



Newsletter

No. 47, Autumn 2023



British Myriapod and Isopod Group – *discovering millipedes, centipedes, woodlice and other isopods in Britain and Ireland*

The British Myriapod and Isopod Group (BMIG) aims to improve awareness and knowledge of centipedes, millipedes and other Myriapoda, woodlice, waterlice and intertidal Isopoda and related species in Britain and Ireland.

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Cover photo: *Scutigera coleoptrata*, Lizard Peninsula, Cornwall, August 2023 (photo © Tylan Berry).

BMIG News

Centipedes – all change!

Don't worry, it's not the names of Centipedes this time! Instead, it is who to contact about Centipede recording. For more than 50 years Tony Barber has been our ever present, reliable, communicative and helpful go-to for all things Centipede. As from the BMIG AGM in April 2023, Tony has handed-over the organisation of the Centipede Recording Scheme to Steve Gregory. Tony will remain involved with the Scheme in an advisory role, but the primary point of contact is now Steve (contact details at end of this newsletter).

Tony's unique contributions with organising the Centipede Scheme since 1970, and with BMIG and its predecessors, will be acknowledged in the next BMIG Bulletin (Spring 2024).

... and Woodlice and Waterlice!

As a consequence of the changes to the Centipede Recording Scheme highlighted above a vacancy opened up at the Woodlouse and Waterlouse Recording Scheme, which had been organised by Steve Gregory since April 2000. At the BMIG AGM in April 2023 this role was transferred to the capable hands of Thomas Hughes (contact details at end of this newsletter).

BMIG Annual Field Meeting and AGM 2024

Snowdonia National Park and Llyn Peninsula, Thursday 4 April to Sunday 7 April 2024.

We will be based at Plas Tan y Bwlch near Maentwrog:

<https://snowdonia.gov.wales/visit/plas-tan-y-bwlch/>

This is ideally placed for coastal parts of north-western Wales and for the varied landscapes and habitats of Snowdonia National Park (Parc Cenedlaethol Eryri) itself.

Suitable accommodation has been difficult to find. Plas Tan y Bwlch is rather better than some venues we have used in the past, but BMIG has been able to negotiate a favourable rate. Depending on numbers it will be under £300 per person full board (e.g. single en-suite) for the whole weekend.

Booking details will be publicized on the BMIG website and via the usual social media in October. Early booking will be essential.

Paul Harding & Kevin Clements

BMIG Website Update

The BMIG website has a new look! In June 2023 the BMIG website was updated (I refrain from using the term 'upgraded') from Drupal 7 to Drupal 9, primarily in order to comply with current UKCEH security and IT procedures (it is UKCEH who host the BMIG website). Our website address is now simply <https://bmig.org.uk>. The 'www.' has been dropped, but it will work if included. The main issue following the update was the formatting of page layout, text and images. Basically I have been through every page (hopefully!) checking that it looks ok!

The home page was very messy with blocks of text seemingly dumped at random and a very odd selection of images displayed by the scrolling image viewer. It took several days, with help from Biren Rathod at UKCEH, to tidy up. In my opinion it is not as pleasing to look at as it was, but it works. Another problem (for example!) was that images were turned into super-sized full-page monsters and had to be reduced to a more sensible (and aesthetically

pleasing) size. Under Drupal 7 one could simply specify the number of pixels to define width and height, but in Drupal 9 it seems that one has to specify a percentage of the original image size. Since the original images vary considerably in size it was almost impossible to reduce them to a 'standard' size other than by tedious trial and error. In addition a lot of the headings in the text had been turned into extra-large 'monster' fonts and needed to be reformatted to something more aesthetically pleasing. Also I've noticed that newly added images in species accounts do not scroll with the others but sit alone, and that the tab listing related species, previously showing all species in the same family, now just shows the single species that one is viewing. These are issues that still need to be resolved.

The good news is that it is still possible for BMIG to edit and update existing pages and indeed create new ones. I've taken the opportunity to update the species accounts, primarily for woodlice and centipedes, but millipedes are work in progress. If anyone spots any additional issues with the website please do let me know.

Steve Gregory

Obituary – John Harper (1942-2022)

Born in Bermuda in April 1942, John spent his early years there before the family returned to the UK to settle in Shetland for a few years. After university, where he obtained a degree in botany, John became a teacher in Kenya, where he brought up his family; four children, and subsequently seven grandchildren and one great grandson. John passed away peacefully in December 2022 after a short illness.

Based in Abergavenny, South Wales, John was a talented all-round natural historian, notably of spiders, molluscs, myriapods and isopods. For a number of years John attended BMIG's annual field

meetings, including Ireland in 2001 and Galicia, north-west Spain, in 2004 (where I shared a room with him) and he was also co-opted onto the BMIG committee for a number of years. In the last decade his involvement with BMIG more or less ceased, though presumably he remained active with other invertebrate taxa.

