# Highland
## Red Squirrel Survey

Trees for Life

**December 2025**

## Acknowledgements

Many thanks are given to Saving Scotland's Red Squirrels for their assistance and for the use of their squirrel sighting hub to access red squirrel sightings for the Highlands, and for the use of grey squirrel data. Also, to Forestry and Land Scotland, RSPB, BTO, Woodland Trust Scotland, John Muir Trust, iRecord and National Trust Scotland for sharing red squirrel sightings and promoting the survey amongst their staff and visitors. We also thank those private landowners, estate workers and members of the public that shared red squirrel location data with us and allowed us access to woodlands.

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Image: Scotland: The Big Picture

## Trees for Life’s Red Squirrel Reintroduction Project

Red squirrels are an iconic but threatened species. The Red Squirrel Reintroduction Project is working to reintroduce red squirrels to areas of their former range which they cannot reach on their own due to fragmented woodland and areas of open ground. This helps to restore reds at a national level and increases the resilience of the population. To date the project has translocated over 250 red squirrels, creating 13 new populations.

Historic habitat loss and human persecution has brought this woodland-loving mammal to the brink of extinction. Today, the recovery of red squirrels remains under threat due to competition with non-native grey squirrels and the fatal ‘squirrel pox’ they carry. The project provides refuges from greys, which, if they got into the Highlands, could wipe out all our existing reds.

**The Scottish Highlands is the largest remaining stronghold for red squirrels in the UK.**

Trees for Life have a licence from NatureScot to translocate squirrels from anywhere in Highland and Moray. Squirrels are only taken from areas with strong and healthy red squirrel populations, and the licence allows us to trap 2 squirrels per 200 hectares. All translocations follow strict animal welfare protocols to ensure minimal stress to the squirrels.

Local communities are essential to the project, with volunteers involved in both the trapping and releases, as well as contributing to ongoing supplementary feeding and monitoring through camera traps and sightings.

The data from the Highland Red Squirrel Survey provides key insight into the distribution of red squirrels and the success of the translocations in increasing the species’ range. The findings have also enabled us to identify fragmented habitats that could be linked and possible future reintroduction sites.

We are helping red squirrels reclaim woodlands where they have been absent for generations, securing their future in a wilder, more connected landscape. The new populations in the north and west are thriving and we expect some of them to eventually merge together. This will strengthen numbers and ensure this pioneering project remains a rewilding success story.

We are delighted to share these results with the public for the first time.

## Summary

A red squirrel distribution map has been produced for the Scottish Highlands. This comprehensive survey gives a detailed range for the species and can be used as a baseline against which to assess changes in distribution and to inform future conservation efforts. A new feeding sign survey method was developed and used in combination with sightings records to map distribution at the 5km² scale. The survey shows that red squirrels are found across all areas of suitable habitat in the central Highlands. It also demonstrates that reintroductions to the north-west and northern Highlands have been successful in markedly increasing the species' range. The stark differences between previous distribution maps and this current range demonstrates the benefits of recent reforestation and conservation efforts and highlights the importance of surveys such as this in providing up-to-date data on the distribution of a threatened species.


Image: Trees for Life

## Contents

## 1. Introduction

Red squirrels were once found throughout the British Isles and Ireland. They are now limited to parts of Ireland and Wales, northern England and isolated English islands, plus Scotland, and their range is continuing to decline[1]. Estimates of red squirrel numbers in the UK range from 160,000[2] to 287,000,[3] with the majority of these in Scotland. The species is classified as Endangered in Great Britain, England, and Wales and Near Threatened in Scotland.[4] Habitat loss and the introduction of the non-native grey squirrel (*Sciurus carolinensis*) have been the key reasons for this decline, and grey squirrels remain a critical threat today. Red and grey squirrels have overlapping niches and compete for food and resources,[5] with greys readily able to outcompete reds in broadleaf and mixed forests.[6] Additionally, grey squirrels carry Squirrelpox virus, a disease asymptomatic to grey squirrels but fatal to reds.[7] Together, these factors have led to a widespread increase in grey squirrels throughout most of the UK, and a consequent decline in reds (*Figure 1*).

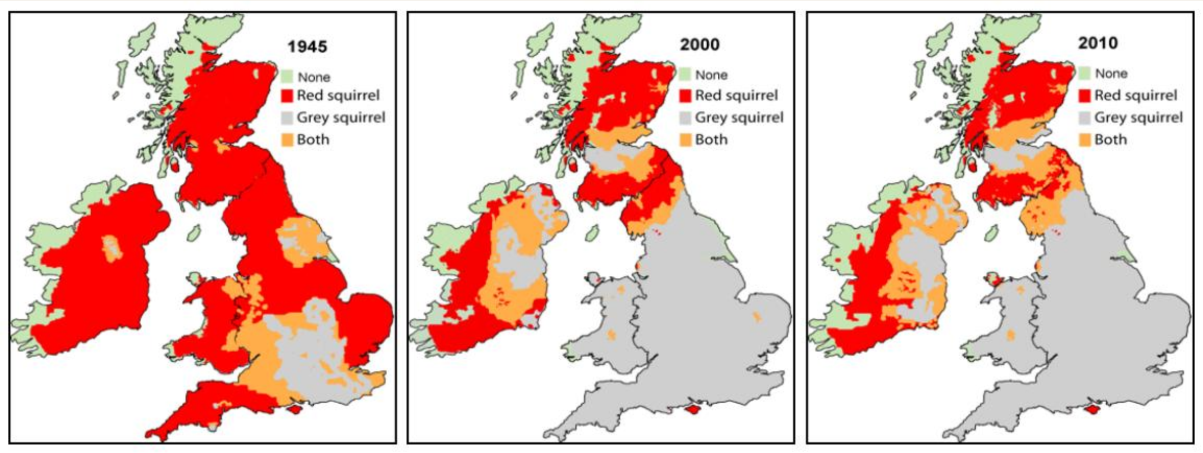


*Figure 1: The change in distribution of red and grey squirrels across the British Isles from 1945 to 2000 and 2010.[8] The introduction of grey squirrel control efforts in 2009 in the Scottish borders halted grey expansion further north.*

Today, Scotland is the national stronghold for British red squirrels, with 80% of the British population found in Scotland.[9] However, prior to recent reintroductions, the species was absent from its former range in the north and northwest Highlands. Populations were lost due to deforestation and persecution[10] and the last records of red squirrels in the region were generally in the 1970s.[11] In recent decades, there has been large-scale afforestation that has created a wealth of suitable habitat. However, as these woodlands are isolated from the existing red squirrel range, the species was unable to re-colonise these regions naturally.

Since 2008, 16 red squirrel translocations have been carried out in the Scottish Highlands, initially by the Roy Dennis Wildlife Foundation[12] and, since 2016, by Trees for Life. More than 300 red squirrels have been captured from populations around Inverness-shire, Moray and Strathspey and relocated to the northwest. To date, releases have occurred at Dundonnell, Loch Broom, Alladale, Shieldaig, Coulin, Plockton, Letterewe, Reraig, Attadale, Inverewe, Spinningdale, Lochaline, and Golspie, with three other populations created at Arisaig, Drimnin and Ratagan since the survey concluded (2023-2025).

