CENTIPEDES RECORDED AT THE BMIG DURHAM MEETING, WITH COMMENTS ON SPECIES RECORDED BY RICHARD BAGNALL

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INTRODUCTION

The particular interest of a meeting in the Durham area was that this was a region from which myriapods were collected by Richard Bagnall and from where he recorded several species new to Britain, notably in the Derwent Valley, in the early part of the 20th century.

The inclusion of the species *Lithobius nigrifrons* (= *L.tenebrosus*) on the British list dates from 1911 (Bagnall, 1912a, b, 1913a) when he reported on two mutilated specimens of a lithobiid from Gibside collected in 1906 which had been identified by Edv.Ellingsen of Kragerö, with some hesitation, as this species. He comments that "it is necessary to obtain more material".

Reviewing field work for 1911 (Bagnall, 1912b), he gives a list of species from meetings in the Lower Derwent Valley, Harbottle, Haswell, Easington and Deneholm, the coast near Beadnell, Farne Islands and from Seaton Sluice and St.Mary's Island. From this we have records of *Lithobius forficatus*, *L.variegatus*, *L.tenebrosus* (above), *L.glabratus* (= *L.melanops*), *L.crassipes*, *Henicops fulvicornis* (= *Lamyctes emarginatus*), *Stigmatogaster subterraneus*, *Schendyla nemorensis*, *Scolioplanes crassipes* (= *Strigamia crassipes*), *S. accuminata*, *S.maritima*, *Geophilus carpophagus*, *Gproximus* (= *Ginsculptus* in this sense), *Glongicornis* (= *Gflavus*), *Gtruncorum*. From the fact that the *Geophilus carpophagus* is reported from Blanchland and is "not uncommon on the moors" it is likely that this refers to *Geasoni*.

In a subsequent paper (Bagnall, 1913b) there is a report of what was thought to be a species new to Britain, *Lithobius duboscqui*, determined by Brolemann himself. In his 1918 checklist (Bagnall, 1918a) he describes this species as "= *microps* of British authors non Meinert". It is as *L.microps* that we know the species today.

His account of the myriapods of the Derwent Valley (Bagnall, 1913a) adds to our species list *Lithobius calcaratus*, *L.piceus britannicus*, *Cryptops hortensis* ("Usually found in greenhouses") and *Mecistocephalus carniolensis* (= *Dicellophilus carniolensis*) an exotic found in hot houses at Leazes Park, Newcastle. *L.piceus* subspecies *britannicus*, a "fairly large and distinct form (recognised in the field by its bright yellow tibae)" was from Blanchland Moors, Buckshott Moor, Cowbers Fell. "Dr Brölemann, to whom I submitted specimens, considers it advisable to describe it as a form of *piceus* (a species not yet recorded as British) though it may ultimately prove to be a new species".

In 1918 (Bagnall, 1918b) there is a comment that most, if not all, of the existing records of *Lithobius borealis* may be really referable to *L.lapidicola*; he refers to records of *L.borealis* from the mountains of Northumberland and Scotland but also reports on a specimen from Lancashire identified by Brölemann as being specifically *L.borealis*. We now know the species formerly referred to by British workers as *L.lapidicola* as *L.borealis* whilst *L.lapidicola* is more correctly applied to another species found in Britain in recent years.

The only subsequent Bagnall reference to species from the Northumberland / Durham area appears to be of *Clinpodes linearis* (*Geophilus linearis*) from Hexham and from coastal areas of Durham and Yorkshire (Bagnall, 1935).