With a keen eye for detail, John had a knack of finding unexpected species that could easily be overlooked as common ones. For example, in a single day in 2001 John discovered four species new to Wales from two sites: the woodlouse *Haplophthalmus montivagus*, the millipede *Propolydesmus testaceus* and the centipedes *Lithobius piceus* and *Lithobius muticus* (Harper, 2002, *BMIG Bulletin* 18; Harper, 2004, *BMIG Bulletin* 20). At the time of their discovery all showed very restricted distribution patterns in Britain and were perhaps unexpected in Wales. John also had a knack for finding small and elusive species. This includes the joint discovery, with Paul Richards, of the pill-millipede *Adenomeris gibbosa* new to the UK during the 2004 BMIG field meeting in Buckinghamshire (Harper & Richards, 2006, *BMIG Bulletin* 21) and a second pill-millipede, *Trachysphaera lobata*, new to Wales, then only known from the Isle of Wight (Harper, 2010, *BMIG Bulletin* 24).

In the early 2000s John volunteered to help set up the BMIG collection of British and Irish species, which is housed at the BENHS headquarters at Dinton Pastures, Reading (Harper, 2007, *BMIG Bulletin* 22). This impressive collection, comprising about 600 tubes, includes many of his own specimens collected from Wales, but also material from other people collected more widely. This collection has proved invaluable, both for identification workshops held at Dinton Pastures and also for research purposes, such as highlighting that *Philoscia affinis*, a woodlouse first discovered in the UK in 2017, had been present in Wales since at least 2004.

John contributed much to our understanding of the biogeography of British isopods and myriapods. He is fondly remembered by his daughter Jennie to whom I am very grateful for providing additional information.

Steve Gregory

Obituary – Des Kime (1932 – 2023)

It is with deep sadness that we record the death of Desmond Kime on 11th September 2023 at the age of 91. A graduate of Durham University, Des taught biology at the Royal Grammar School Guildford from 1956 to 1974 and then at the European School in Brussels, until 1997. In due course he and his wife Kathleen retired fully to their house at Nontron in the Dordogne.

Whilst at Guildford he first became interested in millipedes and was at the foundation meeting of the then British Myriapod Group in North Devon. Des was also at the 1972 International Myriapod Congress in Manchester and subsequently attended several other international myriapod congresses. After his move to Brussels his research activities with millipedes blossomed. He published variously about them and was heavily involved with the Atlas of European Millipedes.

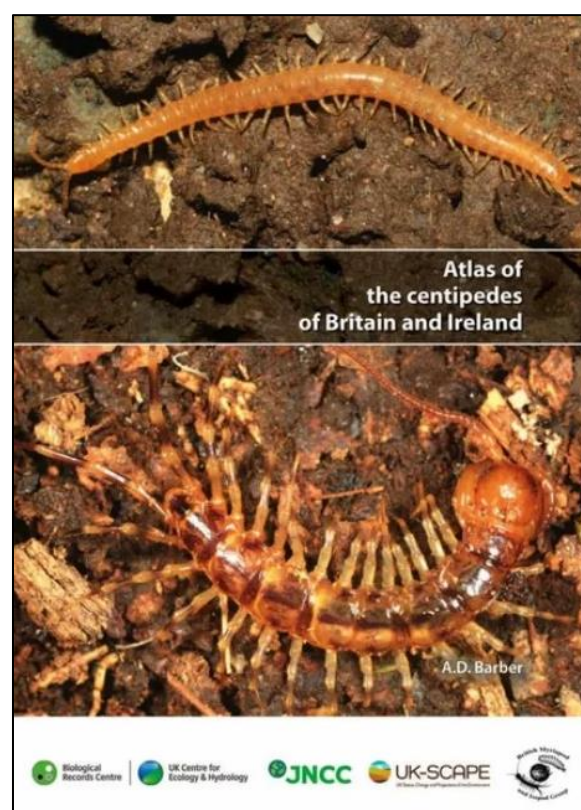
A tribute to him by Paul Harding on his 80th birthday with a photograph and list of publications was published in the *BMIG Bulletin* Volume 26: 2-5 (2012).

A gentleman, a scholar and an inspirational teacher, he will be much missed.

Tony Barber

Atlas of the Centipedes of Britain and Ireland

I doubt if it's slipped anyone's attention, but in case you've been on Mars, December 2022 saw the publication of Tony Barber's eagerly anticipated *Atlas of the Centipedes of Britain and Ireland*. This land-mark publication is the culmination of over 50 years of centipede recording, with over 53,000 records submitted to the Centipede Recording Scheme. Set up in 1970, the scheme included the collection of habitat data, and Tony has been at the helm from the start.



The Atlas covers all 55 species known from Britain, Ireland, Isle of Man and Channel Islands, with species distribution maps plotted at 10km square resolution and differentiated into four date classes. However, it is much more than just dots on maps. There is a detailed account for each species which includes occurrence in Britain, Ireland and more widely across Europe (and beyond) and colour photographs for most species. Where species have a sufficient number of records there is a detailed

analysis of the associated data (presented as tables), including regional distribution, principle habitat preferences, ecotone, phenology, altitude data, collecting method, etc. In total the Atlas comprises 390 pages, including 136 colour photographs, 138 colour illustrations, 61 colour distribution maps and 94 colour tables. The most commonly recorded species is the large, conspicuous and ubiquitous *Lithobius forficatus* with over 10,000 records from more than 2,200 hectads. At the other extreme several centipedes have only been observed a few times, such as 'Scandinavian' *Geophilus proximus* recorded from Unst, Shetland in 1974 and rediscovered there in 2021.

