

REPORTS ON THE 2009 BMIG SPRING MEETING IN CORNWALL

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INTRODUCTION AND DETAILS OF SITES

Myriapods and woodlice have been reported from Cornish sites since the 19th Century with F.A. Turk being especially interested in centipedes and millipedes in the 1940s and 1950s but overall recording has been patchy for the area depending mostly upon individuals, often from outside the county. A considerable number of records are held by ERCCIS (Environmental Record Centre for Cornwall and the Isles of Scilly) on their ERICA database.

Records from the Isles of Scilly were published by Jones & Pratley (1987a; b) and a report on Cornish woodlice by S.P. Jones the same year (Jones, 1987). In 1998 the then British Myriapod and British Isopod Study Groups met at Chyvarloe near Helston and recorded specifically for these groups in the area. A report on the woodlice found appeared in *BISG Newsletter* issue 41 (Gregory, 1998) whilst reports for centipedes and millipedes were in *BMG Newsletter* issues 29 and 30 (Barber, 1998; Lee, 1998, 1999). Subsequently, in the *Bulletin*, Gregory & Jones (1999) documented the first mainland occurrence of the centipede *Arenophilus peregrinus*, while Barber (2000) gives a detailed report of the centipedes. There are also accounts of various species in the first and second editions of the Red Data Book for Cornwall & the Isles of Scilly (Spalding, 1997, Benallick *et al*, 2009).

Sixteen members of the group, including Monica Farfan from Columbus, Ohio (who was working on introduced julids and gave us a talk on her studies) met at Woodland Valley Farm during the period 16th – 19th April 2009. Various visits were organised to the Eden Project (where we were joined by other Cornish naturalists), Kilminorth Woods LNR, Trelissick and Glendurgan gardens (both National Trust) and Devichoys Wood (CWT). In addition, collections were made around Woodland Valley Farm and elsewhere by individual recorders.

We are grateful to Chris Jones of Woodland Valley Farm, to Tim Pettitt and the other staff of the Eden Project and to Janet Lister and the various site staff of the National Trust for both access and for permission to collect at the various locations; also to the Cornwall Wildlife Trust for a permit to collect on their reserves including Devichoys Wood. We are especially grateful to Sue Scott of ERCCIS who first suggested a meeting at Woodland Valley, was invaluable in suggesting sites, provided us with an introductory talk and enthusiastically came out with us each day.

From the various outdoor sites some 16 species of centipede, 26 of millipede (including one new to Britain from outdoors at the Eden Project), 13 of woodlice and the terrestrial amphipod *Arcitalitrus dorrieni* were collected. Details of sites visited and by whom are shown in Table 1.

Recorders were Keith Alexander (KA), Tony Barber (TB), Glyn Collis (GC), Mike Davidson (MD), Monica Farfan (MF), Jim Flannagan (JF), Angela Lidgett (AL), Peter Nicholson (PN), Eric Philp (EP), Helen Read (HR), Adrian Rundle (AR), Sue Scott (SS), Jo Smith (JS) and Mark Telfer (MT).

Some preliminary findings were recorded in *Wild Cornwall & Wild Scilly* (Issue 109, Summer 2009) under Reserves News; "Rare centipede rediscovered at Devichoys Wood" and in the *CISFBR Newsletter* for

Summer 2009; “The Long and the Short, Two Centipedes at Trelissick”. An article on “Centipedes, Millipedes and Woodlice from the Eden Project” appeared in the *Bulletin of the Peninsular Invertebrate Forum* 19 (October, 2009) and included reference to the BMIG visit. The present report deals primarily with the “outdoor” species. Although species from the Eden biomes are mentioned herein, a further report specifically on these animals (including two species of millipede new to Britain) will be published later.

TABLE 1: Sites recorded for myriapods, terrestrial isopods and terrestrial amphipods.

