

BRITISH MYRIAPOD GROUP

Newsletter Number 6 - September 1986

Honorary Editor - D T Richardson

BMG AT MANCHESTER POLYTECHNIC 2-6 April 1986

The fourth joint meeting of BMG and BISG was held at Manchester Polytechnic from 2-6 April when 36 members attended. Our numbers were augmented for the Charles H Brookes Memorial Lecture when about 100 enjoyed Professor Dohle's lecture on Myriapoda and the Ancestry of Insects; the elegance of his English presentation and the scientific content were described only in superlatives. An excellent dinner following the lecture was enjoyed by 68 persons. During the lecture and after the dinner, Charles Brookes was remembered with affection.

Amongst other formal business we had an excellent film, by Professor Ruth Bellairs, on swarming behaviour of Streptogonopus phipsoni in India; more excellent isopod and myriapod photographs from Dick Jones; a fascinating paper by Steve Hopkins on the defensive glue secreted by Henia vesuviana; a synoptic review of the distribution of isopods and myriapods in Yorkshire by Douglas Richardson, and a guide to characters useful in field identification by Adrian Rundle. Tony Barber gave us the good news of the advanced state of preparation of the centipede atlas, Douglas reported on the Millipede Survey and Desmond Kime on the European Survey. Volume III of the Bulletin of the British Myriapod Group was available at the meeting and Tony is to be congratulated on producing this excellent publication within 12 months of Volume II.

At this meeting we were pleased to have Dr Henrik Enghoff from the University Museum in Copenhagen and Professor Wolfgang Dohle and Mrs Dohle for the whole of our field meetings. During the 3 days, 22 major sites were visited (see table); 4 in Cheshire, including Delamere Forest where we were guided by Colin and Joan Fairhurst; 7 urban sites in Manchester were examined under the guidance of John Delf of the Greater Manchester Countryside Unit. We spent the last day examining 11 sites in Derbyshire and Staffordshire on the carboniferous limestone. Nineteen species of centipedes and 27 of millipedes were collected, including a first attested British record, 9 new county records and 2 new vice-county records.

Details of the new records follow:

CHILOPODA

Lithobius macilentus new to Derbyshire, from Coombes Dale and Mill Dale; collected H Enghoff & J G Blower, and Cressbrook Dale, col. A D Barber and A J Rundle. This species has been found at Mill Dale on several previous occasions by JGB but these are the first formal records for the county.

Lithobius melanops new to Staffordshire, col. A D Barber at Hall Dale and another Staffordshire locality, and by J Lewis in the Manifold valley.

Geophilus electricus new to Staffordshire, col. A D Barber and A J Rundle in Hall Dale.

Schendyla nemorensis new to Derbyshire, col. P Lee in Coombes Dale.

Strigamia crassipes new to Cheshire from Hartford, Tabley and Delamere, col. A Keay.

Lithobius muticus new to Cheshire from Delamere, col. E Philp; new to S Lancashire from Heaton Mersey, col. A Keay.

DIPLOPODA

Nopoiulus kochii This species appears in the updated vc list in the June 1983 Newsletter for vc's 58, 59, 64 and 67 but these records originated in the list in Vol. I of the Bulletin. There is doubt regarding these records of the animal then named Nopoiulus minutus (see 1958 Synopsis); the record for vc 59 should definitely be referred to Choneiulus palmatus (loc. cit.). The first specimen of N. kochii to be seen by extant myriapodologists and checked by H Enghoff was collected by Steve Hopkin on waste land adjoining the University Department of Zoology!

Polydesmus gallicus new to Lancashire, col. A J Rundle at Didsbury.

Melogona gallica new to Lancashire, col. A J Rundle from Didsbury and Heaton Mersey.

Macrosternodesmus palicola new to Staffordshire, col. A J Rundle from Hall Dale. New to Derbyshire, col. A J Rundle from Cressbrook Dale. New to vc 59 col. A J Rundle from Heaton Mersey and A D Barber from Gorton.

Brachychaeteuma bradeae new to Derbyshire, col. H Enghoff in Coombes Dale. Brade-Birks (1918) had a single female from near Bakewell, 29.5.18 which proved difficult to attach to either bradeae or bagnalli and he erected a new species to receive it - B. quartum. Adrian had females from Didsbury and Heaton Mersey but at the moment, none of us is confident at naming females.