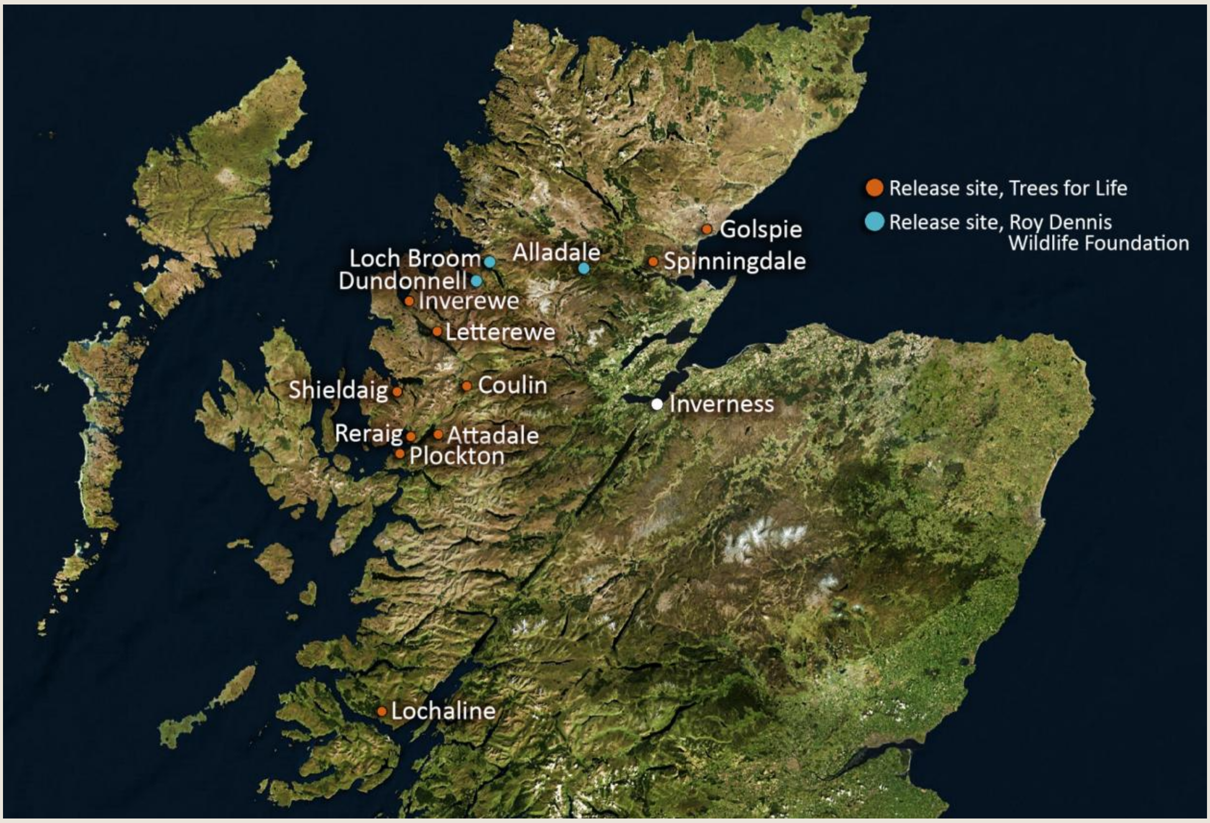


Figure 2: Locations of red squirrel reintroductions carried out by Roy Dennis Wildlife Foundation (RDWF) 2008-2012 (blue) and Trees for Life (TfL) 2016-2022 (orange) that were present at the time of survey.

The aim of the Highland Red Squirrel survey was to create a comprehensive, up-to-date map of red squirrel distribution across the Scottish Highlands. Historically there has been little monitoring of red squirrels across the region and no systematic surveys of distribution. Reintroductions have increased the species' range, so we considered a detailed map of distribution to be a valuable tool to assess the impact of these conservation efforts and to provide a baseline against which to monitor future changes in range.

## 2. Methods

A combination of citizen science and physical surveys were used to map red squirrel distribution in the Scottish Highlands at the 5km² (quadrant) scale. Sightings data was collated from various sources and feeding sign surveys were carried out in locations with no sightings records.

### 2.1. Red Squirrel Sightings:

Records were collated from the following public sightings databases from the years 2020-2023:

- Saving Scotland's Red Squirrels (SSRS) - scottishsquirrels.org.uk
- National Biodiversity Network - nbn.org.uk
- Bird Track (British Trust for Ornithology)
- iRecord

Additionally, the following professional environmental and conservation organisations were contacted for official records and a sightings questionnaire sent to employees (Appendix 1).

- Forestry and Land Scotland
- RSPB
- Woodland Trust Scotland
- Highland Council
- Mammal Society
- National Trust Scotland

Smaller conservation groups and private landowners (see Appendix 2) were also sent the questionnaire, in areas where few other records were found and in areas adjacent to the limits of known red squirrel range.

Three years was considered an appropriate time frame from which to collate records. Squirrel numbers can vary significantly between years due to food availability,[13] so using fewer than this may not have given a true representation of squirrel range. Additionally, citizen science can have limitations in the number and distribution of people submitting sightings so including multiple years reduces these biases.

SSRS runs the national sightings database for both red and grey squirrels. To encourage the public to log sightings, media campaigns were run in conjunction with the Big Scottish Squirrel Survey (September 2022) and again in May and June 2023. These comprised press releases, newsletter articles, television and radio pieces and social media.

All records were verified by checking the location and several parameters were used to exclude unsuitable records:

1. Less than a minimum of 6 figure grid reference provided. This was to ensure consistency and a minimum level of accuracy, with geographic margin for error limited to 100m².
2. Outside of known range. Sightings were excluded if reported at least 20 km further north than known mainland range (See Table 1); in the sea; or in areas of unsuitable habitat (0% tree cover within that quadrant). Any that appeared unlikely (e.g. an isolated woodland with a sighting only reported by one person) were marked as 'Uncertain' and checked by a physical survey.
3. Inaccurate grid references or location data. Sightings were excluded where grid references were incorrect and did not match location data notes and this could not be rectified.

A quadrant was classed as occupied if at least one verified record was logged in it.

## 2.2 Field surveys

For quadrants where no sightings data was recorded, or further confirmation was needed, physical feeding sign surveys were undertaken, with the exception of the following:

| Category | Code | Description |
|---|---|---|
| Unsuitable Habitat | UH | Quadrants with 0% tree cover indicated on an Ordnance Survey 1:50,000 (Landranger) map. |
| Non Diagnostic | ND | Quadrants that only contained broadleaf woodland other than hazel were excluded on the basis that feeding remains in these habitat types are not fully diagnostic. |
| Outside Range | OR | All islands*, all quadrants further than 20 km north of known mainland range, and areas to the west known to have no red squirrel populations by the working knowledge of the Trees for Life Red Squirrel Project Manager.<br>Known mainland range was defined by:<br>- No verified sightings had been recorded outside of this area on the SSRS database for more than 5 years (2018-2023).<br>*The Isle of Bute and the Isle of Arran are the only Scottish islands known to be inhabited by red squirrels. These are both outside of the Highland region. |
| Inaccessible | IN | Due to time and resource limitations, where woodlands covered multiple quadrants and red squirrels were found in some of these, others that were only accessible e.g. by a remote, time-consuming track were excluded on the basis that the woodland was already known to be occupied, as were woodlands that were unsafe to access e.g. in a steep gully. Where possible, landowners in these areas were contacted to source red squirrel records. |

Table 1: Quadrant exclusion criteria

Surveys were carried out from June 2022 to the end of June 2023. As sightings were also submitted during this period, there were some quadrants in which presence was confirmed both from physical surveys and subsequent sightings records.

Squirrel feeding signs are commonly used to establish habitat use.[14] Feeding remains in conifer and hazel woodlands are distinctive[15] and can be reliably used to assess presence, with conifer cones stripped leaving a raggedy core and hazelnuts split cleanly in half - see Figure 3. Feeding remains could potentially be confused with those left by wood mice, but the signs are quite different (see Appendix 3), and all survey personnel were trained in identification.

