REPORT ON THE BMIG FIELD MEETING AT HALTWHISTLE 2014

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INTRODUCTION

The 2014 BMIG field weekend, held from 24th to 27th April, was based at Saughy Rigg, half a mile north of Hadrian's Wall, near Haltwhistle in Northumberland but very close to the border with Cumbria to the west and Scotland to the north. The main aim of the meeting was to record in central areas of northern England (VC 66, 67 and 70) where few records existed previously but many attendees were drawn also to sites on the east coast of England (VC 66) and to the Scottish coast on the Solway Firth (VC 73). All these vice counties had been visited by BMG/BISG or BMIG in the previous twenty years but large parts of them remained under-recorded.

The annual joint field meeting of BMG and BISG in 1995 was held at Rowrah Hall near Whitehaven (VC 70). Gregory (1995) reports 24 millipede species found during the weekend including *Choneiulus palmatus* new to VC 70. A list of the centipede appears not to have been published. Bilton (1995) reports 14 woodlouse species including *Eluma caelata* found at Maryport, its most northerly global location, and *Armadillidium pictum* in the Borrowdale oakwoods. Most of the sites visited were in the western part of the county.

In 1997 BMG and BISG met at the Lochinvar Hotel, St Johns Town of Dalry (VC 73). Lee (1999) lists 17 millipedes including *Boreoiulus tenuis, Choneiulus palmatus, Macrosternodesmus palicola, Melogona scutellaris* and *Thalassisobates littoralis* all recorded new to VC 73. No list of centipedes was produced from the meeting. Gregory (1997) lists 11 woodlice reporting 'no spectacular finds' but comments that the coastal sites were the most interesting.

The penultimate annual meeting of BMG and BISG was held at Ford Castle, Northumberland (VC68) in 1999. Most of the sites visited during the weekend were further north in VC 68 and 81. Barber (2001) reports just four species of centipede from a single site in VC 67 while Lee (2006) gives no millipede records from VC 67. It seems that no list of woodlice was produced from the meeting.

BMIG was based at Collingwood College in Durham for the annual meeting in 2005. Lee (2006) reports 30 millipedes collected including *Geoglomeris subterranea* and *Poratia digitata* new to VC 66. Barber (2006) lists 14 species of centipede recorded and Standen & Gregory (2006) list 12 species of woodlouse.

There is a wealth of earlier published work on the centipedes and millipedes of Durham and Northumberland beginning with the work of Bagnall in the first half of the twentieth century (1912a, 1912b, 1913, 1918, 1922). Barber (1981, 1984) gives details of his own records from VC 66 and 67 made in 1976 and 1981. He also includes some unpublished records from Ted Eason, Des Kime and P.S. Davies. Jackson (1982) reported on centipedes, millipedes and woodlice from pitfall trap material collected by David Sheppard in Castle Eden Dene. He refers to his own records from VC 66 as well as

some records made by Val Standen. In comparison there is little published data on the woodlice of Durham and Northumberland or the centipedes, millipedes and woodlice of Cumbria or Dumfries and Galloway.

As a result of the combined efforts of the individuals and groups outlined above, prior to the BMIG meeting in 2014, the number of millipede species recorded from Durham (VC 66), South Northumberland (VC 67), Cumberland (VC 70) and Kirkcudbrightshire (VC 73) stood at 30, 26, 28 and 23 respectively (Table 1). For centipedes, ignoring the old and doubtful *Lithobius piceus brittannicus* and *Lithobius tenebrosus* and the hothouse *Dicellophilus carniolensis* but including the old records by Bagnall of *Strigamia crassipes*, *Strigamia acuminata* and *Stenotaenia linearis*, the numbers of species for the same vice-counties were 18, 17, 20 and 16 (data from Biological Records Centre, etc.). For woodlice, the numbers of species for the same vice-counties were 16, 6, 10 and 12, respectively (of a total of 17 species), including records for *Armadillidium album* (VC 70), *Armadillidium pulchellum* (VCs 66 & 73), *Trichoniscoides albidus* (VC 66) and *Trichoniscoides saeroeensis* (VC73).

