
STANDARD OPERATING PROCEDURE

TITLE: Environmental Enrichment / Swine / HSACF and WVB
SOP NO.: 450-01
REVISION:
EFF. DATE: February 2010
SUPERSEDES: NA

APPROVALS

Prepared by (print name): _____ Dept.: _____
Signature: _____ Date: _____

Reviewed by (print name): ____S. Fussell____ Dept.: ____ACVS____
Signature: _____ Date: _____

Approved by (print name): _____ Dept.: _____
Signature: _____ Date: _____

1.0 PURPOSE

- 1.1 To outline the various environmental enrichment strategies used to ensure welfare, encourage normal species-specific behaviour, decrease stress to reduce research variables and benefit research results, and provide consistent environments for all animals groups.

2.0 SCOPE

- 2.1 This SOP applies to all pigs housed in the Health Sciences Animal Care Facility (HSACF) and West Valley Building (WVB) at Western.
- 2.2 It applies to all personnel involved in swine animal studies performed at the above facilities.

3.0 RESPONSIBILITIES

3.1 ANIMAL CARE (AC) STAFF

- 3.1.1 Monitor animal health and welfare daily, ensuring enrichment strategies are being used unless otherwise approved on an Anima Use Protocol (AUP).
- 3.1.2 Inform Veterinary Services (VS) of any observed stereotypic behaviours and implement requested new enrichment strategies to work to alleviate these behaviours. Maintain records in Animal Health Binder.
- 3.1.3 Reference any researcher notes at door, room, or cage level regarding enrichment needs.
- 3.1.4 Provide a stock of clean enrichment devices.
- 3.1.5 Inform manager/lead hand if sufficient supplies are not available.
- 3.1.6 If new enrichment devices are being tested, inform manager/lead hand and Veterinary Services about cage level observations.
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3.2 RESEARCH STAFF

- 3.2.1 All deviations from standard enrichment strategies must be included on an approved AUP.
- 3.2.2 Provide information at room and/or cage level regarding any alterations to the standard enrichment program for your species.
- 3.2.3 Work with ACVS staff to minimize stereotypic behaviours.

3.3 LEAD HAND AND/OR FACILITY MANAGER

- 3.3.1 Pass on any alterations to the standard enrichment programs to full-time and part-time AC staff.
- 3.3.2 Continue to obtain information on new forms of enrichment.
- 3.3.3 Work with veterinary staff to periodically evaluate and review the enrichment program.

4.0 PROCEDURE

4.1 PIGS

- 4.1.1 Pigs are highly intelligent, curious, and social animals which prefer contact with other animals of their species.
- 4.1.2 Our enrichment strategies for pigs are designed to promote natural, species-specific behaviours; such as rooting for food, chewing, scratching, sustaining mental stimulation through manipulating novel objects, and social interactions
- 4.1.3 Standard enrichment in pig pens in the facility include all of following items:
 - Apples, one per day
 - Scratch/rub pad attached to cage wall
 - A small ball and plastic bowling ball in feeder, for rooting (as an alternate, a roller bar could be placed in the feeder).
 - Toy that can be manipulated by mouth and/or makes noise (changed weekly)
 - For example: plastic balls, a PVC tube over cage bar that can be pushed up and down, etc.
 - A chew toy (changed weekly)
 - For example: white boat fender
 - Toys should not be easily to destroy or eat

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- 4.1.4 Singly housed pigs should have caging set up to allow them access to visual, auditory and olfactory cues from one another at all times.
 - 4.1.4.1 Some physical contact is ideal (i.e. sleeping next to the neighbouring animal); however may not be possible due to medical conditions or incompatibilities.
- 4.1.5 Pigs are adventuresome when it comes to food preferences and enjoy treats, if permitted by researcher.
 - 4.1.5.1 They are omnivorous and will eat meat as well as vegetable material and grains.
 - 4.1.5.2 Creamed corn, peppermints and marshmallows are a few of their more unusual likes. The provision of any treats should be discussed and approved in advance with ACVS veterinarians.
- 4.1.6 Stereotypic and stress-related behaviours or symptoms in pigs may include (but are not limited to):
 - Higher levels of aggression
 - Tail biting
 - Lameness

5.0 HEALTH & SAFETY

- 5.1 PERSONAL PROTECTIVE EQUIPMENT (PPE)
 - 5.1.1 ACVS Staff must wear clean scrubs while performing all animal care duties.
 - 5.1.1.1 Discard scrubs to laundry at the end of each work day.
 - 5.1.2 PPE is not required if you are only observing the animals and not handling them.
 - 5.1.3 Follow Swine husbandry SOP and room-level signage from proper PPE to work in the housing room.
 - 5.1.4 Report all accidents/incidents to your supervisor.
 - 5.1.5 Report all animal bites to your supervisor and UWO Workplace Health.
- 5.2 All ACVS staff will be enrolled and monitored as per the UWO Preventative Health Program for Animal Handlers Policy by UWO Workplace Health.

6.0 REVISION HISTORY

Revision	Reason(s) for Revision	Initiated by

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7.0 REFERENCES / ASSOCIATED MATERIALS

- 7.1 UWO WebCT lecture, created by Dr. Susan Fussell
- 7.2 CCAC: guidelines on: the care and use of farm animals in research, teaching, and testing: http://www.ccac.ca/en/CCAC_Programs/Guidelines_Policies/PDFs/Farm_Animals.pdf
- 7.3 CCAC Species-Specific Resources: http://www.ccac.ca/en/alternatives/species-resources_ressources-especes/pigs_porcs.html
- 7.4 A review of environmental enrichment for pigs housed in intensive housing systems; Applied Animal Behaviour Science, 116, pp. 1-20 (2009).