The march of the Green Meshweb Spider

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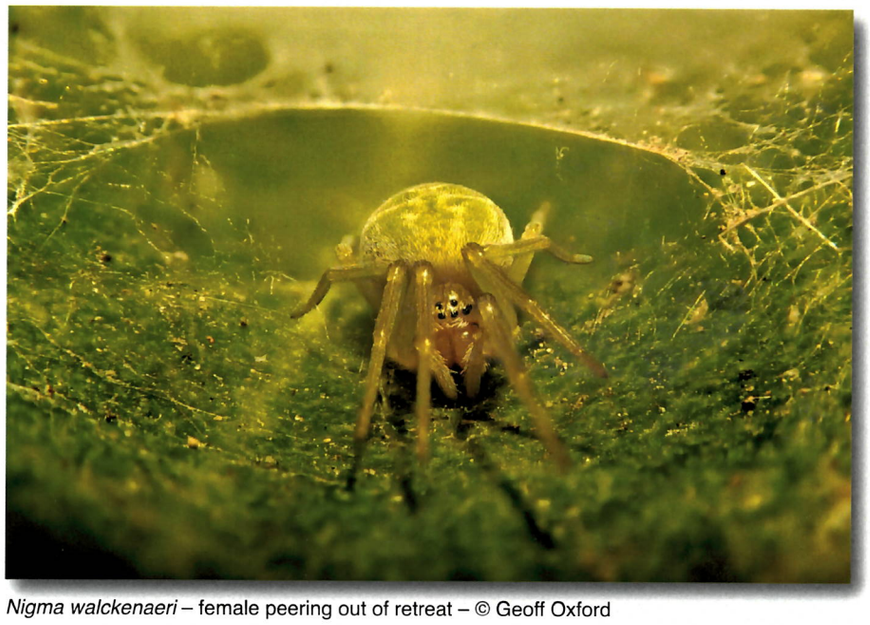
Nigma walckenaeri – mature male – © Geoff Oxford

The Green Meshweb Spider *Nigma walckenaeri* has a fascinating history in Britain. It was first reported from Box Hill and Kew (Surrey) in the late 19th century. One hundred years later (1990) it was still restricted to a few sites in the Thames valley. Over the last 30 years, however, it has spread dramatically and now occupies much of south-east England with an additional stronghold around the Severn Valley in western England. Scattered records have also been reported from northern England.

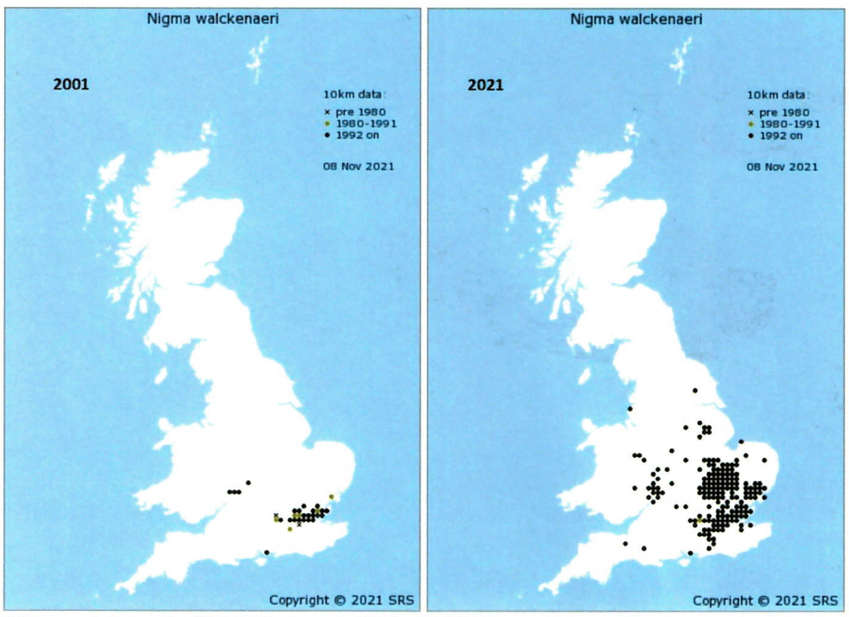
The spider frequents bushes in gardens and parks, often in suburban areas, and is most easily found on the upper surface of slightly up-curved leaves of ivy and holly. A white, translucent



Nigma walckenaeri – female peering out of retreat – © Geoff Oxford

sheet of silk is spun across the hollow and under which the spider lives. The spider itself is small; females reach a body length of 4-5mm and males, 3-4mm. Juveniles of both sexes are all green with a slightly marbled abdomen. Females retain this coloration throughout but on maturity the cephalothorax (front part of the body) of males becomes reddish-brown and the legs pinkish. The presence of this species is usually indicated by spotting its retreat, but a closer inspection will often reveal the spider lurking beneath the silken sheet.

Understanding the life-cycle of the Green Meshweb Spiders is still a work in progress. It matures quite late in the year with adult males found in August through to March, and females in almost any month. Most observations of mature males and females are from August to October, but not many arachnologists are recording in winter and so the mating season might be more prolonged than we currently think. Indeed, in north Kent, I found a pair mating on Christmas day, and another pair was seen in



Nigma walckenaeri – Distribution maps 2001 and 2021.

Worcestershire on New Year's Day! It seems likely that mated females overwinter and then produce their egg sacs from about April onwards, with tiny young found in May, June and July.

Increasingly, sightings have been coming in from further north, as is the case for many other spider species. In 2018, a single male was found on the saddle of a motorbike in Full Sutton, in central Yorkshire – the first record for the county. It was unclear whether this lone individual had been imported from further south, or was part of an established population. To my great surprise and delight, in mid-July this year I discovered 15 individuals on ivy in my back garden in York. I began to examine ivy growing in garden hedges and on fences further afield. Populations have been found across the city and also in a number of outlying villages. Clearly, this once very rare spider has made itself at home in and around York, which raises interesting questions. Has it recently arrived and is spreading super-fast, possibly as a result of climate change, or has it been

Nigma walckenaeri – typical ivy habitat (left); web on ivy leaf (right) – © Geoff Oxford

here, hidden in plain sight, for a number of years but with too few arachnologists to notice? A similar thing seems to have happened across the Severn Valley region and in the Bedfordshire, Huntingdonshire and Cambridgeshire areas.

This spider also raises the fascinating question of why so few British spiders are green (the subject of a future *Bug Club Magazine* article). In the case of the Green Meshweb Spider, it is easy to see why this might be an advantage. The spider spends most of the day under its semi-transparent silk sheet and is very difficult to spot against the dark green background of the leaf. As mature males have to wander from leaf to leaf to find females, being half-green and half-brown might serve to break up its 'spider' outline and reduce predation. Another interesting thought is that, in my experience at least, the spider is commonest on evergreen shrubs, such as ivy and holly. Given that it remains on these plants over the winter, does it somehow 'know' that the leaves will not be shed during autumn and that they will remain green throughout, providing it with an appropriate background?

Nigma walckenaeri – mature female – © Geoff Oxford

Is this spider in your garden or in a neighbour's ivy hedge? I would love to know. The spider is easily recognized from photographs and so if any Bug Club member finds one, I would be grateful if you could email an image to me at: geoff.oxford@york.ac.uk. Please include your name, the date photographed and the postcode of where it was found. Verified records will be added, with your name as recorder, to the national database of the Spider Recording Scheme.

Thanks to Helen Smith and Jean Young for their comments as this article was being written.

Geoff