

Editor: Gerald Legg

Contributions to me c/o The Booth Museum of Natural History,
194 Dyke Road, Brighton, BN1 5AA;

e-mail: office boothmus@pavilion.co.uk,
home gerald@natura.uklinux.net

Visit Pseudoscorpions at:
chelifer.com/pseudos

On the Move

Galea is on the move! It will now be merging with the *Newsletter of the British Arachnological Society* as from this edition, No. 6 in *Newsletter 98*. This has been done in order to streamline the production and fit it in with the style of the BAS.

Copies will still be sent out to non-BAS members and it will be available on the web at <http://www.Chelifer.com/pseudos>.

Marine Pseudoscorpions

Pseudoscorpions can be found on the sea shore. Several species occur including the ubiquitous *Chthonius ischnocheles* associated with maritime plants and *Neobisium carcinoides* from beneath stones and amongst other debris. Other species obligate marine species. *Dactylochelifer latreillei* hides away amongst leaf bases of marram grass and other maritime plants and beneath drift wood and other flotsam and jetsam. It well adapted to the potentially very dry conditions of dunes and sandy shores having a thick tough integument. If you turn over a piece of drift wood and spot some they move surprisingly quickly to get away from the light.

Chthonius kewi Gabbutt, originally found in Essex, occurs throughout salt-marsh, dune and shingle habitats hiding amongst vegetable debris much like its common cousin, *C. ischnocheles* (Herman). Its close relative *C. tetrachelatus* (Preyssler) (which lacks the additional micro-setae on the posterior row of the cephalothorax) is found in similar places.

Neobisium carpenteri (Kew), originally found at Glenglariff, Co. Cork, Ireland high on the shore under the bark of flaking *Arbutus* trees is also known from the Essex coast (and a quarry in

Wales!). Its habitat in Essex is quite different to that of Ireland. In Essex it occurs in salt marsh debris and vegetable mould on shingle beaches and sand dunes close to salt marshes. Clearly something is awry. The species originally described in Ireland can not be the same as that living in Essex, let alone the quarry in Wales. Until someone looks closely at this problem we will not be able to resolve. DNA work would be the way to sort this problem out.

Of all the maritime species, *Neobisium maritimum* Leach is more marine than the rest. This species can, like several flies, collembola and other insects, withstand being submerged by the sea. It is found at the top of the upper down to the lower littoral (*Ascophyllum* zone) where it secretes itself in rock crevices when sprayed or submerged in sea water. There are a few scattered records from France, SW Cornwall, SW Wales, the Isle of Man, the Isle of Wight, Anglesey and the coast of Ireland. As a rare species it has been identified and is listed by MARLIN (Marine Life Information Network for Britain and Ireland, <http://www>).

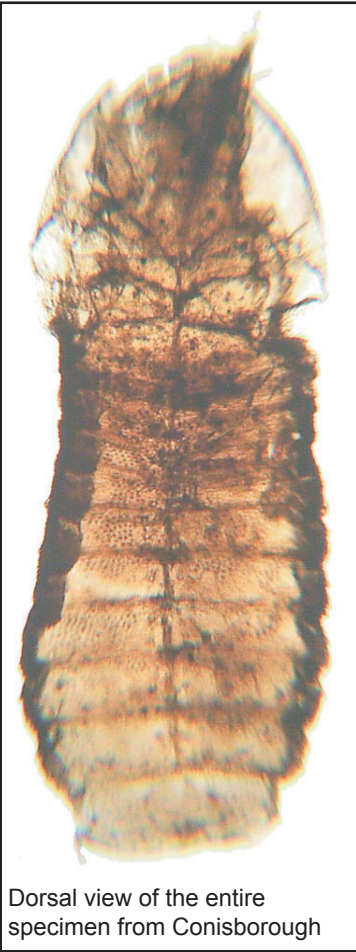
Suction sampling of sea-wall and salt-marsh plants and dune grasses will yield all of the species mentioned above without too much tedium or habitat destruction. Nature reserve wardens, English Nature, the RSPB and other organisations do not look kindly on people who systematically rip up dune plants to look for pseudoscorpions lurking in the leaf-bases! Such activity leads to dune 'blow-outs' and erosion. Be warned!