If you have not done so already, I thoroughly recommend purchasing the Centipede Atlas, either directly from the Field Studies Council website or booksellers elsewhere.

<https://www.field-studies-council.org/>

ISBN 9781906698812; Price £35.

Steve Gregory

Animals under Logs and Stones, 2nd edition

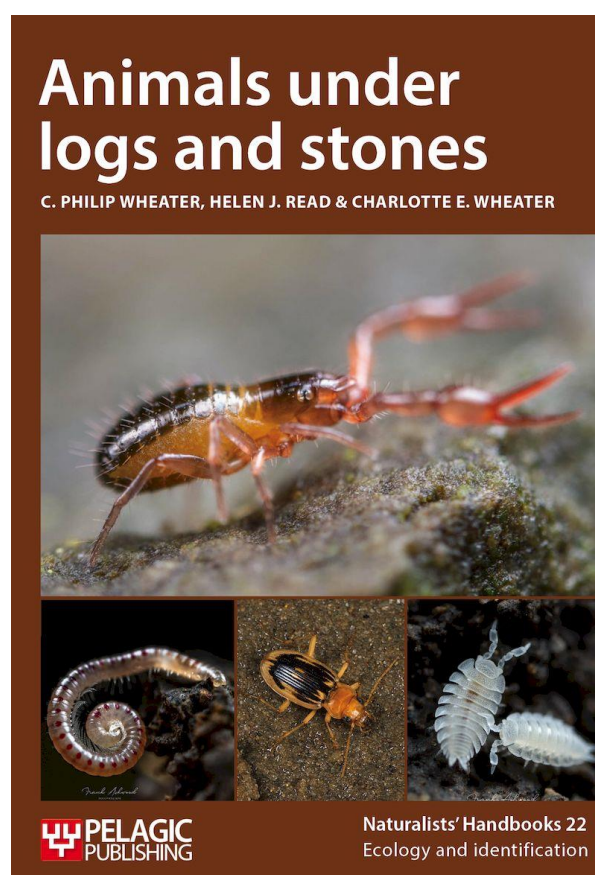
Animals Under Logs and Stones by C. Philip Wheeler, Helen J. Read & Charlotte E. Wheeler.

Naturalist's Handbooks 22. Pelagic Publishing, 2023. ISBN: 9781784274177. Price £30.

<https://pelagicpublishing.com/collections/new-books/products/animals-under-logs-and-stones-e2>

One of the authors, our own Helen Read, described this forthcoming book in the Spring 2023 *BMIG Newsletter* (No 46, p4). The book was published in July. It is a greatly expanded 2nd edition of the same title published in 1996.

Every BMIG member should have this book on their shelves, or even in the field, because it covers so many of the other taxonomic groups that we encounter when looking for myriapods and isopods. Every aspect of observing, collecting and recording the diverse fauna that can be found under logs, stones and similar micro habitats appears to have been covered. The authors have thought of everything, with apposite in-text references and a valuable bibliography, sampling techniques, guidance on equipment, health and safety and much more. There is something in this book to spark the interest of every enquiring naturalist.



Reviewers have commented on various aspects of the book:

"Most striking are the new illustrations, photographs, links to the underpinning research and updated keys making this an essential resource for field courses and projects." Prof. Mark Langan, Manchester Metropolitan University.

“Invertebrate systematics is one of the most challenging subjects to teach, due to the wide range of specialist keys that are required to encompass a sufficient number of taxa. *Animals Under Logs and Stones* solves this problem by bringing 25 different animal keys (22 of which are invertebrate keys) in one book.” Dr Jaime Martin, Nottingham Trent University.

“The identification keys that form the bulk of this guide will enable anybody – whether a novice or experienced ecologist – to identify animals ranging from tiny mites to small mammals. This comprehensive guide will enable prospective researchers to embark on much-needed field studies that will help to fill the many existing gaps in our knowledge.” Dr Stephen Tilling, formerly of Field Studies Council.

Paul Harding

Records submitted via iRecord and iNaturalist

Throughout 2023 records for centipedes, millipedes, woodlice, waterlice, marine isopods and landhoppers continue to trickle into both iRecord (iRec) and iNaturalist (iNat): typically just a few centipedes or millipedes and several isopods (woodlice, waterlice and marine species) each day, but they add up. I check both sites regularly and where possible verify records for inclusion into the respective BMIG recording schemes, assisted by Warren Maguire (notably for marine isopods) and Thomas Hughes (woodlice). Numbers of records submitted so far during 2023 and the number subsequently verified are indicated in the tables below. Note that woodlice, waterlice and marine isopods not easily differentiated within iRec or iNat and are lumped together as ‘isopods’.

