

SMU ANIMAL CARE AND USE PROGRAM: Quarterly Newsletter

April 2025

We hope that as researchers involved in animal use you find the following newsletter helpful in navigating the changing landscape of animal welfare and ethics guidelines. Questions and further discussion are always welcome via animalcare@smu.ca

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Tips for writing a progress report during protocol renewal

The most important component of a protocol renewal is the progress report, as it demonstrates to the committee what was attempted and/or accomplished in the study, what was not, and what future directions arise as a result. To assist PIs in capturing progress made in a protocol, a recent example of an excellent progress report is below (in grey). Some details have been removed and any information [in brackets] was modified from the original report for confidentiality or to make it more general and thus more applicable to other animals and projects.

We bred fish in 2023 and 2024. These fish are currently being housed in [facility] or were transferred to [Collaborator or other protocol].

- ➔ *opening statement summarizes when and how animals were used and their current disposition. In some cases, that would look like: The animals were all humanely euthanized after use according to the preestablished scientific endpoint.*

In 2024 we made in vitro crosses by collecting eggs and sperm from fish post-euthanasia. We also tested [procedure that was not part of original protocol, an approved amendment] and successfully collected many fertilized eggs [total number and species included]. We had less success with [species/strain that behaved/performed differently in the same experiment]. In total [x] offspring from crosses made in 2024 are currently [in the facility]. No fish have been transferred to [collaborators]. None of these fish have been used in any experiments yet.

- ➔ *includes progress in the past year of a multi-year protocol, and includes total cumulative uses on the animals used and/or bred.*

In 2023 we made in vitro crosses; some crosses were made in the field so mothers could be released back into the wild [x fish used], while others were made in the lab [x fish used]. Some 2023 fish are still in [facility] and have not yet been tagged or been used in any experiments [total of x fish; breakdown by species].

- *Includes progress from previous year, providing context for what occurred in current protocol year, demonstrates refinement techniques.*

The rest of the fish were transferred to [collaborator protocol, details included on their final disposition]. The summary of transfers is as follows: [fish transfer dates, number of fish by species and age]

- *summarizes number of animals transferred to collaborator*

We also have [x number] wild fish held in the lab to be used for breeding in summer 2025. [x number] of these [underwent procedure on different protocol], so only have one use remaining. We plan to use them for natural breeding for this remaining use.

- *Cumulative use tracking, future directions*

Animal Welfare Assessment (AWA) in the field

Formerly assessing animal welfare during field procedures has its challenges. The number one concern the ACC hears from researchers about integrating a welfare assessment into field studies:

1. Increased animal handling time, which
 - a. causes the animal more stress
 - b. limits the number of animals you can process in a given time period.

The SMU ACC Coordinator was a part of a discussion group that raised this concern with a CCAC representative. The representative's response is summarized and expanded upon below:

Unlike in a housing facility where staff and researchers are monitoring animals continuously, in the field the research team is solely responsible for catching, handling and releasing (using) the animals. The first and most important part of a welfare assessment in this setting: is this animal well enough to use? The answer will depend on how they are being used and on their condition.

On a typical field day, it is likely that most of the animals caught will be deemed "normal", "healthy", and thus, in good condition to process, but you may come across some "abnormal", "unhealthy" individuals that you assess should not be used, or require humane euthanasia. All welfare data (normal and abnormal) should be documented along with any other data you are collecting, either during processing, or at the end of the day.

To implement this:

1. Establish a clear welfare scoring system that is described in your animal use protocol, and that all researchers are trained on.
2. Determine what (if any) additional steps need to be taken to assess the animal welfare during handling.

3. Document the welfare assessment and share with your research team, and with the ACC in the form of PAM or a progress report.
4. After the field season, assess how well the welfare assessment worked and if any handling methods could be refined to reduce animal welfare impact.

Here is an example of an AWA for a SMU field protocol which categorizes the animal's welfare based on several physical factors and provides actions based on the welfare score:

Descriptors	A: Acceptable welfare	B: Minor risk to welfare	C: Major risk to welfare – probable humane endpoint reached
Action required:	None	Record any issues and take steps to provide comfort and reduce stress as per the SOP, training, and AUP	Check with PI/Vet before processing or do not process
Physical	<ul style="list-style-type: none"> • Normal appearance, feathering, weight, 	<ul style="list-style-type: none"> • 1-5 external parasites present • Underweight • Wounds or deformities that do not appear to impact typical behaviours 	<ul style="list-style-type: none"> • Severely parasitized • Emaciated • Injury that prevents safe handling, sampling, or banding
Behavioural	<ul style="list-style-type: none"> • Feeding normally • Will become still once calmed/comfortable in hand • Return to normal behaviour post-processing 	<ul style="list-style-type: none"> • Shivering • Erratic movement/aggression • Lethargic 	<ul style="list-style-type: none"> • Severe lethargy/signs of dehydration • Signs of morbidity
Environmental	<ul style="list-style-type: none"> • Nest boxes are in good condition and are cared for by parent 	<ul style="list-style-type: none"> • Abandoned nest • Minor nestbox damage • Processing bird in poor conditions 	<ul style="list-style-type: none"> • Fallen nestbox or severe damage • Predation event

The CCAC Publishes Revised Scientific Procedures Guidelines Parts A and B

In March 2025, the CCAC released 2 revised guidelines with a 1-year implementation timeline:

- [CCAC guidelines: Scientific procedures \(Part A – Administration of substances and biological sampling\)](#)
- [CCAC guidelines: Scientific procedures \(Part B – Analgesia, anesthesia, and surgery\)](#)

From the [website](#): These documents contain guidelines previously found in the *CCAC Guide to the Care and Use of Experimental Animals, Volume 1, 2nd ed.*, which have been updated and streamlined to assist investigators, animal care committees, facility managers, veterinarians, technicians, and animal care



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personnel in facilitating improvements to both the care given to animals and the manner in which experimental procedures are performed.

Thank you for taking the time to read the SMU ACC Newsletter!