

FIELD MEETING REPORTS

REPORT ON BMIG FIELD MEETING AT STAINBOROUGH, BARNLSLEY, 2012

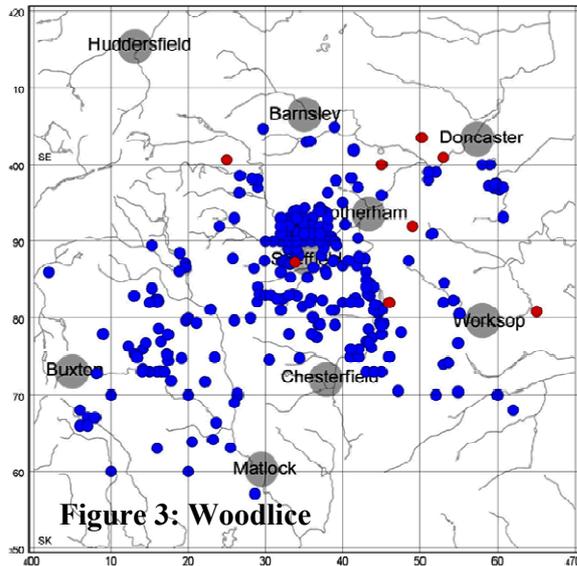
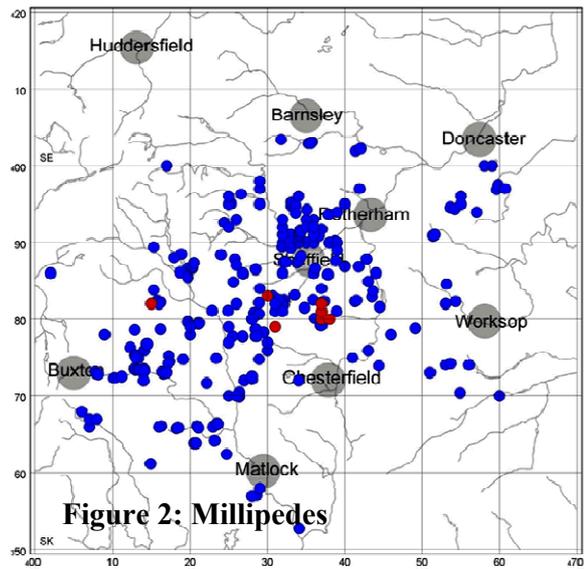
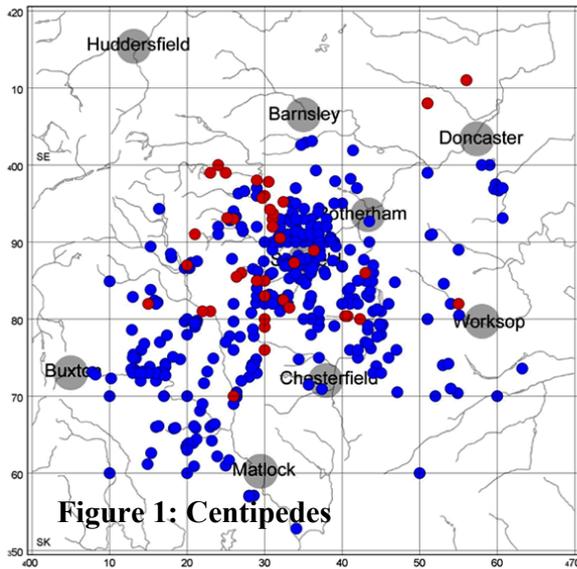
J. P. Richards

Dept of Animal & Plant Sciences, University of Sheffield, Western Bank, Sheffield, S10 1UN, UK.
 Email: paul.richards@sheffield.ac.uk

INTRODUCTION

The annual general meeting and field meeting of the British Myriapod & Isopod Group was held at Wentworth Castle, Stainborough, Barnsley, South Yorkshire from 13-15th April 2012.

Figures 1-3 show records from the Sheffield database and demonstrate the paucity of local records for Barnsley (top centre of map) prior to the BMIG meeting. Rotherham and Doncaster have only partially been mapped. The large accumulation of records in north Sheffield are the result of a specific recording project, Street Safari in 2007 (Clegg & Richards, 2007).



FIGURES 1-3: Previous records for the Sheffield area

- - pre-1990 records
- - records from 1990 onwards

A total of 607 records were reported from: Keith Alexander, Tony Barber, Mike Davidson, Jim Flanagan, Steve Gregory, Desmond Kime, Paul Lee, Angela Lidgett, Keith Lugg, Helen Read, Paul Richards, Duncan Sivell, Mark Telfer, Ashley Watson & Derek Whiteley. 28 one kilometre grid squares (monads) were visited across Barnsley Metropolitan District and adjacent areas of South Yorkshire (see Table 1).