With iRec it is encouraging that between 85% to 89% of records submitted have been verified and

accepted by the recording schemes. These are records either supported by clear images of the specimen or records submitted by reliable recorders well known to BMIG. Those not verified tend to be records submitted by ‘unknown’ people without a supporting image or of species (e.g. *Polydesmus* sp. or *Lithobius* sp.) where microscopic examination is needed for species identification.

iRec 2023	Submitted	Verified	%
Centipedes	405	347	86
Millipedes	656	556	85
Isopods	1587	1409	89
Landhopper	22	19	86

In the case of iNat all submitted observations are supported by images. However, these are often very poor, often a complete blur and often totally inadequate for species identification. Thus, for isopods and landhoppers, which are more easily identified from sub-standard images, a similar percentage of records (88% and 90% respectively) are verified for the recording schemes. In the case of centipedes and millipedes, where there are several superficially similar looking ‘confusion’ species, just over a third (34% and 35% respectively) have been verified. These verified records are, not surprisingly, dominated by a few species that are easy to identify from an image and this is not necessarily the most common species!

iNat 2023	Submitted	Verified	%
Centipedes	1142	386	34
Millipedes	1634	572	35
Isopods	3411	2998	88
Landhopper	29	26	90

For example, in the case of *Cryptops* centipedes 75% (15) of records for the uncommon *Cryptops anomalans* have been verified due to the diagnostic X-suture on tergite 1 that is readily imaged, even if unintentionally! In stark contrast just 3% (5 of the 163 submitted!) of records for the common *C. hortensis* have been verified. All are where

recorders have deliberately imaged the diagnostic pre-femoral groove on last leg. And in the case of two 'rare', but highly distinctive, centipedes all records (100%) have been verified for *Henia vesuviana* (32 records) and *Scutigera coleoptrata* (6 records).

Two of the most notable records submitted via iNat, an unknown *Styloniscus* from an aviary and *Philoscia affinis* from Birmingham city, are highlighted below.

Steve Gregory

An unknown *Styloniscus* from Chester Zoo

Back in May an image of a small dark-purplish woodlouse collected inside a tropical aviary at Chester Zoo was posted on iNaturalist by Sean Hartnett (aka 'apricaria'). The image caught my eye. Was it a Styloniscid or could it be the tiny Philosciid, *Setaphora patiencei*, a woodlouse described new to science from Kew in 1908 and not seen since? Upon our request Sean kindly posted additional images of the antennae confirming a Styloniscid, and it looked to be a male! Sean's images can be seen at <https://www.inaturalist.org/observations/161979514>.

Sean kindly sent the specimen to me for examination. It was just 1.9 mm long! I finally took up the challenge to dissect the specimen and, perhaps to be expected, it is not one of the three species previously recorded from the UK. My images of the specimen can be seen at <https://www.inaturalist.org/observations/176089396>. I sent some images to Thomas Hughes who, following a bit of research, noted some similarities in the male pleopods to *Styloniscus otakensis*, a species from New Zealand. However, it seems that *Styloniscus* taxonomy is a bit of a mess with lots of unconfirmed species and some apparently

morphologically diverse. Thus, it may not be possible to reliably identify this specimen.

Steve Gregory

Philoscia affinis in Birmingham city!

In August an image of a strikingly patterned '*Philoscia*' found in Birmingham city was posted on iNaturalist by user 'yatton'; see <https://www.inaturalist.org/observations/179812167>. This was promptly identified by Franck Noël as the *trifasciata* variety of *Philoscia affinis*; apparently an uncommon form. Thus, I made some enquiries about its 'city-centre' habitat. Apparently the specimen was collected from a large raised planting bed (with ornamental flowers and shrubs) outside the Crowne Plaza Hotel and some additional images of the 'habitat' were subsequently added by 'yatton'. In Britain *P. affinis* has a distinctly western bias and a strong preference for rural semi-natural habitats. Birmingham lies in the English Midlands and this is clearly a highly synanthropic urban location. So the eternal question; how did it get there? The obvious suggestion is via the horticultural trade along with the flowers and shrubs that have been planted there. To support this view *P. affinis* has been recorded recently from two garden centres in south-east Scotland and north-east England (see **Garden Centre Woodlice and Millipedes** below), so it is possible that the Birmingham specimen may have been inadvertently introduced there. Thus, it seems that *P. affinis* could be found anywhere in Britain and Ireland! Do look out for it.

Steve Gregory

Lamyctes africanus in Essex

On the 29th April, during a passive search for non-native invertebrates at a garden centre in north Essex, several *Lamyctes* specimens were collected under a Lavender pot imported from Italy. These animals showed potential signs of being the elusive non-native, *L. africanus*, with the pale single ocelli surrounded by a dark patch, a characteristic otherwise referred to as the 'raccoon mask' (Enghoff et al., 2013). The antennae also comprised 28 articles, slightly more than the common and widespread species, *L. emarginatus*, which typically has around 25. Once under the microscope I could also see another telltale sign of *L. africanus*, the 2+2 configuration of the forcipular teeth, which is 3+3 in *L. emarginatus*.

Excited by the discovery I shared my findings to the society's Facebook page for opinions. Steve Gregory readily agreed that the *Lamyctes* was very likely to be *L. africanus*, but insisted that the presence of a triangular projection on the 12th leg was needed to fully validate the species record. A quick examination of the leg confirmed the presence of this character and a happy confirmation from Steve.



Lamyctes africanus (photo by Thomas Hughes).

