Report on the BMIG field meeting in Preston Montford in 2022

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Introduction and background

The 2022 BMIG field meeting, held from 21st to 24th April, was based at the Field Studies Council (FSC) Preston Montford centre in Shropshire. The field centre has extensive grounds including sheep grazed and rough grassland, ponds and mature broadleaved woodland on the bank of the River Severn (the Severn Montford SSSI). Shropshire has a varied geology, with outcrops of limestone, sandstone, shale and igneous rocks, with many potential sites including meadows, heath, wetlands and woodland.

BMIG had previously visited Shropshire in 2007, which was then based in Ludlow further south near the Herefordshire and Worcester borders. Shropshire was targeted due to the lack of recording of BMIG species, which was highlighted by Lee (2010) in his summary of the historical recording of millipedes in Shropshire (VC40). Up to 2001 there were about 100 millipede records comprising 20 species, with a few additional species records added from FSC Preston Montford by Paul Lee during identification courses undertaken prior to the 2007 meeting. The number of records is likely to have been similarly depaurate for centipedes and woodlice, thus highlighting the need for this field meeting.

The 2007 meeting proved successful with about 40 sites visited within 15 hectads (10km squares), significantly improving our knowledge of the Shropshire fauna. A summary of centipedes, millipedes and woodlice observations are reported by Barber (2008), Lee (2010) and Gregory (2010) respectively. In total 19 species of centipede were recorded, including *Schendyla dentata* and *Henia brevis* (the latter new to Shropshire). Of the 21 species of millipede species recorded five were new to Shropshire: *Brachychaeteuma melanops, Cylindroiulus parisiorum*, and perhaps more surprisingly the widespread *Melogona scutellaris, Archiboreoiulus pallidus* and *Polydesmus coriaceus*. The 16 species of woodlouse included *Trichoniscoides sarsi seg.* at Ludlow Castle (at the time only known from Kent, Suffolk and Leicestershire in Britain) and *Armadillidium pictum* at Downton Gorge NNR. Centipede, millipede and woodlouse records have continued to be made during identification courses held at FSC Preston Montford, and as recently as February 2022 female specimens of *Chordeuma* species (which will be new to Shropshire) were collected from the Severn Montford SSSI (in the grounds of FSC Preston Montford) (SJG pers. obsv.). It is hoped to find males to confirm the species.

Methods and Sites

A list of sites with permission to survey and collect specimens was provided to all participants who were free to undertake field work whenever and wherever they chose to record. A few sites that were surveyed in 2007 were re-visted in 2022, for example along Wenlock Edge. The only 'organised' site visit was a brief evening excursion to the 'brick wall' in the grounds of FSC Preston Montford to demonstrate how to undertake a torch light survey with the objective (in this case) of finding the woodlouse *Porcellio spinicornis* (Fig. 2).

The week before the field meeting Gary Farmer of Vale Landscape Heritage Trust had emailed images to the author of a fast running dark reddish/purple trichoniscid woodlouse with the eye comprising a single ommatidium that he had found beside the River Avon in Worcestershire (Farmer, 2022). It seemed to be *Hyloniscus riaprius*, a species not recorded in Britain, so a site visit was hastily arranged.

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In total 29 sites falling within 12 hectads were visited and are listed in Table 1.

Table 1: List of sites visited.

Records were submitted by: Kieran Anderson (KA), Kevin Clements (KC), Gary Farmer (GF); Neil Fletcher (NF), Steve Gregory (SG), Thomas Hughes (TH), Warren Maguire (WM), Dawid Martyniuk (DM), Annie Northfield (AN), Helen Read (HR), Duncan Sivell (DS) & Derek Whiteley (DW)

