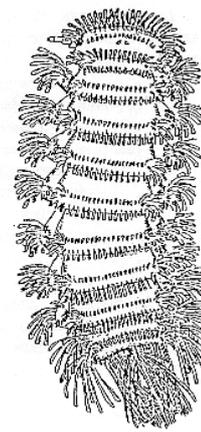




British Myriapod and Isopod Group



Spring 2009

Newsletter number 18

Editor: Paul Lee

BMIG business

You may have noticed that since late last summer the BMIG website has not been functional. Orange pulled the plug on the hosting of the website (and many others). The excuse was that they wanted users of their free webspace to move to a more sophisticated web hosting environment! They sent out a warning email about two weeks beforehand, but there were so many spelling and grammatical errors that it seemed to be a phishing scam like those that originate in Russia and the far east - wanting you to log in, provide your password etc etc. so it was ignored. Glyn Collis has been working hard to get us back into cyberspace and requests that members sign up to the BMIG google e-discussion group. Much of the information from the old BMIG website is now available at: <http://groups.google.com/group/bmigroup/web/index-2>

Unfortunately many of the field meetings, other the Easter meeting, organised by the BMIG committee, including the one at Wisley RHS gardens last October, are not well attended by members. It has been suggested that members should be encouraged to organise meetings in their own areas, particularly away from the south of England. Glyn Collis has been successful in getting people to travel north to Scotland for meetings. If any member wants to try and organise a field meeting, whether it is a single day mainly aimed at local naturalists or a longer meeting to attract folk from further a field, I would be pleased to receive details and to advertise them in this newsletter.

In the last issue of the newsletter Graham Proudlove announced that he had uncovered some copies of Blower's 1985 millipede synopsis. Graham has now sold all of the copies he had so I'm afraid you will have to wait for the updated volume to see the light of day.

Paul Lee, Oakdene, The Heath, Tattingstone, Ipswich IP9 2LX

2009 BMIG AGM and Field Weekend

It looks as though there will be just over a dozen of us at Woodland Farm for this year's annual field meeting. Other commitments and a meeting in Spain have taken their toll of numbers. However, we look forward to an interesting time and a chance to find some of the Cornish rarities.

Detailed information will be e-mailed out or posted to all those who are coming; please let us know if you need transport to & from stations.

Anyone who has not yet said they are coming but still wants to do so – please get in touch as quickly as possible (abarber159@btinternet.com) and we will see if we can arrange it.

Tony Barber

AGM notice

All BMIG members are invited to attend the AGM to be held at 8pm on Friday 17th April 2009. The venue will be the Woodland Valley Farm, Ladock, Cornwall (NGR: SW 908515).

The present committee is keen to receive nominations for new committee members from any BMIG member. Ideally nominations would be communicated to the secretary beforehand but they can also be made from the floor at the AGM.

A tropical woodlouse new to Britain

A few years ago Tony Barber sent me some woodlice collected from the Eden Project, Cornwall. These were extracted from soil from the Humid Tropical Biome using a Tullgren Funnel. The samples included a large number of the Platyarthrid *Trichorhina tomentosa*, a woodlouse previously recorded from tropical glasshouses in Britain. This species is a close relative of the ant woodlouse, *Platyarthrus hoffmannseggii*, but has a less squat appearance and has prominent eyes composed of a single black ocellus.

Of greater interest were specimens of a ball-rolling woodlouse, akin to a small *Armadillidium*, but which clearly were not a known British species. These had a distinct square-ended telson and a conspicuous pattern of pigmentation on the dorsal surface. Recently, I sent some specimens to Stefano Taiti in Italy, an expert in tropical woodlice. He identified them as *Venezillo parvus* (Budde-Lund, 1885), a member of the family Armadillidae (to which another glasshouse alien, *Reductoniscus costulatus*, also belongs).

This is the first record of *V. parvus* occurring in Britain or Ireland. It is widespread in the tropical and sub-tropical regions of the world and has been introduced into tropical glasshouses elsewhere in Europe. It is clearly unable to survive outdoors in the cool British climate and cannot be considered to be a component of our native and naturalised fauna.

I am grateful to Stefano Taiti for identifying the specimens of *V. parvus*.
Steve Gregory

Centipede records for the atlas: spreadsheet data

Centipede records are still coming in and will be welcomed whilst I am still working on them. Record cards (RA85) are always acceptable but alternatively, Excel spreadsheets are easy to handle.

