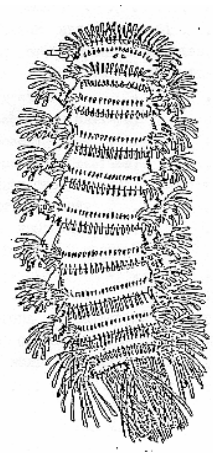
British Myriapod and Isopod Group



AUTUMN 2002 **Newsletter number 5** **Editor: Paul Lee**

BMIG business
Congratulations to John Lewis from fellow members of BMIG. You will be pleased to know that John was elected as President of the CIM during the Congress in South Africa earlier this year.

On behalf of BMIG, following discussions within the group, Helen Read has written to the British Entomological and Natural History Society (BENHS) to formally request that BMIG be considered for affiliation. The request will be raised at their next Committee meeting in December. There are very few obligations for BMIG as a result of affiliation. BENHS would appreciate a reference collection of myriapods and isopods to be housed at their headquarters at Dinton Pastures near Reading and expect details of their meetings to be circulated to BMIG members. In return they would be happy to house a BMIG library and generally make the facilities at Dinton Pastures available to BMIG members. Importantly affiliation will also ensure insurance cover is in place for BMIG field meetings. As he lives the nearest to Dinton Pastures (and was out of the room making coffee at this point) Steve Gregory was nominated as the BMIG librarian, curator and link to BENHS at our October committee meeting. We look forward to hearing more from him on the library etc in future newsletters.

Enclosed with this issue are details and a booking form for the Annual Field Meeting to be held at Reaseheath College, Cheshire from 24-27 April 2003. The meeting will incorporate a special memorial meeting to be held at Manchester Museum on 25 April and recognising the contributions of Gordon Blower and Ted Eason to myriapodology. I hope that as many members as possible will take the opportunity to attend at least part of the meeting to celebrate the lives of our former colleagues and friends. Helen Read would also be very pleased to hear from anyone able to offer a talk or poster either for the evenings during the field meeting or for the Manchester event.

Woodlice on the web
Someone at JNCC has anonymously sent a print out of a web page relating to the Radio 4 "Home Truths" programme hosted by John Peel. The page in question shows a photo of *Oniscus asellus* with the caption "A lesser spotted woodlouse" and appears to result from a listener's comments on the myriad local names for woodlice. The two stories on the web page describe confusion between woodlice and earwigs and confusion between a woodlouse and a currant (with predictable consequences). Take a look for yourself at
www.bbc.co.uk/radio4/hometruths/0218woodlice.shtml

Obituary - W.D. (Bill) Williams
Bill Williams died in Brisbane, Australia in January 2002, aged 65. He made an outstanding contribution to knowledge of the occurrence of freshwater isopods (*Asellus* spp) in Britain and Ireland and gave freely of his knowledge to support the recording scheme in its early years. A full obituary and list of publications will appear in the next BMIG Bulletin.
Paul Harding, BRC, CEH Monks Wood, Abbots Ripton, Huntingdon

Non-marine Isopod Recording Scheme News
Back in April David Scott-Langley sent me a male specimen of what appears to be *Haplophthalmus montivagus* from a coastal site in Devon. I am ashamed to say I left the specimen in my in-tray all summer, but recently sent it to David Bilton for a second opinion. If it is *H. montivagus* this record not only extends its known range further south west of Bath, but also considerably broadens it known habitat preferences (predominantly calcareous woodland). This reinforces the point is that it is essential to check male specimens of *Haplophthalmus mengei/montivagus*. Species records cannot be based on females.

At the end of September Greg Jones sent me a Trichoniscid specimen he had collected a few days previously from the *Oritoniscus* site in Carmarthenshire in South Wales. It does look like this common Irish species, but so far (10 days) the specimen has not even begun to start fading in 70% alcohol. My Irish specimens of *Oritoniscus flavus*, collected last year, faded quite noticeably after a week and are now a very pale orange. Unfortunately Greg's specimen is a female and cannot be reliably identified, but it may be something different, possibly *Hyloniscus*. I believe Greg has more specimens (he certainly saw several in at least one location) so hopefully there will be a male amongst them.
Steve Gregory, Northmoor Trust, Little Wittenham, Oxon. OX14 4RA

One species of centipede becomes two

This is just a brief note to make readers aware of the discovery that, what was previously known as *Geophilus carpophagus,* is in fact two species. These correspond to Ted Eason's 'long' and 'short' forms, which he thought were mere developmental variants. The evidence for them being separate species is now overwhelming, and includes all sorts of characters: morphological, molecular, ecological and behavioural. I give a very quick summary of some of these differences below; for more detail please see my paper in the 2002 Bulletin.

