

Red Squirrel Monitoring Report

Autumn 2025

Introduction

The autumn monitoring of the North Merseyside and West Lancashire Red Squirrel Stronghold was conducted in October 2025 using visual transects. Most visual transects were completed within a 3-week period in October. 14 sites throughout the reserve woodlands of Formby and Ainsdale were surveyed. A further 11 woodlands within the buffer zone and wider were surveyed covering Little Crosby, Ince Blundell, Southport, Scarisbrick and Knowsley. Due to access on some sites, some transect were conducted in the week before or week after this period.

Reserve Woodlands – Autumn Surveys

14 visual transects throughout the reserve woodlands were carried out, with each transect being walked up to three times, due to poor weather conditions at the end of the three-week period not all transects were able to be walked three times.

Red squirrels were sighted on 12 out of 14 transects, 15 grey squirrels were seen within the reserve. We believe the increase in grey squirrels is due to it being a mast year for several tree species in the area. We are working with landowners and volunteers to control grey squirrels in the reserve and buffer zone.

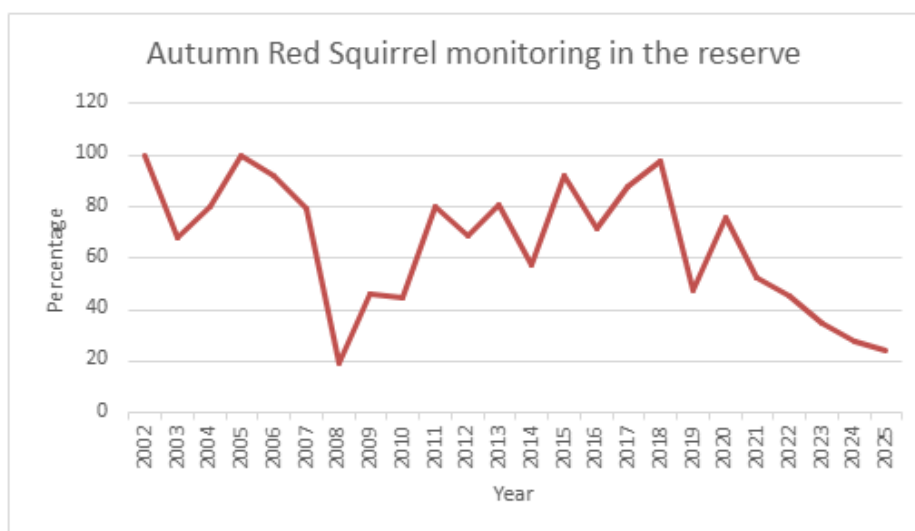


Figure 1: Changes in the autumn red squirrel reserve population between 2002 and 2025.

Figure 1 shows the red squirrel autumn monitoring results in the reserve woodlands from autumn 2002 to autumn 2025. The average number of red squirrels seen across reserve transects in 2002 are taken as 100% of the population. The average number of red squirrels seen in subsequent years are compared to this value. This year, the red squirrel population was at 23%, a decrease from last years 27%.

Whilst the percentage of red squirrel is lower than in 2002 when the monitoring first began, we are looking at the population density and believe that this number is a more natural density compared to 2002. This is because the amount of supplementary feeding has been reduced and red squirrels are now dispersing into new areas. We have also had less reports of squirrel pox, with no recorded cases in 2025 despite an increase in grey squirrels being seen in the buffer zone.

This autumn saw an increase in the number of red squirrels at 1 of the transects within the reserve compared to autumn 2022. The highest number of red squirrels were seen on the National Trust Victoria Road and Caravan Parks transect, with five sightings on each transect, this is an increase in the number seen in autumn 2024.