RECENT RECORDS

The present author (Barber, 1981, 1984) reported on centipedes from Northumberland and Durham, finding most of Bagnall's species in the two counties except for *Dicellophillus*, the two terrestrial *Strigamia* species, *Geophilus linearis*, *Cryptops hortensis*, *Lithobius piceus britannicus* and *L.tenebrosus*. He confirmed *Lithobius borealis* and added *L.macilentus*, the latter from north Northumberland. *Lithobius macilentus* was not recognised as British until

TABLE 1

Records of Centipedes from the Durham Meeting (all records are from 1-2.04.05)

Locations:

Hareh. = Harehope Quarry, Derwent G. = Derwent Gorge / Windybank Wood,

Middleton Quarry, Coxh. = Woodland near Coxhoe, Raisby = Raisby Hill, Trimdon = Trimdon Grange Quarry, Wing. = Wingate Quarry, Easin. = Easington, Hesle. = Hampst. = Hampsterley, Gibs'e = Gibside, Snipes = Snipes Dene, Gibside, C.Coll. = Grounds of Collingwood College, Bot.G. = University Botanic Garden, Bp.Md. = Bishop Hesleden Dene, Black. = Blackhall Rocks, Hord. = Horden, Crim. B. = Crimdon beach, Crim. S. = South of Crimdon

Collectors:

DK = R.D.Kime, EP = E.C.Philp, HR = H.J.Read, PL = P.Lee, PR = J.P.Richards, ST = S.Turnbull, TB = A.D.Barber

Location	Hareh.	Hareh. Derwent G.		Hamst. Gibs'e		Snipes	C.Coll. Bot.G.		3t.Chilte B	Gt.ChiltcBp.Md. Coxh.		aisby H T	Raisby H Trimd. Wing.	'ing. Easin.	in. CED	Hesle.	. Black.	Hord.	Crim.B Crim.S	Crim.S
NGR	NZ0336	NZ0336 NZ0648 NZ0649 NZ0730 NZ1758 NZ1859 NZ2740	NZ0649 1	NZ0730 1	NZ1758	NZ1859	NZ2740 1	NZ2740 1	NZ2740 NZ2930 NZ3332	IZ3332 N.	NZ3335 N	NZ3335 N	NZ3635 NZ	NZ3737 NZ4143		NZ4238 NZ443	NZ4437 NZ4540	0 NZ4442	NZ4836 NZ4936	NZ4936
Cryptops hortensis																				
Dicellophilus carniolensis *																				
Geophilus carpophagus																				
Geophilus easoni																		x		
Geophilus flavus		X					X					X	X							
Geophilus insculptus		X			X		X			X		X	X	X	-	X X			ć.	
Geophilus linearis																				
Geophilus truncorum		X		X								X	X				X		X	
Lamyctes emarginatus																				
Lithobius borealis																				
Lithobius calcaratus												X						X		
Lithobius crassipes	X	X	X		X							X								
Lithobius forficatus	X	×			X		×	**	X			×	X	X	X		X			
Lithobius macilentus										X			x	X						
Lithobius melanops	X		X						X						X		X			
Lithobius microps							X	X		X	X		X	X			X			X
Lithobius piceus																				
Lithobius tenebrosus																				
Lithobius variegatus		×		×	X	×														
Schendyla nemorensis							X													
Stigmatogaster subterraneus					×		X	X									X	X		
Strigamia acuminata																				
Strigamia crassipes																				
Strigamia maritima																	X		X	
	DK	EP, PL	TB	DK	TB, PL	PL	TB, PR	PR	PR S	ST, PR	PR P	PL, HR PL, HR	L, HR	TB	TB H	HR HR	TB	TB	HR, DK	DK
* inside buildings or greenhouse only	onse only											E	EP, PR							

Northumberland	RSB	ADB	BMIG	BMIG
& Durham	1911-	1981	1999	2005
	1935	1984		
Cryptops hortensis	X		X	
Dicellophilus carniolensis *	X			
Geophilus carpophagus	x(sl)	x(sl)	x(sl)	
Geophilus easoni	x(prob)	x	x	X
Geophilus flavus	X	x	x	X
Geophilus insculptus	x	x	x	X
Geophilus linearis	x			
Geophilus truncorum	X	x	x	X
Lamyctes emarginatus	X	x		
Lithobius borealis	X	X		
Lithobius calcaratus	X	X		x
Lithobius crassipes	X	x	x	x
Lithobius forficatus	X	X	x	X
Lithobius macilentus		X		X
Lithobius melanops	X	x	x	x
Lithobius microps	x	X	x	X
Lithobius piceus	X			
Lithobius tenebrosus	x			
Lithobius variegatus	x	X		x
Schendyla nemorensis	x		x	X
Stigmatogaster subterraneus	x	X	x	X
Strigamia acuminata	x			
Strigamia crassipes	x			
Strigamia maritima	x	X	x	X
* inside buildings or greenhouse of	-1			

