EQUINE HUSBANDRY

1. PURPOSE

1.1. The purpose of this Animal Care and Use Procedure (ACUP) is to describe the routine husbandry procedures at Cornell University’s equine facilities. 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 application.

2. SCOPE

2.1. This ACUP is intended for all Cornell University staff members and students who perform routine equine care.

3. INTRODUCTION

3.1. This ACUP provides general husbandry guidelines for equine species housed in research facilities at Cornell.

3.2. Contact the Cornell Center for Animal Resources and Education (CARE) at Cornell University by e-mailing care@cornell.edu for more information or for assistance.

4. MATERIAL AND EQUIPMENT

4.1. Feed and water
4.2. Bedding
4.3. Bathing and grooming supplies
4.4. Environmental enrichment devices

5. PROCEDURE

5.1. Observation of Animals:

5.1.1. Observe all equine species daily (including weekends and holidays) for illness, injury, and general condition.

5.1.2. Report any injuries or illnesses to the facility manager, Principal Investigator (PI), clinical veterinarian, and CARE vet staff. Refer to ACUP 607 Reporting Sick Animals.
5.2. Records and Documentation:

5.2.1. General

5.2.1.1. Identify each animal with a tattoo, tag on halter, or collar that individually identifies the animal by name or number.

5.2.1.2. Maintain individual health records including medical, vaccination, and transportation history. Refer to ACUP 542 Maintaining Health and Procedure Records for Research and Teaching Animals for record keeping requirements at Cornell animal facilities.

5.2.1.3. Maintain daily husbandry records, including feeding, watering, cleaning, and daily turn out.

5.2.2. Pen Level Information

5.2.2.1. Post a sheet identifying the horse(s), feeding instructions, plus the PI and protocol number (if not posted elsewhere for the facility or area), on each stall or holding pen.

5.2.2.2. Illness / Injury and treatment sheets should also be posted at the pen level. If pen design does not allow for direct posting, place documentation in a conveniently accessible location.

5.2.3. Pastures

5.2.3.1. Outdoor sites must have posted identification and emergency contact information if not part of another facility. All posted information should have weather protection (e.g., plastic laminate).

5.2.4. Non-CARE Veterinary Care

5.2.4.1. In order to provide general veterinary care, non-CARE veterinarians must sign a Letter of Agreement with CARE before treating any Cornell owned animals as per IACUC Policy 500 Primary Clinical Veterinary Care Performed by Non-CARE Veterinarians.

5.3. Feed and Water:

5.3.1. Feed animals to meet the current National Research Council recommendations for equine nutrition.

5.3.2. Feed any animals housed inside, or where they cannot graze, at least twice a day. Roughage in the form of hay or other fibrous feedstuff must be provided.

5.3.3. Feed supplemental grain to animals not able to meet nutrient requirements on hay and/or pasture alone.

5.3.4. Provide access to selenium/salt supplementation on a daily basis.

5.3.5. Feed storage

5.3.5.1. Store feed off of the floor (e.g., on pallet, rack, or cart) and 4-6 inches away from the walls.
5.3.5.2. Store bulk grain in leak-proof containers with tightly fitting lids. Label all feed storage containers with milling date.

5.3.5.3. Use feed within 6 months of the milling date.

5.3.6. Provide access to clean water at least twice per day; heaters may be needed to keep water from freezing in cold weather.

5.3.6.1. Sanitize water buckets/automatic waterers as per facility SOP.

5.4. General Housing Requirements:

NOTE: All halters placed on horses in pastures or free stalls must be fitted with a break-away feature unless the horse is maintained under constant observation. Horses maintained in tie stalls do not require breakaway halters. See the Guide for the Care and Use of Agricultural Animals in Research and Teaching 3rd Edition, 2010 for further details.

5.4.1. Space, Temperature, Ventilation and Lighting Requirements:

5.4.1.1. Must meet or exceed requirements listed in one of the following, as applicable:


5.4.1.1.2. Guide for the Care and Use of Laboratory Animals, 8th Edition 2011.

5.4.2. Indoor Housing:

5.4.2.1. Bedding

5.4.2.1.1. Use straw, wood shavings, or sawdust for bedding stalls. Do not use cedar or black walnut wood shavings or cocoa husks due to potential toxicity.

5.4.2.1.2. Do not use rubber mats alone, except in cases when animal health or experimental design do not permit traditional bedding.

