

# The Green Forest Hoverfly Surveys:

## 2025 Results

## Andy Murdock

**Project Website**

<https://caliprobola.maploom.com/info>



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# The Green Forest Hoverfly Hunt

- For the last 4 years a team of volunteer (mostly amateur) naturalists searching for *Caliprobola speciosa* to help better understand its status
- Online mapping allowed us to gather locations and build a database of potential trees for further investigation



# Background

- **Green Forest Hoverfly** *Caliprobola speciosa* (Rossi, 1790)
- specialist of ancient woodlands
- occurs in just 2 locations in UK, New Forest and Windsor Forest
- heavily dependent upon rotten Beech stumps for its larval habitat
- anecdotal evidence suggests that *C. speciosa* may have declined in recent years
- limited data (c. 150 records total from HRS/NBN)



Priority Tree Number: **30**  
 Max Males: **3**  
 Max Females: **1**  
 Max Adults: **0**  
 Total: **4**

SU2606 - more

Live Layers

- Priority stumps
- Caliprobola sightings
- Nil returns

Previous Records

- Caliprobola sightings 2024
- Caliprobola speciosa sightings by tree during 2023
- Caliprobola speciosa sightings prior to Nov. 2021 (HRS)
- Caliprobola speciosa sightings NBN

Prioritisation

- Visits
- AO wood. no sightings/little info.
- Ancient and Ornamental Woodland (FE)
- Visits in 2024
- Visits in 2023
- Visits in 2022

Context

- New Forest National Park Area
- EA Vegetation Object Model 2022

# Mapping Platform and mobile apps with tree info

**Sighting 896**

Species: *Caliprobola speciosa*

Male: 1      Female:      Adult:     

Date: **May 9, 2025**

Site Name: -

Comment: **Another male. Not 'Mark'. The caught and marked as Niall.**

Tree number: **950**

**Delete**

**Tree 30**

Site:

Recorder: **CS-PS-TS-AS**

Comment: **Suitable trees identified by CS and then specific tiny stump at base of fallen trunk held 3 males per PS, TS and AS 18/05/23 . Photo: T.Short. Later in season stump obscured with bracken.**

Mobile app interface showing:

- Map view with a red crosshair and a tree icon.
- Location Ref screen with a search bar and a list of stumps (1128, 356, 1132, 1127, 357, 358).
- Selection screen with a note: "Please select from the nearby stumps in the pulldown or 'new' if a new stump. Note: this defaults to the nearest which depends on the accuracy of the original GPS position (not always correct)".
- Photo upload screen with a "Large photo of selected stump" label and a "Save" button.

# Results

- Great weather in 2025
- Flight period: 2<sup>nd</sup> May - 6<sup>th</sup> June
- 227 unique Green Forest Hoverfly records
- 6 records from outside the team
- No records outside of the New Forest
- Windsor Forest – not visited

Male	220
Female	12
Adult	27

- 25 volunteers, >900 hours
- 6 records from outside the team (one coming to light)



