

Fixed monitoring point: Observed feeding station recording form



Tetrad ID (e.g. NZ06K):		Date sticky pads (& feeder if not already set up) installed (= DAY 1):		Please fill in all sections. Thank you
Site name:		Surveyor's name:		
Habitat type (G=Garden B=Broadleaved woodland C=Coniferous M=Mixed):		6 fig grid ref (e.g. NZ 054 618) (10 fig if using GPS, e.g. NZ 05400 61800):		

Highest number of each squirrel species seen at once in each of three windows recorded below. All three observation and hair sampling windows must be recorded or the data may be discarded.

ONE SURVEY (1h 30m period at any time during daylight hours) AND ONE SET OF HAIR SAMPLES IN EACH 5-DAY OBSERVATION & HAIR SAMPLING WINDOW. Hair pads to be collected and new ones installed as late as possible on last day of each window. Please send hair samples to RSNE for analysis.

FIRST OBSERVATION WINDOW (DAY 1 TO DAY 5)

Date of visual survey:		Weather (score wind 1- 3 and rain 1 -3 (1 = low, 3 = high)):		
	Red	Grey	Unknown	Comments
Highest number of squirrels seen at one time				
Hair on sticky pads (Y/N)	Hair results*: Red, Grey, Both, Unsure, None			

SECOND OBSERVATION WINDOW (DAY 6 TO DAY 10)

Date of visual survey:		Weather (score wind 1- 3 and rain 1 -3 (1 = low, 3 = high)):		
	Red	Grey	Unknown	Comments
Highest number of squirrels seen at one time				
Hair on sticky pads (Y/N)	Hair results*: Red, Grey, Both, Unsure, None			

THIRD OBSERVATION WINDOW (DAY 11 TO DAY 15)

Date of visual survey:		Weather (score wind 1- 3 and rain 1 -3 (1 = low, 3 = high)):		
	Red	Grey	Unknown	Comments
Highest number of squirrels seen at one time				
Hair on sticky pads (Y/N)	Hair results*: Red, Grey, Both, Unsure, None			

**Only enter a hair sample result if trained in hair analysis.*

Submit your results on this form by post (please keep a copy/scan) to the address below, including the hair samples by 30th June. Results may also be submitted online – email records@rsne.org.uk to request a user name.

RSNE, c/o Cumbria Wildlife Trust, Gosling Sike Farm, Houghton Road, Houghton, Carlisle, Cumbria, CA3 0LD

Example. In one window you see 1 red & 1 grey squirrel together, later on 3 reds at once, later still 2 greys at once, then 2 reds, 1 grey and 1 red.



This window's results would be recorded like this:	Red	Grey	Unknown
	Highest number of squirrels seen at one time	3	2

Guidance Notes and Information: Observed Feeding Stations

1. Introduction

Red Squirrels Northern England have established a program of standardised red and grey squirrel monitoring at selected sites across Northern England, which started in 2012. Each monitoring point is located within a defined tetrad (a 2 x 2km square). The network of tetrads (approx. 300 sites) are surveyed each year using either baited visual transects, baited trail cameras or observed feeding stations. The collection of data using these methods 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

Each 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 observed feeding stations

Surveyors will need the following equipment:

- Flip-top lid feeder box
- Disinfectant (Trigene or Virkon S)
- 3 pairs of sticky “hook & loop” pads (at least 20mm x 20mm)
- Bait (squirrel mix containing approximately 45% sunflower, 45% maize and 10% peanuts)
- 3 Self-seal bags for collecting hair samples (with waxed paper for protecting hairs)
- RSNE observed feeder recording form

Sticky pads should be attached to the underside of the feeding box lid (Fig. 1). This will improve the probability of detecting squirrels within each window. Any hairs left should then be sent to RSNE to confirm species present (red or grey).



Fig. 1. Baited squirrel feeder with sticky hair pads on the underside of the lid.

Activity timeline for observed feeder surveys:

- **The two week survey is to be conducted at any time between March and May, so long as it begins on or after 1st March and is complete by 31st May.**
- 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. Fill the feeder with suitable squirrel mix.
- 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.
- Attach two sticky pads to the under-side of the feeder lid. Retain the sticky pad backing paper to recover them when putting in sample bags later.
- Re-bait and disinfect the feeder as needed.
- Days 1 – 5 (Window 1): **Carry out one survey on any one day of Days 1 – 5.** The survey should take place during daylight hours, preferably in the morning, and will involve continuous observation of the feeding station for 1.5 hours. Record the highest number of squirrels seen of each species at any one time. **At the end of Day 5, remove the sticky hair pads**, cover with the original backing paper (**the waxy, shiny side!**) or loosely with baking parchment. Put in sample bag labelled with the grid reference, date, site name and your name.
- Days 6 – 10 (Window 2): **Carry out one survey on any day of Days 6 – 10**, following same methods as above. Hair samples collected and new pads installed at the end of Day 10. Put the hair samples in a **new bag**, labelling as above.
- Days 11 – 15 (Window 3): **Carry out one survey on any day of Days 11 – 15**, following same methods as for above. Hair samples collected and new pads installed at the end of Day 15. Put the hair samples in a **new bag**, labelling as above.
- **Please post form and all three hair sample bags to RSNE by 30th June.** The form can be submitted to us on our online system but the hair samples will still need to be sent to us.

Many thanks for taking part. If you have any questions, please get in touch with Simon O'Hare at records@rsne.org.uk.