TABLE 1: Summary of sites visited during BMIG field meeting to Barnsley, 2012

Site name	Grid reference
Dunford Bridge	SE1502
Trans Pennine Trail, Wogden bottom	SE1602
Little Don Valley/Langsett Reservoir	SE1900
Whitely edge	SE1904
Ingbirchworth	SE2105; 2106; 2006
Langsett	SE2200
Clough Wood, Gunthwaite	SE2406
Cannon Hall Country Park	SE2707
Menagerie Wood, Bretton Park	SE2812
Stainborough Park/ Wentworth Castle	SE3102 to 3303
Trans Pennine/Dove Trail, Barnsley	SE3403
Barnsley Canal, Wilthorpe	SE3408
Stairfoot, Ardsley	SE3705; 3706
Edderthorpe Ings	SE4107
Upper Haigh Wood	SE4208
Goldthorpe	SE4703
Brockadale YWT Reserve	SE5017; 5117
Broomhead Reservoir	SK2696
Stocksbridge	SK2698

There is a diversity of habitats across the district including upland heath, blanket bog, ancient woodland, post-industrial brownfield sites, restored wetlands and grazing marsh (see SY timescape, 2007). The geology is predominantly Coal measures and Millstone grit sandstones. The limited natural provision of calcareous habitat is slightly balanced by the influence of many restored rail and industrial synanthropic sites that are available, offering sporadic alkaline, calcium rich environments.

RESULTS

The venue for the meeting, Wentworth Castle and in particular the walled garden and plant nursery, was by far the most productive site, providing 39 species of the 54 recorded across the district (see Tables 2-4).

This recording effort produced records for at least 22 new species of myriapod and terrestrial isopod to the Barnsley area in what was previously a very under-recorded area. The Sorby Record Special publication, *Millipedes, Centipedes & Woodlice of the Sheffield Area* (Richards, 1995) is the nearest published record of recent information from these groups, but the maps finish at the SE00 line just below Barnsley. The datasets for the area just north of this line are very limited indeed, with records for only 25 species from these groups.

Therefore, the field meeting has established a good foundation for future recording in the Barnsley area by adding a significant amount to local knowledge for these groups. The weekend produced a good range of species, many of which are new to the current datasets. These have made a valuable contribution to establishing context to the north of what is otherwise a very well recorded area. The more interesting species are discussed below.

Centipedes

The wealth of new centipede records was very welcome (Table 2), with 5 new species to the Barnsley area, including the very widespread *Haplophilus subterraneus* (Fig. 4) and *Lithobius melanops*, which show clearly how under-recorded the area has been. There are a few scattered localities elsewhere around Sheffield for *Lithobius macilentus*, with a typically parthenogenetic distribution of localized clusters of records (Richards 1995). It remains to be seen if the two new Barnsley sites represent equally isolated populations. The two westerly upland sites for *Lithobius calcaratus* mirror other local records. This small, dark species is very much a moorland and heath resident, which will no doubt prove to be much more common when these habitats are investigated more closely in the region. The other new species was *Schendyla nemorensis*.



FIGURE 4: *Haplophilus subterraneus*, a centipede new to the Barnsley area (image © Paul Richards)

Millipedes

Among the millipedes (Table 3), the most significant records were for *Choneiulus palmatus*, from Wentworth Castle gardens, which was previously not known locally (Richards, 1995). Interestingly, *Leptoiulus belgicus* was not found in this location during the BMIG meeting, but had been found in good numbers quite recently at the same site as another new species to the region (Richards 2010). Other significant millipedes included *Melogona gallica* from Langsett, which is only the third local record and one of very few outside the south and west of Britain. Three of the locally scarce *Brachychaeteuma bradeae* were found around Wentworth castle. *Brachyiulus pusillus* (Fig. 5) is also a very uncommon species around Sheffield, with only three sites noted in Richards, 1995, but two new South Yorkshire sites were identified. The very productive Wentworth site also turned up a single record of *Cylindroiulus vulnerarius*. This species has a strong affinity with mature gardens locally and was not unexpected in the heavily managed grounds of the castle.



FIGURE 5: *Brachyiulus pusillus*, an uncommon millipede in the Sheffield area (image © Paul Richards)

Woodlice

Despite the slightly larger dataset in local record centres for woodlice compared to the myriapods, the expansion in local knowledge was quite notable (Table 4). No *Armadillidium* species had previously been recorded for Barnsley, but 3 were encountered during the field meeting. *Armadillidium nasatum* was picked up around Wentworth Castle. This species is scarce in the Sheffield area and only known from synanthropic, urban sites.

