British Myriapod and Isopod Group

www.bmig.org.uk

Newsletter 31 Autumn 2015

Editorial

Dear members, welcome to the latest edition of the BMIG's newsletter. Hopefully you have all had a pleasant and productive year so far and have been able to get out and find lots of myriapods and isopods. This issue is my first as newsletter editor and I hope you enjoy the information we've managed to pull together for you and hope you can get as excited as we are about the upcoming changes planned for the publication. The format of this issue will largely follow previous ones but next year we are hoping to move over to digital pdfs. This means we will be much freer to express the ideas of BMIG members in a more modern format, including the use of colour and photographs. Please let us know if you have any problems with receiving electronic copies and we can arrange hard copies. I would also like to implement some new sections to broaden the scope of the newsletter whilst remaining within the group's core remit of recording British myriapods and isopods. These include articles exploring the group's specimen collections and articles regarding the collection of fossil species. Fossil specimens are much rarer than extant ones but can still provide important and interesting information. See the reading list below for some initial literature around the subject. This issue contains the usual important group news including details of the upcoming AGM and reviews of meetings. There are also several interesting articles from committee members regarding the collection of unusual specimens around the country.

As always we are keen to hear about what you have been collecting yourselves. So if you have any interesting stories to tell the other members of BMIG then please do send any short notes to my details below. These may include the collection of extant or fossil species or anything else regarding the recording or conservation of myriapods and isopods around the UK.

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Annual Field Meeting and AGM

Juniper Hall Field Studies Centre, Dorking, Surrey

Thursday 31st March to Sunday 3rd April 2016

Venue: Juniper Hall is situated in the North Downs, north of Dorking in Surrey. The Field Centre has its own extensive grounds and is adjacent to the National Trust's Box Hill site. We will have sole use of the Cedars accommodation block including a common room suitable for talks and meetings. We also have access to laboratory facilities. The bedrooms are shared accommodation but, depending on the uptake, some may be available for single occupancy and some have en suite facilities. Towels and bedding are all provided.

Surrounding area: Surrey provides a good range of habitats including lowland raised bog, ancient woodland, chalk grassland, sandy heath and synanthropic sites such as ornamental gardens and parkland. For anyone wanting to journey further afield The High Weald, Central London and the South Downs National Park could be visited and dedicated halophiles could reach saltmarsh, shingle and chalk cliffs between Selsey Bill and Eastbourne.

Travel: Juniper Hall is readily accessible by car or train. Please check the Centre's website for more details (http://www.field-studies-council.org/centres/juniper hall/location.aspx). Car parking spaces are available.

Booking: Please book AS SOON AS POSSIBLE if you want to attend the meeting. Download a booking form from the website (https//www.bmig.org.uk) or find a booking form at the end of this newsletter. Prices and further details can be found in the form.

Full payment will be on invoice which will be sent by the end of January – payment due by the end of February at the latest.

No last minute booking/payment.

Linlithgow field meeting 2015

Our 2015 field meeting was based at the Lowport Centre in Linlithgow, 20 miles west of Edinburgh, and well situated for exploring the Lothians and Fife. Fifteen people attended the meeting and on Friday we all descended on the Royal Botanic Garden in Edinburgh, where we were given privileged access to the working glasshouses as well as permission to collect in the public areas of the Garden. The presence of the woodlouse *Styloniscus mauritiensis* was confirmed (first recorded at RBGE in 1986) and other glasshouse species such as *Lithobius lapidicola*, *Cylindroiulus salicivorus* and *Poratia digitata* were recorded (more details from Steve Gregory below).

A quick foray to the nearby Water of Leith picked up *Arcitalitrus dorrieni* (also discussed in further detail by Steve Gregory below). The landhopper was not found elsewhere during the meeting but it has obviously made it into the heart of the capital, which is a substantial jump in this species' east coast distribution. A more welcome sight along the Water of Leith was seeing a few isopod and myriapod species illustrated on public interpretation boards!

