. ACS is not responsible for miscalculated DOB's.
- 6.10.** When an overcrowded cage is found, the Husbandry technician will place an orange "Overcrowded Cage" (OC) card on the cage. At this time the card will not be filled out. The blank card will be used as a flag to indicate that a problem exists as a courtesy to the Investigators for one day.
- 6.10.1.** Cages that contain situations detrimental to the health and welfare of the rodents (as determined by ACS veterinary staff), such as 2 litters (1 of weaning age and 1 new litter) may be separated by ACS staff immediately.
 - 6.10.1.1.** The litter of pups being weaned will be put into a separate cage for the investigator to sort according to sex or protocol specific housing scheme(s), and to reduce the density to 5 mice per cage.

- 6.11.5.** Annotate the OC card at this time, as corrected by the Investigator's staff. Return the annotated card to the original cage. ACS staff will remove it.
- 6.12.** If the overcrowding problem has not been corrected by the investigator by 10am of the fourth day, an ACS Husbandry technician will separate the animals within the cage.
- 6.12.1.** The separation of cages by ACS will be considered a non-compliance "incident" and will result in a service fee being charged to the applicable protocol. Three "incidents" within a 30-day period will be reported to the IACUC and the ACS Director.
- 6.12.2.** If separating the animals involves weaning pups, they will be placed into a separate cage(s) by sex at a density of 5 or less mice per cage.
- 6.12.2.1.** A water bottle will be placed into all weaned pups' cages.
- 6.12.3.** The technician will complete a separate CCR card for each new cage created.
- 6.12.4.** The new cages will be added to the applicable protocol's census at this time.
- 6.13.** If the new cages (actual number of animals) cause the protocol to exceed its authorized animal population, the animals will be transferred to the ACS Holding Protocol until this situation is remedied by the Investigator.
- 6.13.1.** Animals transferred to the ACS Holding Protocol may not be used for research until this situation is remedied by the Investigator.