Female *C. speciosa*: © Tony Short



Male *C. speciosa* © Colin Easton

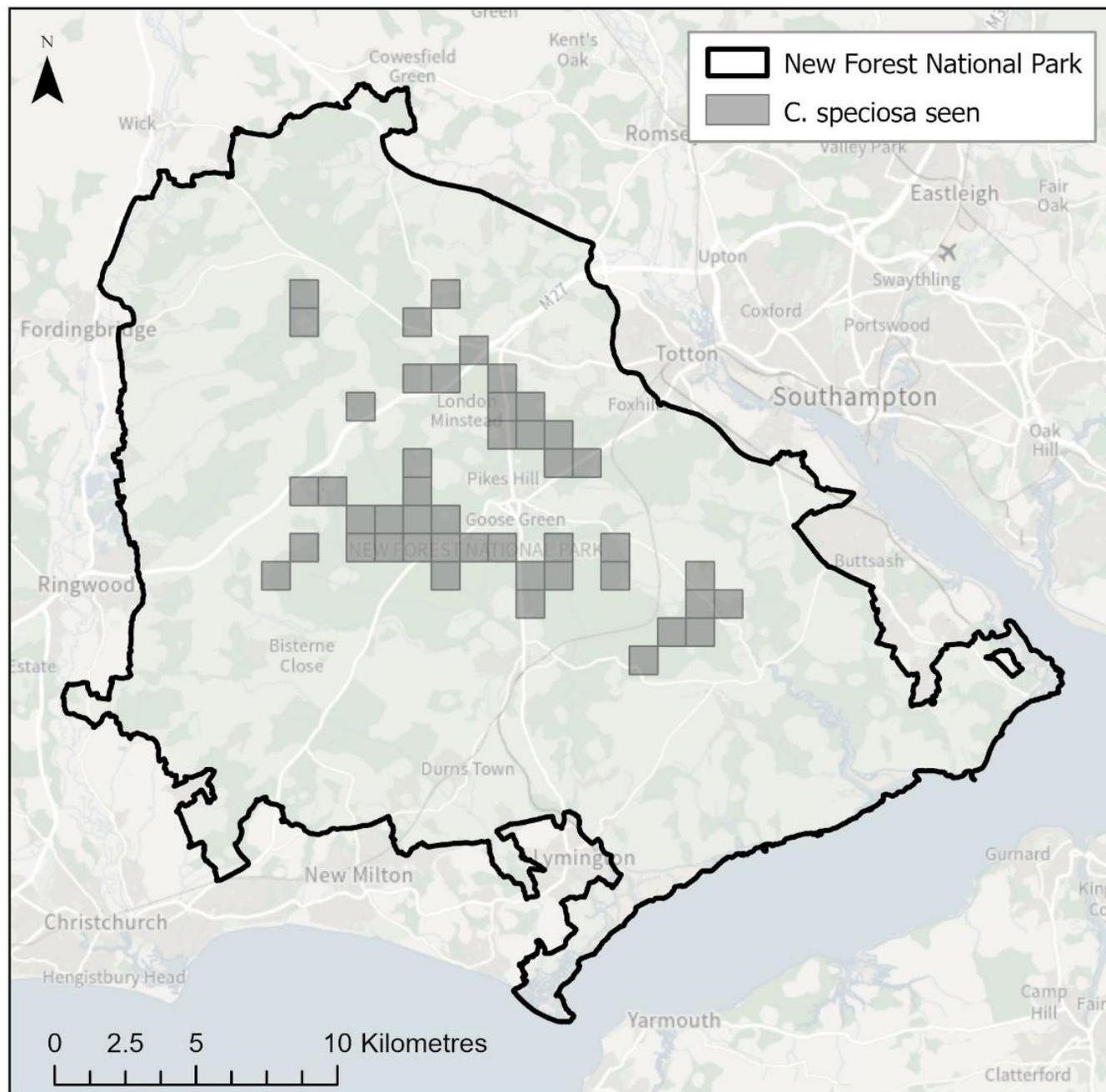
# Updated New Forest Distribution

Updated Green Forest Hoverfly distribution

6(+2) new 1km squares added in 2025

Since 2022, found in 37(+2) new grid squares

Nearly connected distribution across the ancient woodlands of the New Forest