On Saturday morning, before everyone set off for the field, we held a practical session in the grounds of the Lowport Centre to discuss collecting methods. When we turn over a log or stone most of us look for centipedes, woodlice then millipedes in that order. Tony Barber introduced us to the "Guinness test" because although Lithobiomorph centipedes scuttle away very quickly the Geophilomorphs can take a few moments to appear, so it's worth waiting a short while before moving onto the next stone or log (about the time it takes to pour a pint of Guinness!). Steve Gregory, who has a knack for making unusual finds, emphasized the value of searching less predictable microhabitats, and Helen Read compiled notes from this session with a view to posting some advice on the website.

The remainder of the weekend followed the more typical pattern of small groups dispersing in car-loads to scattered locations. A popular destination was Dalkeith Country Park, a site for *Oritoniscus flavus*, and a flurry of records suggests a healthy population of this woodlouse is well established there. Over the course of the field meeting 21 different sites were visited and a wide range of habitats were surveyed, including shale bings, sand dunes, disused quarries and palace ruins. A wealth of weather conditions kept us company; some stinging hail showers tested the resolve, but there were also sunny spells and the weather was generally better than dreich.

A mix of presentations and the AGM were held in the evenings. Duncan Sivell gave an introductory talk to the Lothians, Gordon Corbet told us about myriapods on the Fife coast and Tony Barber looked back at the history of myriapodology. A milestone was reached at the AGM when Helen Read retired as secretary. As a mark of gratitude for many years of hard graft Helen was presented with some artwork of *Trachysphaera lobata*, a rare species that she has worked on.

Thank you to everyone who has submitted their species records so far. A fuller report will be produced in due course, when the outstanding records have been received.

Duncan Sivell

Some highlights from Royal Botanic Garden, Edinburgh

For me, one of the highlights of the BMIG April 2015 field meeting to Linlithgow, Edinburgh, was the opportunity to rummage through the glasshouses at the Royal Botanic Garden, Edinburgh (NT2475). Although many may consider that recording the fauna of a glasshouse is not 'proper' natural history, I find that it provides an interesting, and often challenging, contrast to surveying our familiar species in their familiar 'semi-natural' habitats.

Encouraged by Tony Barber, Charles Rawcliffe visited RBG Edinburgh in 1986 and added a woodlouse, *Styloniscus mauritiensis,* new to Britain. This was found hiding among peat inside flower pots containing *Lycopodium* club-mosses (*British Isopod Study Group Newsletter No. 22*). In the wild this species is known from the tropical islands of Mauritius and Hawaii. The following year he added a millipede to the British list, C*ylindroiulus salicivorus* (*British Myriapod Group Newsletter No.9*), a species endemic to alpine grasslands in northern Italy. This highlights the lure of recording species inside heated glasshouses, such as those of botanic gardens; you never quite know what you are going to find.

One of my objectives for the BMIG visit to RBG Edinburgh was to rediscover *Styloniscus mauritiensis*, which had not been seen since its original discovery. At barely 2.5 mm in length, this elusive beastie proved very difficult to track down. It was not until the last glasshouse of the day, the Montane Tropics, that it was found. With the assistance of Keith Lugg, several specimens were collected from among damp peat and debris, because without a male specimen the identification could not be confirmed. An excellent image of the live animal, taken by Keith, has been uploaded onto the BMIG website - see http://www.bmig.org.uk/gallery/86/107.

During the desperate searches for the elusive *S. mauritiensis* many other 'exotic' species were also encountered. This included a few specimens of C*ylindroiulus salicivorus*, which were found in several places. Also of note was a small cluster of the tiny flat-back millipede *Poratia digitata* lurking beneath a stone in a secluded corner of the Tropical Palm House (Keith's images at http://www.bmig.org.uk /gallery/47/75) and some specimens of the centipede *Lithobius lapidicola* seen scurrying away from beneath up-turned plant pots in the non-public 'Arid House'. In all a very successful and interesting day. Our thanks go to Duncan Sivell for arranging access.

Steve Gregory

50 years of the Biological Records Centre.

A special issue of the Biological Journal of the Linnean Society (Volume 115, Issue 3, July 2015) celebrates fifty years of the (British) Biological Records Centre, now at Wallingford with a series of papers reflecting on some of the collaborative achievements of biological recording across the UK. The paper also acknowledges the importance of such large spatial coverage and increasingly fine-scale recording for ecological research.