TABLE 1: Summary of number of species of centipede, millipede and woodlice recorded prior to2014 from VCs 66, 67, 70 & 73

	VC 66	VC 67	VC 70	VC 73
Centipedes	18	17	20	16
Millipedes	30	26	28	23
Woodlice	16	6	10	12

METHODS AND SITES

The meeting was less targeted than some of these in more recent years. No effort was made to undertake a systematic survey during the weekend. The approach adopted was more like the 'square bashing' of earlier years with members free to spend however long they liked wherever they chose to record. This resulted in almost fifty sites being visited, the majority in South Northumberland (VC 67) but a few were in Cumberland (VC 70) and single visits were made to the Southwick Coast in Kirkcudbrightshire (VC 73) and to Tow Law in Durham (VC 66). A specific visit to the Hunstanworth area was made by one group to, again, unsuccessfully, attempt to throw any further light on the enigmatic *Lithobius piceus britannicus* of R.S. Bagnall (1913).

A summary of the sites is shown in Table 2. Where recorders had reported records from what were considered sub-sites of a larger site, usually within a single monad (1x1km square) of the OS national grid, only the main site is listed for clarity.

Further details of the species records for each site are summarised in Tables 3-5.

CENTIPEDES

Out of a total number of 23 species of centipede previously recorded for the four vice-counties altogether, only 15 were collected during the meeting, a number that compares with the 13 collected by ADB in two summer visits to Durham, Northumberland and the Scottish Borders in 1976 and 1978 (Barber, 1981) and the 12 found during a fortnight's work based at Wooler in 1981 (Barber, 1984).

TABLE 2: List of sites visited. Recorders: ADB - Tony Barber; DS - Duncan Sivell; HJR - Helen Read;JPR - Paul Richards; KL - Keith Lugg; KC - Kevin Clements; MR - Mark Robinson; PL - Paul Lee;SJG - Steve Gregory; WA - Wallace Arthur.

Site	Site name	Grid	VC	Date	Recorders
code		reference			
1	Southwick Coast	NX9155	73	26/04/2014	WA, SJG, DS
2	Southwick Coast	NX9156	73	26/04/2014	KL
3	Wreay Woods	NY4449	70	25/04/2014	SJG, KL, DS
4	Bewcastle, Townfoot	NY5578	70	27/04/2014	КС
5	Bewcastle	NY5675	70	27/04/2014	КС
6	Williamstone River Shingle SSSI	NY6851	67	25/04/2014	КС
7	Williamstone River Shingle SSSI	NY6852	67	25/04/2014	КС
8	Waterhead Plantation, Kingwater	NY6369	70	27/04/2014	КС
9	Robin's Rigg, Kingwater	NY6570	70	27/04/2014	КС
10	Spadeadam Forest, Kingwater	NY6671	70	27/04/2014	КС
11	Catches Rigg, Kingwater	NY6873	70	27/04/2014	КС
12	Kielder Water	NY6785	67	26/04/2014	JPR
13	Kielder Water	NY6490	67	26/04/2014	JPR
14	Haltwhistle	NY7166	67	25/04/2014	DS
15	Saughy Rigg	NY7368	67	24/04/2014	ADB, KL
16	Saughy Rigg	NY7468	67	24/04/2014	JPR
17	Steel Rigg	NY7567	67	26/04/2014	ADB, MR
18	Barcombe Grove	NY7765	67	25/04/2014	PL, HJR
19	Beltingham River Gravels SSSI	NY7864	67	25/04/2014	KC
20	East Crindledykes Quarry	NY7867	67	25/04/2014	PL, HJR
21	Allen Banks & Briarwood Banks	NY7962	67	25/04/2014	KC, DS
22	Scotchcoultard	NY7270	67	26/04/2014	PL, HJR
23	Outer Butt Hill	NY7575	67	26/04/2014	KC
24	Stonehaugh picnic site	NY7876	67	26/04/2014	KC
25	Falstone cemetery	NY7286	67	26/04/2014	JPR
26	Near church, Greystead	NY7685	67	26/04/2014	JPR
27	River North Tyne, Greystead	NY7786	67	26/04/2014	JPR
28	Pundershaw, Border Country Ride	NY7981	67	26/04/2014	KC
29	Allendale Town	NY8355	67	26/04/2014	ADB, MR
30	Allendale, Huntrods	NY8452	67	26/04/2014	ADB
31	Tony's Patch	NY8265	67	26/04/2014	ADB, PL, HJR, MR
32	Langley Wood	NY8361	67	26/04/2014	ADB, MR
33	Haydon Bridge	NY8464	67	26/04/2014	ADB
34	Whinny Hill, layby on B6319	NY8968	67	26/04/2014	KC
35	Houxty Burn valley	NY8279	67	26/04/2014	KC
36	Simonburn, layby on B6320	NY8873	67	26/04/2014	KC
37	Pundershaw, Border Country Ride	NY8080/ NY8180	67	26/04/2014	КС
38	Belingham churchyard	NY8383	67	26/04/2014	JPR
39	Hunstanworth Common	NY9447	67	26/04/2014	ADB
40	Hunstanworth churchyard	NY9449	67	26/04/2014	ADB, MR
41	Juliet's Wood	NY9758	67	26/04/2014	KC
42	Tow Law	NZ1336	66	24/04/2014	JPR
43	Priestclose Wood	NZ1062	67	25/04/2014	SJG, KL, JPR
44	Cresswell	NZ2893	67	25/04/2014	MR
45	Swallow Pond LNR	NZ3069	67	25/04/2014	ADB, MR
46	Cresswell Quarry	NZ3092	67	25/04/2014	MR
47	Seaton Delaval Hall	NZ3276	67	25/04/2014	ADB, SJG, KL, JPR, MR
48	Seaton Sluice	NZ3376/7	67	25/04/2014	SJG, KL, JPR