Site Code	Location	NGR	Date	Nature of Site	Collectors
1	Woodland Valley Farm	SW 9051	16 – 18.iv.2009	Farm, Woodland, etc.	KA, GC, MD, JF, AL, PN, EP, AR, JS, MT
2	Eden Project (outdoors)	SX 0455	17.iv.2009	Educational / ornamental gardens	JF, HR, MT
3a	Kilminorth Woods: woodland & grassland	SX 2453	17.iv.2009	Local nature reserve on edge of creek	GC, MD, MF, PN, JS
3b	Kilminorth Woods: woodland	SX 2354	17.iv.2009	Local nature reserve on edge of creek	KA
3c	Kilminorth Woods: woodland	SX 2454	17.iv.2009	Local nature reserve on edge of creek	MD, AL
3d	Kilminorth Woods: Upper shore	SX 2453	17.iv.2009	Upper shore, strandline, rocks, etc	TB, GC, JF, PN, JS
3e	Kilminorth Woods: Saltmarsh area	SX 2454	17.iv.2009	Upper shore & saltmarsh, rocks, etc	TB, MD, JF, AL
4a	Trelissick Gardens: Garden	SW 8339	18.iv.2009	Ornamental gardens with exotic plants (NT)	KA, TB, GC, MD, JF, AL, PN, EP, AR, SS, JS, MT
4b	Trelissick Gardens: Parkland	SW 8339	18.iv.2009	Parkland (NT)	KA
4c	Trelissick: Seashore	SW 8339	18.iv.2009	Rocky shore	GC via TB
5	Devichoys Wood	SW 7737	18.iv.2009	Ancient woodland: mixed woodland (CWT reserve)	TB, GC, MD, MF, JF, PN, EP, AR, MT
6a	Glendurgan Garden: Garden	SW 7727	18.iv.2009	Ornamental gardens with exotic plants (NT)	TB, GC, MD, JF, AL, PN, EP, AR, JS, MT
6b	Glendurgan: Seashore	SW 7727	18.iv.2009	Rocks and shingle	TB, GC
7	Ladock Village	SW 8950	18.iv.2009	Village	GC
8	Lost Gardens of Heligan	SX 0046	18.iv.2009	Ornamental Gardens	GC
9	Lostwithiel	SX 1059	16.iv.2009	Car park & waste ground	TB
10	Pendennis Castle, Falmouth	SW 8431	15.iv.2009	Walls of castle	MD
11	St. Mary's Church, Truro	SW 8245	16.iv.2009	Churchyard	MD
12	Trewithen Gardens	SW 9147	16.iv.2009	Ornamental gardens	MD
13	Gyllngvasse Beach, Falmouth	SW 8131	15.iv.2009	Sea shore	MD
14	Restormel Park	SX 1061	16.iv.2009	Parkland	KA
15	Carmears Wood, Luxulyan	SX 0756	17.iv.2009	Mixed Woodland	KA
16	Sowden's Bridge	SX 2255	17.iv.2009	N. of Kilminorth, West Looe River	KA
17	Talland Cliff	SX 2251	17.iv.2009	Cliffs near Polperro	KA
18	Tredinnick	SX 2266	17.iv.2009	N. of Sowden's Bridge	KA

CENTIPEDES

A total of 16 species of centipede were collected, several of them rare or absent in other parts of Britain, and including four seashore species. Collecting in the Moist Tropics Biome at the Eden Project yielded two further, exotic species, *Cryptops doriae* and *Tygarrup javanicus* which had previously been recorded there. Collecting sites are shown in Table 1 and the species recorded from them in Table 3. The general nature of the local centipede fauna proved somewhat different to that of other parts of Britain with *Stigmatogaster subterranea* being widespread and common in all sorts of habitats (as elsewhere in the South West) and the large brown *Lithobius* being mostly not *L. forficatus* but *L. pilicornis*, here not as an occasional synanthrope in urban areas, but as a woodland and garden species. Also present were more familiar rural species such as *Lithobius variegatus*, *L. microps*, *Cryptops hortensis*, *Geophilus truncorum* and *Geophilus flavus*.

A visit specifically to Devichoys Wood (CWT Reserve) was arranged as this was one of the two known sites for the species now known as *Stigmatogaster souletina*. This had first been found (and described as *Nesoporogaster souletina brevior*) from Carclew by Ted Eason back in 1962 (Eason, 1962), its nominate form (*Nesoporogaster souletina souletina*) being known from the Pyrénées. Devichoys Wood is about 2km from the original site and specimens had been found there, unexpectedly, during the BMIG/BISG meeting in 1998 (Barber, 2000). It closely resembles *Stigmatogaster subterranea* from which it is most easily distinguished by the larger number of trunk segments and the characteristic sternal pits. It proved possible, with suitable magnification, to clearly see these pits in live animals on trunk segments approximately 44 - 48 (females) or 42 - 46 (males) by holding the specimen flat in a plastic envelope and easier to do than counting legs in a live geophilomorph with more than 80 pairs.