This special issue is available on-line from the Biological Journal of the Linnean Society website (http://onlinelibrary.wiley.com/doi/10.1111/bij.12575/abstract) and is open access for a period.

Our recording schemes operate in association with BRC who also support the publication of this newsletter.

Bioblitz in South Devon

This year`s MBA organized bioblitz in the South-West took place on 27th-28th September at North Sands, Salcombe.

Although, obviously, collecting large numbers of littoral/marine records these bioblitzes also collect records and organize public and school activities relating to terrestrial aspects of the locations. For more information about this and previous bioblitzes visit http:www.mba.ac.uk/bioblitz.

Crapedosoma rawlinsii in Cornwall and a further record of the centipede *Haplophilus souletinus* (*Stigmatogaster souletina*).

Following queries about records of the millipede *Craspedosoma rawlinsii* from Cornwall, near Falmouth, well away from its "normal" range, we were able to track these down, thanks to Colin French, through the Cornwall/Isles of Scilly database, ERICA (taken from the old CBRU card index) to old records from W.P.Cocks` *Contributions to the Fauna of Falmouth* published in the *Annual Reports of the Royal Cornwall Polytechnic Society*, copies of which are held by Plymouth Central Library.

1849 report (p. 85): *Craspedosoma Rawlinsii*, Leach. – Under stones, bark of decayed trees, &c.: not uncommon

1851 report (p.19): *Craspedosoma Rawlinsii*, Leach. – Under granite fragments, moss roots, &c., Budock bottom, College wood: - not uncommon

In ERICA the records are queried "Almost certainly wrongly identified. Both these records from Cocks almost certainly apply to *Nanogona polydesmoides*" and the records were listed under that species (although now separated out).

Anyone familiar with the two species will recognize that morphologically they are strikingly different in appearance, certainly when looking at adults. This leaves us with several possible explanations:

a. That Cocks actually saw *N. polydesmoides*, a species he does not list in his reports and identified it as *Craspedosoma*.

b. That *C. rawlinsii* did (does) occur in the area and was correctly recognized by him.

c. That we might have another chordeumatid, of which there are species in Europe including *Anthogona brittanica* (now known from South Devon where it was first thought to be an immature *C. rawlinsii*) and *Anamastigona pulchella* recorded from Northern Ireland. The latter is now recorded from England along with two further new chordeumatid species reported in the forthcoming BMIG 2015 Bulletin.

In an attempt to find the species in question during the 2015 Bioblitz at Tremough Campus in May 2015, Paul Gainey kindly met up with me and took me to both Budock Bottom and College Wood to see what we could find. Weather and season seemed to be against us and we found nothing that might match any of the options suggested above although several millipede species were recorded from Budock Bottom. A return visit is planned in due course. What was found in College Wood, however, was a further locality for that Falmouth area specialty, *Stigmatogaster souletina* (*Haplophilus souletinus*), making this the 7th site for it in Britain (see Newsletter 27) as well seeing *Lithobius pilicornis* in both sites (both species were also re-recorded from Tremough).

An opportunity was taken to visit a National Trust garden further west with exotic plants, Trengwainton, where the widespread *Stigmatogaster subterranea* (*Haplophilus subterraneus*) was found but not *S. souletina* and a search at another NT property, Godolphin also failed to find it although a visit a few days before to Trelissick, from where it had been previously recorded, had been successful.

Anyone visiting the Falmouth area is encouraged to look for further sites for *H. souletinus* - as well as any millipedes that might look like *C. rawlinsii*!

Tony Barber

Haplopodoiulus spathifer in Birmingham

Staying in the Leamington Spa area at the end of July, it seemed an opportunity to try to visit the Birmingham Botanical Gardens to look for exotic myriapods and woodlice, especially in their heated glasshouses since, as far as I know there were no records from there.

Equipped with permissions and a SatNav, on 24th July, in most unpleasant weather, we made our way into the city and found the gardens where we were made most welcome

and given the opportunity to search both in the houses and the garden areas (in the rain!).

The heated areas were remarkably clean & I was unable to find much, the heavily overcast weather making it more difficult to see animals. The only things I saw (apart from some cockroaches) were some *Porcellio scaber* (presumably from outside) in the Arid House.