An Archaeological Pseudoscorpion

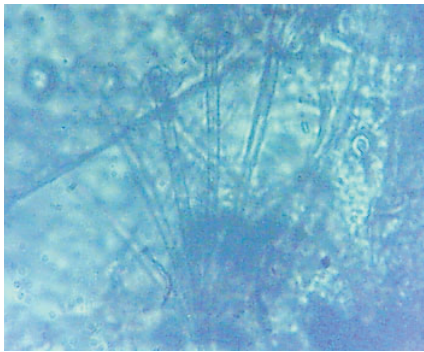
During the year I received an unusual identification request – a pseudoscorpion found in an archaeological deposit at Conisborough, S. Yorks. Beetles are the common

component of such deposits and they can often be identified to species, or at least genus. From such results it is possible to build a picture of the fauna occupying the site in the distant past.

Apparently pseudoscorpion palps, tentatively identified as belonging to *Chernes cimicoides*, are found. The palps are probably the most robust and tough part of a pseudoscorpion and so the most likely to survive a long period of time, much in the same way as beetle elytra are preserved.

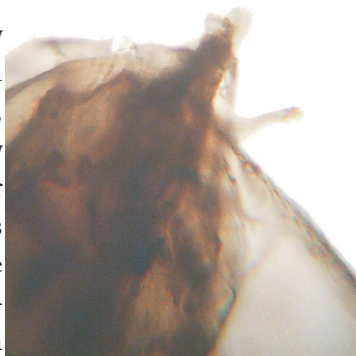


Dorsal view of the entire specimen from Conisborough



Setae around genital area

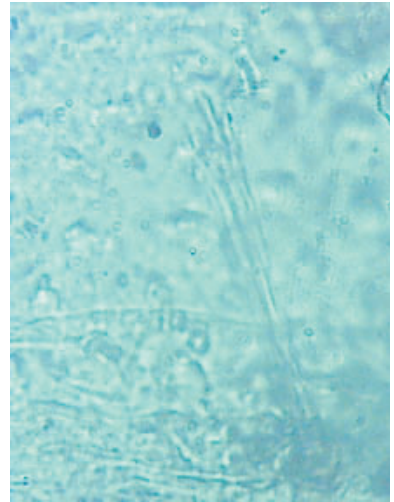
This was the first time, as far as I can ascertain, that an almost whole pseudoscorpion had been found. Of course I am probably wrong so should anyone know of similar finds please do let me know. As the National Recorder, one question that comes to mind is to how to add the record to the database when it comes to entering its 'date of collection'. This usually refers to a live specimen which is easy to date, even though it may only be to year (for old historical records gleaned from the literature for example). Now I have a specimen that is over



Anterior end showing chelicerae

a thousand years old.

The specimen was found in deposits in a ditch around a medieval deer park (Paul Buckland, Dept. of Archaeology & Prehistory, University of Sheffield). It is surprisingly complete consisting of the bulk of the prosoma and opisthosoma, albeit squashed flat. Even setae and the positions of trichobothria can be seen.