Similarly limited numbers of species, although not necessarily the same ones, have been found during BMG/BISG & BMIG field meetings. 11 species were reported from the 1999 meeting and 4 from the 2005 meeting (Barber, 2006). Of the 15 species reported in the present paper, all are here recorded from the vice county of South Northumberland (VC 67), 4 each from Cumberland (VC 70) and Kirkcudbrightshire (VC 73) and two from Co. Durham (VC 66). This is undoubtedly a reflection of the relatively limited centipede fauna of rural areas of northern England and southern Scotland compared with southern Britain. The highest number of species for any one location (9) was recorded from Site 47, Seaton Delaval Hall.

Certain species which have been recorded before in the general area include the parthenogenetic *Lithobius macilentus* whose occurrence is distinctly patchy and was found during the 2005 meeting, *Strigamia crassipes* and *S. acuminata* both recorded by Bagnall (1913), *Stenotaenia linearis* recorded from Hexham and Ryhope Dene by Bagnall (1935) and *Geophilus electricus* which E.H. Eason found in Peebles. Also Bagnall's *Dicellophilus carniolensis* (a mecistocephalid from a hothouse in Newcastle) and his *Lithobius tenebrosus* and *Lithobius piceus britannicus*, neither of which have been subsequently found in the area and whose status is unclear. It is almost certain that all earlier records of *Geophilus carpophagus* from rural inland sites are likely to refer to *Geophilus easoni* as recorded here.

Haplophilus subterraneus (4 records) is almost always synanthropic in northern Britain as is Cryptops hortensis (1 record). Geophilus easoni (3 records) is often characteristic of upland areas including moorland and woodland, G. alpinus (11 records) is a typical northern species although not restricted to there, G. flavus (10 records) and Schendyla nemorensis (2 records) are both widespread as is Geophilus truncorum (14 records) which is often found in moorland as well as sub-cortically and in litter in woodlands (14 records). Lithobius forficatus (15 records) is a large and commonly found species in many habitats whilst L. crassipes (8 records) is the common smaller lithobiid of the area. L. borealis (1 record) on the other hand, of comparable size to L. crassipes, seems to be commoner in western Britain. Both L. melanops (6 records) and L. microps (4 records) are often associated with human influenced and disturbed sites in the area. L. calcaratus (2 records) is usually associated with drier sites and can be a typical member of the fauna of moorland areas. L. variegatus (14 records) is restricted in its occurrence in eastern Britain including the present study area; its sometimes unpredictable occurrence is commented on by Barber (1981, 1984) and it was not recorded at all during the 1999 BMG/BISG meeting (Barber, 2001). Strigamia maritima, found at Cresswell Quarry is a common marine littoral species found around most of Britain and Ireland.