The gardens themselves yielded not much else; collection was difficult with a layer of wet litter overlying dry soil. No centipedes were found, *P. scaber*, *Oniscus asellus* and *Philoscia muscorum* turned up in the alpine area & there were a few small millipedes in the wooded area. However, in an area with bamboo, some relatively large and active millipedes were found in the litter which I have identified as *Haplopodoiulus spathifer*. This species is known from the Pyrenees and was first found in Britain at the Royal Botanic Gardens, Kew (collected 1976) and from Bedgebury (1987) and Wakehurst Place (1990) both outstations of Kew. It has been reported as the commonest outdoor millipede at Kew but there are no records from the area around there even though it seems so well established and able to overwinter in the gardens. Until the present record the only "non-Kew" locations known were Trelissick Gardens (National Trust) in Cornwall where it was found in 2009 and the garden of the Natural History Museum (2008: see Newsletter 30, spring 2015).

It would be useful to make further collections at the Gardens (in better weather) - they are certainly worth visiting for the plants anyway and the staff were most helpful.

Tony Barber

Adding to the above note Tony Barber has let me know that *H. spathifer* has also been recorded along with *Cylindroiulus apenninorum* at the Ventnor Botanic Garden on the Isle of Wight. They were determined by Henrik Enghoff (Copenhagen). The record of *C. appenninorum* is the first one from the British Isles although immatures of what might have been this species have been found in Wales. More detailed information to follow.

More on north-eastern Landhoppers *Arcitalitrus dorrieni*

In the BMIG newsletter 25, autumn 2012 I reported on the discovery of the Landhopper *Arcitalitrus* in Sunderland on the cold north-eastern coast of England. At the time this was by far the most northerly record in eastern Britain (by about 350km!), though it does occur much further north on the west coast of Scotland which is bathed in the warm waters of the North Atlantic Drift.

This spring I was alerted to a second Landhopper sighting in Sunderland that had been posted on iSpot (http://www.ispotnature.org/). It was found in January by Andrew Fox under debris in a domestic garden and apparently there were hundreds of specimens sheltering from the winter snow within burrows excavated into the underlying soil. I looked at his images and it certainly looked to be correctly identified (i.e. it wasn't a freshwater shrimp!). However, given the location (well outside the usual south-western range for *A. dorrieni*) I asked if I could be posted a specimen (or three) for checking. At this point I was wondering (hoping!) if it was another closely related introduced species new to Britain. It appears that the location (NZ39-54-) is only about ½km from the 2012 sighting, suggesting that whatever it is, it's well established in the Hill View area of Sunderland. Then in April, at the BMIG field meeting held at Edinburgh, Duncan Sivell casually told that he'd found *A. dorrieni* at Water of Leith nearby (NT26-75-). Needless to say, I asked for a specimen! Duncan, clearly anticipating my question, thrust a tubed specimen in my direction.

Subsequently, I have had a very close look at all those specimens mentioned above. All seem to be the genuine *A. dorrieni*; as do those specimens I have examined from Sussex, Hampshire, Cardiff, Devon and Cornwall. Duncan's record from Edinburgh extends the range of this 'soft-southern' species another 100km further north in eastern Britain. However, just to add insult to injury, it turned out that my specimens of '*Arcitalitrus dorrieni*' (as I had provisionally identified them in the field) from just south of Edinburgh were a species of the semi-terrestrial amphipod *Orchestia*, possibly *O. gammarellus* (Pallas). These were collected from beneath drift wood and stones on grassland above saltmarsh at Aberlady Bay (NT46-80-), in just the sort of place where *A. dorrieni* can be found in Devon and Cornwall in the far south west.

Thus, the Landhopper *Arcitalitrus dorrieni* still remains our only truly terrestrial amphipod. Do look out for it anywhere in Britain's (or Ireland's) coastal areas (though I'd be amazed if it turns up in Aberdeen – now there's a challenge!). Coastal areas tend to be slightly more hospitable for cold sensitive species, such as *A. dorrieni*. However, do take care with identification. On several occasions (such as that cited above) semi-terrestrial *Orchestia* amphipods have caused confusion. In particular the darkly pigmented semi-terrestrial *O. cavimana* can occur well away from the coast, though always close to a water body. It has even been recorded from the Thames in Oxford, which apart from Derbyshire (I'm reliably told?), is as far away from the coast as it's possible to get. A paper detailing these observations is being prepared for the Bulletin.

