



How to collect guano (bat poop) samples for DNA testing

For NWT Residents

Thank you for supporting bat conservation in the Northwest Territories (NWT)!

Collecting bat guano (droppings) can provide a DNA sample to identify bat species and provide important health information on bats in the NWT.

If you know where bats are roosting and you have easy access to bat poop, you can send in a sample. Guano collected in May or June is preferred for health monitoring, but guano can be collected at any time throughout the summer.

You will need:

- ✓ Gloves (work gloves or disposable gloves)
- ✓ Paper envelope (such as a coin envelope)
- ✓ Pen or pencil, and tape
- ✓ Something to scoop with, like clean tweezers or another tool for pushing guano into the envelope (such as a clean spoon or popsicle stick)
- ✓ Mask (N95 or better) if you are working indoors in a confined area



Do not handle or disturb roosting bats. Never touch a living or dead bat with your bare hands.

How to collect a sample:

- Place guano pellets inside a paper envelope and seal it closed with tape.
- Do not touch guano directly with your bare hands. Use tweezers, or use a scoop to push the guano into the envelope. If you're wearing clean disposable gloves you can scoop with them.
- Select guano that seems to have been deposited in the current year (from the top of the pile).
- If possible, aim to collect about 30 ml (2 tablespoons) of guano. A large amount is best for health monitoring, but even just one or two pellets can provide valuable information.
- If you have only a few guano pellets, nesting them in a cotton ball inside the envelope can prevent them from being crushed.
- If you have multiple roost sites (e.g. more than one occupied bat-house), use a different envelope for each site, and clean tweezers or change gloves between locations. If some pellets look like they might be from a different species (e.g. larger pellets), collect them separately.



Guano collection (J Wilson/GNWT)



- Avoid putting samples into a plastic bag – they need air flow. Put the small sample envelopes into a larger paper envelope to store and mail.
- If you cannot mail the samples within 14 days, air-dry them for 1 - 2 weeks, then put them in a Ziploc bag and store them in the freezer.

Label envelopes with:

- Your name and contact information
- Date you collected the guano
- Site name (e.g. address and specific location like “north side of attic”)
- UTM or latitude and longitude coordinates if possible (from GPS unit or phone)

Send samples to your [regional ECC office](#) or mail to:

Joanna Wilson
Wildlife Biologist (Species at Risk)
Department of Environment and Climate Change
Government of the Northwest Territories
P.O. Box 1320
Yellowknife, NT X1A 2L9
Phone: 867-767-9237 Ext. 53214

Questions? Email WildlifeOBS@gov.nt.ca

If you find a dead bat:

Be cautious if you find a bat—bats may appear to be dead when they are resting. Avoid handling a bat. If you must pick it up, wear thick leather gloves. Never use bare hands.

If you are sure it's dead, use a box or container to pick up the bat and seal it in a plastic bag. Include the location and date you found the bat, your name and contact information. Bring it to your local ECC office or contact WildlifeOBS@gov.nt.ca for next steps.



Guano collection (J Wilson/GNWT)



Take precautions to avoid inhaling dust and germs. Germs that can cause disease in people can be found in the droppings (poop) of any animal. Wearing an N95 mask or better is recommended when collecting guano within confined areas.



[Learn more](#)