MILLIPEDES

During the 2014 meeting only a single site in Durham (VC 66) was visited. Collecting there produced just four common species none of which were new to the vice-county fauna. The large number of sites visited in South Northumberland (VC 67) was reflected by the fact of the 31species recorded over the weekend, 29 were recorded from at least one site in VC 67.

Furthermore, seven of these species, *Allajulus nitidus*, *Brachychaeteuma bagnalli*, *Chordeuma proximum*, *Cylindroiulus caeruleocinctus*, *Cylindroiulus truncorum*, *Cylindroiulus vulnerarius* and *Polydesmus coriaceus*, appear to be additions to the vice-county fauna. Two species, *Allajulus nitidus* and *Craspedosoma rawlinsii*, were added to the fauna of Cumberland (VC 70) and *Melogona gallica* was collected for the first time from Kirkcudbrightshire (VC 73).

Location:	1	2	3	4	6	7	11	14	15	16	17	18	19	20	21	22	23	25	26	27
Haplophilus subterraneus																				
Strigamia maritima																				
Schendyla nemorensis																	Х			
Geophilus easoni								Х	Х							Х				
Geophilus flavus										Х		Х		Х				Х		
Geophilus alpinus	Х		Х		Х	Х									Х			Х		
Geophilus truncorum	Х	Х					Х			Х		Х	Х		Х				Х	Χ
Cryptops hortensis																				
Lithobius borealis															Х					
Lithobius calcaratus					Х														Х	
Lithobius crassipes				Х	Х										Х					X
Lithobius forficatus	Х		Х		Х			Х				Х	Х	Х						X
Lithobius melanops	Х										Х			Х						
Lithobius microps															Х					
Lithobius variegatus				Х			Х	Х							Х	Х	Х			
Location (cont.):	28	29	30	31	32	33	35	36	37	38	39	40	41	42	43	45	46	47	48	
Haplophilus subterraneus						Х									Х	Х		Х		
Strigamia maritima																	Х			
Schendyla nemorensis															Х			Х		
Geophilus easoni																				
Geophilus flavus			Х							Х		Х			Х			Х	Х	
Geophilus alpinus		Х											Х		Х	Х		Х		
Geophilus truncorum	Χ												Х		Х	Х		Х		
Cryptops hortensis																		Х		
Lithobius borealis																				
Lithobius calcaratus																				
Lithobius crassipes					Х		Х				Х		Х							
Lithobius forficatus		Х			Х					Х	Х			Х		Х		Х		
Lithobius melanops									Х						Х			Х		
Lithobius microps				Х										Х				Х		
Lithobius variegatus	Χ	Х		Х	Х			Х			Х		Х		Х					

TABLE 3: Summary of species of centipede recorded during the BMIG meeting in Northumberland.

Location:	1	2	3	4	5	6	7	8	11	12	13	14	15	16	17	18	19	20	21	22	23
Glomeris marginata	Х		Х								Х	Х				Х	Х		Х		
Brachychaeteuma bagnalli																					
Craspedosoma rawlinsii			Х																		
Nanogona polydesmoides							Х														
Chordeuma proximum																					
Melogona gallica/voigtii	Х																				
Melogona scutellaris																Х					
Brachydesmus superus	Х	Х	Х										Х	Х		Х		Х	Х		
Polydesmus angustus	Х					Х					Х	Х				Х		Х			Х
Polydesmus coriaceus											Х										
Polydesmus denticulatus																					
Macrosternodesmus palicola																Х					
Ophiodesmus albonanus																					
?Choneiulus palmatus																					
Proteroiulus fuscus	Х		Х	Х											Х	Х			Х	Х	
Blaniulus guttulatus																					
Archiboreoiulus pallidus												Х				Х					
Boreoiulus tenuis			Х													Х					
Nemasoma varicorne																					
Julus scandinavius			Х			Х													Х		
Ophyiulus pilosus	Х	Х	Х													Х			Х	Х	
Allajulus nitidus			Х																		
Cylindroiulus britannicus	Х	Х	Х													Х					
Cylindroiulus caeruleocinctus																					
Cylindroiulus latestriatus	Х	Х																			
Cylindroiulus punctatus	Х		Х	X	X	X		Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
Cylindroiulus truncorum																					
Cylindroiulus vulnerarius																					
Brachyiulus pusillus	Х																				
Ommatoiulus sabulosus	Х		Х																Х		
Tachypodoiulus niger	Х		Х	X		X			Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

TABLE 4: Summary of species of millipede recorded during the BMIG meeting in Northumberland.

