

Algoma University Animal Care Committee	
#AU 0001 Blood Collection from Small Birds	
Issue date: August 2010	Last revised: March/2025

1) Purpose

This Standard Operating Procedure (SOP) describes acceptable procedures for collecting blood from small bird species.

2) Policy

CCAC guidelines and regulations

3) Responsibility

Principal investigator, their research staff, and their student investigators

4) Training Required

Animal Research Ethics

Handling/training in the relevant species

Bio-methodology training in the relevant technique and species

Federal Canadian Wildlife Service Scientific Collection Permit

5) Materials Required

Q tip swabs or cotton balls

Rubbing alcohol

27 G needle for adults

25 G needle for nestlings

Heparinized capillary tube

Gloves

6) Procedures

Procedure (adults):

1. The researcher will wear gloves during blood sampling.
2. The bird will be held in the non-dominant hand, with the bird facing up, the head of the bird secured between the first and second fingers, and the body secured with the thumb and last 2 fingers. The wing is secured in an outstretched position, below the 'elbow' joint using the second and third fingers (see figure 1).
3. The site will be cleaned with a swab dipped in 70% rubbing alcohol. Blood will be collected from the ulnar vein, prior to where it branches, at the point where it crosses the joint (see figure 2).
4. The ulnar vein will be punctured using a 27G needle, and 50-100 µl of blood will be collected from the surface using a heparinized capillary tube (free flowing blood collected, no syringe used).

5. The site will be cleaned using alcohol and then a Q-Tip/cotton ball placed on the wound. The bird is secured with the wing closed on the Q-Tip/cotton ball to keep it in place with pressure on it for 1-5 minutes (time to clotting varies between individuals).

6. The site will be inspected, and the bird released when the blood stops.

Procedure (nestlings):

1. The nestling will be held in the non-dominant hand with the right leg held between the thumb and index finger and middle finger (at the foot) (see figure 3).

2. The site will be cleaned with a swab dipped in 70% rubbing alcohol.

3. The metatarsal vein will be punctured using a 25G needle and 50 μ l of blood will be collected from the surface using a heparinized capillary tube. Blood will be collected from the mid-point of the tarsal vein (see figure 5).

4. The site will be cleaned using alcohol and then a Q-Tip/cotton ball placed on the wound and kept in place with pressure on it for 1-3 minutes (time to clotting varies between individuals).

Species: This SOP applies to all small birds under 50g



Figure 1: Bleeding grip for adult birds

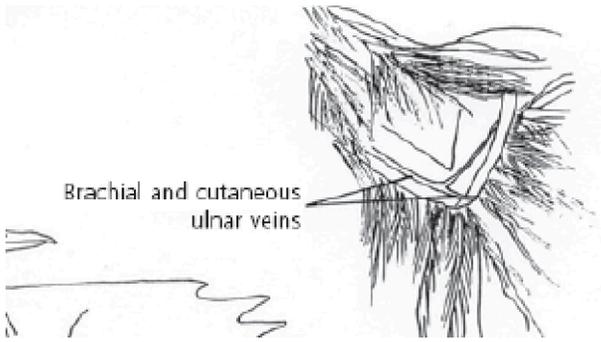


Figure 2: Ulnar vein including branching



Figures 3 and 4: Blood samples being taken from nestling birds, a black capped chickadee and an indistinguishable bird.

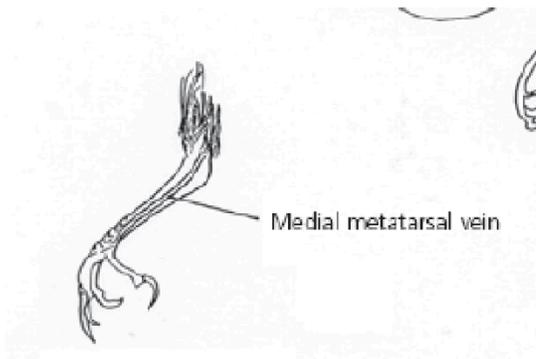


Figure 5: The medial metatarsal vein where blood should be collected from nestling age birds.

7) References (if applicable)

REVISION HISTORY		
Revision #	Revision Date	Summary of Changes
1	April 2011	
2	October 2018	
3	September 2022	
4	July 2024	Reformatted to new SOP template