Site		Grid		_	Records
code	Locality	ref.	VC	Date	submitted by:
1	Boring Mill Pond	SJ6604	40	21/04/2022	DW
2	Ercall Wood and quarry	SJ6409	40	21/04/2022	DW
	The Ercall	310409	40	22/04/2022	DM
3a	Lincoln Hill Wood	SJ6603	40	21/04/2022	DW
3b	Lincoln Hill Quarry	SJ6704	40	22/04/2022	HR
4	Smalley Hill SWT reserve	SJ6608	40	21/04/2022	DW
	Smalley Hill, New Works	530000	70	22/04/2022	HR
5a	FSC Preston Montford, torch survey			22/04/2022	SG
5 b	FSC Preston Montford, grounds	SJ4314	40	23/04/2022	KC, SG, DM, DW
5c	FSC P.M. Severn Montford SSSI			23/04/2022	SG
6	Haines Meadows, Wick	SO9647	37	22/04/2022	GF, SG, TH, WM, AN
7	Tiddesley Wood NR	SO9245	37	22/04/2022	SG, TH, WM, AN
8	Ironbridge Gorge car park	SJ6603	40	22/04/2022	HR
9	The Wrekin, Shropshire	SJ6409	40	22/04/2022	NF
10	Dale Road, Coalbrookdale	SJ6604	40	22/04/2022	KA
11	Dolgoch Quarry SWT, Shropshire	SJ2724	40	23/04/2022	NF, DM
12	Harton Hollow	SO4787	40	23/04/2022	DS
13	Much Wenlock, Quarry near	SO6199	40	23/04/2022	SG
	Wenlock Edge near Presthope				
14a	Manure heap	SO5897	40	22/04/2022	CC TH WA AN
14b	Sparsely vegetated quarry	SO5797	40	23/04/2022	SG, TH, WM, AN
14c	Secondary woodland in quarry	SO5796			
15	Rea Brook Valley, Shrewsbury	SJ5012	40	23/04/2022	HR
16	Shrewsbury Abbey grounds	SJ4912	40	23/04/2022	HR
17a	Uffington, Old Canal	SJ5214	40	23/04/2022	HR
17b	Uffington canal	SJ5313	40	24/04/2022	DW
18	Uffington Church	SJ5213	40	23/04/2022	HR
19	Uffington Mill	SJ5213	40	23/04/2022	HR
20	Sweeny Fen	SJ2725	40	23/04/2022	DM
21a	Attingham Dark	SJ5510	40	22/04/2022	DM
21b	Attingham Park	SJ5409	40	24/04/2022	DW
22	Doctor's Field, Shrewsbury	SJ4813	40	22/04/2022	KC
23	Beck's Field, Shrewsbury	SJ4812	40	22/04/2022	KC
24	Copthorne Park, Shrewsbury	SJ4712	40	22/04/2022	KC
25	Mousecroft Pool, Shrewsbury	SJ4710	40	22/04/2022	KC
26	Carding Mill Valley, Long Mynd	SO4494	40	22/04/2022	KC
27	Rectory Wood, Long Mynd	SO4493	40	22/04/2022	KC
28	Townbrook Valley, Long Mynd	SO4493	40	22/04/2022	KC
29a	Woodland	SJ4005			
29b	Earl's Hill Nature Reserve Grassland	SJ4105	40	23/04/2022	KC
	Stassiana	20.100	1	l .	1

Species recorded

During the field meeting 61 species of BMIG taxa were recorded: 14 species of centipede (Table 2), 23 of millipede (Table 3), 17 of woodlice (Table 4), and also six species of pauropod and a symphylan (Table 5). The two most prolific sites are both large sites that not only support a wide array of contrasting habitats but were also visited by a large number of participants. The grounds at FSC Preston Montford (where we were based!) turned up 37 species (12 of centipede, 14 millipede, 9 woodlice and 2 pauropods) and a disused limestone quarry on Wenlock Edge near Presthope turned up 31 species (5 centipede, 15 millipede and 11 woodlice).

The pygmy woodlouse *Hyloniscus riparius* (C. Koch) is confirmed new to the UK (at a site where it was first found the week before). One species, the millipede *Choneiulus palmatus*, is listed in the Natural England species status review (Lee, 2015) as being Nationally Scarce. These species are discussed in more detail below.

Centipedes

Fourteen species of centipede were recorded from 30 sites (Table 2). The most frequently recorded species were *Lithobius forficatus* (17 sites), *Lithobius variegatus* (14 sites; reflecting the relatively western location which this species favours) and *Haplophilus subterraneus* (12 sites). Other centipedes recorded were found at nine sites or less.