The ideal pattern, from my point of view, for a spreadsheet is columns in the following order (but I can always edit and re-arrange):

1. Species code number (as on card)
2. Species name (older or current)
3. 100km national grid square (letters or numbers)
4. 6 fig. grid reference
5. Vice County number (if known)
6. Location
7. Location detail (if any)
8. Date
9. Recorder
10. Recorder code number (if known)
11. Determiner
12. Altitude (if known)
13. Principal Habitat (number 010 through 190 as on record card)
14. Coastal / Inland (number 001 through 006 as on record card)
15. Urban /Rural (number 001 through 003 as on record card)
16. Microsite location (number 001 through 003 as on record card)
17. Substrate (number 001 through 017 as on record card)
18. Soil / Rock (if known) (number 001 through 002 as on record card)
19. Method of Collection (number 001 through 005 as on record card)
20. Notes

Plus any additional columns / data as available; in practice I appreciate whatever level of detail is available and for mapping purposes name/grid reference/date/determiner is minimal.

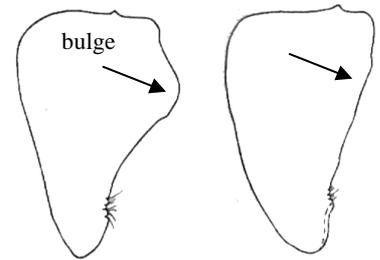
Tony Barber

Distinguishing species within the *Trichoniscus pusillus* species aggregate

Trichoniscus pusillus is probably our most abundant woodlouse. I reported previously (BMIG Newsletter 13, 2006) that our two forms had been elevated to full species; the 'true' *Trichoniscus pusillus* Brandt, 1833 and *Trichoniscus provisorius* Racovitza, 1908. This means that we should be attempting to distinguish between these two species.

Although impossible to distinguish in the field, male specimens can be readily separated by microscopic examination of the first exopods. Using a fine pin the first endopods/exopods are gently teased from the specimen.

T. provisorius has a prominent bulge on the outer edge of the first exopod (see left-hand figure), which is easier to see against a dark background or with under-lighting. This



bulge is absent in *T. pusillus* (right). See also figure 10 in the Synopsis (Oliver & Meechan, 1993).

Unfortunately, it is not that simple, since *T. pusillus* is parthenogenetic and males comprise about 1% of the population (about 50% in *T. provisorius*). Although males tend to be slightly smaller and darker, they can be frustratingly elusive and consequently *T. pusillus* is relatively under recorded. *T. pusillus* is a comparatively larger species and females reach 5 mm in length. Gravid females (i.e. mature) over 4mm in length are almost certainly this species (those of *T. provisorius* rarely exceed 3.5mm).

In addition, the virtual absence of males may be a convenient (but unreliable) means of recognising a population of *T. pusillus*. There are two potential pitfalls. First, it is essential to collect large numbers of specimens (over 50, preferably more). Second, it is essential to sample discrete populations since both species frequently occur in close proximity (albeit in different microsites) and it is possible to inadvertently sample populations of both species at the same time.

The identification of small numbers of females is seldom possible. Specimens that cannot be allocated to either species should be recorded as *T. pusillus* aggregate (or *T. pusillus* sensu lato), which corresponds with the *T. pusillus* ff listed on BRC card RA51. I am willing to confirm identifications or identify male specimens.

References

- Frankel, B., Sutton, S.L. & Fussey, G.D. (1981). The sex ratios of *Trichoniscus pusillus* Brandt (Crustacea: Oniscoidea). *J.Nat.Hist.*, 15: 301–307.
- Fussey, G.D. (1984). The distribution of the two forms of the woodlouse *Trichoniscus pusillus* Brandt (Isopoda: Oniscoidea) in the British Isles: A reassessment of geographic parthenogenesis. *Biol.J.Linn.Soc.*, 22: 309-321.
- Steve Gregory

AIDGAP Centipede Key

This essential publication for any self respecting myriapodologist is now available from FSC publications price £8. It can be purchased online by going to: <http://www.field-studies-council.org/publications/pubsinfo.aspx?Code=OP130>

A request for UK specimens of symphyla

I would be grateful to receive any specimens of symphylans collected in the UK. Specimens should be preserved in 70% alcohol and each tube should have the usual location data included. I cannot undertake to return specimens, but will inform collectors of the species where ever possible (juveniles are particularly difficult to identify).