Location (cont.):	24	25	26	27	28	29	31	32	34	35	36	37	38	40	41	42	43	44	45	47	48
Glomeris marginata		Х					Х	Χ									Х				
Brachychaeteuma bagnalli																				Х	
Craspedosoma rawlinsii																					
Nanogona polydesmoides							Х													Х	
Chordeuma proximum		Х																			
Melogona gallica/voigtii																					
Melogona scutellaris							Х						Х				Х				
Brachydesmus superus	Х	Х	Х	Х		Х			Х				Х			Х	Х	X		Х	
Polydesmus angustus		Х		Х		Х	Х						Х			Х	Х			Х	
Polydesmus coriaceus																					
Polydesmus denticulatus							Х														
Macrosternodesmus palicola																	Х			Х	
Ophiodesmus albonanus																				Х	
?Choneiulus palmatus													Х								
Proteroiulus fuscus		Х			Х	Х	Х	Х			Х				Х		Х			Х	
Blaniulus guttulatus						Х											Х		Х	Х	
Archiboreoiulus pallidus													Х				Х				
Boreoiulus tenuis		Х															Х				
Nemasoma varicorne							Х													Х	
Julus scandinavius				Х			Х										Х			Х	
Ophyiulus pilosus		Х	Х					Χ					Х			Х	Х				
Allajulus nitidus				Х									Х								
Cylindroiulus britannicus													Х				Х		Х	Х	
Cylindroiulus caeruleocinctus																				Х	
Cylindroiulus latestriatus																		Х			
Cylindroiulus punctatus	Х	Х		Х	Х	Х	Х	Χ	Х	Х	Х		Х		Х	Х	Х	Х	Х	Х	
Cylindroiulus truncorum																				Х	
Cylindroiulus vulnerarius																				Х	
Brachyiulus pusillus																	Х			Х	
Ommatoiulus sabulosus																					
Tachypodoiulus niger	Χ	Χ	Χ		Χ	Χ	Χ		Χ	Χ	Χ	X	Χ	Χ	Χ		Χ	Χ		Χ	Χ

TABLE 4: Continued

Location:	1	2	3	4	5	7	9	10	11	13	14	15	16	18	19	20	21	22	23
Ligia oceanica																			
Androniscus dentiger																			
Haplophthalmus danicus																			
Haplophthalmus mengii																			
Trichoniscoides saeroeensis		X																	
Trichoniscus pusillus	Х	Х	Х			Х		Х	Х		Х	Х		Х	Х	Х	Х	Х	Х
Trichoniscus pygmaeus																Х			
Philoscia muscorum	Х		Х							Х	Х					Х			
Oniscus asellus	Х	Х	Х	Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	Х		
Porcellio scaber	Х	Х	Х	Х	Х	Х	Х			Х	Х			Х	Х	Х	Х		
Porcellio spinicornis			Х							Х		Х							
Porcellionides pruinosus																			
Armadillidium vulgare																			
Location (cont.):	24	25	26	27	28	29	31	34	35	36	37	38	41	42	43	46	47	48	
Ligia oceanica																		Х	
Androniscus dentiger						Х						Х					Х		
Haplophthalmus danicus															Х		Х		
Haplophthalmus mengii												Х			Х				
T. saeroeensis																			
Trichoniscus pusillus	Х	Х	Х	Х	Х		Х	X		Х	Х	Х	Х	Х	Х		Х	Х	
Trichoniscus pygmaeus												Х			Х		Х		
Philoscia muscorum	Х	Х	Х	Х			X					Х	Х	Х	Х	Х	Х	Х	
Oniscus asellus	Х	X		Х	Х		X	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	
Porcellio scaber				Х			Х	Х	Χ	Х	Х		Х	Х	Х	Х	Х	Х	
Porcellio spinicornis												Х							
Porcellionides pruinosus																	Х		
Armadillidium vulgare													Х			Х	Х	Х	

TABLE 5: Summary of species of woodlouse recorded during the BMIG meeting in Northumberland.