Of the six species of *Geophilus* the common *G. flavus* and *G. truncorum* were both recorded from four sites and the more local *G. electricus* from two. A specimen of *Geophilus carpophagus s.str.* was observed at night climbing up a brick wall during the night-time torch survey undertaken in the grounds of FSC Preston Montford to look for the woodlouse *Porcellio spinicornis*. The closely related, but ground dwelling, *Geophilus easoni* was recorded from three woodland and/or moorland sites. The only species of *Cryptops* recorded was *C. hortensis* which was found at nine sites in a wide variety of habitats, including a garden, a river-side meadow, disused quarries and ancient woodland. All five species of *Lithobius* recorded are common species and were found from between six to seventeen sites, with the exception of *L. crassipes* which was found in just one site, an ancient woodland.

Additional species recorded during the 2007 BMIG field meeting (Barber, 2008) include the elusive synanthropes *Schendyla dentata* and *Henia brevis* and the primarily rural 'woodland' species *Strigamia acuminata*, *S. crassipes* and *Lithobius macilentus*.

Millipedes

A total of 23 species of millipede were recorded from 33 sites during the field meeting (Table 3). Perhaps unexpectedly, the most frequently recorded millipede was *Polydesmus coriaceus* from 22 sites, closely followed by the ubiquitous millipedes *Cylindroiulus punctatus* (18 sites) and *Tachypodoiulus niger* (17 sites).

The abundance of *Polydesmus coriaceus* relative to the 'ubiquitous' *P. angustus* (which was recorded from just 12 sites) perhaps reflects the calcareous geology of the majority of sites surveyed. Certainly, in lime-rich Oxfordshire, albeit further south, *P. coriaceus* is by far the most abundant species and *P. angustus* is mainly restricted to the few parts of the county with more acidic soils (Gregory, 1996). Two additional congeners, *P. denticulatus* and *P. inconstans*, were both found at single sites; a deciduous woodland and a riverside meadow respectively. The 'little white jobs' *Macrosternodesmus palicola* (1 site, with 3 sub-sites) and *Ophiodesmus albonanus* (2 sites) also favour calcareous soils and both were recorded from disused limestone quarries on Wenlock Edge (the latter also in the grounds of FSC Preston Montford). *Brachydesmus superus* (6 sites) was mainly recorded in disused quarries and woodland.

Table 2: Centipedes recorded during the Preston Montford 2022 field meeting. X = species recorded from site.

*Geophilus impressus - formerly known as G. insculptus and more recently G. alpinus.

Site code:	1	2	3a	3b	4	5a	5b	5c	6	7	9	11	13	14a	14b	14c	15
Hectad:	SJ60	SJ60	SJ	60	SJ60		SJ41		SO94	SO94	SJ60	SJ22	SO69		SO59		SJ51
Haplophilus subterraneus			X				X					X			X	X	
Schendyla nemorensis							X										
Geophilus carpophagus s.str.						X											
Geophilus easoni								X									
Geophilus impressus*												X					
Geophilus electricus			X				X										
Geophilus flavus							X		X								
Geophilus truncorum		X			X			X		X							
Cryptops hortensis							X	X	X	X							X
Lithobius crassipes										X							
Lithobius forficatus	X	X	X		X		X	X		X		X	X	X	X	X	
Lithobius melanops						X			X				X		X	X	
Lithobius microps			X				X					X	X	·	X		
Lithobius variegatus		X	X	X	X		X	X		X	X			X			
Total 14 species / No. per site:	1	3	5	1	3	2	8	5	3	5	1	4	3	2	4	3	1

Table 2: Centipedes recorded (continued)

Site code:	16	17a	18	20	21a	21b	22	23	24	25	27	28	29a	29b	Total
Hectad:	SJ41	SJ51	SJ51	SJ22	SJ51	SJ40	SJ41	SJ41	SJ41	SJ41	SO49	SO49	SJ	40	records
Haplophilus subterraneus	X	X	X	X				X	X				X		12
Schendyla nemorensis		X													2
Geophilus carpophagus s.str.															1
Geophilus easoni											X	X			3
Geophilus impressus*															1
Geophilus electricus															2
Geophilus flavus									X	X					4
Geophilus truncorum															4
Cryptops hortensis				X	X		X		X						9
Lithobius crassipes															1
Lithobius forficatus					X			X	X	X				X	17
Lithobius melanops							X								6
Lithobius microps				X	X	X							X		9
Lithobius variegatus				X	X	X				X	X		X		14
Total 14 species / No. per site:	1	2	1	3	4	2	2	2	4	3	2	1	3	1	

Table 3: Millipedes recorded during the Preston Montford 2022 field meeting. X = species recorded from site.