5.4.2.2. Stall Maintenance

5.4.2.2.1. Clean occupied stalls daily and unoccupied stalls at a minimum of three times per week.

5.4.2.2.2. Maintain clean, dry stalls that are free of dust and odor.

5.4.3. Outdoor Housing:

5.4.3.1. Fencing height must be a minimum of 4 ft.

5.4.3.2. Lower fence edge must be to the ground or the space from the ground must be greater than approximately 2x the hoof width of the largest equid within the enclosure.
5.5. Social and Environmental Enrichment

5.5.1. House equids in groups whenever possible.
5.5.2. For individually housed animals, make every effort to house within sight of other equids. Additional enrichment is highly recommended.
5.5.3. Provide foraging opportunities.
5.5.4. Grooming:

5.5.4.1. Brush and/or bathe the animal to remove excessive dirt and hair as needed.

5.5.5. Provide additional environmental enrichment (e.g., turnout, hand-walking, mirrors, pasture balls, flavored likit treats, thoroughly cleaned plastic jugs).

5.6. Preventative Health Care

5.6.1. Refer to ACUP 622 Preventative Health Care for Equids.

5.7. Quarantine / Acclimation Procedures

5.7.1. Refer to ACUP 609 Equid Acquisition, Receiving, Acclimation, and Disposition.

5.8. Transportation

5.8.1. All equids transported for non-emergency purposes must have a current, negative Equine Infectious Anemia (Coggins) test. Refer to New York State Regulations for equine transport.
5.8.2. Transport equid(s) in vehicle designed for large animals (e.g., truck & trailer).

NOTE: the following are general guidelines, refer to facility level policies for more specific details as needed.

5.8.3. Sanitize transport compartments whenever a contagious pathogen is suspected (e.g., new animals of unknown health status) or likely (e.g., diarrhea noted). Maintain a vehicle record listing cleaning and sanitization.
5.8.4. Load animals with care and attention to their prey animal nature. Move calmly and steadily, and minimize sudden noises so as not to worry animals. Equids are large, easily frightened animals and can be very dangerous to themselves and personnel if suddenly panicked in a confined area.

5.9. Pest Control

5.9.1. Refer to ACUP 538 Vermin Program for a complete description of the vermin control program.
5.10. **Euthanasia and Disposal of Dead Animals**

5.10.1. Euthanize equids by barbiturate overdose, performed by or under the supervision of a CARE veterinarian or approved non-CARE veterinarian. Refer to ACUP 307 Euthanasia of Non-Rodent Mammals.

5.10.2. Dispose of carcasses through CVM Waste Management or renderer.

5.11. **Waste Management**

5.11.1. Deposit non-regulated or non-infectious medical waste and soiled material in dumpsters or other designated area for removal from the facility.


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 care, email CARE veterinary staff at care@cornell.edu.

8. **REFERENCES**


8.5. Cornell Environmental Health & Safety Regulated Waste Removal:  
http://sp.ehs.cornell.edu/lab-research-safety/waste/regulated-medical-waste/Pages/default.aspx

8.6. ACUP 307 Euthanasia of Non-Rodent Mammals:  

8.7. ACUP 538 Vermin Program:  
http://www.research.cornell.edu/care/documents_k/ACUPs/ACUP538.pdf

8.8. ACUP 542 Maintaining Health and Procedure Records for Research and Teaching Animals:  

8.9. ACUP 607 Reporting Sick Animals:  

8.10. ACUP 609 Equid Acquisition, Receiving, Acclimation, and Disposition:  

8.11. ACUP 622 Preventative Health Care for Equids:  

8.12. CARE Occupational Health and Safety webpage:  
http://www.research.cornell.edu/care/OHS.html

9. APPENDIX

9.1. None

10. HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>06 APR 17</td>
<td>Most Recent Annual Review – Reviewed by: B. Burke</td>
</tr>
<tr>
<td>24 MAY 16</td>
<td>New Format – Converted by: J. Kirby</td>
</tr>
<tr>
<td>UNK</td>
<td>Revised – Revision Author: E. Silvela; Referee: V. Grove</td>
</tr>
<tr>
<td>30 JUN 03</td>
<td>New Issued – Original Author: B. Collins; Referee: S. Baxendell</td>
</tr>
</tbody>
</table>