

Thanks for your interest in grizzly bear conservation science! These instructions are intended for the Grizzly Bear Program's scat collection kits. For a quick video demonstration, check out friresearch.ca/scat

## SCAT DNA COLLECTION PROTOCOL

- 1. Wear gloves, bears may have parasites that can make you sick!
- 2. Using the wooden stick in your collection kit, scoop 0.5 cm<sup>3</sup> of scat from the inside of the scat.

0.5 cm<sup>3</sup> of scat is roughly the size of a pencil eraser: A sample larger than this will not dry out properly.



- 3. Transfer the scat sample into a vial containing silica beads and snap the lid back on.
- 4. Gently tip the vial upside down a couple of times to make sure plenty of silica beads surround the scat sample.
- 5. Leave the biodegradable wooden collection stick upright in the middle of the scat to indicate to others that it has been sampled.
- 6. Fill out the required information on the vial label: the date and time of collection, the name of the person who collected the sample, and the location of the sample.
  - **Location information is critical** so please provide precise coordinates, i.e. latitude/longitude or UTM Nad83 coordinates or a legal land description (see instructions on back).
- 7. Store your sample in a cool and dry place out of the sun.

## GET THE COORDINATES OF YOUR SCAT SAMPLE:

- 1. If you have cell service, find your location on your phone using Google Maps or another map app (which will likely have a similar protocol):
  - a. iPhone: open the Google Maps app, touch and hold an area of the map that isn't labeled until a red pin appears. At the bottom, tap "Dropped pin", scroll down to see the coordinates (e.g. 53.399100, -117.582000 in latitude/longitude format).
  - b. Android: Open the Google Maps app, touch and hold an area of the map that isn't labeled until a red pin appears. The coordinates show up in the search box at the top.
- 2. If you don't have cell service take note of your precise location (e.g., on a paper map, an address, or by road intersections), then look up the coordinates on a device as soon as possible.
  - Computer: open Google Maps, right-click the place or area on the map. Select *What's here?*. At the bottom, you'll see a box show up with the coordinates.
- 3. If available, you can also use a hand-held GPS, vehicle GPS, or offline map app (e.g., Avenza Maps) while collecting your scat sample in areas with no cell service.
- 4. Preferred location coordinate formats:
  - a. Latitude/longitude: 53.399100 -117.582000 (decimal degrees), 53° 23.946' N 117° 34.920' W (degree minute), or 53° 23' 56.76" N 117° 34' 55.20" W (degree minute second)
  - b. **UTM:** 11N 461303 5916826
  - c. **Legal land description:** NE4-51-25-W5 (NE quarter of Section 14, Township 51, Range 25, West of the 5th Meridian)