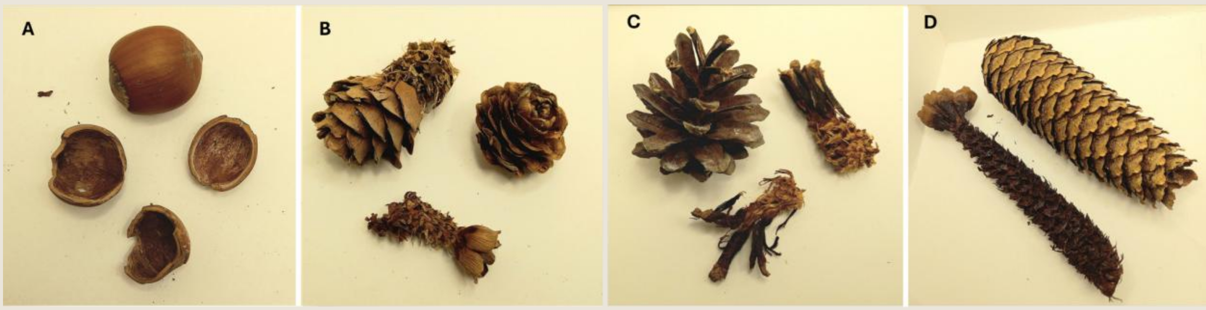


Figure 3: Squirrel feeding signs commonly found in the Scottish Highlands*:* (A) Hazel, (B) Larch, (C) Scots pine, and (D) Norway spruce.

It is not possible to differentiate between red and grey squirrel feeding remains but, as the Highlands is outside of recorded grey squirrel range,[16] and see Figure 4, this methodology was appropriate to use for the purposes of this study.

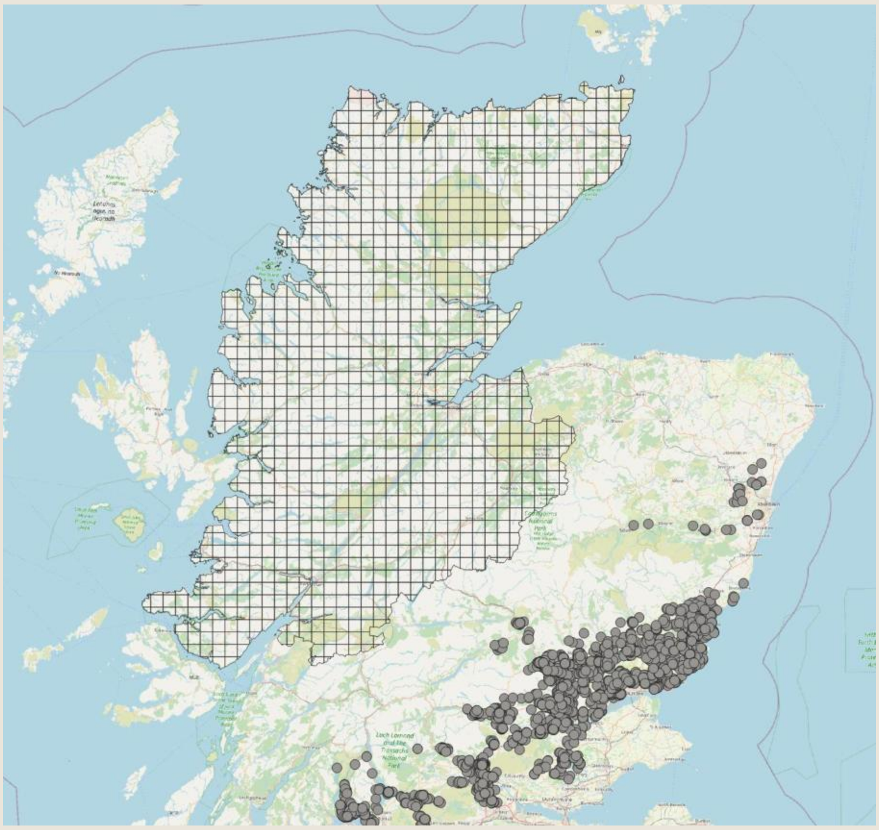

Figure 4: The distribution of grey squirrel sightings 2020-2023 in the counties surrounding the Highlands of Scotland (data from SSRS - accessed July 2023). The distance between the Highland region and the nearest grey squirrel report meant that all feeding signs from a squirrel could be determined to be a red squirrel with confidence.

A stratified sample approach was used whereby, for each quadrant, transects were carried out in areas that were most likely to contain squirrel feeding signs if squirrels were present, based on the surveyors' experience in the Highland region. These were, in priority order:

- Scots pine
- Douglas fir, Norway spruce, lodgepole pine, larch
- Hazel
- Sitka spruce

A new methodology was developed whereby an area of suitable habitat was searched for three minutes to look for stripped cones. The transect was carried out in whatever pattern worked best for the habitat - a line along a track or winding around several trees. If feeding signs were found, that quadrant was marked as occupied. If not, up to a maximum of four additional transects were carried out in that quadrant, across different areas of woodland, and the quadrant then marked as occupied or presence not detected. Pilot studies were carried out prior to the survey to trial the length of time needed to conduct a transect and the number of transects needed within one quadrant, across a range of sites. It was found that three minutes and up to a maximum of five surveys enabled feeding signs to be detected in 100% of surveys where feeding sign was present. (Appendix 4).

Figure 5: Squirrel feeding signs were carried out in suitable habitat. A non-linear path was followed for 3 minutes, based on the topography and tree cover of each location.

## 2.3. Mapping

QGIS Desktop 3.28.4 was used to create distribution maps. Location grid reference data was converted to eastings and northings and added to QGIS to create individual location points for each sighting and survey location. These were processed using vector analysis to convert to a chloropleth map. This used the 5km² quadrant overlay polygon shape and was filled according to red squirrel detection.

## 3. Results

The Highland region comprises 1,142km² quadrants. These were classified as the following:

| Category | No. | % |
|---|---|---|
| Unsuitable Habitat | 489 | 42.19 |
| Nondiagnostic | 48 | 4.13 |
| Outside Range | 162 | 13.95 |
| Inaccessible | 30 | 2.58 |
| Red squirrel: detected | 347 | 29.89 |
| Red squirrel: not detected | 85 | 7.32 |
| Total | 1,161 | |

Table 3: Highland region squirrel habitat classifications. Where quadrants comprised more than one category they were classified in the following order of priority: OR, UH, IN, ND

Of the exclusion criteria, Unsuitable Habitat had the greatest coverage of the Highlands (489 quadrants). Woodland* outside of the current range covered 162 quadrants. Quadrants that may have contained red squirrels but were composed of woodlands with non-diagnostic tree species accounted for 48 quadrants. 30 quadrants were inaccessible for surveys.

*Woodland refers to that marked on an O.S. Landranger map and includes both conifer and broadleaf. No assessment of the suitability of this woodland for red squirrels was carried out, i.e. whether it contains favourable tree species.