L. africanus was first reported in the Britain Isles from the Royal Botanic Garden, Edinburgh by Charles Rawcliffe in 1986 (Barber, 1992). It wasn't seen again until very recently when a colony was found by Nicola Garnham indoors in a heated propagator at her home in Lancashire (Gregory & Garnham, 2022). Therefore, this Essex observation

is the third confirmed locality for *L. africanus* for the British Isles. It is very likely, due to its route of introduction through the horticultural industry, that *L. africanus* is much more widely distributed, but is severely under-recorded. To contribute additional sightings be sure to keep an eye out at your local Garden Centres and nurseries, especially ones with plants imported from the Mediterranean region.

References

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- Gregory S. J. & Garnham, N. (2022). Re-discovery of *Lamyctes africanus* (Porath, 1871) in Britain (Chilopoda: Lithobiomorpha: Henicopidae). *Bulletin of the British Myriapod & Isopod Group* 34. pp. 7-13.

Thomas Hughes

The House Centipede, *Scutigera coleoptrata*, found naturalised at the Lizard Peninsula, Cornwall

Scutigera coleoptrata is a large, distinctive centipede (approx. 30mm in body length) originating from the warmer climes of the Mediterranean, though it is now naturalised across much of Europe, Asia and North America, being spread by human activity. It is a thermophilic species and is often found in synanthropic habitats, mainly being observed indoors towards the northern limits of its distribution where it is spotted running along internal walls. Whilst being known to be widely established in the Channel Islands since the mid-19th century, its appearance in mainland Britain has always been irregular with sightings

being linked to the importations of goods. The species was first recorded on the mainland in Aberdeenshire in 1883, where the sighting was thought to be connected to the importation of rags from Southern Europe, and with only six further observations within the next 100 years, its appearance in the past was very sporadic. Recent data from the updated distribution atlas (2022) shows that the species has now been recorded 38 times in mainland Britain with 25 of these observations being between 2001 and 2022. Whilst it is difficult to determine whether the swift influx of sightings of late is due to climate change or technological advances in ecological recording and information sharing, it would certainly appear that the species is on the move and increasing its range, and it would only be a matter of time until it is recorded as naturalised at a location in mainland Britain.



Scutigera coleoptrata (photo by Tylan Berry).

Late afternoon 8th August 2023, Cerin Poland and I visited the cliffs near Kynance Cove to spend a bit of time looking at the rare clifftop assemblage of spiders that are present at the maritime grassland slopes. The site lies slightly to the northwest of Lizard Point which is the most southerly point in mainland Britain and, as such, it's south facing cliffs have a distinctively warm and Mediterranean character to them. The area is renowned for hosting an array of very rare invertebrate and plants species, many of which are only found at this location in the UK. As the majority of the associated spider species are found under stones here, we were

lazily turning rocks enjoying the warmth of the afternoon sun when, suddenly, I heard an expletive as Cerin proclaimed that there was a very odd creature under the stone he had turned!



Scutigera coleoptrata habitat (photo by Tylan Berry).

I craned over and caught a slight glimpse of some very spindly legs rushing to the far side of the rock. As soon as we placed the stone in a sorting tray, a large and distinctive (and very fast) centipede shot into view – “House Centipede!!” We were both a little stunned! Whilst we were discussing what a bizarre find this was, and questioning whether this is just a very odd singular importee, another specimen decided to dash right past the sorting tray. It felt rather odd to discover the the species at such a well-studied area of Cornwall, though locating two specimens meant that there were likely more nearby. Indeed, a further visit on 22nd August 2023 by Paul Gainey found two more specimens at the site; one under a stone and one under heather abutting a large boulder.



Scutigera coleoptrata habitat (photo by Tylan Berry).

It would seem that there is an established population of *S. coleoptrata* at Kynance Cove and, given the area's mild climate, it is likely that the species will be able to survive here. It is certainly an interesting and unexpected sighting as observations of this species have always been near to human habitation. Whilst there are one or two small buildings within a 500m radius of the clifftop site, the nearest built-up area is the Lizard village, nearly 2km away – this raises many questions. How did it get to the cliffs? How long has it been present there? Maybe more pertinently, can it survive and where will it move to next?

Tylan Berry & Cerin Poland

***Cryptops anomalans* new to Cumbria**

Over the last four years I have moved house twice, from Gloucestershire, where I was (still am) county myriapod and isopod recorder, to Hampshire and then up to Wigton in Cumbria. In each of my gardens I have come across *Cryptops anomalans*, always well-established and anything up to half a dozen at a time. Also having worked in the landscaping/gardening industry for many years, this gave me the opportunity of visiting many a synanthropic site not generally accessible to the public. Every now and then this species turned up, including a garden within not-too-distant sight of Ted Eason's old home.

Over the last year I have had building works going on at my house which has necessitated much excavation including in my very patient neighbour's garden for drainage works. A good number of times *C. anomalans* could be seen being disturbed and scuttling around on the soil surface in both gardens. Checking Tony Barber's new atlas and corresponding with him directly confirmed this to be the most northerly record for this species in the UK, being some 120 miles northwest of the next nearest record near Sheffield. The previous owner

of the house was a keen gardener and so it is possible that this species was introduced with her planting schemes.