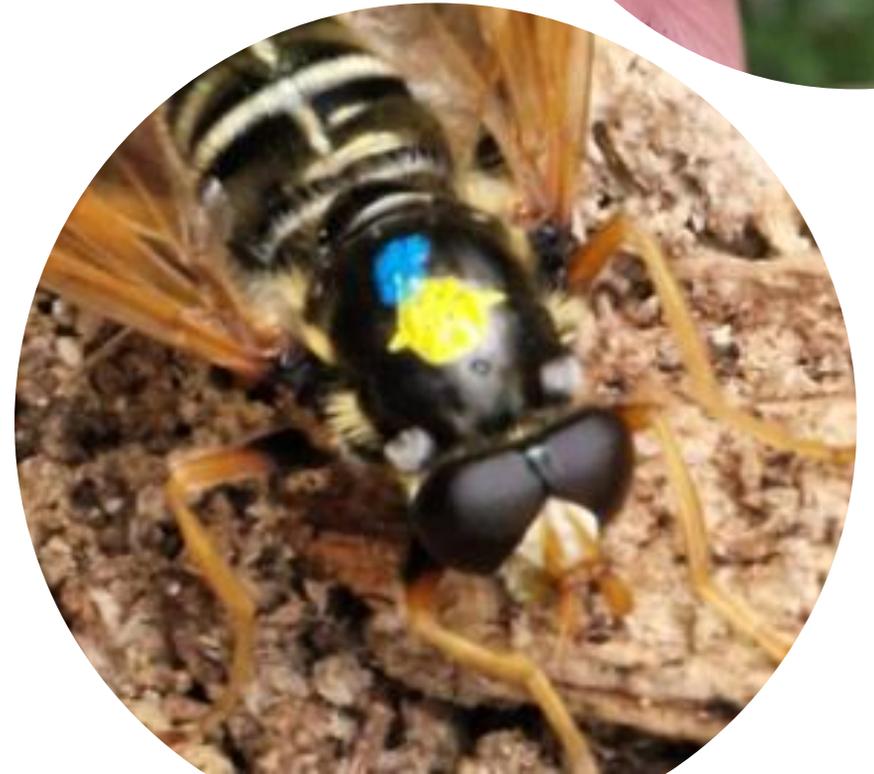
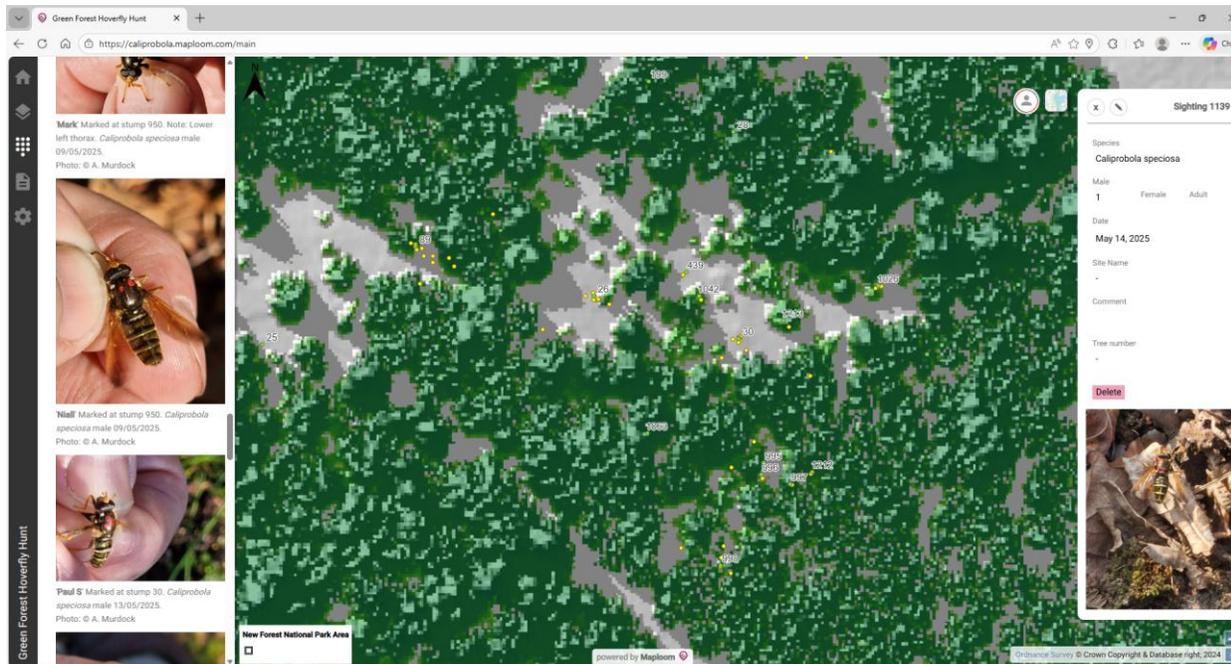






# Mark-Release-Recapture

- 30 individuals marked (29m, 1f)
- 15 each at 2 sites
- Revisits and a blitz on 18<sup>th</sup> May
- 'Recapture' part not needed





© Paul Stevens



© Paul Stevens

16:41 [signal icons] [battery 67]