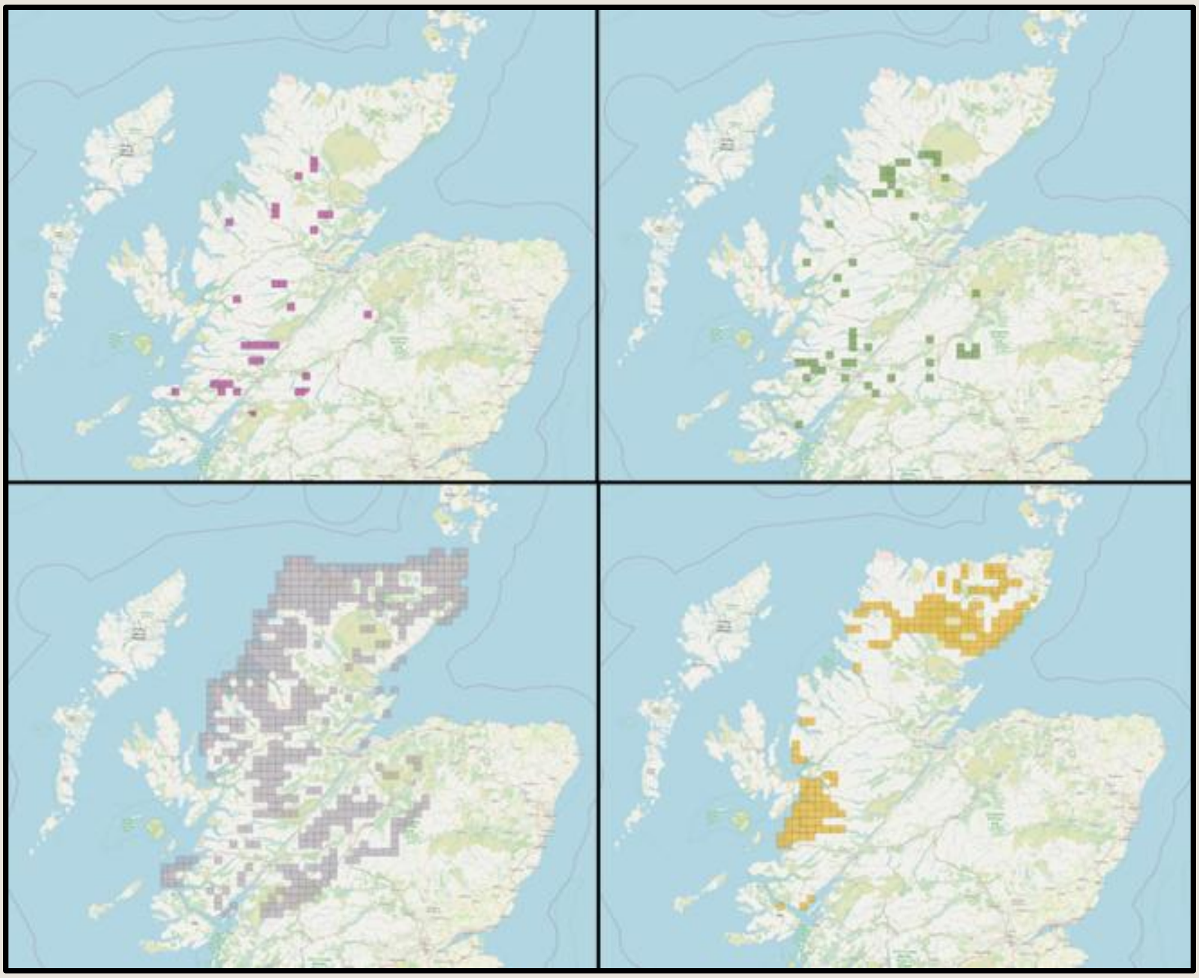

Figure 7: Excluded 5km² quadrants: Top left: Inaccessible (purple). Top right: Nondiagnostic (green). Bottom left: Unsuitable Habitat (grey). Bottom right: Outside Range (orange).

Red squirrels were detected in 347 quadrants (Figure 8) and were not detected in 85 surveyed quadrants (Figure 9). Specific locations of sightings and feeding signs are shown without quadrant lines in Figure 10.

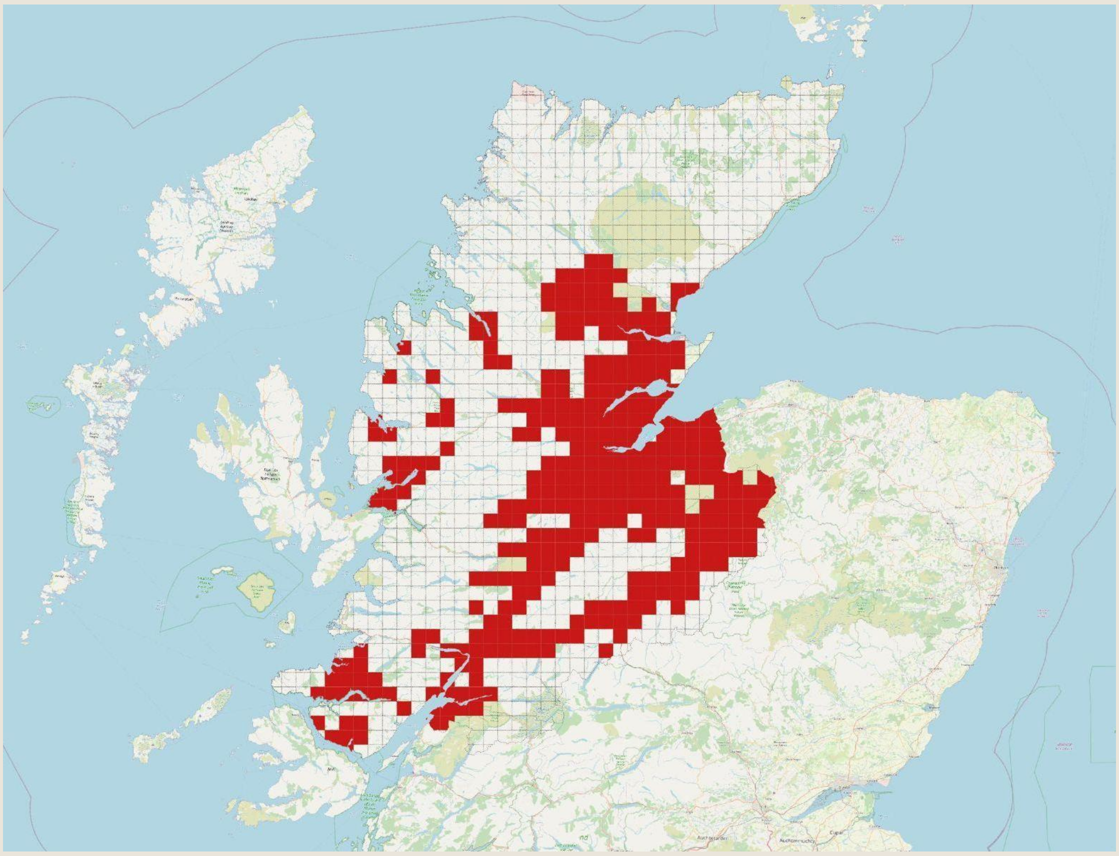

Figure 8: Red squirrel detection in the Scottish Highlands at the 5km² (quadrant) scale.