David Scott-Langley

Garden Centre Woodlice and Millipedes

As a result of foot pain (not helped by clambering over coastal rocks in wellies), my wildliffing activities have been somewhat curtailed for much of 2023. But in June 2023, I decided that investigating the woodlice in my local garden centres might be a suitable (and certainly less strenuous) outlet for my passion for all things isopod-related. Garden centres are well known for harbouring unusual and even exotic invertebrate species that have stowed away in potted plants, so I was hopeful that my searches might turn up something interesting. Between June and September 2023 I visited garden centres that I happened to find myself near to in the Lothians in Scotland, in Northumberland and Tyneside in north-east England, and in Tyrone and Fermanagh in Northern Ireland. Informal searches were made beneath potted plants in the outdoor sections of garden centres, and a range of interesting woodlouse species as well as some unusual millipedes were found (see below). Most are new for their vice-counties and in some cases appear to be new records for Scotland and Ireland. Middle-sized (usually plastic) pots set on the ground or, especially, on damp (but not sodden) absorbant mesh on trestles were most productive, especially in areas with some build up of detritous, moss and soil, whilst pots set on hard plastic, metal, dry wood, gravel or wood chips rarely had anything of interest beneath them. Woodlice and millipedes were found beneath a range of plants, with no specific associations noted, though *Ilex crenata* (Japanese Holly) was particularly productive (especially for *Armadillidium nasatum* and *Oxidus gracilis*), whilst

acidic plants such as conifers rarely produced anything of interest.

Woodlice

In addition to *Trichoniscus pusillus* (agg.), *Oniscus asellus*, *Philoscia muscorum* and *Porcellio scaber*, the following species were found:

Armadillidium arcangelii

The geographical range of this Mediterranean species is currently expanding (<https://bmig.org.uk/species/armadillidium-arcangelii>), and there are a number of records from garden centres in southern England. A single female individual was found on my first garden centre search, on the outskirts of Edinburgh (Midlothian, VC83) in June, representing the first Scottish record of the species. A further two (male and female) were found in Enniskillen (Fermanagh, H33) in July, these being the first records of the species from Ireland.



Armadillidium arcangelii (photo by Warren Maguire).

Armadillidium nasatum

A characteristically striped individual of this species was the first woodlouse spotted (within a couple of minutes!) on my first garden centre search, in

Edinburgh (Midlothian, VC83) in June. This species has turned out to be common, being found in every garden centre I've checked and usually being the most frequent woodlouse seen. In addition to garden centres around Edinburgh, it was found in July at Alnwick (North Northumberland, VC68), Berwick-upon-Tweed (North Northumberland, VC68), Omagh (Tyrone, H36), Enniskillen, Livingston (West Lothian, VC84), Newcastle Upon Tyne (South Northumberland, VC67) and Ponteland (South Northumberland, VC67), and at Dunbar (East Lothian, VC82) in August. All of these records are well outside of the known wild range of *A. nasatum*, and are probably all vice-county firsts.



Armadillidium nasatum (photo by Warren Maguire).

Armadillidium vulgare

Although this species is unremarkable in north-east England and the Lothians, it has a strongly coastal distribution in both areas. Even so, a single individual was recorded 4 miles inland at Edinburgh in June, and hundreds were present 10 miles inland at Ponteland in July. More notably, a single individual was also found in Omagh in July, possibly a county first for the species.

Philoscia affinis

Single female individuals, both consistent in colour and patternation with *Philoscia affinis*, were found at Ponteland in July and Edinburgh in September,

both well outside of the (poorly) known range of this 'new' species for Britain and Ireland (<https://bmig.org.uk/species/philoscia-affinis>), making them vice-county firsts.

Trachelipus rathkii

A single small male individual of this species was found in Edinburgh in September. This is the first record of the species in Scotland.

Millipedes

Although millipedes were not the primary target of my garden centre searches, the following species were recorded, in addition to *Nanogona polydesmoides* and *Polydesmus angustus*:

Cylindroiulus londinensis

A single individual of this species was found at Enniskillen in July. Although it has been recorded elsewhere in Northern Ireland, this appears to be the first record from Fermanagh.



Ommatoiulus moreleti (photo by Warren Maguire).

Ommatoiulus moreleti

A single individual of *O. moreleti* was collected from under the same pot as *Cylindroiulus londinensis* in Enniskillen in July, and is the first known record of the species, which has only been recorded occasionally in Britain, from Ireland.

<https://bmig.org.uk/species/ommatoiulus-moreleti>

Oxidus gracilis

This species, the 'greenhouse millipede' was found, sometimes in large numbers, in most garden centres visited. It was recorded in Edinburgh in June, in Alnwick, Omagh, Enniskillen, Livingston, Newcastle and Ponteland in July, and in Dunbar in August. In most cases these are likely to be vice-county firsts.



Oxidus gracilis (photo by Warren Maguire).

