

Green Forest Hoverfly Hunt

2024 SEASON SUMMARY REPORT - PUBLIC VERSION

ANDY MURDOCK, COLIN EASTON AND RUSSELL WYNN



Photo: Tony Short

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New Forest Biodiversity Forum



Wild New Forest



Mike Creighton MBE (1952 - 2025)

This report is dedicated to our friend Mike Creighton who sadly passed away in Spring 2025. Mike had a vast knowledge of natural history and made a huge contribution to the project recording many sightings. He was also a real pioneer, searching extensively across the New Forest for potential sites. Notably Mike and his partner Jan have the only sighting from our work so far of *Caliprobola speciosa* at Oak. We are extremely grateful to have known Mike and for all his contributions to the Green Forest Hoverfly Hunt and to nature conservation generally.

The Green Forest Hoverfly Hunt Team - 2024

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Green Forest Hoverfly Hunt - 2024 Season Summary Report

1 Introduction

Now in its third year, the Green Forest Hoverfly Hunt (GFHH) is a volunteer-led project focused on understanding the distribution and ecology of the rare Green Forest Hoverfly, *Caliprobola speciosa*. In the UK, this species is only found in the New Forest and Windsor Forest and it is limited to ancient woodland habitats and closely associated with dead and decaying Beech stumps.

2024 although impacted a little by weather conditions and volunteer availability, still yielded valuable new insights into species behavior, movement, and habitat associations.

Survey Details

Surveys took place between late April and late June. Conditions were less optimal compared to the previous year, with significantly fewer sunny days and affecting hoverfly activity and observation potential.

Enhanced digital tools supported real-time recording of sightings and habitat metrics. Sightings were logged with detailed behavior, environmental conditions, and optional temperature readings. Marked hoverflies were assigned unique IDs, allowing behavior and movement tracking across days and locations. Lack of mobile signal remains a challenge for field recording.

2 Results

Highlights

The earliest recorded sighting of *Caliprobola speciosa* occurred six days earlier than in prior years on 9th May, 2024. The last sighting was the 5th June, although there was a further record from outside the team on 25th June, 2024. There was a notable increase in female sightings, especially at the start of the season, which were often seen entering tree stumps—suggesting egg-laying behavior was underway early. The females also spent considerable time underground (>30 minutes) which may indicate potential underreporting during brief surveys. Three females were observed entering a single stump on the same day.

There were:

- 110 unique sightings of *Caliprobola speciosa* in 2024 consisting of 98 males, 20 females, and 13 undetermined adults across 59 individual tree stumps.
- 267 records of 31 other hoverfly species were also recorded.

Geographical Distribution

The 2025 surveys further expanded the known New Forest range by one new 1km grid square. The total new squares added by this project since 2022 is now 29 and the distribution mostly follows the ancient woodland areas. In the maps below 1km squares visited are outlined in grey and filled where *Caliprobola speciosa* was seen.

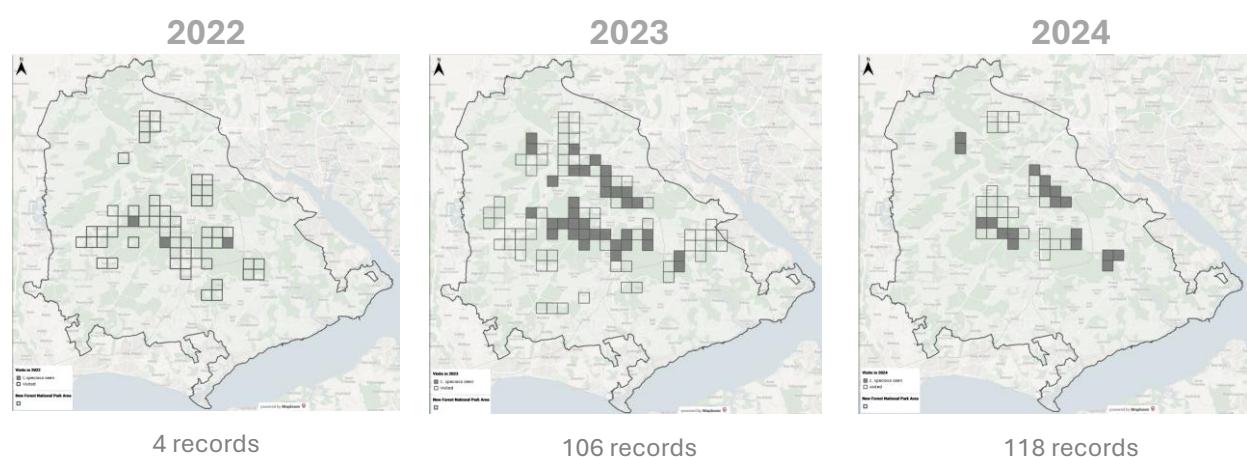


Figure 1 Summary of 1km grid squares visited and *Caliprobola speciosa* sightings by year.

Habitat Parameters

Volunteers recorded stump characteristics such as size, degree of rot, sun exposure, and surrounding vegetation. Data gaps remain; however, analysis of existing data will continue in 2025 with targeted efforts to fill gaps.

Holly Clearance

Tree stumps that had holly removed saw some encouraging results, including first-time sightings of both male and female hoverflies at a previously unsuitable stump. Further work will be undertaken in 2025 to explore stumps cleared of holly by FE to encourage *Caliprobola speciosa*.



Figure 2 A Beech stump (in the background) which was cleared of Holly and with a subsequent sighting of *Caliprobola speciosa* (male and female) in 2024.

Vole Activity

Observations suggest burrows created by small mammals may aid access for females to root zones, potentially enhancing stump suitability.

Mark-Release-Recapture Study

Mark release recapture trials began with garden testing, refining handling techniques and marker selection. In the field, 25 individuals of *Caliprobola speciosa* (19 males, 6 females) were successfully marked.

Observations of marked hoverflies after release indicate the marking does not appear to have a detrimental effect and with sightings of marked individuals up to 1 week later. 4 individuals were resighted (16% recovery rate), with movements of up to c. 200m recorded. Behaviorally, males

appeared to rotate territories at specific stumps and territorial conflicts were observed. Females were not observed returning to the same stump after marking.



Figure 3 The marking process – showing the mark in situ. (Photos: Rhys Leighton)



Figure 4 Marked Male *Caliprobola speciosa* 'Tony', shortly after release. (Photos: Tony Short)

Genetic Study

Three male *Caliprobola speciosa* were collected for genetic sequencing under the Darwin Tree of Life initiative. Specimens were flash frozen and delivered to Natural History Museum London for DNA analysis. Results will help determine whether genetic bottlenecks are a concern in the UK population.

3 Future Work

In 2025 the team will extend surveys to earlier/late in the season, fill habitat data gaps and expand stump mapping. In addition, they will monitor holly clearance sites and undertake additional marking focusing on specific sites with large numbers of sightings.

For further information about or to get involved in the project, please visit:

<https://caliprobola.maploom.com/info> or contact us: andy@maploom.com