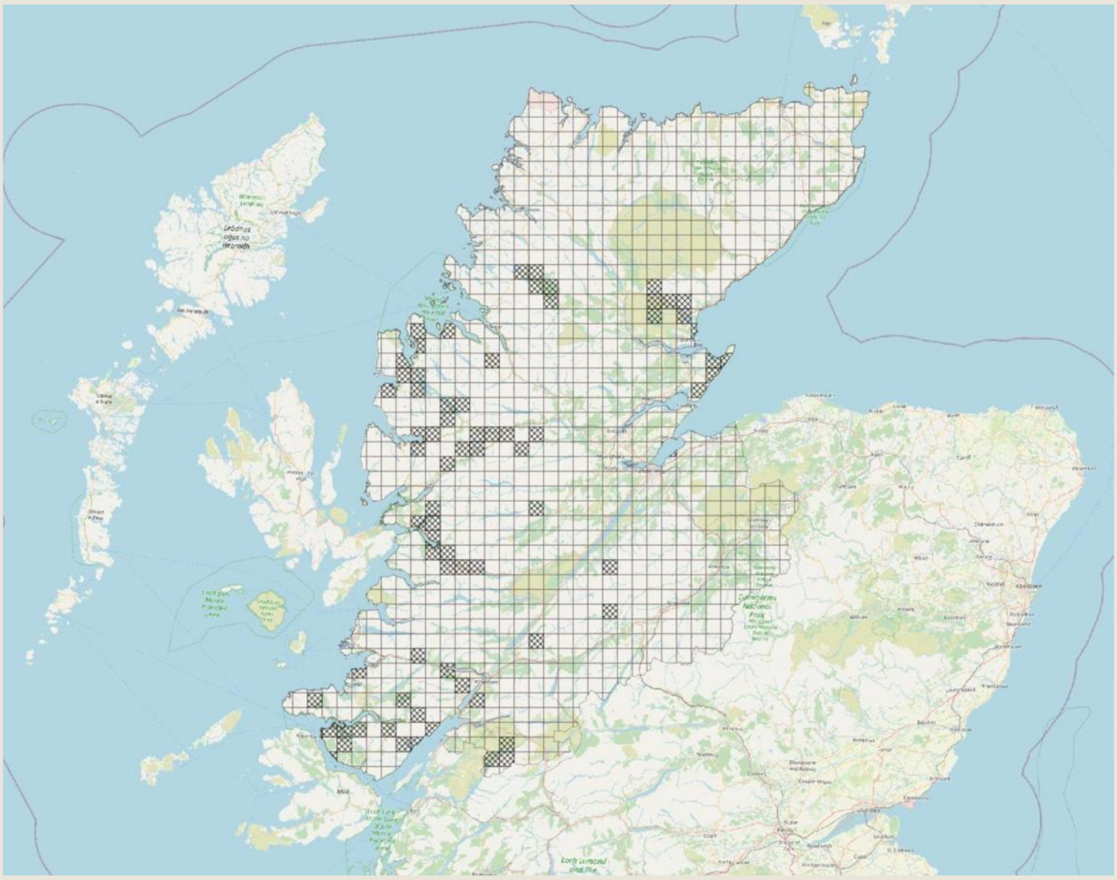

Figure 9: Red squirrel non detection in the Scottish Highlands at the 5km² (quadrant) scale.

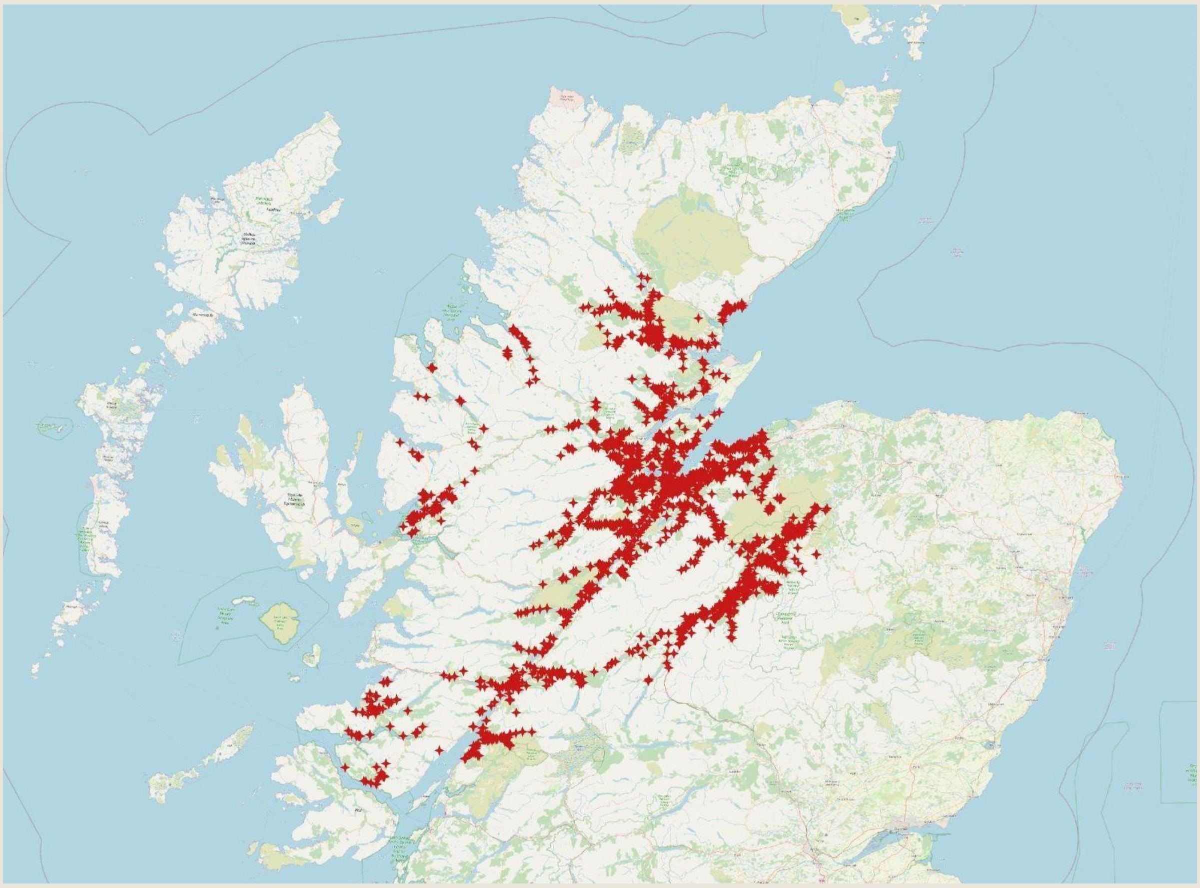

Figure 10: Red squirrel distribution in the Scottish Highlands. Each cross represents a specific location where red squirrels were detected.

# 4. Discussion

## 4.1. Areas of presence

Red squirrels were detected throughout the central and eastern Highlands, including urban areas, except in the uplands and mountains where there is a lack of available forest habitat. They were found as far north as Lairg in the central Highlands, Ullapool in the west and Brora to the east. There are scattered populations along the western coast of the Highlands from Ullapool to the Morvern Peninsula. Red squirrels were also detected in the southern Highlands including Ardnamurchan. Overall, red squirrels were found to be present in 30.68% of the Highlands (excluding IN and ND quadrants) and in 80.32% of suitable habitat within existing range (excluding IN and ND quadrants). The proportion of total woodland in the Highlands currently occupied is 58.42 (excluding IN and ND quadrants). This includes Out of Range woodland areas but this survey made no assessment as to the actual suitability of these woodlands, i.e. whether the tree species are favourable for red squirrels.

### 4.1.1. Red Squirrel Strongholds

There are 19 Forestry and Land Scotland (FLS) Red squirrel priority sites designated across Scotland.[17] These are large areas of forest that have been identified as having the potential to maintain healthy red squirrel populations in the long-term, in the face of encroaching grey squirrel populations. Seven of these are in the Highlands: Morangie Forest, Glen Glass, Black Isle, Daviot Loch Moy, Abernethy, Inshriach and Glenfeshie, and Leanachan. The survey demonstrated that all these areas hold red squirrel populations, with many sightings reported by the public across the survey period.

### 4.1.2. Impact of red squirrel reintroductions

The survey has demonstrated that red squirrel reintroductions have markedly increased the distribution of red squirrels in the Scottish Highlands.

In 2007, prior to any translocations, the north and west Highlands were almost absent of red squirrels, except for the Ardnamurchan peninsula.[18] Today, reds are present as far north as Lairg, along the northeast coast to Gordonbush north of Brora, and at multiple locations on the northwest coast and Morvern to the southwest.