Armadillidium pulchellum was a surprising find in the post-industrial Dearne valley at Edderthorpe. In the region, this species is widespread on the Carboniferous limestone of the Peak District and is tentatively assumed to have been introduced here in chippings associated with the railways and mining operations.

Armadillidium vulgare was less surprising at Brockadale, just to the east of the Barnsley district, on the band of Permian limestone, where it is widespread, but uncommon. Another species found only at Brockadale was *Platyarthrus hoffmannseggii* which has a very specific local distribution down the Permian limestone belt (Richards 1995) as part of the most northerly inland population for this species (Gregory 2009). Another species associated with limestone, *Porcellio spinicornis* occurred in the walls of Wentworth castle gardens and on the disused railway at Stairfoot but is not known from any more 'natural' habitats locally, outside the limestone areas of the Peak District.

Other than within the grounds of Wentworth Castle, it would seem that dung heaps and compost heaps were not well surveyed during the meeting. *Porcellionides pruinosus* was recorded here and from a dung heap at Whitely edge. The other dung specialist, *Porcellio dilatatus* was not recorded at all, but is known from a single Barnsley farm-yard site, not far from Wentworth. A recent unpublished survey of stables and dung heaps around Sheffield has shown both species to be widespread in other parts of South Yorkshire and Derbyshire.

A scarcity of specialist recording has produced an inaccurate picture for the distributions of the small pale *Haplophthalmus* species. Both local species were found at Wentworth Castle and the disused railway at Wogden. *Haplophthalmus danicus* (Fig. 6) was also found at Brockadale and *H. mengii* at

Gunthwaite. All the *H. danicus* sites are calcareous, either naturally or through human influence, while Gunthwaite is more naturally acidic on coal measures.



FIGURE 6: *Haplophthalmus danicus* – this woodlouse was found at four sites.
(image © Paul Richards)

The close attention of BMIG has also added *Trichoniscus pygmaeus* to the Barnsley list, at Dunford Bridge and Wogden. This is a hugely under-recorded species, which is widespread in urban areas across Sheffield and particularly frequent in the limestone of the Peak District.

ACKNOWLEDGEMENTS

In addition to the above mentioned recorders, thanks are extended to the Yorkshire Wildlife Trust for access to their reserves, Jim Flanagan for assistance with site permissions and Derek Whiteley at Sheffield City Ecology Unit for records and maps for Barnsley sites. Particular thanks go to Peter Clegg for assistance with arranging accommodation at Stainborough and providing access to all areas of the park.

REFERENCES

- Clegg, P & Richards, J.P. (2007) Street Safari: recording myriapods and isopods as part of a community project in Sheffield *Bulletin of the British Myriapod & Isopod Group* (2007) **22**: 36-43.
- Gregory, S.J. (2009) *Woodlice and Waterlice (Isopoda: Oniscidea & Asellota) in Britain and Ireland*. Centre for Ecology & Hydrology/Field Studies Council.
- Richards, J.P. (2012) Millipedes, Centipedes & Woodlice of the Sheffield Area. *Sorby Record Special Series* **10**. Sorby Natural History Society/Sheffield City Museum.
- Richards, J.P. (2010) *Leptoiulus* in Yorkshire. *Newsletter of the British Myriapod and Isopod Group* **21**: 2-3 (unpublished).
- SY timescapes (2007)
<http://www.sytimescapes.org.uk/files/uploads/pdfs/zonemaps/BarnsleyZones.pdf>

TABLE 2: Number of records of Centipede species recorded during BMIG field meeting to Barnsley, 2012

Grid Ref: Species	SE1502	SE1602	SE1900	SE1904	SE2006	SE2105	SE2106	SE2200	SE2406	SE2707	SE2812	SE3102	SE3103	SE3202	SE3203	SE3302	SE3303	SE3403	SE3408	SE3705	SE3706	SE4107	SE4208	SE4703	SE5017	SE5117	SK2696	SK2698	TOTAL
<i>Haplophilus subterraneus</i>												3						1		1								1	6
<i>Schendyla nemorensis</i>			1				1						2								1								5
<i>Strigamia acuminata</i>																									1				1
<i>Geophilus easoni</i>			3																				1						4
<i>Geophilus flavus</i>			4		1		1																						6
<i>Geophilus insculptus</i>		1	2					1	3				2		1						1						2		13
<i>Geophilus truncorum</i>			4		1	2	1	1	3											1		1	1	1	1		2		19
<i>Cryptops hortensis</i>												6			2						1	1		1					11
<i>Lithobius calcaratus</i>			3	2																									5
<i>Lithobius crassipes</i>				1			1		2														1						5
<i>Lithobius forficatus</i>		3	6	2	1		2		6				5		4		1		1	1	1	2	1	1		1	1		39
<i>Lithobius macilentus</i>		1							1																				2
<i>Lithobius melanops</i>									1				3		2		1												7
<i>Lithobius microps</i>			1			1	1		1				1		1						1	1			1				9
<i>Lithobius variegatus</i>	1	2	8	1	1	2	2	2	7		1	1	4	1	1		1	1	1	1	1	2		1			2		43

