**Preamble:** The OVC and OAC through the Department of Clinical Studies (DCS) and the Veterinary Teaching Hospital (VTH) make use of two types of teaching animals during the delivery of the undergraduate and post-graduate teaching programs. Faculty members who wish to use animals for teaching must before hand receive approval of the Department Undergraduate Teaching Committee or Graduate Studies & Research Committee by submitting a course proposal outline which must include a completed ACC Animal Utilization Protocol. Again, Committee approval is contingent upon approval of the protocol by the ACC. **This is established DCS policy.**

**Conditioned Animals**

One type, conditioned teaching animals, is comprised of approximately 40 (range 20-56) adult cattle, 18 (range 14-20) adult horses, 10 dogs (max 15) and 6 cats (max 10) which are maintained in the VTH by VTH personnel. These animals are accustomed to the VTH environment and College personnel (faculty, staff and students) and have been selected because of their quiet disposition and willingness to stand quietly for palpation and other non-painful clinical examination procedures, and their ease of handling for demonstration purposes.

The DCS and VTH teaching dogs and cats are housed predominately for use as blood donor animals. The teaching cats and dogs are rotated through a blood collection schedule (see AUP# 03T025). The teaching cows and horses are rotated through a blood collection schedule as well (see AUP# 04T047).

Conditioned teaching horses remain in the herd as long as they are healthy and display acceptable temperament. Generally conditioned teaching cows are shipped to market after two years and replaced with healthy cull cows from the University of Guelph Research herds. The exceptions to this policy are; cows with rumen fistulas which are shipped every 3-5 years provided no complications develop at the site of the fistula and animals.

Conditioned teaching dogs and cats get adopted to a good family after 2 years. Each potential owner must complete the Central Animal Facility (CAF) adoption protocol.
The Department of Clinical Studies (DCS) together with the Large Animal Clinic Head (VTH) oversee and coordinate with the Teaching and Research Animal Co ordinator (TRAC) (VTH), the approval for and use of the teaching horses. In all cases, requests for their use must be accompanied by a completed Animal Utilization Protocol and such requests are only approved contingent upon approval of that protocol by the University of Guelph ACC. This is established DCS policy.

The Theriogenology group in the Department of Population Medicine together with the TRAC (VTH) oversees and coordinates the use of the teaching cows following the policy referred to above.

A Small Animal Medicine Clinician (VTH) together with Ms. Janette Ogilvie (VTH) and Ms. Debbie Robinson (VTH) oversee and coordinate the use of the teaching dogs and cats following the policy referred to above.

Unconditioned Animals

The second type of teaching animals used by faculty are non-conditioned teaching animals. These are comprised of single or small groups of horses, cattle, small ruminants, swine or dogs purchased occasionally by Department or College faculty in support of the undergraduate core or elective programs or post-graduate teaching. Such animals although reasonably well-mannered and docile are not necessarily accustomed to the VTH environment or to College personnel. These animals are mainly acquired for Phase III Surgical Exercises (VETM 4520) in the DVM program, the laboratory in Emergency Care Procedures and for CVMA examinations. Further, for certain needs, e.g. the final year electives (Equine Lameness), it may be necessary to procure animals which are evidencing a very subtle lameness that can be provocatively exacerbated. The faculty person requesting such non-conditioned animals for teaching purposes is responsible for the care and well-being of such animals.

Where approval involves the provocative elicitation of a clinical sign, this must only be done under the direct supervision of the responsible faculty person and only to the extent necessary to meet the teaching objectives followed immediately by appropriate therapeutic treatment to ameliorate any pain. Subsequently such animals are treated in the same manner that clients' animals would be treated under similar circumstances relative to appropriate therapy and regular observation 24 hours per day in order to maintain analgesia as required. This is established DCS policy.
In the subsequent document the permitted frequency of repetition of a particular technique is determined by whether or not the procedure is considered a Minor Procedure, an Intermediate Procedure or a Major Procedure in terms of the impact of the procedure on the animal's normal feeding, exercise and resting activities taking into account whether it is a conditioned or a non-conditioned teaching animal.

I  Minor Procedures: Apply only to conditioned animals

These are procedures that have very little or no impact on the animal’s normal feeding, exercise and resting behavior. Generally, such procedures can be repeated multiple times per day, 2 half days per week provided the animal is fed and watered as normal and is exercised sometime through the day or early evening. Some exceptions are noted below.

In order to reduce the stress on the canine blood donor/teaching group, animals from this group can not be used for weekly ultrasound laboratories, clinical medicine laboratories, CVMA examinations, anatomy laboratories, or any procedure requiring sedation.