< **marked Cs 2025** [star icon] [share icon] [menu icon]  
PDF reader

<b>Marvin</b>  17/5	<b>Gerry</b>  17/5	<b>Brett</b>  17/5
<b>Anne</b>  16/5	<b>Peter</b>  16/5	<b>Dave</b>  16/5
<b>Jonathan</b>  16/5	<b>John</b>  16/5	<b>Chris S</b>  14/5
<b>Roger</b>  14/5	<b>Rhys</b>  14/5	<b>Paul S</b>  13/5

1/2

<b>Robin</b>  13/5	<b>Russ</b>  13/5	<b>Tony</b>  13/5
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**Add to note**

[hamburger menu icon] [home icon] [back icon]



# Re-sightings

- 20 re-sightings (not inc. same individual, same stump, same day)
- Up to 4 different stumps visited
- 11 days max interval between sightings
- c. 330m moved between sightings
- c. 430m in total by one individual
- Movement across 'non-habitat'
- Extraordinary sighting in parkland > 770m away from nearest known suitable tree, > 1.3km away from nearest 'core habitat'

*'Niall' and 'Robin' fighting*

# Informing practical habitat management



© Andy Murdock



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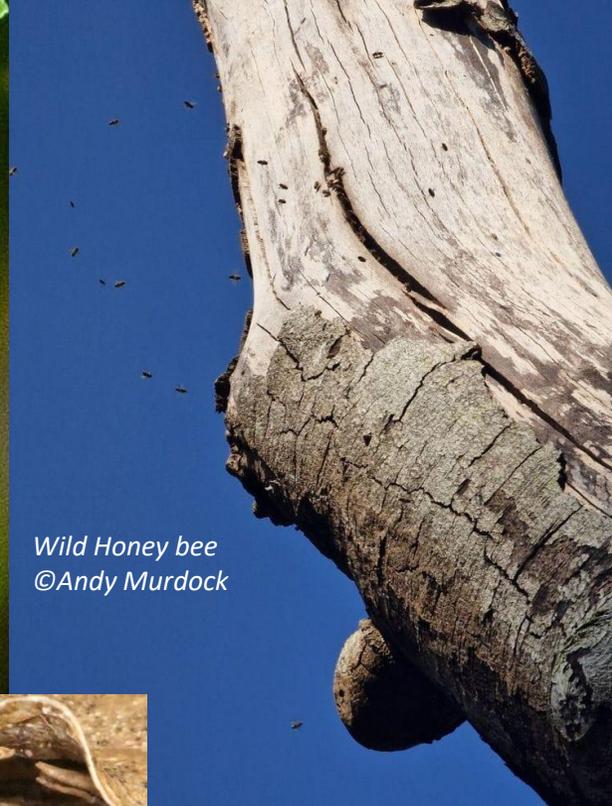
Chicken of the Woods  
© Naomi Addleton