TABLE 2: Data for *Stigmatogaster souletina*
B.(1930) = Brolemann, 1930; E.(1962) = Eason, 1962; EHE = E.H.Eason
* trace of pit on sternite 47

Location	Date	Coll.	Det.	Sex	Length mm	Trunk segments	Pits on sternites
Pyrénées	B.(1930)	-	-	ff	88	103-107	45/49 – 50/54
		-	-	mm	69	99-101	43/44 - 48
Carclew Estate	E.(1962)	EHE	EHE	ff	68	97-101	44 – 48/49
		EHE	EHE	mm	45	93-95	40/41 – 45/46
Trelissick Gardens	18.iv.2009	GC	TB	f	60	99	44 - 49
		TB	TB	f	61	99	44 - 50
		TB	TB	m	68	93	40 – 46*
Devichoys Wood	18.iv.2009	AR	AR	2ff	-	97	-
		AR	AR	4ff	-	99	-
		AR	AR	f	-	101	-
		EP	EP	f	52	99	-
		MF	TB	f	52	99	44 - 48
		TB	TB	f	63	97	43 - 48
		TB	TB	m	48	99	42 - 47
		TB	TB	m	58	97	41 - 45
		TB	TB	m	64	99	43 - 47
		TB	TB	m	57	97	41 - 45
TB	TB	m	47	97	42 - 46		

As it happened, we had, unknowingly, already collected the species that day at Trelissick, a location about 6 km from Devichoys / Carclew. It would be interesting to search in other sites in the area to see where else it might occur. It has always been considered to be an “introduced” species, possibly brought in with exotic plants such as rhododendrons. Whatever its status, it is clearly well established in that area of Cornwall including in an ancient woodland reserve (and apparently nowhere else in NW Europe). Its scarcity, along with being the British geophilomorph with the greatest number of legs makes it an interesting member of the Cornish fauna. Eason (1962) gives trunk segment numbers of between 93 and 95 for males (with pits on

sternites 40/41 to 45/46) and 97 to 101 for females (pits on sternites 44 to 48/49). Data from 2009 is similar except that males with up to 99 leg pairs are recorded from Devichoys Wood. Data is shown in Table 2.

TABLE 3: Centipede species recorded by site – BMIG Cornwall Field Meeting 2009
Site details and recorders are presented in Table 1

	Site Code:																		No. sites per species	
	1 SW 95	3a SX 25	3b SX 25	3c SX 25	3d SX 25	3e SX 25	4a SW 83	5 SW 73	6a SW 72	6b SW 72	9 SX 15	10 SW 83	11 SW 84	12 SW 94	13 SW 83	14 SX 16	15 SX 05	16 SX 25		
<i>Stigmatogaster subterranea</i>	X	X		X			X	X	X	X		X		X						9
<i>Stigmatogaster souletina</i>		X							X											2
<i>Schendyla nemorensis</i>									X											1
<i>Schendyla peyerinhoffi</i>								X												1
<i>Hydroschendyla submarina</i>									X					X						1
<i>Strigamia maritima</i>							X	X						X						3
<i>Geophilus flavus</i>				X																1
<i>Geophilus gracilis</i>							X							X						2
<i>Geophilus truncorum</i>	X							X												4
<i>Geophilus osquidatum</i>								X												1
<i>Stenotaenia linearis</i>								X												1
<i>Eurygeophilus pinguis</i>								X												1
<i>Cryptops hortensis</i>	X				X			X			X									8
<i>Lithobius variegatus</i>	X	X		X				X			X									8
<i>Lithobius pilicornis</i>	X							X			X									7
<i>Lithobius forficatus</i>											X									2
<i>Lithobius melanops</i>														X						2
<i>Lithobius microps</i>	X													X						2
No. of centipede species:	6	3	1	3	1	4	7	7	4	3	2	2	4	5	1	1	1	1	1	

Trelissick, however, had another surprise. When records started to come in, two recorders Angela Lidgett and Eric Philp both, independently, reported *Eurygeophilus pinguis* from the garden. This has possibly the smallest number of leg pairs of any of our geophilomorphs with only 35 recorded previously in males found in Britain (as it happens, Eric's specimen was a male with 37 leg pairs). The species has an unusual distribution being, apparently well established in a variety of sites in North Devon. Outside Britain, it is recorded from the Alps, Pyrénées and Picos. Conceivably the Trelissick animals had been brought in from North Devon e.g. from another National Trust property such as Arlington Court from where it has also been recorded. However it is possible that more recording in Cornwall might find it in other sites.