HORSE

a. Practicing horsemanship skills - largely observation of group and/or individual animals with some hands-on palpation, leading of animals at the walk and trot and demonstration of the proper application of tack (halter, bridle, and saddle)
b. Practicing superficial anatomical palpation
c. Practicing the technique of general clinical examination. This would include general inspection and determination of vital signs (temperature, pulse and respiration). This would not include rectal examination or bladder catheterization
d. Blood sampling from the jugular vein (maximum of twice daily)
e. Collection of vaginal and uterine swabs, and artificial insemination. (maximum frequency of twice daily)
   f. Practicing application of a twitch to the nose or to the ear (maximum twice a week)
g. Use of mare as a teaser for semen collection from stallion (maximum 4 times a week)
h. Demonstration by blacksmith of nailing on a horseshoe (maximum once a month)
i. Trucking of horses from research station to VTH and back
CATTLE, SMALL RUMINANTS AND SWINE

a. Practicing application of a halter
b. Practicing anatomical palpation
c. Practicing showmanship (leading animal at the walk in a large circle)
d. Practicing general clinical examination technique. This would include general inspection, determination of vital signs (temperature, pulse and respiration). This would not include rectal examination or bladder catheterization.
  e. Practicing detailed examination of body systems but without any invasive, diagnostic or sampling techniques
f. Practicing the California mastitis test and the aseptic collection of individual quarter milk samples from the udder
g. Practicing urine collection by digital stimulation of the perineum
h. Blood sampling from jugular vein (maximum of twice daily)
   i. Collection of rumen juice from fistulated cattle for transfaunation (maximum once a day, but coarse digesta must be returned to rumen, not discarded)
j. Artificial insemination
k. Trucking of animals from research station to VTH and back

CATS & DOGS

a. Practicing superficial anatomical palpation
b. Practicing the technique of general clinical examination. This would include general inspection, determination of vital signs (temperature, pulse and respiration). This would not include rectal examination or bladder catheterization
c. Practicing detailed examination of the various body systems without any invasive diagnostic or sampling techniques
d. Use of bitch as teaser to collect semen from a male (maximum twice a week)
e. Venepuncture of dogs for small volume blood sample (<10ml) (maximum twice a week by a veterinarian or an experienced AHT)
II Intermediate Procedures: Apply only to conditioned animals

These are techniques that are either involved enough that the animal’s normal eating, exercising and resting patterns would be significantly disrupted if they were repeated more frequently. This is established DCS policy.

Procedures Which Can Be Repeated Twice in Any Half-day Period (Two half-days per Week; the animal is fed and watered as normal and is exercised sometime through the day or early evening)

a. Practicing passing stomach tube or other oral medication techniques using horses and cattle
b. Practicing oral medication in dogs
c. Rectal / Vaginal examination of cattle, horses, and dogs
d. Bladder catheterization of cows, horses, and dogs
e. Practicing tail bleeding in cattle
f. Semen collection in the bull, stallion and dog
g. Practicing IM, SC, IV injections
h. Abdominocentesis in cattle and horses

Procedures Which Can Be Performed Once Weekly

a. Embryo collection and transfer in cows and horses
b. Bronchoscopy examination without tranquilization of cattle and horses
c. Standing posterior epidural anesthesia in cattle
d. Sedation for demonstration of anesthetic premedication of cats and dogs
e. Sedation for demonstration of ultrasound examination of abdomen of dog
f. Sedation for demonstration of x-ray positioning
g. Sedation for venepuncture on cats for small blood samples by a veterinarian or experienced AHT

Procedures Which Can Be Repeated At 3-6 Month Intervals

a. Floating teeth in horse
b. Trimming feet of horses and cattle
III Major Procedures: Apply to conditioned and non-conditioned animals

These are techniques that if conducted once, in and of themselves, would disrupt the normal eating and/or exercising and/or resting pattern of animals by virtue of the fact that they either require fasting or can only be safely repeated after a fixed time interval in order to allow the animal to return to a totally normal physiological state. This is established DCS policy.

a. General anesthesia of cattle, horses (maximum once a month)
b. General anesthesia of dogs and cats, including practicing intubation (maximum once a week)
c. Demonstration of GI endoscopy or bronchoscopy in dogs under general anesthesia (maximum once a week)
d. Regional nerve blocks in cattle (except a standing posterior epidural) and horses using conditioned animals (once every 2 months)
e. Sedation for large volume blood collection in horses, cattle and dogs (maximum once every 2 weeks, generally every 5-6 weeks)
f. Demonstration of bronchoscopic examination of cattle or horses, with tranquilization (maximum once a month)
g. Blood collection for transfusion of dogs, cats, horses and cattle

Health maintenance of teaching animals: Current DCS/VTH policy

Teaching dogs and cats are housed in the VTH year round. The teaching horses are housed in the VTH during the Fall and Winter semesters. The teaching cows are housed in barn #37 during the Fall and Winter semesters and trucked to the VTH if and when necessary depending upon the course requirements.

The VTH staff have organized an active dog walking program to ensure the teaching dogs socialize with people and get sufficient exercise out of doors, weather permitting. The teaching cats which are group housed (not caged) are socialized using volunteer sitters. Because the small animal staff of the VTH have established an active volunteer canine blood donor program, the needs of the VTH for canine blood donors is largely met, thus reducing the need for resident teaching dogs as regular blood donors. Resident teaching cats, are rotated into the blood donation schedule as outlined previously.
Our goal is that cattle through the Fall and Winter semesters will go out doors 2 hours every second day, weather permitting. Horses are exercised twice per week and on weekends, as weather and labs permit. During the Summer semester teaching cows and horses must spend a minimum of 4 consecutive weeks at pasture during which time they are not used for teaching or research. A faculty or staff veterinarian monitors the health of large animals used in teaching throughout the year and together with a VTH staff person ensures that routine grooming, vaccination and worming procedures are conducted. The Small Animal Ward Technicians and the area AHT oversee and monitor the daily health status of the teaching dogs and cats and together with the staff veterinarian, ensure that routine vaccinations and worming are kept current.