XR = Cylindroiulus sp. bearing thalli of the ectoparasitic fungus Rickia laboulbenioides. NS = Nationally Scarce

Site code:	2	3a	3b	4	5a	5b	5c	6	7	8	9	11	13	14a	14b	14c	15
	SJ60	SJ	60	SJ60		SJ41		SO94	SO94	SJ60	SJ60	SJ22	SO69		SO59		SJ51
Glomeris marginata	X	X	X				X		X			X	X		X	X	
Brachydesmus superus		X	X				X					X				X	
Macrosternodesmus palicola														X	X	X	
Ophiodesmus albonanus						X							X				
Polydesmus angustus	X	X				X	X					X				X	X
Polydesmus coriaceus	X	X	X	X			X	X		X		X	X		X	X	X
Polydesmus denticulatus		X															
Polydesmus inconstans								X									
Melagona sp.												X					
Nanogona polydesmoides						X							X	X			
Blaniulus guttulatus						X						X			X		
Boreoiulus tenuis																X	
Choneiulus palmatus NS																	
Proteroiulus fuscus	X			X		X	X	X								X	
Brachyiulus pusillus								X				X					
Cylindroiulus britannicus	X		X			X		X				X				XR	
Cylindroiulus caeruleocinctus						X							X		X		
Cylindroiulus punctatus	X	X	X			X	X	X	X			X				X	
Julus scandinavius		X					X					X					
Ophyiulus pilosus	X		X					X								X	
Ommatoiulus sabulosus												X					
Tachypodoiulus niger	X		X		X		X		X		X	X	X	X	X	X	
Nemasoma varicorne							X					X					
Total 23 species / No. per site:	8	7	7	2	1	8	9	7	3	1	1	13	6	3	6	11	2

Table 3: Millipedes recorded (continued)

Site code:	16	17a	17b	18	19	20	21a	21b	22	23	24	25	26	27	28	29a	Total
Hectad:	SJ41	SJ	51	SJ51	SJ51	SJ22	SJ51	SJ40	SJ41	SJ41	SJ41	SJ41	SO49	SO49	SO49	SJ40	records
Glomeris marginata							X									X	11
Brachydesmus superus						X											6
Macrosternodesmus palicola																	3
Ophiodesmus albonanus																	2
Polydesmus angustus		X			X					X	X		X				12
Polydesmus coriaceus		X	X		X	X	X	X	X	X	X	X					22
Polydesmus denticulatus																	1
Polydesmus inconstans																	1
Melagona sp.																	1
Nanogona polydesmoides																	3
Blaniulus guttulatus		X					X									X	6
Boreoiulus tenuis																	1
Choneiulus palmatus N.Sc.	X																1
Proteroiulus fuscus				X				X			X			X		X	11
Brachyiulus pusillus						X											3
Cylindroiulus britannicus		X			X	X	X		X		X		X				13
Cylindroiulus caeruleocinctus									X	X							5
Cylindroiulus punctatus			X		X	X	X			X	X	X	X		X		18
Julus scandinavius											X	X					5
Ophyiulus pilosus		X		X	X												7
Ommatoiulus sabulosus										X			X			X	4
Tachypodoiulus niger							X			X	X	X	X	X			17
Nemasoma varicorne																	2
Total 23 species / No. per site:	1	5	2	2	5	5	6	2	3	6	7	4	5	2	1	4	

The pill millipede *Glomeris marginata* was widely found at eleven sites, including disused quarries, secondary woodland and ancient woodland. Very few chordeumatidan millipedes were found. The most widely recorded was *Nanogona polydesmoides* (3 sites) and a single female *Melagona sp.* (*gallica / voigtii*) was found at Dolgoch Quarry. Female specimens of *Chordeuma proximum/sylvestre* had previously been recorded from the riverside woodland in the grounds of FSC Preston Monford (Severn Montford SSSI), but despite a targeted survey by the author, additional specimens were not found.

