

# Western Gray Squirrel Hair Tube Survey Datasheet Guide

## Okanogan County-Methow Valley (2014-2015)

**Record the following data on the sampling tube datasheets:**

**Location ID:** Record the initials of your name and waypoint number indicated on your GPS (*example: KF001*)

**Watershed:** Label the site as the name of the creek drainage or sub-watershed (*example: Libby Creek*)

**Tube #:** Record # taped on tube onto the data sheet (*example, 101*)

**Observers:** Record names of all observers (initials are okay).

**GPS Waypoint ID:** Mark a waypoint with the GPS and as you do, record the label that is automatically given in the GPS. If you are not standing directly over the sampling tube, then specify the azimuth and distance to the tube from where you set the waypoint.

**GPS Name:** Record the Model and Number of the GPS being used.

**GPS Accuracy:** Record the GPS accuracy and note whether meters or feet.

**GPS Lat/Long:** Record the latitude and longitude in Decimal degrees.

**Elev:** Record the elevation and note whether in feet or meters.

**Date Deployed:** Record the date the tube was first placed at base of tree

**Flagging Color and Location:** Record the color of your flagging and the location on the tree or nearby shrub. This will ensure you can find the site again.

### **Adjacent Landowner Consent**

- Fill out the Landowner Consent Form for each property you visit.
- *If you are deploying hair-sampling tubes on property other than your own, you MUST have written consent from the landowner.*

### **Dominant Overstory**

- Circle the most dominant type of tree in the adjacent area (not just under the tree)
- Ponderosa pine, Douglas fir, and Cottonwood will be the most common
- If both Ponderosa pine and Douglas fir are present at equal densities (50% each), circle both.

### **Dominant understory**

- Circle the most dominant understory vegetation in the adjacent area (not just under the tree)
- Grass/forbs, Shrubs (typically woody and above 24 inches in height), or Bare ground (lacks vegetation but could be covered with dead pine needles)
- If both grass and shrub cover are present at equal densities (50% each), circle both.

### **General Location Notes**

- Write down clues that would help to find the same spot plus any interesting observation about the site.
- You can include: approximate distance from a landmark (road, stream, fence, etc), type of shrubs near tree (snowberry, bitterbrush, etc), walking route taken to get to site (followed skid trail on south side of drainage), tree characteristics (no low branches, tallest tree in 20 meter radius, etc.), flagging location (orange flagging on west side of tree on lower branch, etc), general site characteristics (very steep slope, looks recently burned, snow still on ground in patches, etc).

# Western Gray Squirrel Hair Tube Survey Protocol

## Okanogan County-Methow Valley (2014-2015)

### Prior to setting up hair-sampling tubes:

1. Reconnaissance field work to determine potential western gray squirrel habitat in your area
2. Fill out Adjacent Landowner Consent Form  
*If you are deploying hair-sampling tubes on property other than your own, you MUST have written consent from the landowner.*
3. Items to bring with you in the field:
  - sampling tubes
  - walnuts
  - field map of study area
  - Survey Datasheet
  - Survey Datasheet Guide and Survey Protocol (this document)
  - Western Gray Squirrel Project, Squirrel and Nest Observation Forms
  - flagging
  - GPS
  - Compass (if needed and wanted)
  - Digital camera

### At each hair-sampling tube location:

4. Take paper off sticky tape inside hair-sampling tube
5. Place hair-sampling tube on the uphill side at the base of a tree
6. Secure the hair-sampling tube with rocks or sticks (be careful not to camouflage it so well you don't find it again)
7. Bait both ends of the tube with a walnut (2 per site in addition to the walnut glued to the inside of the tube)
8. Flag the tree or a location adjacent to the hair-sampling tube so it is easy to find when you return to check your site
9. GPS the location and name your sampling site
10. \*\*\*Fill out your datasheet to fullest for the site- see Datasheet Guide on reverse side of this page
11. Take a total of 10 photos of each site. The first photo will be the number on tube, the next seven photos will be a 360 degree photo set from around the site (essentially getting a panorama view of what the site looks like), the ninth photo will be straight up, the tenth will be of the tube numbers again. These will be your photo labels associated with each hair-sampling tube site.
12. Finish datasheet documentation and site descriptions.

### Collecting hair samples from hair-sampling tubes:

13. Revisit your hair-sampling tube locations in approximately 3 weeks from setup
14. Is there hair found on the sticky tape inside the tube?
15. **If no** hair is present on the sticky tape, re-bait the hair-sampling tube with two fresh walnuts if needed and recheck again in 3 weeks
16. Record your observations and lack of activity at the site on your datasheet
17. **If yes**, can you tell which species of animal left hair?
18. **If western gray squirrel is certain AND it is a known WGS location**, collect the hair-sampling tube (sticky tape left intact) and bring out of the field
19. **If unsure of what small mammal species left the hair sample OR WGS has not been collected there before**, collect the hair-sampling tube and place a new hair-sampling tube in its place (follow steps 4-7, and record the new tube number on your datasheet).
20. Finish datasheet documentation and site descriptions.

### Final steps for western gray squirrel project:

21. Place hair-sampling tubes safely in a box at your home, where no moisture or other animals can access it
22. Remove flagging from the field
23. Turn in all hair-sampling tubes for hair identification, photos and field forms as soon as you have data from the field:
  - Call Pacific Biodiversity Institute (PBI) at 996-2490 to come collect your tubes, photos and field forms
  - OR deliver your tubes, photos and field forms to PBI at 517 Lufkin Lane, Winthrop.