

# The House Centipede *Scutigera coleoptrata*; the conquest of southern England

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## Summary

The House Centipede *Scutigera coleoptrata* is a large and distinctive centipede typically found inside buildings, including houses. It was previously considered very rare in Britain, with just a handful of records between 1883 to the 1990s, with none from the counties of Berkshire, Buckinghamshire and Oxfordshire. It was first recorded from the three counties in 1998 from High Wycombe (Buckinghamshire), followed by single records in 2016 and 2018, and an unprecedented five records in 2021, a trend reflected across southern England. Although it is likely that ready access to the internet and social media in recent decades has facilitated the recognition and identification of this distinctive species it is suggested that the major contributing factor to this recent increase in observations is climate change which favours this species originally from southern Europe. In order to monitor its increase across Britain it is requested that if this distinctive centipede is encountered that the observation is submitted to the Centipede Recording Scheme.

## Introduction

The House Centipede *Scutigera coleoptrata* (Linnaeus, 1758) (Chilopoda: Scutigermorpha) is a large (body length reaching 30 mm) and conspicuous animal of extraordinary appearance. It is thought to be native to the Mediterranean region, but has been widely spread by human activity throughout much of Europe, Asia and North America (Barber 2009, 2022). In more northerly latitudes it is typically found indoors, rarely in adjacent gardens, where it is typically observed climbing on walls. It's extremely long legs and rapid movement can give a sinister 'spider-like' appearance (albeit with 30 spindly legs).

Belonging to the order Scutigermorpha, in basal clade Notostigmophora (other centipedes belong to the Pleurostigmophora) (Edgecombe & Giribet 2007), they retain a number of primitive characters, including a large compound eye comprising several hundred ommatidia (as seen in insects, class Insecta). In more evolutionarily advanced centipede orders the eye is reduced, with forty or less ommatidia or entirely lost (i.e. blind) (Barber 2009). In common with most other centipedes *S. coleoptrata* is a voracious predator feeding upon other arthropods, such as insects and spiders (Lewis 2007).

In Britain *S. coleoptrata* was always perceived to be something of a mythical beast on a par with the unicorn. It was first noted from mainland Britain in a paper mill near Aberdeen in 1883 where it was thought to have been introduced in bundles of rags from Southern Europe which were used in the manufacture of paper (Barber 2022). In 1907 it was recorded from wine cellars in Leith, a port town near Edinburgh, where it was thought to be breeding. Both these records suggest accidental imports. The Provisional Centipede Atlas (Barber & Keay 1988) also cites a later record from Colchester in the 1940-1950s and comments that the species "might be expected to turn up occasionally in Britain as an introduction". Indeed, two decades later Barber (2009) notes its occurrence in eight counties mainly across southern England, but as far north as Lancashire. Lee (2015), in the review of species conservation status, lists *S. coleoptrata* as a non-native vagrant species (i.e. not established) that is occasionally

reported from inside buildings and notes nine post 1990 records. However, in the last decade *S. coleoptrata* has been increasingly recorded across Britain, usually inside houses (bathrooms, living rooms and/or kitchens), a hospital, a warehouse and store-rooms, mostly across southern England (Barber 2019, 2022).

## The House Centipede in the three counties

In a national context the centipede (Chilopoda) fauna of the current administrative county of Oxfordshire (VC23 and part of VC22 (former Berkshire)) is well documented (Gregory 1996, Gregory & Campbell 1996) with 2817 records (mostly post 1990) collated for 28 species (about half the known UK fauna). Up to that date *S. coleoptrata* had never been recorded from the county, nor from the less well recorded adjacent counties of Berkshire or Buckinghamshire (A.D. Barber pers. comm.). The provisional distribution map compiled in 2013 shows a single record for our area; from inside Wycombe General Hospital in Buckinghamshire (SU86-92-, VC24) in 1998 (A.D. Barber pers. comm.).

This remained the only record in the three counties until 2016 when the species was re-discovered at North Marston, also in Buckinghamshire (A.D. Barber pers. comm.). Then, on 9 October 2018 Nigel Partridge reported observing and photographing a specimen (Figure 1) outdoors at night on the wall of a house close to a compost heap at Loosley Row, again in Buckinghamshire (Partridge 2019).

