

Survey Methodology

Baited Sightings Transects

- Where sightings transects are used, they should be at the rate of about one 1000m. transect per 40ha of woodland.
Samples can be a series of shorter transects where woodland blocks are of insufficient size to allow single 800-1000m transects.
- Sightings transects should follow the recommended methodology of 800-1000m in length (aggregated); divided into 100m sections with 5 minute walks and 5 minutes stops; repeated 3 times within a fortnight; take place in early mornings.
- Sightings transects should be pre-baited to improve detection rates: one week prior to the survey date and then again four days later. Scatter 50 g of mixed peanuts, maize, wheat, sunflower seeds at intervals of around 50 m. The bait should cover an area around 10 m behind, in front and either side of each stopping point. Where pre-bait is used, it should always be used on any follow up round of surveys at the same site in order to maintain a standardisation of method at any one site.

Feeder-box Surveys

- Feeders should be used at the rate of 4 per tetrad, preferably in separate woodland blocks or sampling areas, in areas where there have been recent squirrel sightings, or squirrel activity is evident.
- Feeder-box monitoring should follow the SSRS project's standard practice of filling the feeder with a peanut and sunflower seed mix with a little whole yellow maize. Double-sided sticky tape of the recommended type attached to both sides of plastic blocks, fixed to the underside of the lid to collect squirrel hair. Sticky blocks collected in and replaced after 2 weeks, and then again in a further 2 weeks, i.e. blocks should be put up and collected 3 times over a 6 week period in the months of February to April in order to avoid seasonal effects on population numbers. This should measure the core breeding population.
- Hair attached to the blocks is identified under a top-lit stereo-microscope as being either red or grey squirrel hair, or both.
- If both red and grey squirrels are detected on the first collected block, both species can be recorded as present and no further repetitions need be done. If only one species or neither is detected, there should be 2 repetitions as standard in order to record an "absence" of either species.
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It is estimated that **feeder-box surveys** take about 1½ days per tetrad (including travel, reconnoitre, set-up, 3 follow-up visits and hair-identification time).

Natural Food Abundance Surveys

- In 20 tetrads across the Project area, walk 1000metres, stopping every 100 metres to assess the relative abundance of the major squirrel food species, scoring them as **none / some / abundant**. Note also the presence nearby of pheasant feeding, bird-tables or squirrel-feeders.
- Major food trees would include: oak, beech, hazel, Norway maple, Scots pine, Lodgepole pine, Norway spruce, Sitka spruce, larch species, Douglas fir, yew.
- One food abundance survey should take about 15 minutes.