Breeding success of red squirrels in the reserve woodlands

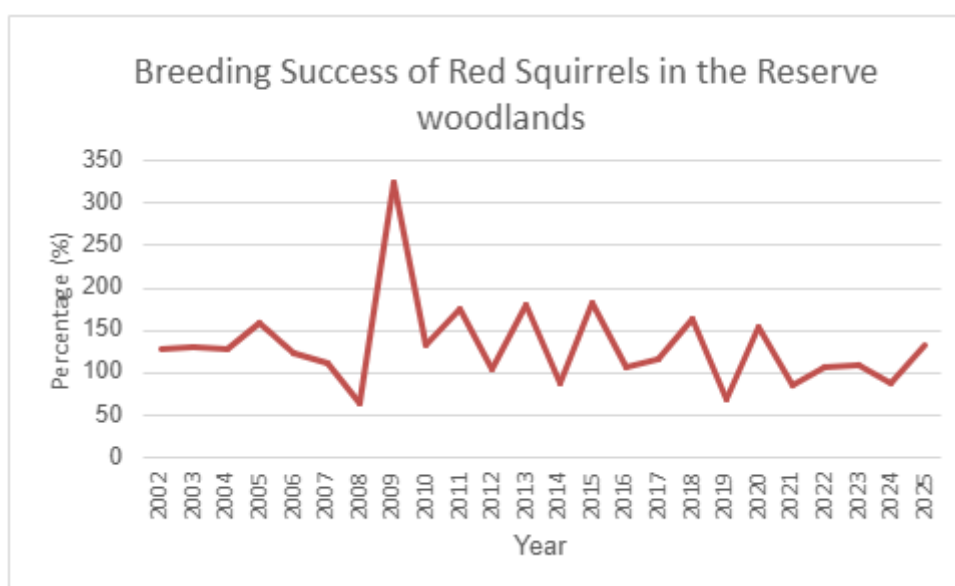


Figure 2: Changes in breeding success in the autumn red squirrel reserve population between 2003 and 2025.

Figure 2 shows the breeding success for the red squirrels, which is calculated by dividing the mean red squirrel autumn results by the mean red squirrel spring results of the same year and multiplying by 100. This year the breeding success was 133%, this is an increase compared to last autumn which saw an 86.7% breeding success. We believe this is due to the mast year and the mild weather we had seen.

Buffer Zone & Wider Landscape: Surveys and Analysis

A further 12 sites were surveyed using visual transects outside of the reserve woodland, 9 within the buffer zone of the stronghold and 3 outside of the stronghold. The results are shown in Table 1.

Table 1. The number of transects within the buffer zone of the stronghold and wider landscape with red squirrel, grey squirrel or both species present.

	Red Squirrel only	Grey Squirrel only	Both species	None
Number of sites	0	9	2	1

There were 9 sites within the buffer zone and wider landscape where only grey squirrel presence was detected (Botanic Gardens, Hesketh Park and Southport Crem in Southport, Ince Blundell Hall, Jospice in Thornton, Moss Wood, Church Wood in Little Crosby, Girl Guides in Scarisbrick, and Riding Hill in Knowsley). Grey Squirrel control has occurred in most of these sites. Whilst grey squirrels were seen in the buffer zones and red squirrels only seen on one site our public sightings data does show red squirrel occupancy in areas outside the reserve boundary.

No squirrels were seen in Ben's Gorse this season, however red squirrels haven't been sighted in this woodland since 2020 and grey squirrel control is not allowed in this woodland due to the use of educational activities.

We continue to monitor in three woodlands in the wider landscape due to historic sightings of red squirrels. Mere sands wood continues to have grey squirrels despite grey squirrel control being done on site. Knowsley Estate however still has red squirrels being sighted on one of the transects and on camera traps. The repeated sightings of red squirrels on the estate is extremely positive as we start the Red Squirrel Recovery Network, who will continue the work that was done by the Reclaiming Reds project.

Laurels wood was included in the bi-annual monitoring for the first time, located just outside of the reserve boundary, The woodland is dedicated to outdoor education, conservation and community engagement. Both red and grey squirrels were sighted here however ongoing grey squirrel control occurs.

Fig.3 shows the results of all 26 transects that was surveyed in Autumn 2025 and can be seen on the next page.

