Policy Title: Animal Tracking for Animal Science General Husbandry Protocols

Background:

The IACUC approves all animal use activities in research, teaching or testing through the protocol review and approval process. The general husbandry of each species maintained by the Animal Science department is described in its respective “General Husbandry Protocol”. Each protocol describes the total number of animals approved for use, and PIs must keep track of animal numbers in order to ensure they do not exceed that number. When the total number of animals “added” (born or purchased) approaches the total approved, the PI must either stop obtaining new animals, or submit a request for modification to the IACUC to increase animal numbers.

The Animal Science Department is unique, in that the herds and flocks maintained by the department represent a pool of animal, from which individual animals can be drawn for use in a variety of teaching and research protocols. Some animals may be used on multiple protocol over the course of their lifetimes. Due to the potential for a single animal to be chosen for use on multiple protocols, (which may or may not involve invasive procedures), it is essential to track animal use for each individual animal. This will create an individual animal record which reflects what protocols that particular animal was used on, and for how long.

The use of animals on successive protocols is subject to IACUC oversight. In particular, the conducting of multiple surgical procedures across different protocols on a single animal will be evaluated on a case by case basis. The tracking sheets will serve as a resource for PIs, the Attending Veterinarian, and the IACUC in identifying suitable animals for use on successive protocols involving invasive procedures. The regulatory guidance on the topic of multiple survival surgery can be found in the Animal Welfare Act Regulations, the Guide for the Care and Use of Laboratory Animals and the Guide for the Care and Use of Agricultural Animals in Research and Teaching:

- No animal will be used in more than one major operative procedure from which it is allowed to recover, unless it is justified for scientific reasons. (9 CFR §2.31(d)(1)(x))
- Multiple surgical procedures, regardless of whether they are classified as major or minor, should be evaluated to determine their impact on the animal’s well-being. (Pg 30, Guide [NRC 2011])
- Multiple major survival surgical procedures on a single animal must be scientifically justified and reviewed and approved by the IACUC. (Pg 30, Guide [NRC 2011]).
• Multiple major survival surgeries performed for nontherapeutic reasons should be performed only when justified and must be reviewed and approved by the IACUC (Pg 10, Ag Guide [FASS 2010]).
• Cost savings alone is not an adequate reason for performing multiple major survival surgeries on a single animal (Pg 30, Guide [NRC 2011]).

Two documents are used in the Animal Science Department to aid in fulfilling regulatory requirements: (1) Animal Census, and (2) Animal Tracking Sheet.

Policy:

Use of the Animal Census

1. Animal numbers on UConn farms are monitored by the farm manager who is responsible for completing the Animal Census on a monthly basis for each species. This document serves two purposes: (1) maintaining a running inventory of the total head of animals on the farm, and (2) keeping track of the number of animals added (born or purchased) to the herd or flock. It is important to note that ALL animals housed in ANSCI farm units are counted on the Animal Census, regardless of whether they are temporarily or permanently transferred to another teaching or research protocol. Each animal is “added” only once.

2. At the end of each month, the Farm Manager sends a copy of the completed animal census to the ACS for use by the AV in oversight and for generating annual reports. In addition, the Manager should be aware of the total number of animals approved for use on the General Husbandry Protocol (e.g., 500 cows), and should be subtracting the number of animals “added” (born or purchased) from that total, to ensure that the total number of animals added does not exceed the total approved.
Tracking the Use of Animals on Successive Protocols

1. Animals used on successive research and teaching protocols are tracked by the PI or farm manager, through completion of the Animal Tracking Sheet, which will become part of the individual animal’s record.

2. Animals may be used on successive protocols provided their health has not been compromised. Examples where health can be compromised include but are not limited to the following:

   - Invasive procedure such as major surgery
   - Illness resulting from non-invasive procedures (e.g. anemia)
   - Health concern unrelated to the protocol (e.g. heart disease, kidney failure)

3. If the health of the animal has been adversely affected, it should not be released to another research or teaching protocol until the health concern has been resolved.