But first, a word about the names of the two species: having examined Leach's type specimens that are in the Natural History Museum, it is clear that all three (a holotype and two paratypes) belong to the 'long' form, which, contrary to Eason's belief, is not restricted to urban and domestic localities, but is found more widely, and often in coastal localities in particular. So, under the rules of zoological nomenclature, the long form is *Geophilus carpophagus*, and it is ironically (and confusingly) the short, more typical, form, that needs a new name. We have called it *Geophilus easoni*, in Ted Eason's honour, in the primary paper reporting the split (Arthur *et al., Biol. J. Linn. Soc*. 2001).

Here are some of the ways in which *G. carpohagus* differs from *G. easoni:* it is longer; it has more trunk segments; it has a different pigmentation, being typically a dull brownish or greenish grey over most of the trunk instead of the striking bright chestnut-brown that characterizes most live specimens of *G. easoni;* it is less common, and more restricted to certain types of microhabitat, including cliffs, rocks, walls, buildings, and trees.

The common theme connecting these microhabitat types is climbing behaviour. *G. carpophagus* is a 'climber', whereas *G. easoni* is generally not. You can actually detect the difference in ability to 'hang on' if you try to shake live specimens off your finger: *G. easoni* can be flung off with ease, while *G. carpophagus* often has to be 'peeled off', and it feels like peeling off velcro.

The situation in Ireland and mainland Europe remains to be clarified, but it seems likely that both species are found there as well as in Britain. However, there may be a complicating factor in identifying them, especially in southern Europe. Because some geophilomorph species have more segments in southern populations, it might be that a 'long' specimen from the Mediterranean area is an elongated version of *G. easoni*; or it might instead be a *G. carpophagus*. This problem needs further investigation. But for British populations there is no problem, as the segment numbers of the two species overlap negligibly if at all. The ranges for females are: 53-57 (Gc) and 47-51 (Ge); for males they are 51-55 (Gc) and 47-49(Ge).

This may of course be the tip of an iceberg. There may be pairs or groups of 'cryptic species' lurking within the confines of a single species name in the case of other centipedes, and indeed in many other invertebrate groups. Although we all claim to be modern biologists using the concept of the biological species, in practice most of our names are for 'morphospecies', because information on breeding compatibility and molecular differences are usually lacking. On the other hand, most of our named morphospecies may be perfectly 'well behaved', in terms of breeding. Time will tell which of these views is nearer to the truth.

An afterthought: If anyone has information on or specimens of *G. carpophagus* or *G. easoni* from anywhere in the British Isles or mainland Europe, I would be most grateful to receive the information or borrow the specimens. Among other things that I want to find out is whether there are any inland populations of *G. carpophagus* north of Gloucestershire and Essex. The only populations of *G. carpophagus* that I am aware of further north are coastal populations in Fife, to which my attention was drawn by Gordon Corbet.

Wallace Arthur, Ecology Centre, University of Sunderland SR1 3SD

Centipede Recording Scheme: Important notes on recording *Geophilus carpophagus* & *Geophilus easoni* on RA58 record cards.

Now that the species formerly regarded as *Geophilus carpophagus* has been recognised as being two, it is necessary to change the method of noting species on the record cards.

Would collectors therefore please, in future record :

801 Geophilus carpophagus only when it is not clear which of the two species is recorded.

Please record at the end of the list under “Other species”:

808 Geophlilus easoni i.e. the “shorter, darker, rural” one.

809 Geophilus carpophagus (ss) i.e. the “long, urban” one.

Tony Barber, Rathgar, Ivybridge, Devon PL21 0BD

Swimming pools

What on earth have swimming pools got to do with BMIG? I am sure very few of us have a swimming pool in our back garden but if you do they are worth checking out as they are quite attractive to Myriapods and Isopods. There are two parts to my day job, that of landscaper and that of swimming pool maintenance engineer, all this in Gloucestershire and surrounding counties. I have about a dozen pools that I visit regularly and around a dozen one-off visits to others each year. The contents of these pools vary according to their location and also their construction.

