**Peromyscus Care: FRSFM Facility**

Last Reviewed: May 13, 2024

**I. Purpose**

This standard operating procedure (SOP) outlines best practices associated with the daily husbandry and quarantine of Peromyscus housed at the Field Research Station Fort Missoula (FRSFM). This procedure ensures consistent and uniform care of the animals and protects the integrity and biosecurity of campus animal housing facilities. This procedure applies to all personnel involved in the care of Peromyscus housed in disposable caging at the FRSFM.

**II. Policy**

It is a LAR policy to meet or exceed all federal, state, and local regulations and guidelines and to comply with all institutional policies and procedures as they apply to the use of animals in research. All personnel must pass online animal training modules and attend applicable training in animal care and use, occupational health and safety, and equipment operation before performing activities outlined in this SOP. Animal housing rooms should be entered using appropriate personal protective gear for the species and disease or hazard containment level.

**III. Transfer and Quarantine Procedures at the FRSFM**

1. **Transfer or Shipment of Peromyscus to the FRSFM Facility**
2. Peromyscus may be transferred by investigators from the campus facility to FRSFM in an enclosed vehicle with appropriate temperature control
3. Peromyscus caging will be placed in labeled shipping containers for transport between the facilities
4. Alternatively, Peromyscus may be shipped directly from the Peromyscus Stock Center to the FRSFM after proper notification and paperwork provided to the LAR Facility Manager
5. Shipments to the FRSFM from the Peromyscus Stock Center typically arrive at 6 am and must be met by a member of the Cheviron group
6. Once animals arrive at the FRSFM, members of the Cheviron group will place the Peromyscus into disposable caging. These cages are identified with appropriate cage cards and placed into temporary housing room QS120 for the duration of their acclimation period (48 hours)
7. Peromyscus transferred from LAR will be acclimated for 48 hours and then the mice will be transferred into disposable caging. The LAR microisolator caging will be packed into garbage bags, the exterior of the bag sprayed with Peroxigard and transported back to LAR for processing
8. Peromyscus will thereafter be maintained in disposable caging (provided by and at the cost of the investigator) and dirty, disposable caging is to be disposed of, along with soiled bedding, into the dumpster at FRSFM
9. **FRSFM Facility Quarantine Procedures**
10. Peromyscus transferred to the FRSFM facility are effectively quarantined at that
facility, and the following conditions will apply:
	1. Peromyscus housed at the FRSFM may not return to the campus animal facilities without an additional quarantine period within the Health Sciences The facility at the expense of the investigator
	2. There will be no exceptions to the quarantine policy within the core animal facilities on campus
11. Peromyscus shipped directly to the FRSFM facility from the Peromyscus Stock Center will not undergo any serologic or parasitic testing and will forego parasiticide treatments
12. All Peromyscus, regardless of origin, are effectively quarantined when housed at the FRSFM facility and all personnel will abide by the following conditions:
	1. Once Cheviron Laboratory staff have returned from the FRSFM facility, **they may not enter the campus core facilities on the same day** unless they shower, change clothes and the bottom of their shoes either sprayed with Peroxigard or shoe covers are worn
	2. If entering the campus core facilities on the same day is a necessity, shoe covers and a disposable Tyvek suit (located in HSB 011A, storage room) must be worn to enter the facility (call LAR before arrival [406-243-4892] to ensure that PPE is ready before entering)
	3. LAR staff members who have visited the FRSFM facility in the afternoon may not enter any LAR housing areas upon return from the FRSFM facility

**IV. Husbandry and Care Procedures**

1. **Morning observation**
2. Record room temperature
3. Observe animals for signs of disease, illness, or injury
4. Check to see if Peromyscus have eaten and are drinking water
5. Note any changes in urine or fecal pellets
6. Report any problems to the LAR facility manager or the Attending Veterinarian (AV)
7. Complete daily check off sheet 7 days/week
8. **Daily routine**
9. Observe animals for signs of disease or illness as above
10. Rinse and refill all disposable water bottles daily checking to make sure lixits are free from debris before replacing on bottles
11. Fill food hoppers with Inotiv 2018
12. Sweep and mop the floor with Peroxigard
13. Empty trash
14. Replenish bedding and feed bin as needed
	1. Request food from LAR if needed
15. Fill out a census sheet and initial daily log
16. **Weekend routine**
17. Follow daily routine except do not mop the floor
18. **Bedding change: Alternating weeks**
19. Follow the daily routine
20. In the chamber room, place Peromyscus in a clean Rubbermaid tote with autoclaved bedding while the cage is being cleaned
21. Dump dirty bedding from the cage into the garbage
22. Add clean, autoclaved Sanichips and EnviroDri or aspen chips and TekFresh bedding into the disposable cage
	1. Request supplies from LAR if needed
23. Acceptable enrichment includes the following:
	1. TP rolls
	2. Nestlets
	3. Irradiated sunflower seeds
	4. EnviroDri
24. Gently place Peromyscus back into the cage
25. Dump and refill disposable water bottles with fresh water; add food
26. Garbage *must* be removed and discard in the dumpster located in front of the building
27. **Complete cage change: Alternating weeks**
28. Prepare new disposable cages with clean autoclaved bedding (listed above), clean feeders, clean disposable water bottles, and new enrichment devices
	1. Request supply from LAR if needed
29. Acceptable enrichment includes the following:
	1. TP rolls
	2. Nestlets
	3. Irradiated sunflower seeds
	4. EnviroDri
30. Remove Peromyscus from the dirty cage and gently place into the clean cage and transfer cage card
31. Dirty disposable caging and bedding *must* be discarded in the dumpster located in front of the building
32. EXCEPTION TO THE GUIDE:
	1. PEROMYSCUS GIVING BIRTH AND PEROMYSCUS PRIOR TO EXPERIMENTAL EUTHANASIA housed in static micro-isolators may have the COMPLETE CAGE CHANGE DELAYED FOR UP TO 2 DAYS.  The justification includes reducing stress and litter mortality via cannibalism and reducing stress in experimental animals just prior to euthanasia and tissue harvest
33. **LAR will ASC once a month**
34. Wash walls, feed bin, counters, light diffusers, floor, door, and threshold with Peroxigard. Let stand 10 minutes before wiping surfaces with a wall mop and/or rag
	1. *LAR will only ASC the chamber rooms if no animals are being housed inside of them*
35. Dry with a paper towel if necessary
36. Initial checklist and ASC sheets and daily log
37. **Health checks**
38. If animals housed at the FRSFM facility are to be housed longer than one month a monthly health check *must* be performed and documented on the appropriate form kept in a notebook located in the anteroom of the environmental chambers. Health check documents must be available at all times
39. The date of the next expected Health Check is to be recorded on the whiteboard located in the anteroom of the environmental chamber (this is at the request of the USDA inspector)
40. **Box and animal numbers**
41. A box count and animal count is to be recorded on the whiteboard located in the anteroom of the environmental chambers (this is at the request of the USDA inspector)
42. A monthly census sheet must be filled out and returned to LAR
43. File filled-out daily check sheets in the daily sheet notebook at the end of each week