Of other species of interest, three of our littoral forms, *Strigamia maritima*, *Geophilus gracilis* and *Schendyla peyerimhoffi* were all found along the estuary-side at Kilminorth Woods. A fourth, *Hydroschendyla submarina* was found in some numbers at Glendurgan beach by Glyn Collis's use of the time-honoured procedure for finding this species of "crowbar-ing" rocks open (he did not actually use a crowbar but the effect was similar).

The total number of species recorded was surprisingly small but the Cornish meeting in April 1998 had similarly found only 15 species. What that meeting had found but were not collected in 2009 were *Schendyla dentata*, *Geophilus carpophagus* and *Arenophilus peregrinus*. The first of these is small and more or less synanthropic and few churchyards had been searched and *Arenophilus*, another small species, easily missed, has only been found twice on the Cornish mainland, at Lamorna Cove in 1998 (Gregory & Jones, 1999) and inland in woodland near Stithians in 2007 (Barber, 2008). The centipede data in the ERICA database of ERCCIS lists a number of other species recorded from Cornwall, *Henia brevis*, *Henia vesuviana*, *Strigamia crassipes*, *Geophilus electricus*, *Geophilus pusillifrater*, *Geophilus truncorum*, *Cryptops parisi*, *Lithobius borealis*, *Lithobius calcaratus* and *Lamyctes emarginatus*. At least some of their records of "*Geophilus carpophagus*" are known to relate to *Geophilus easoni*. There may be a number of reasons why these were not found at the 2009 meeting including season (*Lamyctes*), limited searching of urban habitats (*Henia* species, *Geophilus electricus*, *Cryptops parisi*), small size and genuine difficulty in finding (*Geophilus pusillifrater*). On the other hand, species such as *Geophilus truncorum* and *Lithobius borealis* might be expected to be widespread in suitable habitats.

Other species that could turn up in Cornwall are *Strigamia acuminata*, *Cryptops anomalans* (in urban sites) and *Lithobius tricuspis* (quite widespread in South Devon). Two smaller species of *Lithobius*, *L. curtipes* and *L. macilentus* which are widespread in Britain have not been reliably recorded from Devon or Cornwall and the only records of *L. crassipes* are two made by Adrian Rundle on The Lizard a number of years ago (Rundle, 1977).

MILLIPEDES

When BMIG last visited Cornwall, eleven years ago, at Easter 1998, we recorded 22 different species of millipede. This total was exceeded during the 2009 meeting at Ladock when a total of 26 species were collected from outdoor sites. The 26 species collected in 2009 and the locations they were collected from are given in Table 4. One additional species (*Choneiulus palmatus*) was collected from the Warm Temperate Biome of the Eden Project and another four from the Humid Tropics Biome (*Amphitomeus attemsi*, *Paraspirobolus lucifugus*, *Cylindrodesmus hirsutus* and *Oxidus gracilis*) giving a total of 31 species recorded during the meeting. On a later visit, TB also collected another species subsequently identified by Helen Read and Henrik Enghoff as *Pseudospirobolellus avernus*, a species from a family (Pseudospirobellellidae) not previously recorded from Europe. This total constitutes almost half of the species of millipede recorded from Britain and includes three species new to the country.