Steve Gregory

Meetings

7th International Conference on Fossil Insects, Arthropods and Amber, 26th-29th April, 2016. National Museum of Scotland, Edinburgh. fossilinsects.net/node/56170.

The conference will mostly concentrate on fossil insects but is also a forum for academics working with other fossil invertebrates found in rock or amber.

Please send any contributions in the form of a short article or an interesting note to the editor by 30th April 2016 for inclusion in the newsletter.

Article reviews

Tuf, I.H. *et al.* (2015). Hay-bait traps are a useful tool for sampling of soil dwelling millipedes and centipedes. *Zookeys* **510**, 197-207.

This paper from the Czech Republic looks at a method for recording soil dwelling centipedes and millipedes without the need for collecting, transporting and sieving soil samples. They found that a similar level of sampling success was achieved by using traps baited with hay.

Wilbrandt, J. *et al.* (2015). A first integrative study of the identity and origins of the British Dwarf Pill Millipede populations, *Trachysphaera cf. lobata* (*Diplopoda*, *Glomerida*, *Glomeridae*). *Biodivers. Data J.* **3**, e5176.

Using genetic barcoding and scanning electron microscopy this study looks at understanding the intraspecific and interspecific variation of populations of *Trachysphaera* populations from South Wales and the Isle of Wight. Morphological characters are not always enough to accurately identify species with some morphospecies actually being genetically identical. The barcoding and morphological study found that these populations are *T. lobate*.

Shear, W.A. & Edgecombe, G.D. (2010). The geological record and phylogeny of the Myriapoda. *Arthropod Structure & Development* 39, 174-190.

This is an excellent review of the current fossil record of myriapods and a discussion on the issues regarding myriapod phylogeny and their relationship with other arthropod groups. As well as explaining the known fossils the paper tells us the localities from which these fossils were found and so where we are likely to find others. The oldest myriapod specimens in the world are known from Scotland and are around 400million years old. Others are known from the Carboniferous period of Scotland (~340 million years ago) and Coseley, England (~300 million years ago).

Greg Edgecombe (NHM, London) also held a free meeting at the Linnean Society in March, 2015 discussing the evolution of arthropods. For information on future Linnean Society events see: www.linnean.org/Meetings-and-Events.

Next issue – Spring 2016

The next issue of the newsletter will be available in Spring. As discussed in the editorial we are hoping to modernise the newsletter to be able to better bring you the news and information of the group. It will at least be more colourful.

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British Myriapod and Isopod Group
Juniper Hall, Dorking, Surrey
Thursday 31st March to Sunday 3rd April 2016

Booking Form

Please return to:

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Name(s)

Address **Postcode**

Telephone **Mobile**

Email

Please book me in for the following (PLEASE TICK RELEVANT BOXES):

- The ***shared room rate*** (**£142 for Thursday to Sunday / £95 for Friday to Sunday)** includes bed and breakfast, packed lunch and dinner.
- The ***single room rate*** **(£160)** includes bed and breakfast, packed lunch and dinner but is available Thursday to Sunday only and is subject to availability.

	Shared room	**Single Room**
Thursday 31st March to Sunday 3rd April		
Friday 1st April to Sunday 3rd April		Not available

Special dietary requirements – please tick one box				
Vegan	**Vegetarian + dairy**	**Vegetarian + fish**	**Vegetarian + dairy + fish**	**Other – please specify below**

Please enclose a deposit of £50 per person and tick here _____ if a receipt is required.
Cheques should be made payable to "British Myriapod & Isopod Group"

A ***dinner only option*** **(£17.50 per day**) is available for anyone living locally or planning to arrange their own accommodation. It includes starter, main course, dessert, cheese & biscuits and tea/coffee plus use of lecture room / laboratory. If you wish to take advantage of this option please indicate your dietary requirements above and indicate the days you require a meal below.

Thursday 31st March	**Friday 1st April**	**Saturday 2nd April**

I would be willing to give a talk/report/ etc in the evening **Topic:**