Boreoiulus tenuis new to vc 59, col. A J Rundle & A D Barber from Gorton.

Archiboreoiulus pallidus col H Enghoff, Coombes Dale. The first record of this species in Derbyshire was from Mill Dale (Blower 1979, (Myriapod Biology)). Henrik's find is the second Derbyshire record. Also, new to vc 59, col. A J Rundle from Gorton.

As a result of this recording, Lancashire, which was tied with Surrey as the best worked county for millipedes, has 40 species and is now clearly the first millipede county. Derbyshire, ranked 11th in the county stakes has been elevated to 10th place, Cheshire remains 4th. Staffordshire has 2 extra species. As for vice-counties, our efforts have raised vc 59 from 12th position in 1985 to 7th= with 24 species. The 2 additions to the Derbyshire list of centipedes raises the total to 17 species; the list for Staffordshire now totals 13 species, S Lancashire 18 species and Cheshire 20 species. These counties are still a long way from the top counties, 6 of which have more than 20 species.

Gordon Blower reports that the contributions to the evening drinks and gratuities placed in the box provided, or given to him personally, fell short by £50. This was partly due to his underpricing the wine by £1 per bottle. If you had a bottle of wine, or think you may have added too little to the box, would you please send a contribution to the costs of the Bulletin to Tony Barber; this would kill 2 birds with one stone!

MILLIPEDE SURVEY

D T Richardson

Records continue to arrive, albeit in small numbers, but the cumulative total is quite good. Whilst updating your vice-county lists notice the total number of species per vice-county; there is still a lot of work to be done. Please make an effort to fill some of the gaps, put your new 'Blower' to good use and fill in some cards for the survey.

Many thanks for all who have sent in records; they are much appreciated. I am still waiting for cards from some of you from the Manchester meeting, in particular ones for some of the new vice-county records.

VICE-COUNTY DISTRIBUTION : MILLIPEDES

Additional records from 28 February to 31 August 1986.

Species	Vice-county
<u>Archiboreoiulus pallidus</u>	59
<u>Boreoiulus tenuis</u>	59
<u>Brachychaeteuma bagnalli</u>	64
<u>Brachychaeteuma bradeae</u>	10, 57
<u>Brachychaeteuma melanops</u>	11
<u>Brachyiulus pusillus</u>	38, 44
<u>Chordeuma proximum</u>	45
<u>Cylindroiulus britannicus</u>	23, 46
<u>Cylindroiulus latestriatus</u>	11
<u>Cylindroiulus nitidus</u>	27
<u>Glomeris marginata</u>	18
<u>Macrosternodesmus palicola</u>	39, 57, 59
<u>Melogona gallica</u>	59
<u>Melogona scutellare</u>	46
<u>Ommatoiulus sabulosus</u>	23
<u>Polydesmus angustus</u>	24
<u>Polydesmus gallicus</u>	56, 59
<u>Polydesmus inconstans</u>	42, 65
<u>Polyxenus lagurus</u>	68

Please update the lists which were given in Newsletter No 4, July 1985.

NEWS FROM THE BIOLOGICAL RECORDS CENTRE

P T Harding

Centipede atlas

Tony Barber and Andy Keay have completed the draft text of the atlas and almost all the distribution maps have been prepared by the BRC computer. I am now the delaying factor whilst the text is edited and put onto the word processor. Then the whole thing is committed to the hands of a printer! We still aim to get the Atlas out in time for the BMG/BISG meeting in April 1987.

Centipede data

BRC is open to enquiries and requests for listings of records from the centipede data - subject to the agreement of the scheme organizer and our own workload and priorities.

Three types of listings might be of interest:

1. All records for a species (a detailed counterpart of a distribution map).
2. All records for a geographical unit (eg vice-county, 10 km square).
3. Analysis of habitat data for a species.