Then in 2021 an unprecedented five additional sightings were reported from Buckinghamshire and Oxfordshire: Chenies and Wolverton in Buckinghamshire; Middle Aston, Headington and Chinnor in Oxfordshire (Table 1). These observations, supported by images, have been submitted via the Biological Records Centre's iRecord website ([www.brc.ac.uk/irecord](http://www.brc.ac.uk/irecord)) and verified by the BMIG Centipede Recording Scheme ([www.bmig.org.uk/page/centipede-recording-scheme](http://www.bmig.org.uk/page/centipede-recording-scheme)). In total this amounts to five records for Buckinghamshire and three for Oxfordshire; one dated 1998, one 2016, one 2018 and five in 2021. Currently there remain no records from Berkshire.

**Table 1: Records of House Centipede *Scutigera coleoptrata* in Bucks and Oxon submitted to the National Centipede Recording Scheme**

Date	Locality	Grid Ref.	County	VC	Source
Feb 1998	Wycombe Hospital	SU863926	Bucks	24	A.D.Barber, pers. comm.
Apr 2016	North Marston	SP770227	Bucks	24	A.D.Barber, pers. comm.
Oct 2018	Loosley Row	SP817007	Bucks	24	Partridge (2019)
Mar 2021	Middle Aston	SP475270	Oxon	23	iRecord
May 2021	Chenies	TQ016981	Bucks	24	iRecord
Aug 2021	Headington, Oxford	SP548065	Oxon	23	iRecord
Aug 2021	Wolverton, MK	SP818415	Bucks	24	iRecord
Aug 2021	Chinnor	SP749006	Oxon	23	iRecord

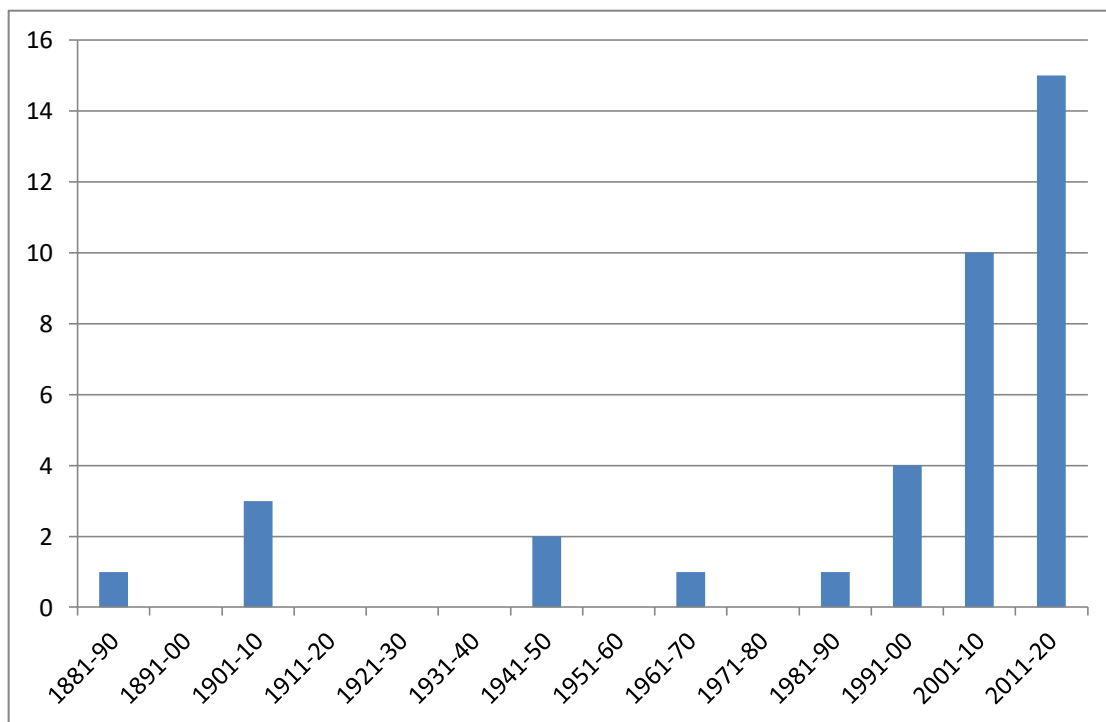


**Figure 1. House Centipede *Scutigera coleoptrata* seen on an outside wall in Loosley Row, Buckinghamshire in 2018. Image from [www.bmig.org.uk](http://www.bmig.org.uk) © Nigel Partridge. Note: this specimen appears to have lost its ultimate (last) leg pair.**