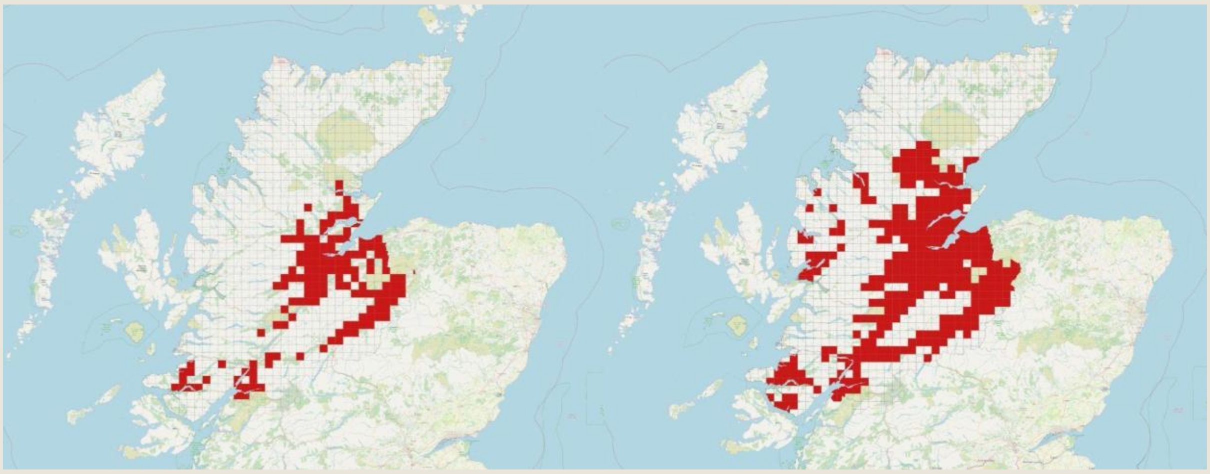

Figure 11: The change in red squirrel distribution from before reintroductions (2007) (left) to the current extent (2023) following 13 reintroductions (right). The right-hand map also depicts more records in the core range around Inverness and Strathspey, due to increased reporting of sightings (SSRS data - accessed July 2023).

13 reintroductions to the northwest Highlands were carried out between 2007 and 2022 (Figure 9).

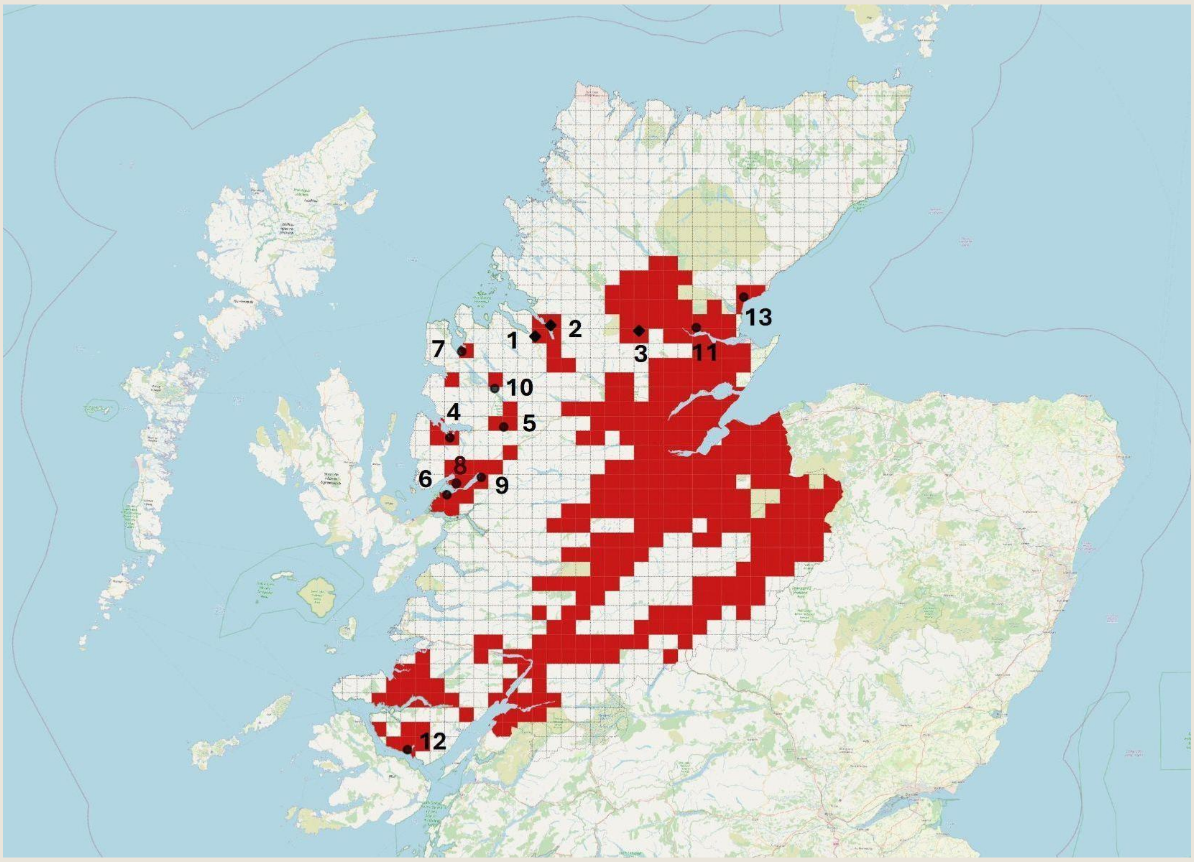


Figure 12: Red squirrel reintroduction sites 2008-2022. Key: [1] Dundonnell [2] Loch Broom, [3] Alladale, [4] Shieldaig, [5] Coulin, [6] Plockton, [7] Inverewe, [8] Reraig, [9] Attadale, [10] Letterewe, [11] Spinningdale, [12] Lochaline, [13] Golspie.

The survey found all these reintroduced populations to still be present but isolated from the core, previously existing Highland range. However, the survey has demonstrated that some of the new populations have spread and linked together (Dundonnell and Loch Broom; Plockton and Attadale; Alladale and Spinningdale) and that other, recently created populations, have the potential to link in the future via current woodland networks (Plockton-Attadale and Reraig, Alladale-Spinningdale and Golspie). Shieldaig and Coulin remain completely isolated and not linked to any other populations although there would appear to be potential for expansion from Coulin through the Beinn Eighe woodlands to the west. Whilst it appears from Figure 12 that 3 and 11 are joined with core range, they are in fact separated by the Dornoch Firth and Loch Fleet.

### 4.1.3. Isolated populations

In addition to the reintroduced populations that remain currently isolated, the survey identified a further population in the western Highlands that appears to be isolated.

Ardnamurchan is known to have a robust population of red squirrels but, despite there being suitable habitat linking these woodlands with those around Fort William, this survey found no evidence of presence in these connecting woodlands, thereby suggesting that the Ardnamurchan population may be isolated. The red squirrels reintroduced to the Morvern peninsula may, in time, spread and join with these.