Summary

It is highly likely that most of the species recorded in garden centres were introduced with potted plants from elsewhere in Britain and Ireland or from abroad and that garden centres and the horticultural trade more generally play a significant role in the introduction of woodlouse and millipede species beyond their usual ranges. Some of these are unlikely to survive the colder months in (northern) Britain and Ireland, though two species (*Armadillidium nasatum*, including several

pregnant females, and *Oxidus gracilis*) seem to be thriving outside in garden centres, albeit during a warm summer. No doubt there is much more to discover, so if you happen to find yourself at your local garden centre, why not have a look beneath some pots and see what's hiding there. All isopod and myriapod records welcome to our recording schemes of course!

Warren Maguire

BMIG Field Meeting, April 2023

April this year saw over 25 members attend a most enjoyable and successful Field Meeting in Somerset, based at the Bridgwater and Taunton College campus in Cannington.



Enantiulus armatus (photo by Duncan Sivell).

We were able to survey a wide variety of sites, including outcrops of limestone in the Mendip Hills and sandstone in the Quantock Hills, broadleaved woodlands across the Somerset Levels, historic gardens, and coastal habitats in Bridgwater Bay.

Several notable species were recorded, including:

- Centipede: *Lithobius lapidicola*
- Millipedes: *Enantiulus armatus*, *Oxidus gracilis* and *Haplopodoiulus sphatifer*
- Marine isopods: *Lekanesphaera levii* and *Jaera prae-hirsuta*
- Woodlice: *Armadillidium album*, *Miktoniscus patiencei* and *Styloniscus mauritiensis*

Thank you to those who have already submitted records, but to those who are still going through their specimens, please submit your records to the appropriate scheme recorder or enter them on iRecord (tagged as Field Meeting 2023) and notify Paul Lee so that he can download them.



Lekanesphaera levii (photo by Warren Maguire).

In April 2024, we shall be visiting North Wales, staying at Plas Tan y Bwlch in Eryri National Park (Snowdonia). Located in the Dwyryd valley, this venue is ideally placed to explore the national park, with its many rocky outcrops, grasslands and woodlands, as well as the Llyn Peninsula and the North and West Wales coasts.

Kevin Clements

2023 BMIG Field Meeting Report

(Matt Vosper)

I arrived at my first BMIG Field Meeting about a year late, my attempt at making it to Preston Montford in 2022 having been miserably snuffed out by Covid. No such trouble this time – in fact I was the first to arrive at Taunton and Bridgewater College. It was a warm and bright day, perfect for swishing a net through the long grass on the campus, and Spring was obviously more advanced than in my native Nottingham. I found my room, and before too long noticed someone outside my window, down below, bashing a conifer with a big stick. That was a good sign.

Over the next while more people trickled onto the site from all over the country, some with names I recognised from online interaction, most not so. Some swishing their nets, or peering under logs, most just looking for their rooms, but it was quickly apparent that I was in friendly company.

I'd first become interested in myriapods in 2020 as I searched for a manageable group of creatures I could still find in the cold months of that first covid winter. I was intrigued by a swarm of bright *Blaniulus guttulatus* I found invading a damaged potato on our vegetable patch, and the masses of self-knotting *Haplophilus subterraneus* I kept digging up that Autumn. So I got myself a copy of Tony Barber's AIDGAP to centipedes and the rest was history. By the time of this year's field weekend I'd recorded 18 species of myriapod and the big 5 woodlice all on my usual haunt of iNaturalist. But I knew I needed a leg up to find much more – where to look and how to examine those tricky small species. I especially wanted to see *Lithobius variegatus*, and any *Cryptops* sp. (which had all so far evaded me).

After the first night's whistlestop guide to the sites we could visit, we made our plans for the first morning. I joined those heading with Warren to the coastal saltmarshes to look for intertidal isopods, which were a complete unknown to me.

Lekanasphaera rugicauda was everywhere, but the greatest excitement was the huge numbers of *Armadillidium album* on the wood at the top of the beach: beautiful things. In the same area we came across a pile of straw that was begging to be investigated and yielded *Brachyiulus*, and *Porcellionoides cingendus* amongst other things, and a stone wall teeming with *Polyxenus lagurus*. The afternoon was spent productively in the woods in the pouring rain. Jumping bristletails complemented the more typical BMIG fare of *Geophilus truncorum* and *Brachydesmus superus* – and yes, my first, stunning, *Lithobius variegatus*.



Armadillidium album (photo by Warren Maguire).

The next day's outings followed a similar pattern – coast followed by woods. Amongst those seeking myriapods and isopods were people with much wider interests too – finds of beetles, flatworms, bristletails, fungi, spiders and snails were all observed with plenty of excitement. A snail I photographed on the saltmarsh was only recently identified as a range expansion for *Assimineia grayana*. By the end of the weekend I'd seen a further 8 species of myriapods and a further 10 species of isopods, in addition to a host of other creatures.

But the weekend wasn't just about the fieldwork and finding new species – there was plenty of opportunity for wide ranging conversations throughout the day, in the field, in the car, over meals, in the pub... and talks in the evening including Tony Barber launching the centipede atlas (and incidentally explaining why I'd never seen L.

variegatus in Nottingham!), and a trip to the ice age to understand why a newly discovered French woodlouse only lives on a certain mountain!