TABLE 3: Number of records of Millipede species recorded during BMIG field meeting to Barnsley, 2012

Grid ref:	SE1502	SE1602	SE1900	SE1904	SE2006	SE2105	SE2106	SE2200	SE2406	SE2707	SE2812	SE3102	SE3103	SE3202	SE3203	SE3302	SE3403	SE3408	SE3706	SE4107	SE4208	SE5017	SE5117	SK2696	TOTAL	
<i>Glomeris marginata</i>		3						1	4				1				1		2			1	1	2	16	
<i>Brachychaeteuma bradeae</i>													2	1												3
<i>Melogona gallica</i>								1																		1
<i>Melogona scutellaris</i>																								1		1
<i>Nanogona polydesmoides</i>		1						1	1				2							1	1	1		1		9
<i>Brachydesmus superus</i>			1	1		1	1	1	2				1									1	1			10
<i>Polydesmus angustus</i>			3	1					1				2	1								1	1	1		11
<i>Polydesmus coriaceus</i>		1		1			1	1	2				9	3												18
<i>Polydesmus inconstans</i>				1		1																	1			3
<i>Archiboreoiulus pallidus</i>														1												1
<i>Blaniulus guttulatus</i>								2					4	1								1				8
<i>Boreoiulus tenuis</i>																				1						1
<i>Choneiulus palmatus</i>													1	3												4
<i>Nemasoma varicorne</i>			1						1															1		3
<i>Proteroiulus fuscus</i>		3	6		1	1	1	1	3	1			5	1							2	1		2		28
<i>Brachyiulus pusillus</i>													2									1				3
<i>Cylindroiulus britannicus</i>				2					1				8	3												14
<i>Cylindroiulus caeruleocinctus</i>													1									1				2
<i>Cylindroiulus punctatus</i>	1	2	7			1	2	2	8			1	7	6	1	1		2	1		1	1		2		46
<i>Cylindroiulus vulnerarius</i>														1												1
<i>Julus scandinavicus</i>			2					1	2				1								1			1		8
<i>Ommatoiulus sabulosus</i>																							1			1
<i>Ophiulus pilosus</i>								1					6	2				1				1				11
<i>Tachypodoiulus niger</i>	1	3	6	1		1	1		6	1	1		4	4	1	1	1	1	2	1	2	1	1	1		41

TABLE 4: Number of records of Woodlouse species recorded during BMIG field meeting to Barnsley, 2012

Species	Grid ref:																				TOTAL					
	SE1502	SE1602	SE1900	SE1904	SE2006	SE2105	SE2106	SE2200	SE2406	SE2707	SE2812	SE3102	SE3103	SE3202	SE3203	SE3302	SE3403	SE3408	SE3706	SE4107		SE4208	SE5017	SE5117	SK2696	
<i>Androniscus dentiger</i>	1	3											3		1					1						9
<i>Haplophthalmus danicus</i>		1											3		3								1			8
<i>Haplophthalmus mengii</i>		1							1				1		1											4
<i>Trichoniscus pusillus agg.</i>	1	1	3	2	1	1	1	1	2				3				1	2	1		1	1		1		23
<i>Trichoniscus provisorius</i>													1													1
<i>Trichoniscus pusillus s.str.</i>		2	2						4				1		3											12
<i>Trichoniscus pygmaeus</i>	1	1							1				1													4
<i>Oniscus asellus</i>	1	4	7	1	1	1	1	1	6		1		8	1	3	1	1	2	2	1	1		2	1	1	47
<i>Philoscia muscorum</i>		1						1	3		1	1	7		3	1	1	1	2	1	1		2	1	1	27
<i>Platyarthrus hoffmannseggii</i>																							1			1
<i>Porcellio scaber</i>		1	3	1	1	1	1	2	3	1		1	7	1	4	1				2	1		1	1	1	33
<i>Porcellio spinicornis</i>													4		2				1							7
<i>Porcellionides pruinosus</i>				1									3		2											6
<i>Armadillidium nasatum</i>													1		2											3
<i>Armadillidium pulchellum</i>																				1						1
<i>Armadillidium vulgare</i>																							2			2