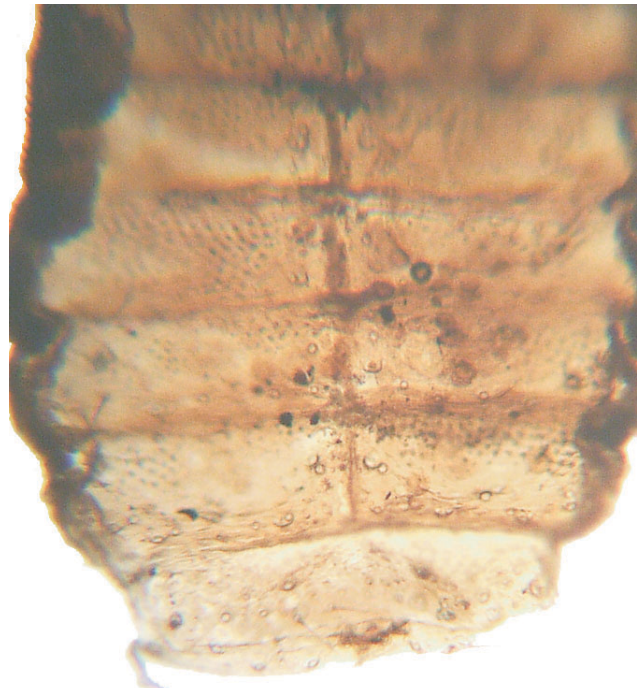


'Goose-foot' body seta

Identification could not be based on the usual string of characters but rather through elimination of suspects based upon the features preserved in the specimen.

Divided sternites and tergites suggested it was probably a chernetid. It also lacked eyes. Setae were still present, particularly around the genital area and the form and disposition of these suggested it was a female.

Most of the other body setae had been lost, their presence only marked by the circular scars of



Posterior opisthosoma showing setal and trichobothrial base scars

their bases. Those setae away from the genital area were multi-tipped 'goose-footed', this elimi-

nated the three species of *Lamprochernes* since *Lamprochernes* has fine acute body setae.

The main feature to help narrow the identity down further was the number of setae in the posterior rows of the sternites and tergites. Most of the chernetids have over 14 setae (*Chernes cimicoides*, a typical woodland species has 14 – 16 on tergite I and tergite VI 18 – 19). This specimen has 8 – 10, a similar number to that found in *Pselaphochernes scorpioides*. This feature together with the presence of trichobothria on the the posterior of the opisthosoma would suggest that the pseudoscorpion was *P. scorpioides*.

Pselaphochernes scorpioides is not a typical woodland species, but since it was found at the bottom of a ditch it could well have been associated with medieval rubbish dumped in the ditch. This species is associated with compost heaps, manure heaps and other high nitrogen vegetable waste habitats where it is associated with beetles and flies with similar habitat requirements. Additionally *P. scorpioides* (Hermann) is often phoretic on compost/manure flies and records are regularly received from recorders finding them indoors on such flies – always females.

My thanks to Paul Buckland of the University of Sheffield for the specimen and details of the site.

suction a particular sampling session in grassland. However other habitats had yielded material.

Suction sampling can be very efficient at picking up all kinds of invertebrates, including pseudoscorpions, so the fact that none were found during this particular sampling session is perhaps of significance indicating an absence of these predators. Of course to confirm this other sampling techniques would have to be tried.

Sampling various grasslands in Sussex I have found *Chthonius orthodactylus* (Leach) and *C. ischnocheles* (Hermann). By hand sorting the bases of rough grasses further specimens were found.

Has anyone else experienced the absence of pseudoscorpions in a particular habitat which that can not attribute to poor sampling or the methods used?

Records Received

There was a small drop in the number of records received over the past year with about 50 being coming in. Thanks to all those who have sent in their records and specimens – even the common ones!

Gerald

Sphagnum Bogs Again

I've still not been told where the *Microbisium brevifemoratum* Ellingsen was collected despite efforts to do so. As mentioned in previous issues of *Galea*, this species occurs in *Sphagnum* bogs and other marshy areas. If anyone has the chance to vacuum sample such an area in a search for spiders or insects do remember to keep your eye open for any pseudoscorpions. Should you find any please send them to me, of course with full details of where you found it!

'No Finds' is Still Significant

One of our stalwart pseudoscorpion hunters, John Hunnisett, remarked in a letter he sent accompanying some specimens that he had failed to pick up any pseudoscorpions during a