The Eden Project continues to be a source of interesting material. Read (2008) detailed the millipedes found there up to that time and described *Paraspirobolus lucifugus* and *Rhinotus purpureus* as new to Britain (although the latter had in fact been found earlier at Kew by Adrian Rundle but had gone unrecognised). *Rhinotus* was not re-found in 2009 but *Amphitomeus attemsi* was collected for the first time. *Amphitomeus attemsi* is described and illustrated in the Encyclopedia of the Swedish Flora and Fauna (Andersson *et al*,

TABLE 4: Millipede species recorded by site – BMIG Cornwall Field Meeting 2009
Site details and recorders are presented in Table 1

	Site code	10 km square:																		No. sites per species				
		1 SW 95	2 SX 05	3a SX 25	3b SX 25	3c SX 25	3e SX 25	4a SW 83	4b SW 83	5 SW 73	6a SW 72	6b SW 72	7 SW 85	9 SX 15	10 SW 83	11 SW 84	12 SW 94	13 SW 83	14 SX 16		15 SX 05	16 SX 25	18 SX 26	
<i>Glomeris marginata</i>	X			X	X										X						X			9
<i>Chordeuma proximum</i>				X																				1
<i>Brachychaetema melanops</i>	X									X														3
<i>Brachydesmus superus</i>	X								X	X														5
<i>Polydesmus angustus</i>	X			X					X	X											X			8
<i>Polydesmus denticulatus</i>														X										1
<i>Polydesmus coriaceus</i>	X																							1
<i>Ophiodesmus albonanus</i>										X														3
<i>Brachydesmus superus</i>	X							X		X														5
<i>Proteroiulus fuscus</i>	X			X				X			X													10
<i>Blanulus gutturalis</i>	X										X													3
<i>Nemasoma varicorne</i>	X										X													3
<i>Julus scandinavicus</i>				X					X	X														4
<i>Haplopoiulus spathifer</i>										X														1
<i>Ophyiulus pilosus</i>	X			X					X	X														8
<i>Leptoiulus kerwilli</i>											X													1
<i>Allajulus nitidus</i>										X														1
<i>Cylindroiulus britannicus</i>	X		X							X														6
<i>Cylindroiulus caeruleocinctus</i>											X													1
<i>Cylindroiulus laetestratus</i>		X									X													2
<i>Cylindroiulus londinensis</i>											X													2
<i>Cylindroiulus parisiorum</i>																								1
<i>Cylindroiulus punctatus</i>	X			X					X	X														14
<i>Brachyiulus lustratus</i>		X																						1
<i>Brachyiulus ?pusillus</i>																								2
<i>Ommatoiulus sabulosus</i>		X	X	X	X	X	X	X	X	X	X													7
<i>Tachypodoiulus niger</i>	X		X	X	X	X	X	X	X	X														8
No. species per site:	13	4	9	5	8	1	15	2	7	14	1	1	1	1	6	2	12	1	2	2	4	1		

2005) but descriptions of the Eden specimens of this and another new hothouse alien, *Pseudospirobolellus avernus*, will be published separately. More surprisingly, *Brachyiulus lusitanus*, an outdoor species new to Britain, was collected from the vegetable garden at the Eden Project also. This discovery means that all previous records of *Brachyiulus* from Britain, including those from Trelissick and Trewithen, will have to be referred to an aggregate taxon, at least until we have a better idea of the distributions of the two species. *B. lusitanus* may be a recent introduction with records currently restricted to Eden or to Cornwall or to botanic gardens or to some other subset of locations but further work will be needed to establish the situation. Existing voucher specimens may help but it is likely that more material will need to be collected from across the country to confirm the relative distributions of the two species. With this in mind, when *Brachyiulus* is encountered in future, specimens (ideally male) should be collected and retained for checking. Further details on separation of the two *Brachyiulus* species will be published separately.

In addition to the Eden Project, BMIG members collected millipedes from 15 other sites between 16th and 19th April 2009. Three of these locations had been visited previously to collect millipedes, Devichoys Wood in 1998, Glendurgan in 1998 and 2007 and Trelissick in 2007. The most species diverse sites visited in 2009 appeared to be Trelissick (16 species) and Glendurgan (14 species) but species diversity is very sensitive to recorder effort. Without standardised sampling procedures, generalisations about the importance of the millipede fauna at these sites should be avoided. It is worth noting that even at Glendurgan and Trelissick, species recorded on earlier visits were not re-found on this occasion. These included relatively large and easily recognisable millipedes such as *Leptoiulus belgicus* and *Julus scandinavus*.