The only Nationally Scare species recorded was the blaniulid *Choneiulus palmatus* which was found by Helen Read at Shrewsbury Abbey grounds. Interestingly the most frequently noted blaniulid was the typically subcortical *Proteroiulus fuscus* with 11 sites, whereas the 'ubiquitious' soil dwelling *Blaniulus guttulatus* was recorded from just six (with *Boreoiulus tenuis* also found at one of those sites). Perhaps this reflects a bias to looking under loose bark on trees and dead wood (2 sites were also noted for the subcortical *Nemasoma varicorne* too), rather than beneath partly buried stones and logs. After the ubiquitous *Cylindroiulus punctatus* and *Tachypodoiulus niger*, the next most widely recorded julid was *Cylindroiulus britannicus* (13 sites). A male specimen of *Cylindroiulus britannicus* collected from a wooded quarry on Wenlock Edge was found to be infected with the host specific ectoparasitic fungus *Rickia laboulbenioides* De Kesel. *Brachyiulus pusillus* was found at three contrasting sites: a riverside meadow, woodland in a disused quarry and on farmland.

Woodlice

In terms of woodlice the meeting proved very successful with a total of 17 species recorded from 31 sites (Table 4). As to be expected the four most frequently recorded species were *Porcellio scaber* (from 27 sites), Oniscus asellus (21 sites), *Trichoniscus pusillus agg.* (18 sites) and *Philoscia 'muscorum'* (*s.str* or *s.lat.*) (16 sites).

The woodlouse highlight of the field meeting is undoubtedly confirmation of the discovery of the trichoniscid woodlouse *Hyloniscus riparius* (C. Koch) new to the UK from Haines Meadows in the Vale of Evesham, Worcestershire. In liaison with Gary Farmer of Vale Landscape Heritage Trust, the site was visited by Steve Gregory, Warren Maguire, Thomas Hughes and Annie Northfield (Fig. 1A; 1B). Several male specimens were collected which proved to be *H. riparius* (Gregory & Farmer, 2023). Numerous specimens of *Trachelipus rathkii* were also seen at this site and recently this species has been found at several other nearby sites along the Worcestershire Avon (Farmer, 2021), a species previously known downstream from the river Severn. Both species are often found together in flood plain habitats across Europe so they may share the same source of colonisation in Worcestershire. However, given the relatively isolated inland location and the close proximity of numerous 'market garden' glasshouses then it is quite likely that *H. riparius* (and possibly also *Trachelipus rathkii*) is an unintentional introduction to the Vale of Evesham.

A visit to the nearby Tiddesley Wood, an ancient deciduous woodland, also proved very productive with several specimens of the elusive trichoniscid, *Trichoniscoides albidus*, found beneath dead wood partly buried in wet soil near a ditch (Fig. 1C). A number of other interesting (non-BMIG) species were also encountered at this site. An additional four species of trichoniscid woodlice were also found over the course of the field meeting: *Haplophthalmus danicus* (5 sites), *Androniscus dentiger* (4 sites), *Trichoniscus provisorius* and *Trichoniscus pygmaeus* (both 3 sites).

With the exception of one site all *Philoscia* specimens were attributed by recorders to *P. muscorum*. Confirmed *Philoscia muscorum s.str*. were collected from 11 sites, including FSC Preston Montford and two disused quarries along Wenlock Edge. Other records for *Philoscia 'muscorum'* are probably this species, but it is not apparent if all recorders had checked specimens for the presence of the scarce *P. affinis*, which was found by Ducan Sivell in woodland on Wenlock Edge. Although just three female specimens were collected (i.e. no males for confirmation), the head and body pigment patterns (and

habitat) are typical of this species. This is the first record of this species for Shropshire, but it has been recently recorded from the adjacent county of Worcestershire (Wyre Forest; Farmer, 2019) and also in Derbyshire (Paul Richards and Derek Whiteley; verified records on iRecord) and Nottinghamshire (including Sherwood Forest; Pendleton & Pendleton, 2023).