In rural areas, the centipede most frequently found floating on the surface is *Lithobius forficatus*, with very occasionally *L. melanops* and *L. microps*. In towns, *L. forficatus* and *Cryptops hortensis* are the victims. All these species are quite active and usually fall in during their wanderings when they reach the fairly smooth edges of the pool kerbs. Centipedes do not take to being submerged or even floating on the surface for very long and soon appear to succumb. The same appears not to be the case for millipedes and woodlice.

All of my records of millipedes from pools have been in the country. One pool near Cirencester seems to attract only *Polydesmus coriaceus* in small numbers. Another pool near

Stow-on-the-Wold often has *Tachypodoiulus niger* on the bottom, usually dead; this indoor pool is in a building in what used to be an old farm garden and I have found *Brachyiulus pusillus* inside the windows. This building also contains a potted palm that houses a small population of *Oxidus gracilis*. Perhaps the most interesting pool for millipedes is one between Cirencester and Cheltenham. In autumn 2000 I visited the pool to prepare it for winter and was surprised to find the bottom had several hundred *Cylindroiulus caeruleocinctus* lying around, apparently dead. On retrieving a few I found they were still alive but very sluggish and had clearly been immersed for some time, certainly not less than a couple of weeks. As a result they had swelled lengthways with the intake of water and the posterior half of each ring had been bleached by the chlorine pool treatment. The four that I rescued subsequently returned to normal shape and colouring after several days, the rest I had to vacuum up through the pool filter system. On opening up the pool for the summer in 2001 I found exactly the same situation although the millipedes were walking around on the bottom as evidenced by the numerous trails through the winter debris that had accumulated. They were unable to escape from the pool because they could not climb the smooth sides of the vinyl liner. In June 2001 a visit to another pool, on one of the highest points in the Costwolds and surrounded by improved grassland, produced the drowned remains of six *Polydesmus angustus,* three *Ophyiulus pilosus,* one *Cylindroiulus punctatus* and 30-40 *Brachyiulus pusillus*.

Woodlice are often found in pools and can obviously cope with total immersion as long as they are in control. I have often seen them, in concrete pools, walking down the sides to depths of up to 2.4m before returning to dry land. Species so far encountered in pools are *Armadillidium vulgare, A. depressum, Oniscus asellus, Porcellio scaber* and *P. spinicornis*. In about one quarter of my new records of *A. depressum* , remains of the species have first been found in pool filter baskets.

I would be interested to hear from anyone else who has encountered pool invasions of this nature.

David Scott-Langley, 11 Overhill Road, Cirencester, Glos. GL7 2LG

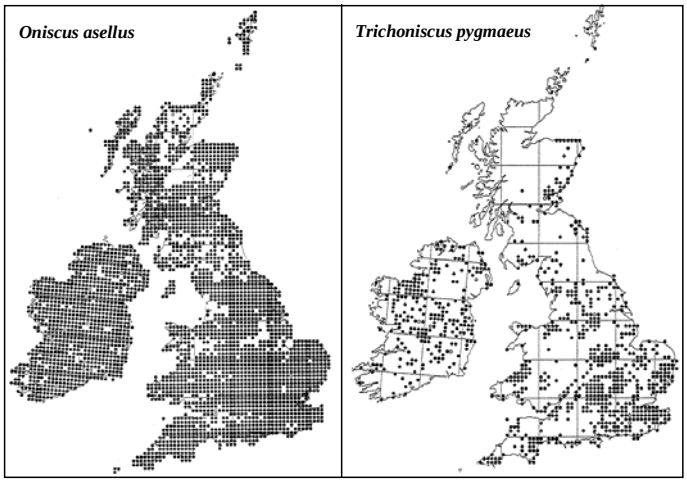
Exclusive *Trichoniscoides* – part two

In the last BMIG newsletter I reproduced a map of the apparently mutually exclusive British distribution of *Trichoniscoides helveticus* and *T. sarsi*. It does seem to be a genuine pattern, rather than recorder bias, but nobody accepted the challenge to offer an explanation. However, I recently received an interesting note from Dr Matty P. Berg, the co-ordinator of Isopod survey scheme in the Netherlands. It seems that *Trichoniscoides helveticus* and *T. sarsi* are mutually exclusive in the Netherlands as well. There the distributions are strongly tied to the underlying geology. *T. sarsi* occurs on the low-lying Holocene clays in the west, whereas *T. helveticus* occupies similar microsites on the Pleistocene clays that occur above mean sea level in the east.