During earlier BMG visits *Allajulus nitidus* had been collected in Durham (VC 66) and North Northumberland (VC 68) (Lee, 2006). Also, it had been reported from Mid-west Yorkshire (VC 64) and southern Scotland. With the species known to occur both north and south of the vice-counties visited in 2014 it was not surprising that Paul Richards added it to the fauna of South Northumberland from two sites in two different hectads and Duncan Sivell collected the first record for Cumberland (VC 70) from Wreay Woods. Wreay Woods also produced the second addition to the VC 70 fauna, *Craspedosoma rawlinsii* (Fig. 1).



FIGURE 1: Craspedosoma rawlinsii, a millipede new to the fauna of Cumberland (VC 70)

Although *Brachychaeteuma bagnalli* was described as new to science from a male specimen collected by Bagnall at Gibside in 1911 (Verhoeff, 1911) and later found at several more sites in Durham (Bagnall, 1919; Lee, 2006), the first hint that it occurred in Northumberland was an unidentified female *Brachychaeteuma* collected in Wooler during the BMG meeting in 1999 (Lee, 2006). The presence of the animal in South Northumberland (VC 67) was confirmed through the collection by Paul Richards of a male specimen from the gardens of Seaton Delaval Hall. These gardens proved to have the most species diverse millipede fauna of any visited during the weekend (Priestclose Wood was a close second) and three other species typically associated with synanthropic sites, *Cylindroiulus caeruleocinctus*, *Cylindroiulus truncorum* and *Cylindroiulus vulnerarius*, were added to the VC 67 fauna from here. The latter two have not been recorded from Durham or North Northumberland but *Cylindroiulus caeruleocinctus* is known from both adjacent vice counties.

The remaining two additions are at first sight the most surprising but both records reflect changes in distribution of the two species that seem to be ongoing. Lee (2006) commented on an apparent northward expansion in range of *Polydesmus coriaceus* following its discovery at five separate sites in Durham during the 2005 BMIG meeting. The discovery of the millipede at a site near Kielder Water, not far from the Scottish border, adds further weight to the idea of a range expansion. The *Chordeuma proximum* collected by Paul Richards from Falstone Cemetery appears to be even further outside of its known south western distribution but unpublished records from Suffolk and, especially, North-east Yorkshire (Tony Wardhaugh, pers. comm.) show a different situation. The species shows a classic Atlantic distribution in Europe (Kime, 2001) but clearly it should be looked for more widely in Britain.

WOODLICE

Out of a total number of 18 species of woodlouse previously recorded for the four vice-counties (VCs 66, 67, 70 & 73) combined, 13 were recorded during the 2014 field meeting. Only a single site in Durham (VC 66) was visited, yielding just three common species of woodlouse. More effort was put into recording VC 67, which was relatively under-recorded (Table 1). This was rewarded with 12

species of woodlouse (of the weekend's total of 13), including *Ligia oceanica* on the coast. *Porcellionides pruinosus* (Fig. 2). The latter, recorded by Steve Gregory and Keith Lugg at Seaton Delaval Hall, appears to be a new vice-county record (VC 67) (Gregory, 2009). An excursion by Keith Lugg to the Kirkcudbrightshire coast (VC 73) turned up *Trichoniscoides saeroeensis*, where this species is well known.

Woodlice were recorded from a total of 37 sites. Unsurprisingly, three species were widely recorded; *Oniscus asellus* (30 sites) *Trichoniscus pusillus* (29 sites) and *Porcellio scaber* (25 sites). The relative scarcity of *Philoscia muscorum* (17 sites) and *Armadillidium vulgare* (4 sites) reflects the northern location, where both these species become less common and increasing coastal in their respective distributions.



FIGURE 2: Porcellionides pruinosus, a woodlouse new to South Northumberland (VC 67).

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