## **Discussion**

It is clear that the recent increase in observations of *S. coleoptrata* across Buckinghamshire and Oxfordshire (Table 1) is reflected at least across southern England. The updated distribution atlas (Barber 2022) only includes records up to the end of 2020, but includes 38 observations from mainland Britain. It is apparent from the data (Figure 2) that there have been very few observations of *S. coleoptrata* in the past, with just seven records noted between 1883 and 1983 (i.e. 100 years), but an increasing number in recent decades; one record from 1981-1990, five records from 1991-2000, ten from 2001-2010 and fifteen from 2011-2020.

It may be that in recent decades ready access to the internet and social media has facilitated the recognition and identification of this distinctive species, and perhaps the establishment of wildlife recording sites, such as iRecord, has allowed such observations to be readily filtered into, and verified by, the national recording schemes. However, climate change is most likely to be a major contributing factor. In France *S. coleoptrata* is widely dispersed, albeit favouring rather thermophilic locations (Iorio 2014), and even in northern France it is very common (Iorio & Labroche 2015). It has been well established on the Channel Islands (located about 30 km off the French coast) since at least the mid-1800s (Barber 1990, 2022). In Britain *S. coleoptrata* remains predominantly a southern animal. Currently, it is considered a casual vagrant (Lee 2015), but climate change (with an overall increase in average temperature in the UK) would increase its chances of survival and may result in populations, at least in the south, becoming permanently established (as seen on the Channel Islands), rather than ephemeral.



**Figure 2. Number of records of *Scutigera coleoptrata* per decade from 1881 to 2020. Data from Barber (2022).**

It is of note that the Loosley Row, Buckinghamshire observation of October 2018 is the first documented outdoor occurrence in the UK (Partridge 2019), no doubt facilitated by the proximity of a compost heap and the unusually hot and dry summer of 2018 (Met Office 2018). Interestingly a second outdoor ‘compost heap record’ from Hampshire was made in 2021 (record submitted to the centipede recording scheme, via iRecord). On the Channel Islands *S. coleoptrata* is widely recorded outdoors (Barber 2009, and records submitted to the recording scheme), especially during the summer months. In the USA it has been reported that *S. coleoptrata* may be found outdoors in summer, but needs to retreat indoors to survive the winter (e.g. Kaestner 1968). It is likely that such a pattern may also be seen in the UK, at least in southern England, with increasing numbers of outdoor observations in summer.

Despite *S. coleoptrata* being of highly distinctive appearance, and usually found indoors, it is apparent that on several occasions large species of *Lithobius*, particularly the Banded Centipede *L. variegatus* Leach, 1814, have been mis-identified as *S. coleoptrata* (records submitted to the Centipede Recording Scheme via iRecord). Both species bear similar dark stripes on the rear legs (compare Figure 1 with images on the BMIG website at [www.bmig.org.uk/species/Lithobius-variegatus](http://www.bmig.org.uk/species/Lithobius-variegatus)), but *Lithobius* species are typically outdoor ground dwelling animals and in the case of *L. variegatus* often found in woodland (Gregory & Campbell 1996, Barber 2009).

However, it should be borne in mind that other Scutigermorph centipedes could be inadvertently brought into the UK as casual vagrants. For example, in 2010 a second species of Scutigermorph centipede, *Thereoneuma tuberculata* (Wood, 1863), was recorded from a warehouse in Swindon, where it had probably originated from a shipping container imported from China (Barber 2011). This latter species lacks the contrasting three longitudinal dark body stripes that are diagnostic of *S. coleoptrata*.

To conclude, it is expected that observations of the House Centipede *S. coleoptrata* will become more frequent, particularly across southern England. Some populations may become permanently established (rather than ephemeral casual introductions) and it is expected that there will be an increase in the number of outdoor records.

In order to monitor the increase of this distinctive centipede across Britain it is requested that any observations of the House Centipede *S. coleoptrata* should be forwarded to the Centipede Recording Scheme ([www.bmig.org.uk/page/centipede-recording-scheme](http://www.bmig.org.uk/page/centipede-recording-scheme)). Ideally observations should also be submitted with a supporting image to iRecord ([www.brc.ac.uk/irecord](http://www.brc.ac.uk/irecord)) where it will be verified by the recording scheme.