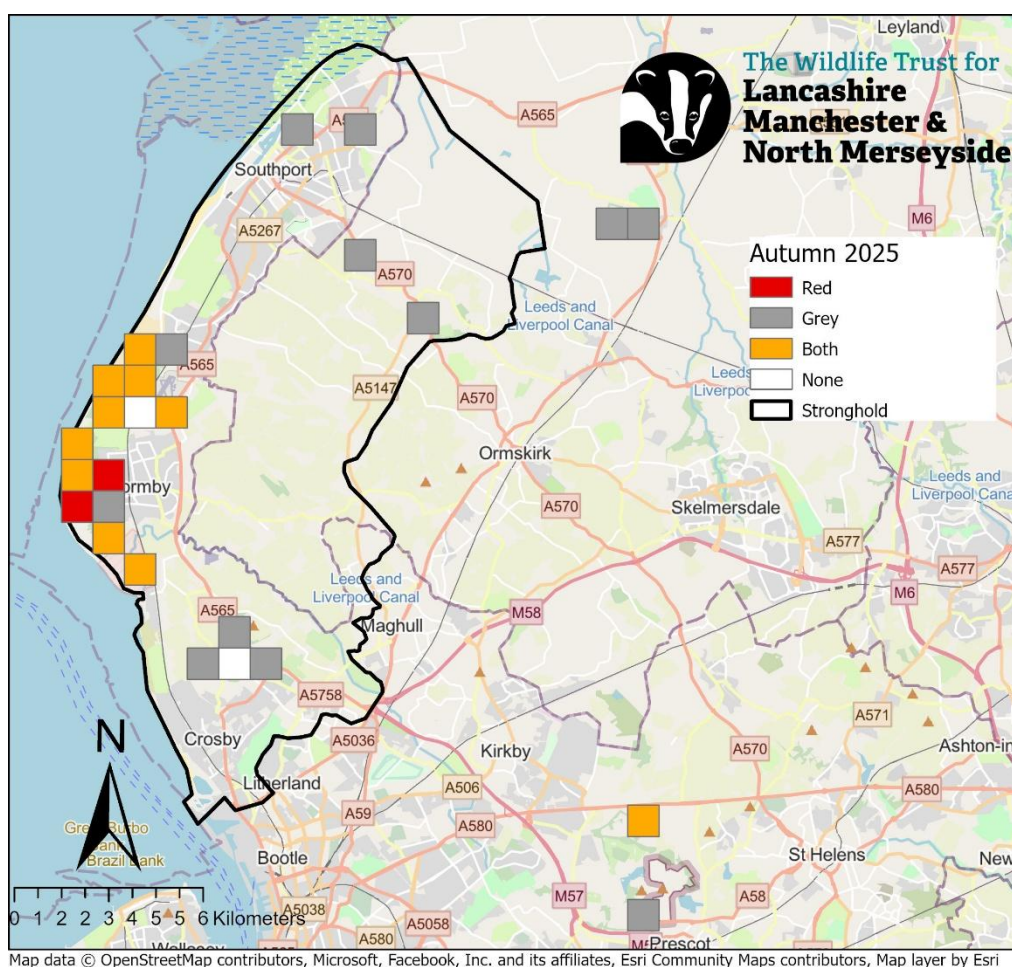


Figure 3: Autumn 2024 standardised monitoring results in the North Merseyside and West Lancashire red squirrel stronghold. Map shows presence of red squirrels (red), grey squirrels (grey), and no squirrels (white) in 1km x 1km squares. The Mere Sands Wood and Knowsley Estate transect (outside the stronghold boundary) is also shown.

Public Sightings and grey squirrel control data

Grey squirrel control is undertaken in the woodlands throughout the stronghold all year round by the Red Squirrel Officers, contractors and volunteers. The urban trap loan scheme to control grey squirrel areas is co-ordinated by the Red Squirrel Officers but ran by local volunteers. Records of grey squirrel control and red and grey squirrel sightings are kept up to date to monitor their distribution and population within the stronghold. Combining this data with the standardised monitoring results further informs our knowledge of red and grey squirrel distribution. Figures 5 and 6 show the current distribution of red squirrels and grey squirrels respectively in North Merseyside and West Lancashire using the combined data. It is important to note, particularly for the grey squirrel sightings map, that one grey square may only denote 1 squirrel sighting.