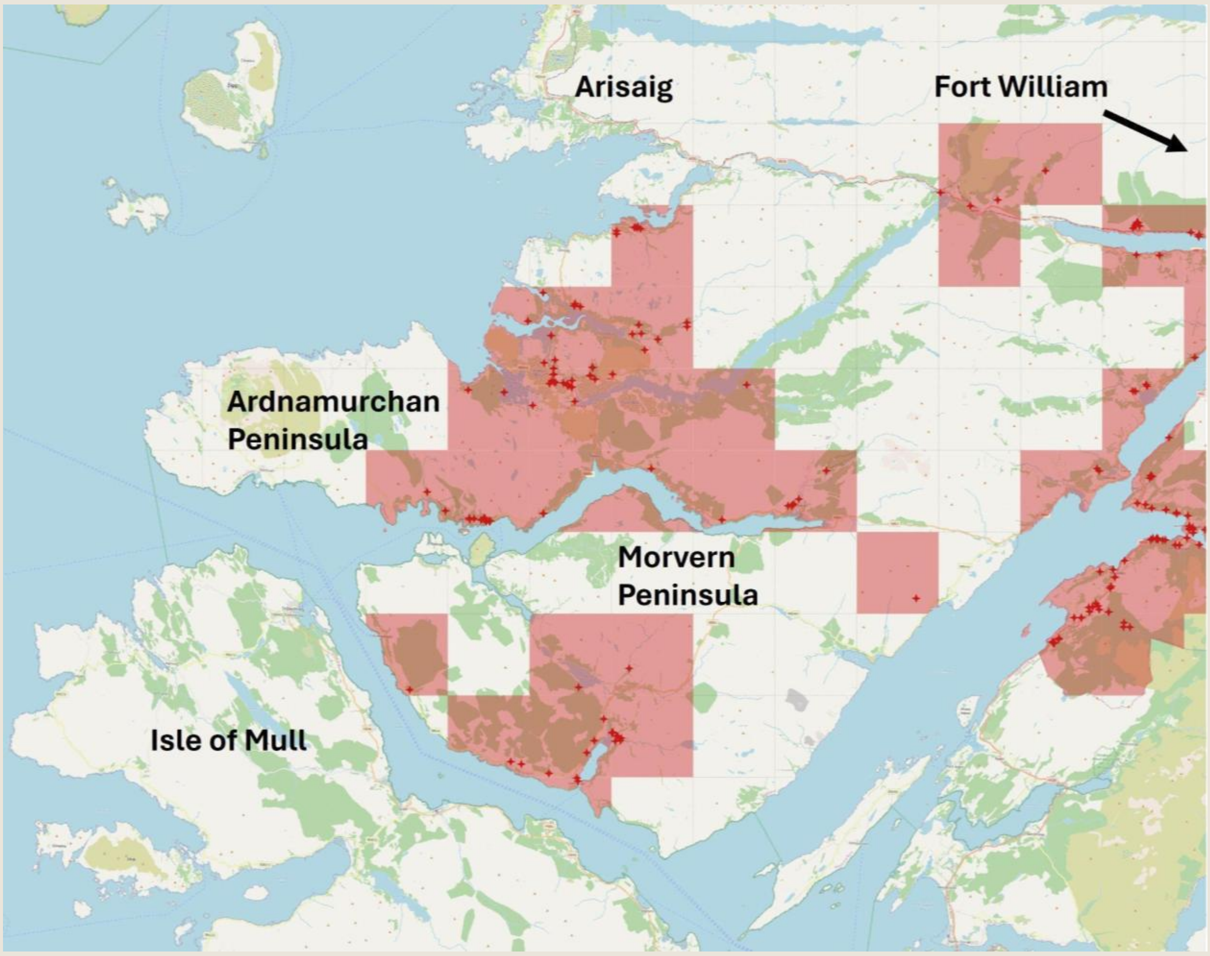


Figure 13: The apparent current isolation of the Morvern and Ardnamurchan red squirrel populations from the core Highland population around Fort William.

### 4.2. Areas of non-detection

Red squirrels were found in most (80.32%) areas of suitable habitat within known range in the Highlands. There were only 85 quadrants that appeared to be suitable habitat for red squirrels where they were not detected (Figure 9). There appear to be two main reasons for this: a) favourable woodlands in proximity to translocation sites which have not yet been colonised, and b) less favourable, patchy woodlands in proximity to core range at which there is perhaps not the population growth to result in occupancy.

A lack of woodland cover is currently limiting expansion from the core range and from those reintroduced populations that have colonised the current extent of available habitat. There are large expanses of treeless terrain to the west of the core range, and we do not consider there to be any scope for the population to expand in this direction at present. The survey did not cover the far north, but we believe red squirrels to be absent from the region due to the reasons outlined in Table 1. We also believe that, without afforestation efforts, the range limit is likely to remain just north of Lairg due to the large expanses of open ground beyond here. There are woodlands to the far north which may be suitable for red squirrels (suitability has not been assessed), but these could only be colonised via translocations as squirrels would be unable to disperse there naturally.

In the future, with increasing afforestation objectives, additional corridors for movement may be created which would allow linkages and further range expansion.

55 quadrants on the west coast were classified as Outside Range. 16 of these are on the Glenelg peninsula and 13 comprise the Arisaig woodlands. Red squirrels have been translocated to both sites since the completion of this survey. 4 are on the Applecross peninsula; 2 encompass the Gairloch woodlands; 3 are on the Morvern peninsula and the remainder are on the Knoydart peninsula. Much of the habitat in these areas is considered to be suitable for red squirrels and may be an option for translocation in the future.

## 5. Conclusion

This survey has provided a much-needed red squirrel distribution map for the Scottish Highlands. It has highlighted areas in which expansion is likely to occur under current habitat conditions. It has also identified populations which are currently isolated, and which could be targets for afforestation efforts to increase connectivity, as well as outlining where afforestation efforts would need to occur for the core range to be extended.

It has also highlighted the positive contribution that red squirrel reintroductions have made to the Highland population. In terms of % quadrants occupied, at the time of survey, translocation sites comprised 21.03.% of the total Highland red squirrel range and have increased the Highland red squirrel range by 26.18%.

The study has also developed a new methodology which has proved highly effective in detecting red squirrels. It does not discern between red or grey squirrels so is only suitable for mapping of overall (combined red and grey) squirrel populations or for areas in which only one species is known to be present. Within this limitation, however, it provides a much simpler method than traditionally used techniques, which involve straight line transects[19] and which can be extremely difficult to carry out in dense woodland such as Sitka spruce plantations. As with any feeding sign survey the method is only effective in coniferous woodland but can also be used with caution in areas of hazel.[15] In areas where conifers are sparse the method may be less effective at detecting squirrels, due to there being fewer potential trees to survey. Our experience was that where scattered conifers were present in amongst birch, there was a strong likelihood of finding feeding sign under the conifers. However, where oak or beech was the dominant species, feeding sign was not always detected under conifers where presence might be expected, most likely because squirrels were preferentially feeding on the broadleaf species. This could theoretically have given a not detection result for a quadrant where red squirrels were, in fact, present. To lessen the likelihood of this, local people were approached and asked if squirrels were known to be present in the vicinity and it is recommended that this should occur in future surveys that use this methodology in any areas of uncertain results.

Overall, this survey illustrates the success of the Highland red squirrel translocations in increasing red squirrel distribution and provides an important baseline against which future changes in range can be compared, which can be used to help guide future conservation efforts.

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## 7. Appendices

**Appendix 1: Highland Squirrel Survey Questionnaire**

Highland
Red Squirrel Survey

Trees for Life is carrying out a red squirrel survey of the whole of the Highlands. Using a combination of sightings reports and field surveys we plan to create an up-to-date map of distribution, which can be used to identify gaps in range and as a baseline for monitoring future changes. For this purpose, it is important that we source red squirrel records from a wide range of locations across the Highlands.

We are using citizen science to gather as much of the data as possible, so are asking both the public and people who work in the woods professionally, to log their sightings.

Your help with this would be much appreciated - please take a minute to record any sightings since 2020 that have not already been logged on the Saving Scotland's Red Squirrels (SSRS) or National Biodiversity Network databases. Please only include non-organisational data on this form as we ask that any organisational database data be sent to us directly.

Please fill in the attached information and return to us. Alternatively, sightings can be recorded on the SSRS website, which allows sightings to be entered on an online map https://scottishsquirrels.org.uk/squirrel-sightings/. If you are submitting using the SSRS website and are a member of a woodland or conservation organisation, please state that this is a professional sighting in the comments section.

Thank you for your help and allowing us to use your information. All personal details will be kept confidential.

