Fixed monitoring point: Baited trail camera recording form

Tetrad ID (eg C9):		Please fill in all sections		
Site name		Surveyors name		
Date camera & feeder installed		Date of 2nd pre-bait:		6 figure grid ref (eg J 028 188)
Habitat type(B=Broadleaved woodland, C=Coniferous, M=Mixed)				
Highest number of each squirrel species in any one image in three windows recorded below. ALL images must be viewed and all three observation windows must be recorded or the data may be discarded.				

First observation – Day one until midnight on day 5 (Window 1)				
Date of start of first observation				
	Red	Grey	Unknown Species	Comments
Highest number of squirrels seen in any one image				
Second observation – Midnight on day 5 until midnight on day 10 (Window 2)				
Date of start of first observation				
	Red	Grey	Unknown Species	Comments
Highest number of squirrels seen in any one image				
Third observation – Midnight on day 10 until midnight on day 15 (Window 3)				
Date of start of first observation				
	Red	Grey	Unknown Species	Comments
Highest number of squirrels seen in any one image				

Guidance Notes and Information: Baited Trail Cameras

1. Introduction

The Ring of Gullion and Cooley Red Squirrel group have an agreed programme of standardised red and grey squirrel monitoring at selected sites across the Ring of Gullion and Cooley. Each monitoring point is located within a defined tetrad (a 1 x 1km square). The network of tetrads (approx. 74 sites in the Ring of Gullion) are surveyed each year using baited trail cameras. The collection of data using this method contributes towards a detailed understanding of red and grey distribution over time across the project area, helping us to gauge the success of red squirrel conservation activity.

2. Survey Rationale

The method involves repeated visits over a short period of time. Designing the monitoring programme in this way enables the calculation of detection probabilities associated with each method and habitat type. For example, if you saw a red squirrel on one out of three visits, you know that you missed red squirrels that were actually there on two out of three visits. This piece of information improves the robustness of our statistical analysis. The implicit assumption is that no squirrels have entered or left the tetrad (either by immigration/emigration or birth/death) during the two weeks of the survey period. For this reason, monitoring should only be undertaken at a site when no control activities are underway there, if at all possible.

3. Methodology for baited trail cameras

- Surveyors will need the following equipment:
- A detailed map of the woodland
- McComb feeder box and motion activated trail camera
- Disinfectant (Trigene or Virkon S)
- Bait (squirrel mix containing approximately 45% sunflower, 45% maize and 10% pe
- anuts)
- Ring of Gullion and Cooley Red Squirrel Group baited trail camera recording form

Activity timeline for baited trail camera surveys:

The two week survey is to be conducted at any time between March and May, so long as it begins on or after 1 st March and is complete by 31 st May .
1. Once a location has been identified, ensure access permission has been granted.

2. Locate the feeding box and camera in good quality squirrel habitat, such as mature woodland containing some or all of oak, beech, hazel, pine, larch or non - native mature coniferous species. If you find a spot with signs of squirrel activity (dreys or chewed cones, gnawed hazelnuts etc), this would be very suitable for a feeding box and camera.

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3. Day 1: erect feeding box in a suitable position where it can be easily monitored, positioning it on a tree at around eye - height to allow for easy feeder filling and cleaning. Make sure to choose a spot away from public footpaths or other areas where the equipment is at high risk of theft. Fill the feeder with suitable squirrel mix.

4. Attach the camera opposite the feeder at a distance of 3 or 4 m. Take a test image to make sure the feeder is in the frame.

5. Record the exact location of the feeder. A 6 figure grid reference will suffice, or record the full 10 figure grid reference if using a GPS.

6. Re-bait the feeder as needed around day 7 (do not allow the feeder to become completely empty).

7. After 15 days, remove the feeder and camera, discarding any unused bait. Clean and disinfect the feeder.

8. Review the camera images in three blocks of five days : Days 1 – 5 (Window 1), Days 6 – 10 (Window 2) and Days 11 15 (Window 3). Remove the SD card from the camera and plug into a computer. View each image, recording on the form the highest number of squirrels of each species in any one image within each window

9. **What to do if the camera date/time resets** - If the camera date/time resets, work backwards from the final image, with window 3 being the last five days, window 2 the second five days and window 1 the first 5 days.

10. If in doubt, contact the squirrel group before deleting the data as it is very important that the data is recorded in these three windows.

11. The form can be submitted to us and arrange equipment return as appropriate.