The paucity of *Armadillidium vulgare* sightings (just 6 sites) is surprising, but this species does become increasingly scarce at inland sites away from south-east England. A thriving population of *A. nasatum* (and *A. vulgare*) was discovered in an old limestone quarry on Wenlock Edge (where the species was previously recorded during BMIG's 2007 field meeting). Specimens were readily found under stones scattered among sparsely vegetated ground on the quarry floor. Nearby specimens of *Porcellio spinicornis* were also encountered among rubble at the base of a rock face. The night-time torch survey





Figure 1: A) Searching (successfully) among flood debris on Haines Meadows for *Hyloniscus riparius* and *Trachelipus rathkii* (from left to right; Warren Maguire, Annie Northfield, Gary Farmer and Thomas Hughes). B) *Hyloniscus riparius* female at Haines Meadows. C) *Trichoniscoides albidus* from Tiddesley Wood. Image A) by Steve Gregory, images B) & C) by Warren Maguire

Table 4: Woodlice and waterlice recorded during the Preston Montford 2022 field meeting. X = species recorded from site.

Except *Philoscia muscorum* records: SS = sensu stricto; SL = sensu lato. National status: NTB = New to Britain.

Site code:	1	2	3a	4	5a	5b	5c	6	7	10	11	12	13	14a	14b	14c	15
Hectad:	SJ60	SJ60	SJ60	SJ60		SJ41	•	SO94	SO94	SJ60	SJ22	SO48	SO69		SO59		SJ51
Asellus aquaticus						X											
Androniscus dentiger			X											X	X		
Haplophthalmus danicus	X		X			X	X		X								
Hyloniscus riparius NTB								X									
Trichoniscoides albidus									X								
Trichoniscus provisorius						X							X		X		
Trichoniscus pusillus agg.						X	X	X	X				X	X	X	X	X
Trichoniscus pygmaeus						X							X			X	
Platyarthrus hoffmannseggii								X		X	X		X		X		
Oniscus asellus		X	X		X	X	X	X	X				X	X	X	X	X
Philoscia affinis												X					
Philoscia muscorum	SS	SS		SS		SS	SS	SS	SS				SS		SS		
Porcellio scaber	X	X	X	X	X	X	X	X	X				X	X	X	X	X
Porcellio spinicornis					X										X		
Trachelipus rathkii								X									
Armadillidium nasatum															X		
Armadillidium vulgare	X								X				X	X	X		X
Total 17 species / No. per site:	4	3	4	2	3	8	5	7	7	1	1	1	8	5	10	4	4

Table 4: Woodlice and waterlice recorded (continued)

Site code:	16	17a	17b	19	21b	22	23	24	25	26	27	28	29a	29b	Total
Hectad:	SJ41	SJ	51	SJ51	SJ40	SJ41	SJ41	SJ41	SJ41	SO49	SO49	SO49	SJ40		records
Asellus aquaticus															1
Androniscus dentiger								X							4
Haplophthalmus danicus															5
Hyloniscus riparius NTB															1
Trichoniscoides albidus															1
Trichoniscus provisorius															3
Trichoniscus pusillus agg.	X	X		X		X	X	X	X			X	X		18
Trichoniscus pygmaeus															3
Platyarthrus hoffmannseggii														X	6
Oniscus asellus		X	X	X		X	X	X	X		X		X		21
Philoscia affinis															1
Philoscia muscorum	SS				SS	SL	SL	SL		SL	SL				16
Porcellio scaber	X	X	X	X	X	X	X	X	X	X	X	X	X		27
Porcellio spinicornis															2
Trachelipus rathkii															1
Armadillidium nasatum															1
Armadillidium vulgare															6
Total 17 species / No. per site:	3	3	2	3	2	4	4	5	3	2	3	2	3	1	

in the grounds of FSC Preston Montford to look *P. spinicornis* proved successful with many specimens seen by the participants (Fig. 2). The ant woodlouse *Platyarthrus hoffmannseggii* was found at six sites, including a river side meadow and several disused quarries.

Of the known UK species that were not recorded during the field meeting perhaps the most obvious omissions are *Haplophthalmus mengii Armadillidium depressum* which were both recorded during BMIG's 2007 field meeting (Gregory, 2010).



Figure 2: A) Night time torch survey of 'the old brick wall' at FSC Preston Montford. B) The primary target species; the woodlouse *Porcellio spinicornis*. Images by Stephanie Skipp.