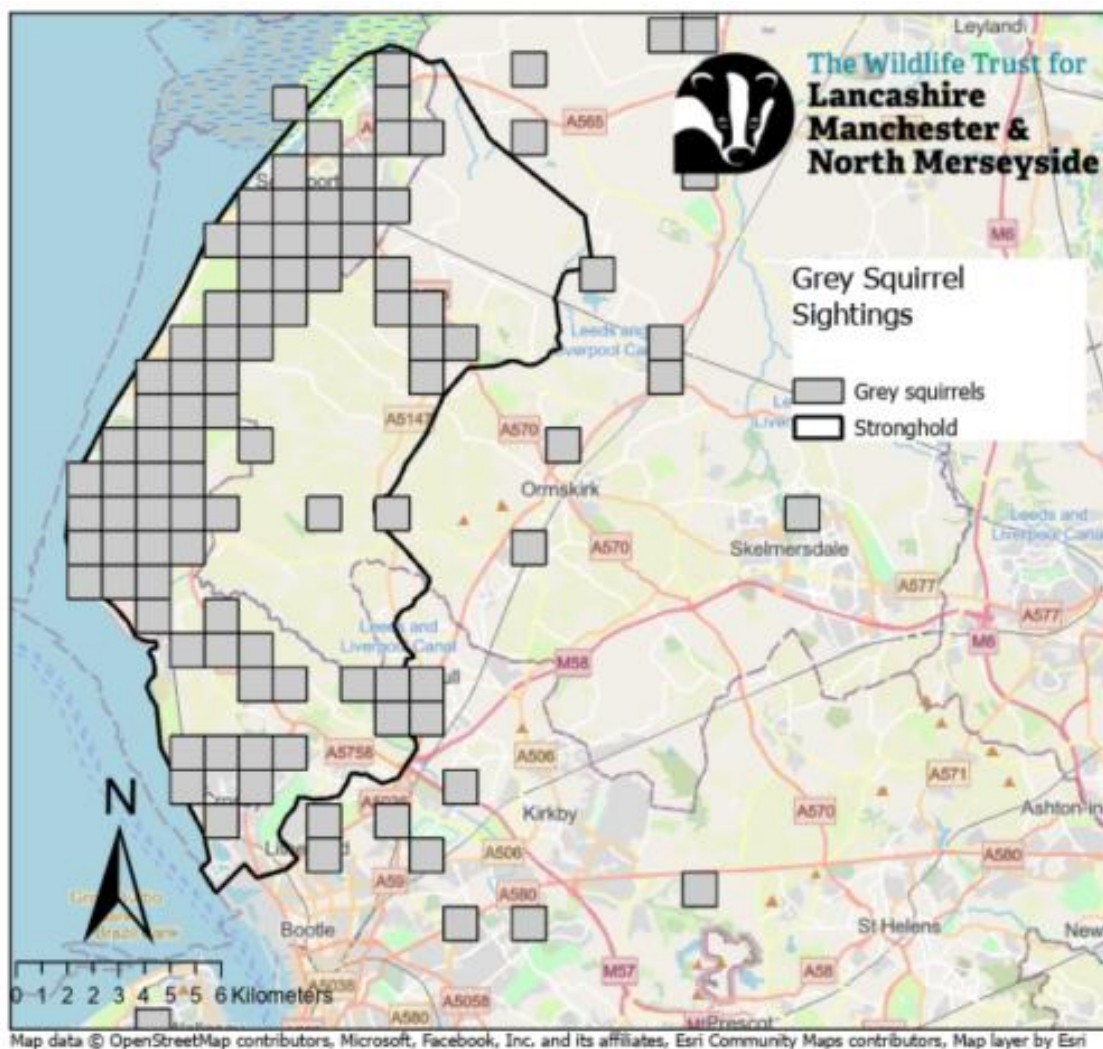


Figure 6: Grey squirrel distribution in the North Merseyside and West Lancashire area. Map shows presence of grey squirrels in 1km x 1km squares. Results compiled from public sightings, control records and standardised monitoring throughout April 2025 – December 2025

Acknowledgements

Thank you to all the staff and volunteers who undertook the surveys and those who have informed us of their squirrel sightings. We also thank the many landowners who continue to grant access to their woodlands.

By Melissa Wharram, 2026