Andy Keay, 37 Merrymeet, Woodmansterne, Surrey SM7 3HX

Catalogue of Myriapoda in the Nordic countries

Per Djursvoll, Ulf Scheller and I have just published a Catalogue of myriapoda in the Nordic countries (in Swedish but the tables are quite easy to understand). Records are given for the different provinces and also for three periods of time: found before 1900, 1900-1949 and 1950 until now.

Reference: Andersson, G., Djursvoll, P. & Scheller, U. 2008. Katalog över Nordens mångfotingar. *Entomologisk Tidskrift* **129** (3): 173-190.

If you are interested in a pdf (572 kb) of the article, please send an e-mail to: goran.a1@telia.com
Göran Andersson, Naturhistoriska museet, Box 7283, S-402 35 Göteborg Sweden

Granfer-Grigs and Chucky Pigs

In 1965 a list of 34 vernacular names used for woodlice in Devon was published and showed some interesting north / south variation. Subsequently a total of eighty names (including variations) was listed. In the current issue of the Transactions of the Devonshire Association (*Rep.Trans.Devon. Ass.Advmt. Sci.***140**:157-164) Dr J.B.Smith presents a paper "From Granfer-Grig to Tiddy-Tope; A look at names for representatives of the natural world in the Laver corpus", devoting some ten pages to woodlice.

Whilst not having the international breadth of the famous Arthur Chater "Woodlice in the Cultural Consciousness of Europe", it does raise some interesting ideas about the origins of these names which the author relates to pigs (sow pig, chucky pig, granfer-grig, grammer zow, tiddy hog, fuzzy pig), people (carpenter, carpenter's flea, shoemaker, slater), the ability of the woodlouse to roll up (billy-button, curly-button, cheese bug, cobber) and insects (crawlers, flat backs, coffin cutter) whilst accepting that the origins of some names are obscure (bibble-bug, snot). There is also discussion of the relationships between these names and those used in other parts of Britain.

Tony Barber

Xystodesmid millipede in Portsmouth

The Sun newspaper on 25 October 2008 reported that shocked workers had found a poisonous millipede from the US in an office pot plant in Hampshire. The four-inch yellow spotted "insect" was said to secrete cyanide from its skin. The millipede was found in a palm bought from Homebase two months earlier. Staff at the *Connect It Electrical Services* office in Fareham were warned to double bag the bug and burn it by Homebase DIY store!

The News (a local Portsmouth paper) on 24 October was a little less dramatic with its headline – 'Scary bug found in pot'. After carrying out some research on the internet, staff at the electrical firm were sure they had got a yellow spotted millipede, a native of the western United States.

The electrical company contacted Dr Chris Palmer, senior keeper of natural sciences for Hampshire museum services, who came to collect the millipede. I have since been in touch with Chris. He has no more information on the species involved or the likely source at present but has promised to keep me informed.

Paul Lee

Gaudy pink millipede gets world recognition

A poisonous pink millipede discovered in Thailand last year has been recognised as one of the Top 10 New Species of 2007 by the International Institute for Species Exploration (IISE). The Shocking Pink Millipede (*Desmoxytes purpureosa*) was chosen from thousands of nominations from around the world by an international committee of taxonomy experts. They select an annual top-10 list based on unique attributes or surprising facts about the species, including peculiar names. The judges agreed that the Shocking Pink Millipede from Thailand is an outstanding species. According to the IISE's description, "its gaudy colouration and habits, it sits openly on the ground and vegetation during the day, probably indicates to would-be predators that it is not edible." It rated third on the list, after the "sleeper ray with a name that sucks, *Electrolux addisoni*", and a "75-million-year-old giant duck-billed dinosaur". The top-10 list is released each year by the IISE and is aimed at drawing attention to biodiversity and taxonomy and teaching the public about preservation of rare animal and plant species.

Somsak Panha, chief of the animal systematics research unit at Chulalongkorn University's faculty of science, who headed the discovery team, said the colourful millipede mostly occurs in limestone mountain areas in northern and central Thailand. The team withheld the exact location to protect it from collectors. Mr Somsak said the new discovery is a member of the dragon millipede family. It grows to seven centimetres long, has 88 legs, is eaten by rats and squirrels and plays a crucial role in enriching soil fertility. Its lifespan is about five years. "The pink colour makes the species stand out from their fellows, which are normally black or brown," said Mr Somsak. However, the millipede's new-found fame is already posing a threat to its existence, with some collectors of exotic animals expressing interest. Websites show buyers willing to pay up to \$30 (1,540 baht) each for them.