Many thanks,

Sarah Woodfin

Red Squirrel Project Manager

Trees for Life

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**Name**:

**Email address**:

| **Sighting 1** | |
|---|---|
| Approximate date or year | |
| Location (e.g. area or ‘road between) | |
| Grid reference (if known) | |
| Was the squirrel alive or dead? | |
| Any additional information | |

| **Sighting 2** | |
|---|---|
| Approximate date or year | |
| Location (e.g. area or ‘road between) | |
| Grid reference (if known) | |
| Was the squirrel alive or dead? | |
| Any additional information | |

**Appendix 2: List of data sources and survey respondents:**

[1] Saving Scotland's Red Squirrels

[2] National Biodiversity Network

[3] Royal Society for the Protection of Birds

[4] Forestry Land Scotland

[5] Woodland Trust Scotland

[6] National Trust Scotland

[7] Highland Council

[8] John Muir Trust

[9] iRecord

[10] British Trust for Ornithology

[11] Croick Estate

[12] Laide Community Woodlands

[13] Letterewe Estate

[14] Kinlochleven Community Trust

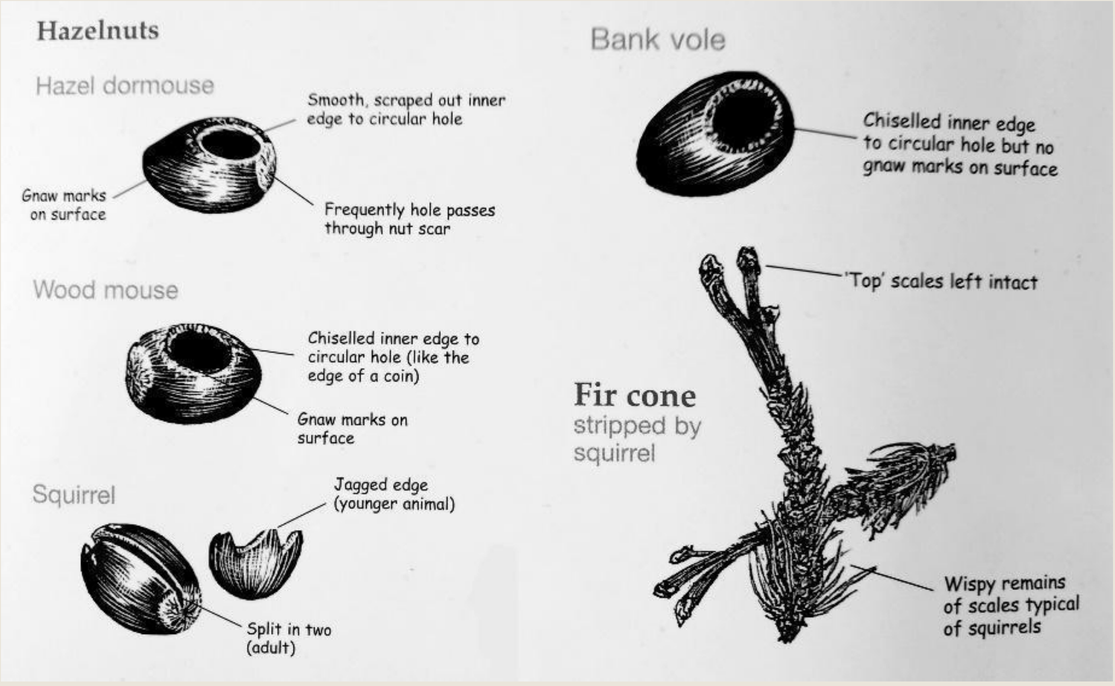
[15] Culligram Estate

[16] Glengarry Community Woodlands

[17] The Mammal Society

**Appendix 3: Further information on the differences between squirrels and other British rodent feeding signs.**

The differences between feeding signs from mice, voles and squirrels on hazelnuts and acorns[15].




The difference between Sitka spruce cones eaten by squirrels (right) and mice (left). Squirrels leave much more untidy looking cones, whilst mice leave their cones uniformly neat.

**Appendix 4 Highland Red Squirrel Survey physical survey pilot trials**

| Survey date | Location and quadrant no. | Grid ref | Core range/ edge | Time taken to find feeding sign | Tree species | No. surveys required |
|---|---|---|---|---|---|---|
| 15/5/22 | NH53NE Aldourie | NH 59917 36784 | Core | 0:42 | Broadleaf with some Scots pine | 1 |
| 15/5/22 | NH63NW Aldourie | NH 60380 37643 | Core | 0:06 | Broadleaf with some Scots pine | 1 |
| 17/5/22 | NH78NE Dornoch | NH 76490 88595 (Wood 1) | Beyond translocation site | None found | Scots pine | 5 |
| | | NH 76491 89398 (Wood 1) | Beyond translocation site | None found | Scots pine | |
| | | NH 77500 89563 (Wood 1) | Beyond translocation site | None found | Scots pine | |
| | | NH 77246 88879 (Wood 1) | Beyond translocation site | None found | Scots pine | |
| | | NH 75575 89820 (Wood 2) | Beyond translocation site | 2:54 | Scots pine | |
| 17/5/22 | NH68NE Spinningdale | NH 67220 89872 | Translocation site | 0:28 | Scots pine | 1 |
| 17/5/22 | NH69SE Spinningdale | NH 67005 90020 | Translocation site | 0:54 | Scots pine | 2 |
| | | NH 66963 90026 | Translocation site | 1:20 | Scots pine | |
| 17/5/22 | NH78NW Ospisdale | NH 73624 89667 | Beyond translocation site | 1:12 | Scots pine | 1 |
| 18/5/22 | NH64SE Inverness | NH 66321 42221 | Core | 0:15 | Scots pine - mixed | 1 |
| 18/5/22 | NH74NW Inverness | NH 723 45 333 | Core | 0:38 | Sitka spruce | 1 |
| 25/5/22 | NH33SW Cannich | NH33856 31774 | Core | 1:15 | Scots pine | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 25/5/22 | NH22NE Glen Affric | NH 28545 28342 | Edge | None found | Scots pine -birch | 3 |
| | | NH 27978 27985 | Edge | None found | Scots pine - birch | |
| | | NH 25987 27368 | Edge | 2:54 | Scots pine | |
| 25/5/22 | NH22SW Glen Affric | NH 22698 24700 | Edge | None found | Scots pine | 5 |
| | | NH 22598 24699 | Edge | None found | Scots pine | |
| | | NH 21788 24342 | Edge | None found | Scots pine | |
| | | NH 23703 21202 | Edge | None found | Sitka spruce | |
| | | NH2141824 220 | Edge | 1:36 | Scots pine | |
| 25/05/22 | NH22NW Glen Affric | NH 22630 24677 | Edge | None found | Birch - Scots pine | 2 |
| | | NH 24872 26620 | Edge | 0:14 | Scots pine - Douglas fir | |
| 25/05/22 | NH22SE Plodda | NH 27879 23866 | Edge | 0:05 | Mixed - larch, broadleaf, Scots pine | 1 |
| 30/05/22 | Outside Highland region: Findhorn | NJ 04348 64005 | Core | 0:16 | Scots pine | 1 |
| 01/06/22 | NG85SW Shieldaig | NG 82354 52742 | Translocation site | 0:32 | Scots pine | 1 |
| 01/06/22 | NG85SE Ben Damph | NG 87995 54198 | Beyond translocation site | None found | Scots pine | Not found in 5 surveys |
| | | NG 88387 54386 | Beyond translocation site | None found | Scots pine | |
| | | NG 88712 54378 | Beyond translocation site | None found | Scots pine - Douglas fir | |
| | | NG 87923 54556 | Beyond translocation site | None found | Scots pine | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | NG 88545 53775 | Beyond translocation site | None found | | |
| 01/06/22 | NH06SW Kinlochewe | NH 03223 61885 | Beyond translocation site | 2:15 | Scots pine - beech | 1 |

Table 1: Pilot survey results