Standard Operating Procedure

SOP Number: 02-18-4503
Service: Research
Operating Section: Husbandry
Unit: CMF
Title: Compatibility Testing of Rabbits

Purpose: To outline the steps that will be used to test rabbits for compatibility with the goal of social housing.

Procedure:

1) Social housing is the default method of housing rabbits. Exemptions to this SOP due to study restrictions must be justified by the PI and approved by the Institutional Animal Care and Use Committee. The attending veterinarian has the authority to restrict social housing for medical reasons. If an exemption is granted the case will be reviewed at least monthly and the requirement noted in the medical record, which will be made available to the IACUC for review during its semiannual review of facilities.

2) Compatibility testing will continue until compatible pairs have been identified or incompatibility of one particular animal has been documented repeatedly by separate testing with at least four (4) different rabbits. If compatibility of a particular animal cannot be established, additional enrichment will be provided (See SOP, "Environmental Enrichment for Rabbits"). Rabbits from commercial vendors that are received together will be pair-housed upon arrival. If they are received singly they will be tested for compatibility as outlined in this SOP.

3) Two animals of the same sex will be placed in adjacent cages, suitable for social housing, visually linked through a clear sliding panel with ¼" holes to allow visual and olfactory engagement.

4) Observations of each rabbit pairing are recorded daily on a Compatibility Testing of Rabbits form until either compatibility of a socially housed pair is documented, or alternatively until incompatibility of the pair has been documented.

5) Assessment of subordinate-dominant behavior may require some time. However, if hostility or other signs of incompatibility persists for 7 or more days, animals can be considered incompatible and new partners will be identified and tested.

6) Animals that appear to be compatible after 3 days with no hostility will be permitted tactile contact by removing the panel that divides them. To minimize aggressive actions of one potential pair inciting aggression in another new pair, only one newly identified compatible pair is permitted to have tactile contact at a time. A veterinarian must be on campus when physical contact is initiated. The animal care technician must remain in the room following the removal of the divider for a minimum of one hour. If aggressions are limited to non-contact antagonism, it may subside after mutual acceptance of their dominant/submissive status. The dominant animal may reinforce
his/her role in the relationship by typical dominance activities (e.g. mounting, biting) and when these activities do not result in serious physical injury, the pair may be considered compatible. If hostility is recognized, the panel should be replaced and further attempts of tactile contact made at another time. If no obvious aggression is observed tactile contact may be allowed for longer intervals and while unattended (during business hours so that animal husbandry staff can check on them periodically).

7) Some wounding and minor injuries are normal during the process of pairing and social housing rabbits. If a minor fight occurs during introduction, or even later in a stable social pair, it is important to attempt to let the socialization process continue unless serious wounding is encountered. Resolution is an important aspect of social behavior and if the fight is interrupted too early, the problem may not resolve. When violence is encountered distract the animals by making loud sounds, spraying water on them or tossing a towel over them. When separating fighting animals personnel safety always comes first. Physical separation by closing the panel is used only after other methods have failed and animals will not stop fighting. After the animals are separated a physical examination is performed. If injuries are detected the clinical veterinarian is informed immediately. Depending on the severity of the encountered aggression, reintroduction or separation must be considered by the clinical veterinarian and research staff. If the animals are deemed to be incompatible, new partners will be identified and tested. Details of all observations must be documented on the Compatibility Testing of Rabbits form.

8) Animals that have demonstrated that they are compatible under conditions of tactile contact for increasing periods over the course of at least seven days will be permitted full physical contact by permanent removal of the cage divider.

9) If a pair has had at least 7 days of full physical contact with no aggression, they will no longer be considered a new pair, and compatibility testing will be complete. The established pair will continue to be monitored; however no more documentation is required on the Compatibility Testing of Rabbits form.

10) To enhance interactions, manipulate (See SOP, "Environmental Enrichment for Rabbits"), will be placed in both adjacent cages. Animals paired for compatibility testing will be offered novel treats such as carrots or bunny sticks during visual, tactile and full physical contact.

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