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## References

- Barber, A.D. 1990. *Scutigera coleoptrata* (L.) (Chilopoda, Scutigermorpha) in Jersey, Channel Islands. *Bulletin of the British Myriapod Group*. **7**: 47-48. Available online at: [www.bmig.org.uk/view/resource/bmig-bulletin](http://www.bmig.org.uk/view/resource/bmig-bulletin)
- Barber, A.D. 2009. *Centipedes*. Linnean Society Synopses of the British Fauna (N.S.) **58** Shrewsbury, Field Studies Council.
- Barber, A.D. 2011. *Thereuonema tuberculata* (Wood, 1863), a scutigermorph centipede from China, found in a warehouse at Swindon. *Bulletin of the British Myriapod & Isopod Group* **25**: 49-50. Available online at: [www.bmig.org.uk/view/resource/bmig-bulletin](http://www.bmig.org.uk/view/resource/bmig-bulletin)
- Barber, A.D. 2019. House Centipedes found in Home. British Myriapod & Isopod Group Newsletter. **37**: 6-7. Available online at: [www.bmig.org.uk/view/resource/bmig-newsletter](http://www.bmig.org.uk/view/resource/bmig-newsletter)
- Barber, A.D. 2022. *Atlas of the Centipedes of Britain and Ireland*. Shrewsbury, Field Studies Council. 389 pp.
- Barber, A.D., Keay, A.N. 1988. *Provisional Atlas of the Centipedes of Britain and Ireland*. BRC, Huntingdon. Available online at: <http://nora.nerc.ac.uk/id/eprint/7275/>
- Edgecombe, G.D., Giribet, G. 2007. Evolutionary Biology of Centipedes (Myriapoda: Chilopoda). *Annual Review of Entomology* **52**:151-70.  
doi: 10.1146/annurev.ento.52.110405.091326
- Gregory, S.J. 1996. Oxfordshire Centipedes. *Bulletin of the British Myriapod Group*, **12**: 27-44. Available online at: [www.bmig.org.uk/view/resource/bmig-bulletin](http://www.bmig.org.uk/view/resource/bmig-bulletin)

Gregory S.J., Campbell J.M. 1996. *An Atlas of Oxfordshire Myriapoda: Diplopoda (Millipedes) & Chilopoda (Centipedes)*. Occasional Paper No. **19**. Oxfordshire County Council. Available online at: [www.bmig.org.uk/page/online-centipedes-millipedes](http://www.bmig.org.uk/page/online-centipedes-millipedes)

Iorio, E. 2014. Catalogue biogéographique et taxonomique des chilopodes (Chilopoda) de la France métropolitaine. Biogeographic and taxonomic catalogue of the centipedes (Chilopoda) of metropolitan France. *Mem. Soc. Linn. Bordeaux* **15**: 1-372.

Iorio, E., Labroche, A. 2015. Les chilopodes (Chilopoda) de la moitié nord de la France. *Invertébrés Armoricaux, Les Cahiers de GRETIA*, **13**: 1-108. Available online at: [www.gretia.org/index.php/telecharg/category/37-invertebres-armoricains-n-13-2015](http://www.gretia.org/index.php/telecharg/category/37-invertebres-armoricains-n-13-2015)

Kaestner, A. 1968. *Invertebrate Zoology Vol. 2: Arachnids & Myriapods*. Wiley, New York.

Lee, P. 2015. A review of the millipedes (Diplopoda), centipedes (Chilopoda) and woodlice (Isopoda) of Great Britain. Species Status No. 23. Natural England Commissioned Reports, Number 186. Available online at: <http://publications.naturalengland.org.uk/publication/4924476719366144>

Lewis, J.G.E. 2007. *The Biology of Centipedes*. Cambridge, Cambridge University Press.

Met Office. 2018. Summer 2018. Available online: [www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-past-events/interesting/2018/summer-2018---met-office.pdf](http://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-past-events/interesting/2018/summer-2018---met-office.pdf)

Partridge, N. 2019. *Scutigera coleoptrata*: Loosely Row, Buckinghamshire. *Bucks Invertebrate Group Bulletin*, **29**: 3-4. Available online at: <https://sites.google.com/site/bucksinvertebrategroup/big-downloads>