New predator swaps dung for decapitation

A lifetime of dining on dung might seem like a raw deal, but the taste of toxic millipedes doesn't sound much better. None the less, scientists have discovered the first instance of a dung beetle who has abandoned the traditional faeces feast, preferring to decapitate millipedes and eat their insides. These extraordinary findings were captured on night vision camera, and published in *Biology Letters*.

Biologist Trond Larsen and his research team decided to investigate the behaviour of a family of dung beetle known as *D. valgum*, after it had been observed grappling with millipedes several times its size. They wanted to find out whether the beetle could actually be preying on the millipedes.

Working in the rainforest of Peru, the team set up over 1,000 traps containing different treats to tempt the beetles, including a traditional menu of dung, fungus and fruit as well as millipedes. Some of the millipedes were alive and healthy, others injured or dead, to see which - if any - the beetles preferred. They found *D. valgum* went exclusively for the millipedes, preferring them living, yet injured. As dung beetles rely on their sense of smell to find food, this finding could be due to a defensive smell produced by millipedes under attack. Stronger smelling and easier to handle, injured individuals would be the most attractive option.

The scientists also filmed the nocturnal beetles attacking the millipedes, in order to find out how their bodies were adapted for this different diet. They noted a narrow, pointy head and sharper 'teeth' which are used to sever and even decapitate the millipedes. Dung beetle heads are usually flat and wide like a shovel in order to roll balls of dung, but *D. valgum* uses its evolved head to get right inside the millipede's body and feed on its insides.

These interesting snippets were noticed by Glyn Collis. A video clip of the millipede predating dung beetle is viewable through the Royal Society website at:
<http://royalsociety.org/news.asp?id=8246>

Local Biological Record Centres

Collecting data for the planned Centipede Atlas, I have been in touch with local biological/environmental record centres across Britain. These exist for counties/vice counties or for smaller or larger regions although for some areas they are still apparently under development. The number of centipede records individual centres have varies from none or a handful to hundreds. What they do have are either locally collected and validated records or records from BMIG meetings or enthusiastic local BMIG members (many familiar names crop up!).

Not all areas seem to have functioning LRCs but almost all of those that do seem to welcome any records that we can send them, especially since, if from BMIG sources, they are likely to be reliably identified. Can we encourage members to send in records to national recorders or to whoever is collating records from a particular meeting but also to their local biological records centre where one exists. Please do not assume that data sent to national schemes, local record centres, national BRC or NBN gets to all the others automatically at the present time.

Tony Barber

Microscopy Supplies

Those considering purchase of a microscope may wish to note the details of Microscopy Supplies And Consultants

Ltd. (MSAC Ltd) Park House, 6a Carneil Road, Carnock, Fife, KY12 9JH. Tel/Fax: 01383 851434.

Web site: www.msac-uk.co.uk

MSAC are able to supply microscopes and accessories from a wide range of manufacturers and also service equipment. They regularly have second-hand microscopes for sale on their website.

Mike Davidson, 77 Mile-End Avenue, Aberdeen AB15 5PS

In the journals

The following publications may be of interest to BMIG members:

Edgecombe, G. D. and Koch, M. 2008. Phylogeny of scolopendromorph centipedes (Chilopoda): morphological analysis featuring characters from the peristomatic area. *Cladistics*, **24(6)**: 872-901.

Iorio, E. 2008. On the morphology, the distribution and the taxonomy of *Lithobius* (*Lithobius*) *crypticola* Ribaut, 1926 (Chilopoda, Lithobiomorpha, Lithobiidae). *Bull. Soc. Linn. Bordeaux*, **143(36)(3)**: 231-238.

This is a detailed review of the morphology and distribution of *Lithobius crypticola* based mainly on specimens in MNHN, Paris.

The December 2008 issue of the Isopod Newsletter (as well as several past issues) is now available on The Crustacean Society website at

http://web.vims.edu/tcs/isopod_newsletter.htm

NEXT NEWSLETTER: Autumn 2009

Please send your contributions to reach the editor by
30 September 2009

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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