It seems that there may be more a lot more to this pattern than meets the eye. It would be interesting to know which species the Irish records refer to. Also, back in April I took a male *T.sarsi/helveticus* in Derbyshire (I believe John Harper had some too), which will hopefully add to the picture.

Steve Gregory, Northmoor Trust, Little Wittenham, Oxon. OX14 4RA

Extent of woodlouse recording in Britain and Ireland



The two maps, both of common species, illustrate the extent of woodlouse recording in Britain and Ireland. The first map shows the known distribution of *Oniscus asellus,* an easily found and readily identifiable woodlouse. This suggests that the basic coverage is extremely good. The second map is for *Trichoniscus pygmaeus*. This small soil dwelling woodlouse can also be as abundant (up to 600 individuals per m^2 have been recorded) and like *O. asellus* should occur in most 10km grid squares. However it is rarely found unless specifically searched for and the map quite clearly illustrates areas where key recorders have been particularly active.

Steve Gregory, Northmoor Trust, Little Wittenham, Oxon. OX14 4RA

National Biodiversity Network - Conferences and Seminars

Trevor James took up his appointment as the NBN Trust's Development Officer for national societies and recording schemes at the beginning of October 2001 and is based at BRC Monks Wood. Through his Networking Naturalists project, he is working with several societies and schemes to prepare development plans and is assisting them with planning recording projects. He has also organised two conferences and three seminars for representatives of societies and schemes, at which at least one member of the BMIG committee has been present. Summaries of the papers and discussions at these events are available on the NBN web site www.nbn.org.uk.

1st National Conference was held at the Natural History Museum, London on 15th November 2001. The conference looked at a range of issues relating to national societies and recording schemes and the work of developing the National Biodiversity Network.

Biological Recording in Scotland was held at Scottish Natural Heritage, Perth on 20th May. The seminar meeting considered the particular needs for species recording in Scotland and how issues such as too few recorders might be addressed.

Putting Biological Data to Use was held at Medical Research Council, London on 11th July. Speakers covered many aspects of the use of data, by volunteers themselves, and for research, nature conservation and development planning. Workshops looked at two issues - the implications of data use for recording schemes, and managing and disseminating records.

Recording in Fresh Water was held at Freshwater Biological Association, Windermere on 11th September. The meeting concentrated on the future of species recording in freshwater and reviewed progress in several areas. The important role of statutory agencies, such as the Environment Agency, was seen as central to supporting species recording by volunteers.

2nd National Conference will be on 15th November 2002 at Natural History Museum, London and will review opportunities for societies and schemes being developed by or in association with NBN.

Paul Harding, BRC, CEH Monks Wood, Abbots Ripton, Huntingdon

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In case you have not yet purchased a copy of the latest Bulletin here are the contents to whet your appetite. Copies are available from A.D.Barber.

A Synopsis of the North American Centipedes of the Order Scolopendromorpha (Chilopoda)

Rowland Shelley's publication provides keys to taxa at all levels, detailed distribution maps, ecological and ethological information for the 27 species of scolopendromorph recognised in North America. Copies can be obtained from the Virginia Museum of Natural History, 1001 Douglas Avenue, Martinsville, VA24112 (www.wmnh.org). The price is $40 plus postage (USA $5, all others $8). Please purchase your copy direct from the Museum rather than through booksellers at inflated prices.

STOP PRESS: Centipede Man Admits To Collecting Rare Woodlouse

During the annual BMIG meeting in Derbyshire earlier this year, bored with finding so few myriapods in Lathkill Dale despite turning over innumerable rocks, ferreting amongst what litter was there and searching through moss, I even went so far as to capture a few woodlice (some people will do anything to get their name in the newsletter - Ed.). One of these was a pillbug which, when I had worked out what "chamfered" meant, ran down in the keys to *Armadillidium pictum*, a diagnosis confirmed by Steve Gregory.

Tony Barber, Rathgar, Ivybridge, Devon PL21 0BD

NEXT NEWSLETTER: SPRING 2003

Please send your contributions to reach the editor by 28 February 2003

Supplies of record cards and additional copies of the British Myriapod and Isopod Group Newsletter can be obtained from the Biological Records Centre.

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