

## A note on *Aulonia albimana* (Walckenaer) in Britain (Araneae: Lycosidae)

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The only known locality for this species in Britain is a gravel pit near Dunster in Somerset: Bristowe (1939), Locket and Millidge (1951), Cooke (1965). There is an additional record by Hull (1950) of one male and three females in a mixed collection of spiders sent to him in 1949 from the Colchester area in Essex, but the exact site for these is uncertain although Hull states "probably from Pelgate Wood". We have not been able to trace these specimens in any of Hull's collections.

It was decided to try to re-locate Cooke's site for this species using a map reference kindly provided by Dr Peter Merrett. There are several disused gravel pits which more or less coincide with the map reference and on 30 July, 1972 three of these sites were carefully examined. The search at two of these proved to be fruitless, but one of us (R.C.) was successful at the third site. This long disused gravel pit is not easy to locate, being well screened by trees of both coniferous and broad-leaved species and the floor of the pit is partially overgrown with gorse. This proved to be the site referred to by Cooke, who described the floor of the pit as being wet on the occasion of his visit. On the day of our visit the surface was dry and adult females of *Aulonia albimana* were found to be active in a small area about 50 feet from the face of the pit.

Specimens were not seen on or near the gravelly area at the bottom of the cliff face. The area of activity had a vegetation cover of small clumps of *Calluna* and low growths of *Ulex*, and at ground level there were grasses and open patches extensively covered by the foliaceous lichen *Peltigera horizontalis*. The presence of this lichen in its dry state clearly indicated that the floor of this gravel pit must, at times, become very wet, particularly after heavy rain when surface water from the higher

surrounding areas would accumulate.

The lichen has a dark grey upper surface and under dry conditions the curled up lobes reveal a white under-surface. Its growth is extremely slow – less than 1 cm per year. The spiders were most frequently found in this lichen layer. No males were seen, but we were careful to avoid undue disturbance to the habitat. All the females were either carrying clear white egg cocoons attached to the spinnerets or had newly hatched young spiders clinging to their abdomens, each in a small compact mass. While the white patellae of the palpi were clearly visible, the white egg cocoons were even more conspicuous when the spiders were moving. However, when movement ceased it was remarkable how the dark colour of the spider and the white patellae and egg cocoons blended into the light and dark colour of the lichen background, so much so that one immediately wondered if there is any significant association between the spider and this plant.

A further observation by one of us (R.C.) made with a spider kept in captivity with a sample of the lichen, showed that the female spins a fragile sheet web spanning the dry curled lichen frond. The web is extremely fine and would be very difficult to see in the field. This supports the observations of Job (1968) who describes how the species, in Germany, spins a very fine tube and sheet web; so fine that it cannot be seen except on a foggy or rainy day, or by spraying it with an atomiser. The silk tube retreat is a downward exit from the sheet; the spider resting within the tube is given warning of the presence of prey by tremors in the sheet web. Both copulation and construction of the egg cocoon were observed in the tubular web. Job compares this habit of *Aulonia* with those of *Trochosa*, *Alopecosa* and *Arctosa* which make silk lined retreats, and to the silk lined burrows of *Geolycosa* in N. America, also with the tube webs of *Pirata* species in sphagnum. (The *Aulonia* tubes were observed to be in moss). He emphasises that the use of the sheet-web supports the inclusion of the genus, by Roewer (1958), in the sub-family Hippasinae on morphological grounds.

In Britain we have only one defined locality for *Aulonia albimana*, but the species is recorded from a number of other European countries including Belgium, Czechoslovakia, Denmark, France, Germany, Holland, Italy and Sweden. It would

therefore be interesting to have information from our colleagues in these countries as to whether they have found *A. albimana* to be associated with this or other lichens at any stage of the spider's life history.

#### Acknowledgements

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#### References

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#### EDITOR'S NOTE

With the publication of the next issue of the *Bulletin* (number 9) in November 1973, volume 2 will be completed, comprising by then some 200 pages. As with volume 1, an index and list of contents will be issued at a later date, for binding up with volume 2. We are indebted to Mr R. Allison for his painstaking work in compiling and keeping this index up to date.

Very few changes are envisaged with volume 3, these being limited to minor details such as re-styling the covers, using art paper throughout and reintroducing the notes for guidance of authors on the inside of the back cover. Different coloured covers will be maintained, in rotation, as these are found to aid identification on the bookshelf. The page format and typeface style will be retained for volume 3, parts of which will be issued in April, August and December, each with approximately 28 pages, copy and funds permitting.

In view of the increasing volume of work entailed in *Bulletin* production, an interim arrangement has been agreed upon to ensure continuity and to contain costs within acceptable limits, whereby a new editor

will be appointed and the present editor will be responsible for production only. Mr D. Nellist will continue as *Bulletin* distributor as at present.

The editorship of the *Bulletin* will be taken over by E. Duffey, O.B.E., Ph.D. on completion of volume 2. After 1 September 1973 when compilation of part 1 of volume 3 will commence, all manuscripts should be sent to Dr Duffey at Monks Wood Experimental Station, The Nature Conservancy, Abbots Ripton, Huntingdon PE17 2LS, England. Prior to this date the present editor will deal with all manuscripts, even if these are to be carried over to volume 3.

Authors are requested to present manuscripts and text figures in the manner laid down in "Notes for Guidance of Authors", which appeared in early parts of volume 2. Copies of these notes are available from the present editor on request. Untidy and badly presented manuscripts usually incur many expensive typesetting errors, waste a lot of the editor's valuable time and considerably delay preparation for publication.