Pauropods

An unprecedented six species of Pauropoda collected from six sites were found during the field meeting (Table 5), which is possibly more than previously recorded in Shropshire! With one exception, these were all found by Dawid Martyniuk who specialises in finding these tiny and elusive species (see Dawid's report in the BMIG Newsletter (Martyniuk, 2022a)). One message coming from the field meeting is that pauropods can be relatively common if searched for in appropriate places and if one is actually able to see them! Most species are barely 1-2 mm in body length. Specimens were identified using Ulf Scheller's key in 'Mangfotingar' (2005), the most detailed and comprehensive key to European Pauropods to date; the distinction between *Allopauropus broelemanni* (Hansen) and *Allopauropus vulgaris* (Hansen) would have been very difficult without descriptions and diagrams of both species' trichobothria (which are present in Ulf Scheller's key).

Allopauropus (Decapauropus) gracilis (Hansen) (Fig. 3A) proved to be most frequent pauropod, being recorded from four sites. This is the most widespread species in the UK (Scheller, 1990) and is found in a wide range of habitats, from mixed woodland to agricultural land where it occurs in damp soil, within rotting deciduous wood or under loose bark. The most prolific site was Dolgoch Quarry with four species recorded. A colony of Allopauropus (Decapauropus) vulgaris (Hansen) was found under flat limestone rocks buried shallowly in the soil at the base of the limestone quarry face. Among these was a single individual of Allopauropus (Decapauropus) helveticus (Hansen), a species previously only recorded once before in the UK in Somerset in 1954. In adjacent woodland Stylopauropus pedunculatus (Lubbock), a relatively common species, was found under a log along with a few colonies of A. gracilis.

A colony of *Trachypauropus britannicus* Scheller was found by Thomas Hughes in Tiddesley Wood. These were found on the underside of dead wood close to where the elusive woodlouse *Trichoniscoides*

albidus was also recorded. A few specimens were collected live and were photographed by Dawid (Fig. 3B). This is Britain's most distinctive species of pauropod and once found it is easily recognised in the field. That said, there are only about a dozen records currently known from Britain (records supported by images submitted to iRecord), which reflects both the tiny size and lack of active field recorders that look for these elusive species.



Figure 3: Two species of pauropods collected during the 2022 field meeting. A) *Decapauropus gracilis* with its characteristic elongated body (leg. Dawid Martyniuk). B) *Trachypauropus britannicus*, a very distinctive pauropod (leg. Thomas Hughes). Images by Dawid Martyniuk.

Table 5: Pauropods and Symphylans recorded during the Preston Montford 2022 field meeting. X =species recorded from site.

Site code:	2	5b	7	11	20	21a	Total
Hectad:	SJ60	SJ41	SO94	SJ22	SJ22	SJ51	records
Pauropods							
Allopauropus gracilis	X	X		X		X	4
Allopauropus helveticus				X			1
Allopauropus broelemanni		X		X	X	X	4
Allopauropus vulgaris				X			1
Stylopauropus pedunculatus				X			1
Trachypauropus britannicus			X				1
Total 6 species / No. per site:	1	2	1	5	1	2	
Symphylans							
Scutigerella sp.				X		X	2
Scutigerella cf palmonii					X		1

Symphylans

Dawid Martyniuk also recorded *Scutigerella* sp. from three sites. This genus comprises five known species in Britain and Ireland, which tend to be the larger and more obvious symphylans and therefore more readily found (Fig. 4). Unfortunately, the five species seem to only have slight variations in morphological characters, making them difficult to accurately identify, especially when considering the lack (or difficulty of access) of literature and keys to British Symphylan species. One individual from

Sweeney Fen was collected and identified as *Scutigerella palmonii* (Michelbacher) using the keys in Edwards (1959) and 'Mangfotingar' (Andersson *et al.*, 2005). However, the identification is not certain as the posterior half was missing, and there could be other species in the UK that it more closely resembles but are not included in these keys, which is not unlikely considering how rarely this taxon is studied.



Figure 4: Symphylan (*Scutigerella* sp.) collected during the 2022 Shropshire field meeting.

Image by Dawid Martyniuk (2022b)

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