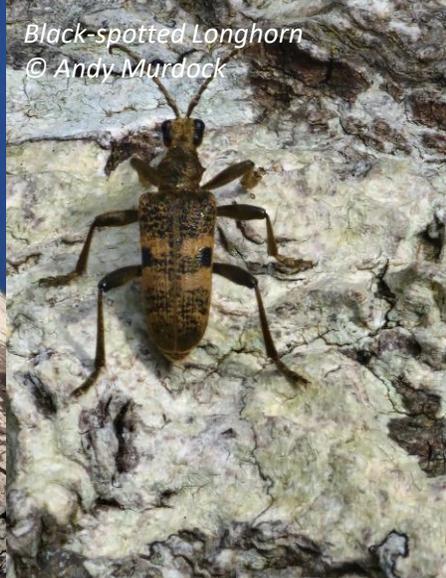
*Pocota personata*:  
© Russell Wynn



*Brachypalpoides lentus*  
© Clare Seymour



Wild Honey bee  
© Andy Murdock



Black-spotted Longhorn  
© Andy Murdock



Jewel wasp sp:  
© Paul Stevens



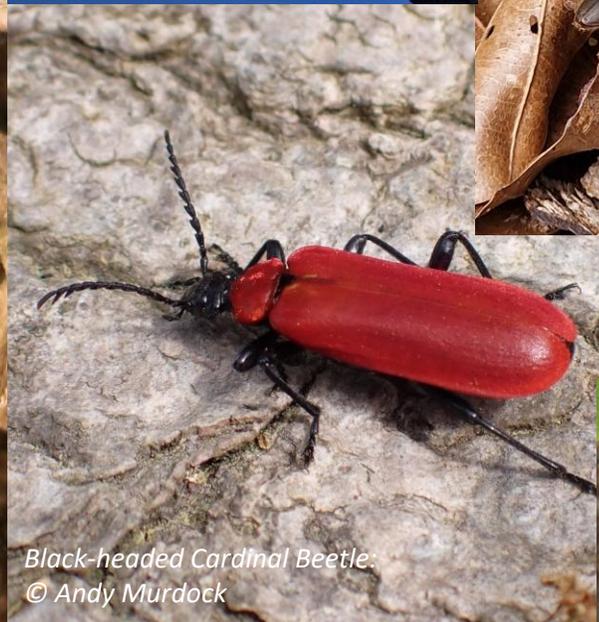
*Microdon analis* -  
© Tony Short



*Ampedus cinnabarinus*  
© Russell Wynn



Two-banded Longhorn  
© Andy Murdock



Black-headed Cardinal Beetle:  
© Andy Murdock



Click beetle sp: © Andy Murdock



*Ctenophora pecticornis*  
© Russell Wynn

# Genetic Study

- Barcode now generated
- Allows comparison with European populations
- *C. speciosa* belongs to a widespread and genetically uniform European lineage
- Supports the idea that *C. speciosa* recolonised much of Europe after the last Ice Age and that the New Forest population is part of a broader continental context.
- BOLD database

## Collection Site(s)



Legend 1+ 10+ 100+ 1000+ 10000+

## Attribution

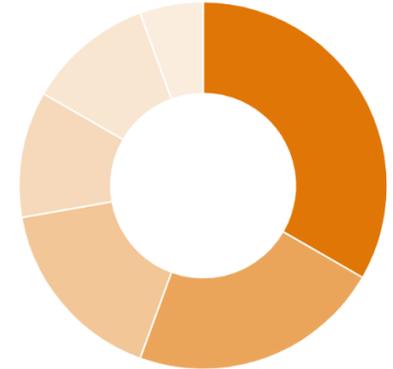
### Specimen Identification:

Andy Murdock [3]  
Ximo Mengual [3]  
Wolfgang Schacht [2]  
Axel Szymank [1]  
Bjoern Rullik [1]  
Ivo Raemakers [1]  
M. Semelbauer [1]  
Sander Bot [1]



Zoologisches Forschungsmuseum Alexander Koenig Mined from GenBank, NCBI  
Natural History Museum, London Centre for Biodiversity Genomics  
Naturalis Biodiversity Center Wellcome Sanger Institute  
Institute of Zoology, Slovak Academy of Sciences

### Specimen Depositories:



Zoologisches Forschungsmuseum Alexander Koenig Mined from GenBank, NCBI  
Natural History Museum, London Bavarian State Collection of Zoology  
Naturalis Biodiversity Center Slovak National Museum, Natural History Museum



# Plans for 2026

- Attempt to fill gaps in coverage
- Survey recently cleared sites
- Hopefully full genetic sequencing will be completed
- Papers
- Future activities



*Photo: Paul Stevens*



*Photo: Andy Murdock*

# With thanks to

## The Team

Naomi Addleton	Ann Short
Niall Bowcock	Tony Short
Paul Carter	Ioannis Sofos
Bob Chapman	Robin Somes
Colin Easton	Paul Stevens
Steve Laycock	Russel Wynn
Harry McBride	John Wright
Andy Murdock	Pete Clark
Chris Searle	Iona McCluskey
Helen Schneider	Jonathan Spencer
Jan Schubert	Clare Muir
Clare Seymour	David Muir

## Expert Input

Roger Morris  
Wout Opdkamp  
Frank Van de Meutter  
Paul Brock  
George Else

## Other contributors

Eric Roeland and colleagues (Dutch State Forestry Dept.)  
Inez Januszczak (NHM, Darwin Tree of Life)  
Tony Davis (Moth trap record)



New Forest Biodiversity Forum



## Get involved

<https://caliprobola.maploom.com/info>

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