In 2009 the National Trust gardens at Trelissick were visited specifically to search for *Haplopodoiulus spathifer* which had been collected there in 2007 (Barber, 2008). Trelissick is an exception to the only other three known British sites for this species (Kew, Bedgebury and Wakehurst Place) in not being in the South East nor having an obvious Kew connection. It is of course possible, as was suggested in conversation by one of the Trust staff, that Trelissick could have been the original place of introduction from which the millipede has subsequently spread with plant transfers to Kew rather than the other way round as has been assumed.

At Glendurgan, *Cylindroiulus caeruleocinctus* was collected by Angela Lidgett. This millipede is common enough in the South East but much scarcer further west and seems never to have been found this far down in Cornwall before.

Despite the diversity of species found, none of the characteristic south-western species such as *Enantiulus armatus* and *Chordeuma sylvestre* were collected. Even *Leptoiulus belgicus*, which is widespread in Devon and Cornwall, was not found despite the fact that it had been collected at both Trelissick and Glendurgan in 2007 (Barber, 2008). Even more surprising was the absence of records of *Polyxenus lagurus*, *Nanogona polydesmoides* and *Polydesmus inconstans*, relatively common species that were recorded on the BMIG visit in 1998.

WOODLICE AND TERRESTRIAL AMPHIPODS

Of the 40 species of woodlice found in Britain at least 24 have been recorded from Cornwall. The county is relatively under-recorded and it is likely that other species await discovery, maybe even a woodlouse new to Britain. However, the predominantly acidic nature of the underlying geology means that it can be hard work to find many species that favour more calcareous conditions. At the 2009 meeting at Ladock 13 species of woodlouse, and the terrestrial amphipod *Arcitalitrus dorrieni*, were collected from eleven 10km Grid Squares. Outdoor sites and the collectors that worked them are listed in Table 1 and the species recorded in Table 5.

The most diverse sites for woodlice were Trelissick Gardens, St.Mary's Churchyard in Truro (which both turned up 8 species) and Pendennis Castle (with 7 species). It is perhaps of significance that all 3 are synanthropic localities, although it is equally likely to be a reflection of more effort having been put into surveying these sites. Most of the species recorded are common and familiar species. *Porcellio scaber*, *Oniscus asellus* and *Trichoniscus pusillus* agg. were by far the most commonly encountered species.

TABLE 5: Woodlice species and *Arcitalitrus* recorded by site – BMIG Cornwall Field Meeting 2009
Site details and recorders are presented in Table 1

Site Code: 10 km Square:	1	3a	3b	3c	3d	3e	4a	4b	4c	5	6a	6b	7	8	10	11	12	14	15	16	17	No. sites per species
	SW 95	SX 25	SX 25	SX 25	SX 25	SX 25	SW 83	SW 83	SW 83	SW 73	SW 72	SW 72	SW 85	SX 04	SW 83	SW 84	SW 94	SX 16	SX 05	SX 25	SX 25	
<i>Ligia oceanica</i>					X	X			X			X			X	X						4
<i>Androniscus deniger</i>															X	X						2
<i>Haplophthalmus mengii</i>															X	X						1
<i>Trichoniscus pusillus</i> agg.	X	X					X			X	X				X	X	X	X	X	X		10
<i>Philoscia muscorum</i>				X			X	X												X		4
<i>Platyarthrus hoffmannseggii</i>				X	X		X				X				X	X						7
<i>Oniscus asellus</i>	X	X	X	X	X		X			X	X			X	X	X	X					12
<i>ssp asellus</i>	+	+	+																			
<i>ssp occidentalis</i>	+			+						+												
<i>Armadillidium depressum</i>																X						1
<i>Armadillidium nasatum</i>							X								X							2
<i>Armadillidium vulgare</i>	X						X						X		X	X					X	6
<i>Porcellio scaber</i>	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X		18
<i>Porcellio spinicornis</i>	X																					1
<i>Porcellionides cingendus</i>							X								X							2
No. of species of woodlice:	5	3	2	4	4	2	8	2	1	3	4	2	2	2	7	8	3	2	3	2	1	
<i>Arcitalitrus dorrieni</i>	X	X					X			X	X				X	X	X					7

Armadillidium vulgare and *Platyarthrus hoffmannseggii* (a common inhabitant of ant nests) were also widely recorded. The other frequently recorded species, *Ligia oceanica*, is exclusively littoral and was found at four coastal sites. Considering its penchant for hard substrates it is not surprising that *L. oceanica* is known to occur all around the rocky Cornish coast.