TABLE 2 Comparison of records of R. S. Bagnall with some subsequent collections

RSB = R.S.Bagnall, ADB = Barber, 1981, 1984, BMIG 1999 = Ford Castle Meeting (Barber, 2001), BMIG 2005 = Durham Meeting, 2005

the mid twentieth century (Eason, 1953). The BMIG meeting at Ford Castle recorded 12 species from a variety of coastal and inland sites, including *Cryptops hortensis* (Barber, 2001).

In April 2005 at the BMIG field meeting some of Bagnall's localities (including Gibside, Derwent Valley, Blackhall Rocks) and other sites were visited and a number of centipede species were recorded. Amongst these were all those listed by Bagnall (above) with the exceptions of *Lithobius piceus britannicus*, *L.borealis*, *L.tenebrosus*, *Lamyctes emarginatus*, *Cryptops hortensis*, *Strigamia crassipes*, *S.accuminata*, *Geophilus linearis* and *Dicelophillus carniolensis*. There were also 3 records of *L.macilentus*. Table 1 summarises these records whilst Table 2 compares records from Bagnall's various reports, those of the present author (Barber, 1981, 1983), the Ford Castle meeting (Barber, 2001) and the present one.

The picture that emerges is of *Geophilus insculptus* and *Geophilus flavus* (along with the smaller *Geophilus truncorum*) as the common geophilomorphs, *Lithobius forficatus*, not surprisingly, as a common large lithobiomorph and *L.crassipes* and *L.microps* as the commonest smaller lithobiomorphs with widespread records of *L.melanops*.

Of interest is the fact that there was only one record of *Geasoni* and that from a coastal site; it is often regarded as a moorland animal and of the relatively small number of records of *Lithobius variegatus*, all from the 10km grid squares NZ 03, 04 and 15. It had not been found at all at the Ford Castle meeting and comments have been made elsewhere (Barber, 1984) about its patchy distribution in this area.

Dicellophillus was not found but only one small greenhouse at the University was sampled; other mecistocephalids have been reported from hothouses at Kew and in Cornwall. The status of *Lithobius tenebrosus* remains unclear; basing a record on two damaged specimens identified with such a level of uncertainty makes it difficult to sustain on our list although it was subsequently reported from Cornwall by Turk (1944), the specimens no longer being available. However a single specimen, confirmed by E.H.Eason, was collected at Aberystwyth in 1988 (Keay,1989) so it is not completely impossible that it might have been found in this area or alternatively these may have been damaged examples of another somewhat similar species such as *L.melanops*.

Lithobius piceus britannicus remains enigmatic. The only two larger lithobiids with typically more that 2+2 forcipular coxosternite teeth that have been found in the area are Lithobius forficatus and L.variegatus, both of which are distinguished from L.piceus by such features as the spine 15VaC and a double claw on the 15th legs of the latter. What species Brölemann actually examined is difficult to say; he was not likely to be very familiar with L.variegatus which has only been found in France in recent years and, although with its colouration it might, perhaps, be thought of as having yellowish markings on the legs is really rather different from the L. piceus piceus of S.E.England. In any case, Bagnall would have been familiar with L.variegatus and, presumably, be unlikely to confuse it with another species. Unless specimens can be located, the mystery must remain.

There are several further species that might, perhaps, be expected to be found in due course including *Geophilus electricus* (which is known from Peebles), *Geophilus carpophagus* (s.s.), *Cryptops parisi* (found in Edinburgh), one or other of the other two *Strigamia* species and possibly other maritime types such as *Geophilus fucorum* and *Hydroschendyla submarina*.

ACKNOWLEDGEMENTS

Thanks to Val Standen, meeting organiser, to Paul Lee for help with records and those who contributed records from the meeting.

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