SWINE HUSBANDRY

1. PURPOSE

1.1. The purpose of this Animal Care and Use Procedure (ACUP) is to describe the routine husbandry procedures for swine at Cornell University. This ACUP is approved by the Cornell Institutional Animal Care and Use Committee (IACUC). Any deviation must be approved by the IACUC prior to its implementation.

2. SCOPE

2.1. This ACUP is intended for all staff members who perform routine swine care.

3. INTRODUCTION

3.1. The purpose of this ACUP is to describe routine husbandry procedures for swine at Cornell University. Contact the Center for Animal Resources and Education (CARE) at Cornell University at care@cornell.edu for more information or for assistance.

   NOTE: If you or anyone in your immediate family have had any illness with the last 7 days (e.g., any symptoms of the flu including cough, congestion, sneezing, headaches, body aches, fever, and fatigue) **DO NOT** enter any area housing swine without prior facility management approval, as humans can transfer the influenza virus to swine.

4. MATERIALS AND EQUIPMENT

4.1. Feed, feeders and watering devices
4.2. Bedding materials (e.g., rubber mats, wood shavings, sawdust)
4.3. Animal-specific tools (e.g., hoof trimmer, restraint board, etc.)
4.4. United States Department of Agriculture (USDA) / Food and Drug Administration (FDA)-approved vaccines and medications
4.5. Supplemental heat source (for piglets)
4.6. Enrichment items
5. **PROCEDURE**

5.1. **Housing**

5.1.1. As applicable, meet minimum housing space requirements as noted in the Guide for the Care and Use of Agricultural Animals in Research and Teaching (FASS), and/or Guide for the Care and Use of Laboratory Animals (NRC).

5.2. **Observation of Animals**

5.2.1. Observe each animal at least once daily, including weekends and holidays, for illness, injury and general condition.

5.2.2. Report injuries or health issues to the facility manager.

5.3. **Feed and Water**

5.3.1. Feed animals to meet current National Research Council’s *Nutrient Requirements of Swine*.

5.3.2. Provide and assure delivery of fresh water *ad libitum*.

5.3.3. Keep feeders, watering devices, and feeding stations in working condition and free from manure, urine and other contaminants (e.g., insects, bedding, animal waste, etc.).

5.3.4. Thoroughly clean feeders and watering devices and disinfect prior to use by newly introduced pigs.

**NOTE:** Snout snares can result in injury. As such, snout snares must only be used by, or under the direct supervision of, trained personnel.

5.4. **New Arrivals**

5.4.1. **Acclimation and Quarantine**

5.4.1.1. Swine Sources:

5.4.1.1.1. Prior to introduction of new swine, consult the facility veterinarian regarding incoming animal health status and applicable biosecurity.

5.4.1.1.2. Acclimate new animals for a minimum of 72 hours prior to performing experimental survival procedures.

5.5. **Preventative Health**

5.5.1. Facility Manager: Consult with the facility veterinarian to assure all pigs are maintained with an appropriate vaccination status.

5.5.2. Observe and trim hooves to assure overgrowth does not occur.
5.6. Primary Enclosure

5.6.1. Clean and disinfect pens or cages thoroughly before a new group of pigs is introduced.

5.6.2. Solid Floor Housing

5.6.2.1. Provide bedding.
5.6.2.2. Remove soiled bedding daily and replenish as needed so as to assure pigs do not become soiled with feces / urine.

5.6.3. Raised Floor Cages / Runs

5.6.3.1. Provide rubber mat or similar surface for pigs to lay on.
5.6.3.2. Hose flooring daily to remove feces and urine.

5.7. Temperature and Ventilation

5.7.1. Ideal temperature range for adult pigs is 65°-75° F. Provide mitigation if temperatures are outside this range (e.g., fans, heat lamps, etc.)

5.8. Lighting

5.8.1. Keep artificial light for experimental and teaching animals in a cycle of 12 hr light:12 hr dark.

5.9. Environmental Enrichment

5.9.1. House swine in groups unless exempted by the IACUC or facility veterinarian.
5.9.2. If group housing is not possible, house swine so as to maintain sensory contact with other swine at all times.
5.9.3. Provide additional enrichment for swine via novel play items in the primary enclosure (e.g., chains, bowling balls, ice blocks, positive human contact, hay, etc.).

5.10. Vermin Control

5.10.1. Rodent and insect control is performed by a Cornell approved vendor.
5.10.2. Refer to ACUP 538 Vermin Program for details.

6. PERSONNEL SAFETY

6.1. Medical Emergencies: CALL 911.
6.2. When working with animals wear appropriate PPE, observe proper hygiene, and be aware of allergy, zoonosis, and injury risks. Refer to the CARE Occupational Health and Safety webpage for more information.
7. ANIMAL RELATED CONTINGENCIES

7.1. Post contact information for emergency assistance in a conspicuous location within the animal facility.

7.2. Emergency veterinary care is available at all times including after working hours and on weekends and holidays:

7.2.1. Biomedical settings: CARE (pager 1-800-349-2456)
7.2.2. Farm animal settings: Ambulatory and Production Medicine Service at (607) 253-3140.

7.3. Non-emergency veterinary questions & requests for animal care, email CARE veterinary staff at care@cornell.edu.

8. REFERENCES

8.5. ACUP 538 Vermin Control: http://ras.research.cornell.edu/care/documents_k/ACUPs/ACUP538.pdf
8.6. CARE Occupational Health and Safety webpage: http://ras.research.cornell.edu/care/OHS.html

9. HISTORY

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<td>Most Recent Annual Review – Reviewed by: J. Wright</td>
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<tr>
<td>17 NOV 16</td>
<td>Revised – Revision Author: Dr. T. Pavek</td>
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<td>18 FEB 16</td>
<td>New Format – Converted by: J. Kirby</td>
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<td>31 AUG 04</td>
<td>New Issued – Original Author: B. Collins; Referee: K. Roneker</td>
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