# A Review of the Population and Conservation Status of British Mammals: Technical Summary (Natural England Joint Publication JP025, 2018)

## *Caveats on the population estimate for red squirrels*

The most recent population estimate for red squirrels in Britain is 287,000 (95%CI = 218,000–553,000)

**Source:** Mathews F, Kubasiewicz LM, Gurnell J, Harrower CA, McDonald RA, Shore RF. (2018) **A Review of the Population and Conservation Status of British Mammals: Technical Summary**. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

**Notes on the study methodology:**
The general approach for estimating population size in this study was to multiply habitat-specific density estimates by the extent of these habitats within the geographical range.

With very limited field survey data available, the assessments presented in this review are based on some broad and potentially incorrect assumptions.  For example, that red squirrels occupy and are present in all suitable habitats within their range at an average density inferred from a small number of research studies.  This means that the reliability of the estimate must be interpreted with caution and the following caveats apply to the estimate.

**Caveats on the 2018 red squirrel population estimate**

The red squirrel population size estimate may be affected by the following factors, which were not included in the analysis:

1. No percentage occupancy data are available, so the population size is overestimated.
2. There may be some overestimation resulting from the inclusion of extensive Sitka spruce plantations, which support only very low densities of red squirrels.
3. Population estimates for England, Wales and southern Scotland are likely to be too high owing to overlapping ranges of grey squirrels.
4. The study allocates a **Reliability score of 2** to the estimate.  A value of 1 indicates very poor reliability, and 4 indicates very good reliability.