

Institutional Animal Care & Use Program - UTEP	
Title: Animal Enrichment	
Policy#: 014	Date in Effect: 27 February 2015
Version #: A	Rev Date:
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A) RESPONSIBILITIES

It is the responsibility of all personnel using animals at UTEP to abide by this policy. Exceptions to this policy must be approved by the IACUC when good justification is provided to deviate from this policy.

B) APPLICATION

Animals housed at UTEP will be provided with species appropriate enrichment and opportunities to express species-specific behaviors that meet or exceed regulatory requirements unless justified and approved by the IACUC.

C) BACKGROUND

The Animal Welfare Act and The Guide for the Care and Use of Laboratory Animals (*Guide*) detail basic behavioral management expectations in the broad areas of structural and social environment, and activity. General laboratory animal expectations assume that animals that are relaxed and comfortable and able to express species-specific behaviors are more stable research subjects and provide more accurate research data.

D) EXEMPTIONS

- 1) **RESEARCH EXEMPTIONS:** Exemptions based upon justified research needs must be considered and approved by the IACUC before initiation of the exemption. The consideration of the exemption requires Full Committee Review.
- 2) **CLINICAL VETERINARY CARE:** Exemptions MAY be granted by the Attending Veterinarian (AV) or a designee appointed by the AV for issues based on animal health, animal condition, or animal well-being. This clinical veterinary care exemption is limited to periods up to 30 days. Exemptions longer than 30 days require IACUC review and approval. Additional or other forms of enrichment described in this policy may be provided based on the professional

judgment of the Attending Veterinarian. Such changes may be based (but not exclusively) on clinical, behavioral, species and physiological needs.

E) PROCEDURES

1) Mice, rats, voles and gerbils

- a) Rodents that exhibit species-specific behaviors such as nesting or burrowing are provided with suitable substrate in addition to the regular bedding if the regular bedding is not conducive to these behaviors.
- b) Rodents will be socially housed unless prior protocol exemption has been approved or it has been well-established that the species is non-social by nature or certain individuals have been determined by the AV or designee as not being compatible.
- c) Veterinary Services personnel, as well as approved research personnel, may provide time for human interaction as enrichment. Consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal to prevent any untoward effects upon the research outcomes.
- d) Veterinary Services personnel as well as approved research personnel may provide species- and health-appropriate, novel treat items as enrichment if not contraindicated by research goals. As noted above, consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal, to prevent any untoward effects upon the research outcomes. In addition, the use of these treat items should be discussed with the AV prior to their introduction to ensure they do not pose a risk to the health or well-being of the animals receiving them.
- e) Housing items and manipulanda may be provided if space allows. Ideal items should be easily sanitized or be disposed of and replaced during cage changes.
- f) Rodents identified as exhibiting aggressive behavior may be singly-housed with additional enrichment (e.g. EnviroDri, crawl tubes, tunnels, exploratory manipulanda, chew sticks, etc.). This single housing is an exception to The Guide but is approved under this policy as a focused activity for the well being of the animal, as long as justification is provided and documented on the cage card and/or in an animal's permanent health record.

- g) Rodents may be held in a cage as single pregnant females for the last 1/3 of gestation (approximately 1 week prior to parturition in most rodent species when the animal's gravid abdomen is observable) to prevent cage mate trauma and overcrowding. The IACUC considers single housing of late pregnancy females a positive animal welfare activity, for the benefit of the pregnant female and her offspring.
- 2) Reptilian species
 - a) Reptiles should be socially housed when space is available, animals are compatible, and research aims do not limit that type of housing.
 - b) Reptiles will be provided with hiding places.
 - c) Arboreal and semi-arboreal species will be provided with perches under heat sources for thermoregulation.
 - d) Certain semiaquatic species (e.g., Red Slider turtles) should have a basking surface to allow them to move in/out of the water.
 - 3) Aquatic species
 - a) Schooling fish (ex: zebrafish) should be socially housed and/or provided with visual barriers to offer hiding places when space is available, animals are compatible, and research aims do not limit that type of housing.
 - b) Non-schooling fish (ex: flounder, betas) should be provided with visual barriers from other animals.
 - c) Amphibians should be socially housed when space is available, animals are compatible, and research aims do not limit that type of housing. Amphibians will be provided with hiding places.
 - 4) Avian species
 - a) Avian species will be socially housed when space is available, animals are compatible, and research aims do not limit that type of housing.
 - b) Avian species will be provided with various species-specific manipulanda.
 - c) Male birds (e.g. zebra finch) identified as exhibiting aggressive behavior may be singly housed with species-specific enrichment.
 - 5) Guinea pigs

- a) Guinea pigs will be socially housed when space is available, animals are compatible, and research aims do not limit that type of housing.
 - b) Housing devices (huts/tubes) will be placed in each cage.
 - c) Veterinary Services personnel as well as approved research personnel may provide time for human interaction as enrichment. Consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal, to prevent any untoward effects upon the research outcomes.
 - d) Veterinary Services personnel as well as approved research personnel may provide appropriate, novel treat items as enrichment if not contraindicated by research goals. Consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal, to prevent any untoward effects upon the research outcomes. In addition, the use of these treat items should be discussed with the AV prior to their introduction to ensure they do not pose a risk to the health or well-being of the animals receiving them.
 - e) Food enrichment may be provided at least twice per week.
 - f) Guinea pigs may be held in a cage as single pregnant sows for the last 1/3 of gestation (approximately 3 weeks) to prevent cage mate trauma and overcrowding. This specific housing is considered a positive animal welfare activity, for the benefit of the pregnant sow.
- 6) Rabbits
- a) Rabbits will be socially housed whenever possible. However, rabbits frequently display aggressive behavior towards their cage mate(s) and often social housing ends up in severe injuries among conspecifics.
 - b) All rabbits will have at least one item of species-specific manipulanda in their cage.
 - c) It should be verified that the space requirement per animal is maintained at or above the minimum noted in the Guide when certain shelter-type enrichment items are placed in the cage.
 - d) Rabbits may be brushed to provide human interaction and reduce fur ingestion.

- e) Veterinary Services personnel, as well as approved research personnel, may provide time for human interaction as enrichment. Playtime in a larger, AV-approved enclosure may be provided on a regular basis if noted in the protocol. Consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal, to prevent any untoward effects upon the research outcomes.
 - f) Veterinary Services personnel, as well as approved research personnel, may provide appropriate, novel treat items as enrichment if not contraindicated by research goals. Consultation with the PI is necessary prior to modifying the existing care or interaction with the research animal, to prevent any untoward effects upon the research outcomes. In addition, the use of these treat items should be discussed with the AV prior to their introduction to ensure they do not pose a risk to the health or well-being of the animals receiving them.
 - g) Food enrichment may be provided at least twice per week.
- 7) Hamsters
- a) Hamsters will be socially housed whenever possible. However, hamsters frequently display aggressive behavior towards their cage mate and often social housing ends up in severe injuries among conspecifics.
 - b) Housing items and manipulanda may be provided if space allows.
 - c) Hamsters may be housed with inanimate enrichment (e.g. crawl tubes, tunnels, exploratory manipulanda).
- 8) ALL SPECIES: It is important to verify that housing items and manipulanda cannot trap or ensnare the animals for which they are used, or otherwise pose a risk for injury (e.g., they should be carefully manufactured and checked regularly to ensure there are no sharp edges or points).