Before we left there was just a little time for Dawid to kindly show me the best log on the campus for Pauropods – and we found one! My only disappointment from the weekend was not finding that first *Cryptops*. But the real test is what comes next... A fortnight later was the City Nature Challenge: poking about a local nature reserve I found not one but two *Cryptops hortensis*, then went home and found another in my own garden! I've added 5 new species since that weekend, and the stones and rotting logs are only just starting to reemerge from their green summer shrouds...

Thanks to all who made the weekend both enjoyable and productive!

Matt Vosper

2023 BMIG Field Meeting Report (Dawid Martyniuk)

During April, I also attended the Soil Global Soil Biodiversity Conference in Ireland, which was very expensive for me, so I'm very grateful for BMIG for offering me another bursary, and Helen Read for giving me a lift to the Field meeting.

Upon arrival, I was very pleased with the facilities at Taunton and Bridgewater College. I got a nice student room with lots of space which was certainly an upgrade from the tiny, shared room I had at FSC Preston Montford. The food was much better too, with a lovely choice of dinners, and great lunches too. The only downside was the small meeting room and a lack of microscopes, but fortunately my camera was good enough to photograph the diagnostic features of most invertebrates.

While waiting for the introductory meeting, I wasted no time and went looking around the college

for areas where I could find some myriapods. I found a rotting log that I took apart to reveal many *Pauropus lanceolatus* pauropods, as well as some *Ophiodesmus albonanus* polydesmids under some rocks, and took them all back to my room to photograph. After the introduction, Warren Maguire gave an interesting talk on marine isopods, I was surprised by the forms and diversity of marine isopods, as well as their different lifestyles and habitats. It inspired me to go looking for coastal invertebrates, though I decided it would be better to focus on inland invertebrates during the field meeting since I know more about them. I live in a coastal town, so I'll go looking for marine isopods when I get home.

The next day, I visited the graveyard at Saint Mary's Church as I've not been recording at graveyards before. I was quite surprised at the abundance of myriapods under the leaf litter; a few centipedes, pauropods, and lots of millipede species. While identifying the millipedes using my hand lens, I noticed that one small, common-looking Julid had a ventral scale along with a pointed telson; I knew it was an interesting species that I've never seen before. I later identified it as the rare *Enantiulus armatus* and submitted my photographs to its description on the BMIG website.

Later that day, we drove to the Mendip Hills in the Cheddar Gorge complex, which was a very interesting habitat, with grassy hills and a rocky valley that had many rocks to easily flip and find invertebrates. Under one such rock, I found an immature proturan which was even smaller than a pauropod, and I managed to take a photograph of it became my first successful photograph of a proturan. There were a few common centipedes and millipedes, but I was disappointed to find only one pauropod (*Decapauropus gracilis*, a very common species), considering I found some interesting species on a family holiday to Cheddar Gorge in May 2022.

On the final day, we went to Great Breachwood, which consisted of mixed woodland with lots of leaf

litter. Many different centipedes were present in the litter and under logs, especially Geophilomorphs. Pseudoscorpions and harvestmen were also abundant, although there seemed to be a lack of Pauropods and very few millipedes. Only common species were found in this woodland, which was a bit disappointing considering the type and size of the habitat.



Pauropus lanceolatus (photo by Dawid Martyniuk).

The last place we visited was the Mendip Hills again, but this time we explored a grassy slope dotted with rocks. I was pleased to find many of my organisms of interest, such as pseudoscorpions, diplurans, symphylans, and especially pauropods. One of the pauropods found was *Decapauropus distinctus*, which I rarely come across. A species that was new to me was a dark Lithobiomorph centipede we found under some moss; upon examining a photograph, I identified it as *Lithobius calcaratus*, and handed over a specimen to the Darwin Tree of Life Project for genetic analysis. I also submitted a pseudoscorpion and some centipedes that I identified from photographs, as well as half an unfortunate symphylan I had to cut in half as the second tergite needed to be slide mounted for identification.

To end the field meeting, Tom Hughes gave a very impressive talk on his research in pill woodlice, his illustrated maps on how they spread from the Mediterranean and speciated was fascinating. Many years of work were put into his research, and I hope

that one day I will also be able to present such a project.

I'm very happy I could attend the field meeting; it was a great opportunity to record in new locations together with people who are just as keen on invertebrates as I am. Different people also specialize on different invertebrate groups, so it was nice to exchange knowledge, learn a bit more about other taxa, and get others interested in pauropods. I will certainly be saving up for the next BMIG Field Meeting, it has been inspirational, and always reignites my motivation to study these wonderful animals.

Dawid Martyniuk

The Rise of AI and Implications

A recent preprint of a scientific paper about millipedes was discovered to have been written by AI. Not only was the article completely fake but the references quoted in it were also completely made up. One of the more alarming issues was that the fake references were attributed to real people who have written articles about millipedes and potentially sound quite legitimate. The paper was rejected and a number of different organisations notified but sometime later it was resubmitted, although one of the original authors had been removed. Again, it was completely fake. There is an organisation called Retraction Watch to which incidents like this should be reported and more information about this particular incident can be found here:

<https://retractionwatch.com/2023/09/01/withdrawn-ai-written-preprint-on-millipedes-resurfaces-causing-alarm/>

Helen Read

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