Title: Ferret Husbandry
SOP Number: 072
Purpose: To establish proper ferret room maintenance and husbandry procedures to ensure quality care and prevent the development of disease.

RECEIPT
A. Individual cage cards are prepared for each animal and include the following:
   1. Investigator
   2. Protocol #
   3. Species
   4. Sex
   5. Age
   6. Arrival Date
   7. Source
   8. Individual ID #
A. Individual animal medical records are prepared for each animal.
B. Shipping crates are inspected for signs of damage and shipment accuracy. The technician should notify the facilities manager regarding any damage to the crate or contents.
C. AV or Clinical Veterinarian will be immediately notified of health concerns or deaths occurring in transit.
D. Physical exams/general health evaluations are performed by the veterinary staff or ACS staff, within 24 hours of arrival and findings will be recorded on a physical exam form.
   1. ID number and/or description
   2. Weight
   3. Heart or Pulse rate
   4. Respiration rate
   5. Nails (trim if necessary)
   6. Teeth
   7. Ears
   8. Eyes
   9. Skin/Coat condition
   10. General attitude and condition
   11. Any treatments implemented

HOUSING AND CARE
A. All forms located in the room’s notebook must be adequately filled out.
   1. Daily observation sheet
   2. Task sheets
   3. Temperature/humidity logs
      a. Temperature range: 40-65 degrees F, never exceeding 70 degrees
      b. Humidity range: 30-70%
   4. Food Enrichment log
5. Treatment records (clinical records/experimental records)

B. Rooms should be checked daily for any operational deficiencies. Any deficiencies should be reported immediately to the facility manager.
C. Water bottles are refilled daily with fresh water.
D. Fresh food is added daily to the feeders. All food is discarded once a week and new food will be provided to all ferrets. Food receptacles are cleaned and sanitized at least once a week.
E. Nails will be trimmed once per month or as needed.
F. Enrichment will be provided according to the enrichment portion of this SOP.
G. Feces and urine are removed daily from troughs.
H. Troughs are sanitized once a week.

TROUGH SANITATION
A. Troughs are taken to the washroom and all accessories are removed and then ran through the cage washer for cleaning and sanitation. Dirty bedding is dumped into a trash bag and taken to the dumpster.
B. Troughs are rinsed to remove gross debris. Following rinsing, the troughs are run through the rack washer. Clean troughs are removed from the rack washer and allowed to dry.

ANIMAL ROOM SANITATION
A. Floors are swept daily and mopped with disinfectant mixed according to manufacturer's recommendations on Monday, Wednesday, and Friday (at minimum twice a week).
B. Weekly- All surfaces (including door frames, lights, and vents) are wiped down with disinfectant mixed according to manufacturer’s recommendations.
C. Monthly- Floors, walls, and ceiling are cleaned with disinfectant mixed according to manufacturer’s recommendations.

FERRET HANDLING
A. The adult ferret is best held by grasping it just behind the front extremities with one hand and holding the hind legs with the other hand.
B. Ferrets can be held by the loose skin on back of the neck. Held in this manner, the animals typically relax and simple procedures such as nail trimming can be performed.
C. Removal/Return to cage
   1. Grasp the scruff of the neck firmly with one hand
   2. Support the hindquarters firmly with the other hand

ENRICHMENT
A. Social enrichment:
   1. Ferrets are social animals and should be group housed unless otherwise justified.
   2. All ferrets receive environmental enrichment, unless an exemption has been approved by the IACUC.
B. Physical enrichment:
1. Tunnels, balls, rubber toys, and nylabones are provided to the ferrets to help satisfy their need to hide, chew, and play.
2. Hammocks are provided to the ferrets for nesting.
3. Cardboard boxes with shredded paper are provided weekly to hide treats and stimulate their foraging behavior.
4. Yogurt drops, cat food, and dog treats may be provided to the ferrets as additional enrichment.

**Food and physical enrichment may vary depending on availability, the above are examples of enrichment that can be provided**

C. Exercise
1. When group housed, ferrets have ample room to play and exercise within their environment.
2. Enrichment will be provided and rotated to encourage play behavior.

D. Socialization
1. A human socialization program will be implemented to help ferrets become comfortable with handling and human interaction.
2. Students and/or technicians will spend time each day during the week designated to socializing the ferrets.
3. Socialization will only occur while ferrets are housed in conventional caging.

E. Implementation
1. Enrichment will be provided to the ferrets by the technicians at change-out and various times throughout the week.
2. Enrichment items will rotate to keep the items novel and the ferrets interested.
3. Treats will be encouraged by the technicians and research staff to allow the ferrets to get use to the personnel and handling, as well as after any procedures for positive reinforcement.
4. Exceptions to this SOP require a statement in the animal use protocol providing adequate justification as to why environmental enrichment would interfere with the study.

ANIMAL HEALTH MONITORING
A. Animals are observed daily by animal care staff for any evidence of illness or change in behavior.
1. Everyone with access to the animal facility is responsible for immediately informing the facility manager or university veterinarians when an animal becomes ill or a change in behavior is observed.

B. In the event of suspected illness:
1. Record your observations in the ferret’s individual record- include the date, the problem observed, and your initials
2. Immediately contact the ACS facility manager or the university veterinarians:

   Sydnee Woodman: ACS facility manager
   806-834-2872 Office
   602-758-0670 Cell

   Tiffanie Brooks: ACS/ University veterinarian