The species found, and their relative frequency, reflects the south-western location of the meeting. The usually ubiquitous *Philoscia muscorum* was surprisingly thin on the ground, being recorded at just four localities. However, this species does seem to become less frequent in the moist Atlantic climate of the south-west of Britain. *Porcellionides cingendus*, a species, surprisingly found just twice, has a strong Atlantic distribution in Britain and can be locally frequent in Cornwall. The pill-woodlouse *Armadillidium depressum*, a characteristic species of the West Country, was found at Truro Churchyard. Its congener *A. nasatum* was recorded from inside a walled garden at Trelissick Garden and on the walls of Pendennis Castle. Both favour calcareous soils and are typically coastal or synanthropic in Cornwall where the predominantly acidic soils are ameliorated. *Porcellio spinicornis* also favours calcareous substrates and was only recorded once (at Woodland Valley Farm). Although common over much of Britain, *P. spinicornis* is under-recorded in many areas (recorders seem not to survey appropriate microsites, such as exposed rocks, mortared walls or calcareous tree bark). However, it does seem to be genuinely scarce in south-western England.

The distribution and ecology of *Oniscus asellus* in south-west England is complicated by the occurrence of two morphologically distinct taxa which both occur in Cornwall. Only one recorder, Mike Davidson, attempted to separate the two subspecies, ssp. *asellus* and ssp. *occidentalis* and these are shown in Table 5. Genetic studies have indicated that *O.a. asellus* and *O.a. occidentalis* represent genetically distinct taxa of ancient genetic divergence (Bilton, Goode & Mallet, 1999). *O.a. occidentalis* is believed to be a relict form indigenous to the British Isles and in Cornwall it is more characteristic of rural sites. *O.a. asellus* is a competitive form strongly favoured by human activity. Across South Devon and Cornwall morphologically intermediate populations of hybrid origin are most frequent (D.T. Bilton, personal communication). Pure *O. a. occidentalis* could be considered to be our most vulnerable woodlouse taxon.

The number of trichoniscid species recorded is very disappointing. The three species encountered are all common and widespread species. *Trichoniscus pusillus* agg. is ubiquitous across the British Isles and was recorded from ten sites. *Androniscus dentiger* was found at Trelissick Garden and Pendennis Castle, while the rather elusive *Haplophthalmus mengii* was also discovered at the latter site. These two soil dwelling species occur in a wide variety of coastal, inland and synanthropic habitats, throughout Britain. Considering the number of supra-littoral centipedes collected it is surprising that coastal trichoniscids such as *Trichoniscoides saeroeensis* were not found.

Collecting in the Moist Tropics Biome at the Eden Project yielded two further, heated glasshouse, species, *Trichorhina tomentosa* and *Venezillo parvus*, both of which had previously been recorded there. This is the only known site in Britain for the latter species (Gregory, 2009), although it is recorded elsewhere in Europe. There remain several tubes of undetermined material from the Tropical Biome of the Eden Project. These will be written up as a separate paper once the specimens have been identified.

The 1998 field meeting based in Chyvarloe recorded 12 species of woodlice (which are summarised in *BISG Newsletter* 41 (Gregory, 1998). Although this is a similar total to this year's tally, some very different species were recorded. Perhaps the best finds in 1998 were *Armadillidium album* from Sennan Cove (a first for Cornwall, but well known in the Isles of Scilly) and *Trichoniscoides saeroeensis* from various coastal locations. This meeting also recorded *Porcellio dilatatus*, another first for Cornwall.

Arcitalitrus dorrieni, our only terrestrial amphipod (familarly known as the “woodhopper” or “landhopper”), was also frequently found. It is an introduced Australasian species first recorded from the Isles of Scilly in 1924. It is now widespread in the South-West, occurs in the London Area, Wales and as far north as Wester Ross (Inverewe Gardens) on the western coast of Scotland. It is also widespread in Ireland, is found in the Channel Islands and various parts of Europe. Cowling *et al* (2004) argue that low winter temperatures and low habitat sodium concentration may limit its spread in Britain.

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