Millipede data

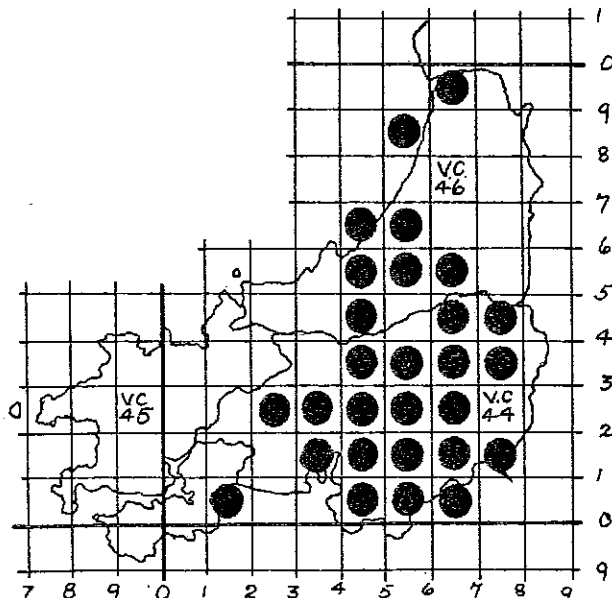
Colin Fairhurst and Douglas Richardson have now deposited with BRC the completed RA13 cards received by them over the years. The total number of cards exceeds 7000, from which 10 000 individual species records are already on computer file at BRC. Further work on the rest of the data will depend on other commitments, but I am willing to try to answer small queries (using the original record cards) until such time as all the data are on computer file at BRC. Douglas Richardson retains, for the time being, all completed RA59 cards received from recorders.

CHORDEUMA PROXIMUM IN DYFED, S W WALES

I K Morgan

Recent survey work on millipedes in Carmarthen (vc 44) and Cardigan (vc 46) has shown Chordeuma proximum to be a quite frequent and widespread species in these 2 vice-counties. The species was also recorded at 2 sites in Merioneth (vc 48) and Glamorgan (vc 41), but a collecting trip into Pembroke (vc 45) had to be cancelled due to the adverse weather conditions of early 1986. In Carms. and Cards. however, Chordeuma proximum was recorded from 39 localities representing 26 10-km squares. The distribution map simply reflects the areas surveyed and doubtless the species will be found to occur in Pembroke and other parts of western Dyfed.

Chordeuma proximum was found to be one of the easiest millipedes to locate during the survey period, being abundant in deep leaf litter, especially in low and mid-altitude oakwoods or even in small roadside copses. It is far less common in woods on base-rich soils, such as on the Carboniferous Limestone outcrop, except where sufficient leaf accumulation has produced acid pockets of humus. It is less frequent too in the upland type sessile oakwoods of the region. The species is quickly found by moving aside the fresher, newly fallen leaves and by looking in the damper, partly decomposed older leaves. Here it is common and often reaches high densities, mostly during mid-October to February inclusive, though specimens can be found in March.



Distribution of Chordeuma proximum in Dyfed
(8.3.1986)

PARTHENOGENESIS IN POLYXENUS LAGURUS

G D Fussey

P. lagurus is one of 4 British millipedes which show parthenogenesis. Proteroiulus fuscus and Stygioglomeris crinata are, it seems, solely represented by parthenogenetic forms, whereas Nemasoma varicorne and P. lagurus are known to have both sexual and parthenogenetic forms. In many species with such an arrangement, the ecological and genetic differences between the 2 forms manifest themselves in their geographical distributions. Vandel (1926) described the phenomenon of geographic parthenogenesis, ie that as one moves towards the poles one is more likely to encounter the parthenogenetic form, and presented the 2 forms of P. lagurus as a model of such distribution patterns. However, more recent work in Europe (Enghoff, 1976, 1978; Meidell, 1970, 1979) suggests that the distribution of sexual and parthenogenetic P. lagurus is considerably more complex than Vandel supposed. Our knowledge of the 2 forms in Britain has been limited. Up until the publication of Blower (1985) sex ratio data were only available for 4 British samples. Fortunately, meeting Henrik Enghoff at the recent Manchester meeting rekindled my interest in Bristly Millipedes and 2 more large samples have been taken recently (both new vice-county records) so that the sex ratio data for Britain are now as follows:

Location	County	Collector	Year	% males	Cited in
Godmersham	Kent	J G Blower	?	50?	Blower, 1985
Bardsey Is	Caernarfon	S L Sutton	1980	42.0	Fussey & Varndell, 1980
Bardsey Is	Caernarfon	GDF & HEF	1981	31.0	Fussey & Fussey, 1981
Whitby	N Yorks	GDF	1980	28.2	Fussey & Varndell, 1980
Graig Wen	Anglesey	I M Varndell	1980	46.7	Fussey & Varndell, 1980
Brinkburn	Northumb	GDF	1986	46.3	
Heath Warren	Hants	S P Hopkin & GDF	1986	52.5	

On the basis of the data above it seems that Polyxenus is represented by the sexual form in Britain (total sex ratio for all samples together is 89 males: 128 females, 41.0% males). Obviously we cannot exclude the possibility of the parthenogenetic form also turning up, and it would be tremendously helpful if BMG recorders could sex any samples they find (or have already found) and indicate the data on the record card as sent to Douglas Richardson. Alternatively, specimens could be sent to me for checking (postage costs and specimens returned). Samples from northern Britain might prove particularly interesting.

References

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WHERE THERE'S MUCK THERE'S BRASS - THE CENTIPEDES OF A
RUBBISH TIP IN SOUTH WOODFORD, N E LONDON

S P Hopkin

You know how it is. A Sunday afternoon trip to visit the parents-in-law. Everyone settles down for a doze after a large roast dinner. An excellent opportunity to nip out for an hour or two in search of records. Last summer while escaping from the post-lunch snooze, I discovered an excellent site for centipedes on an overgrown rubbish tip in South Woodford, N E London (vc 18, 416 893) next to the River Roding. I eventually found 10 species in about an hour of hand-searching among some fairly dubious material!

Henia (Chaetechlyne) vesuviana
Cryptops anomalans
Cryptops hortensis
Geophilus insculptus
Haplophilus subterraneus

Lithobius forficatus
Lithobius melanops
Lithobius microps
Necrophloeophagus longicornis
Schendyla nemorensis

Cryptops anomalans is a magnificent animal. Being a Scolopendromorph, it is very fast moving with 21 pairs of legs and can be in excess of 5 cm in length. Henia vesuviana is another large animal which can easily reach 10 cm in length. When disturbed, it rolls into a tight ball with its ventral surface outermost and secretes a very sticky glue which sets in about 20 seconds and is strong enough to immobilize the most persistent predators, even the Devil's Coach Horse beetle!

It is worth considering for a moment why rubbish tips are such good sites for soil animals. The main reason is the huge diversity of microsites and hence ecological niches which can be filled by a wider range of species than one would expect to find in a more natural situation. Other factors include the presence of large amounts of organic matter (just think what you put in your dustbin!), and the ability of rubbish tips to act as heat reservoirs and generators of heat released during the decomposition of waste, thereby allowing frost-sensitive animals to survive the winter.

A rubbish tip as an SSSI, now there's a (heretical) thought.

BULLETIN OF THE BRITISH MYRIAPOD GROUP

A D Barber

Copies of Volume 3 which includes articles on a new British millipede Trachysphaera lobata, Irish centipedes, Henia (=Chaetechlyne) vesuviana predation, Shetland centipedes and other items are still available from A D Barber.

Material is wanted for Volume 4 - regional studies, new or unusual species, local research, etc. All contributions to A D Barber.

BMG/BISG SPRING MEETING 1987

Details of the April 1987 meeting are enclosed. Please return the Provisional Booking form to D T Richardson as soon as possible if you are interested in attending.

BMG/BISG MEETING 1988

Suggestions for the spring 1988 meeting and volunteer organizers are sought. What about the Isopodologists taking another turn? It would be nice to be able to put a formal proposal to members at the 1987 meeting. For information Good Friday 1988 is 1 April. Suggestions to Paul Harding.

LINNEAN SOCIETY SYNOPSIS NO 35

Gordon Blower has completed a sheet of errata which is enclosed with this newsletter.

NEXT BMG NEWSLETTER

Material intended for inclusion in the next Newsletter should be forwarded to D T Richardson by 30 June 1987.

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