

## WOODLICE ON THE SCOTTISH ISLANDS OF BUTE, ISLAY AND MULL.

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Glyn M. Collis and V. Dawn Collis

Flat 2, Hawthorn Park, Argyle Place, Rothesay, Isle of Bute, PA20 0BA.

Email address (please use for correspondence): g.m.collis@warwick.ac.uk, dawncollis@hotmail.com

This paper considers the woodlice (Isopoda Oniscidea) on the Scottish Islands of Bute, Islay and Mull. All three are situated off the West coast of Scotland, and their climate benefits from the warm sea currents of the North Atlantic drift so that, relative to latitude, winters are mild. However, exposure to the Atlantic means that rainfall is high. The smallest of the three is the Isle of Bute which is one of the Clyde Islands (VC 100). Its land area is about 124km<sup>2</sup> (land areas are from Fleming, 2003). Bute is sheltered from the Atlantic by the Island of Arran to the south and the Mull of Kintyre to the west, and thus receives somewhat less precipitation than Islay or Mull, but it still benefits from the warming effects of the North Atlantic Drift. Islay is the largest of the southern Inner Hebrides (VC 102), with a land area of about 615km<sup>2</sup>. The Isle of Mull is the largest of the mid Inner Hebrides (VC 103) and has an area of about 917km<sup>2</sup>.

The “usual five” species of coastal Scotland, *Ligia oceanica*, *Trichoniscus pusillus*, *Oniscus asellus*, *Philoscia muscorum* and *Porcellio scaber*, are widespread on all three islands. In addition, there are records of *Androniscus dentiger*, *Haplophthalmus mengei* agg. (i.e. *H. mengei* or *H. montivagus*), *Trichoniscus pygmaeus* and *Cylisticus convexus*.

### ISLE OF BUTE

We visited Bute on a number of occasions between August 1999 and October 2003. Table 1 shows the distribution of our records of woodlouse species from these visits. We have not included earlier records published in Harding & Sutton (1985) because six of the seven 10km grid squares covering Bute also include areas of mainland, and there were no such records for the seventh square. However, we do note that the pre 1970 record of *Cylisticus convexus* from Ordnance Survey grid square NS06 in Harding & Sutton (1985) refers to a specimen in the collection of the National Museum of Ireland labelled “Near Rothesay, Bute, Scotland”, dated 26.5.1910 (Harding, 1977). We found this species by the dam at Loch Ascog (which could also be described as near Rothesay). It was abundant there in July 2000, but could not be re-found in a thorough search in April 2003.

We found a single female specimen of *Haplophthalmus mengei* agg. in wet leaf litter at the base of a wall just above the shoreline near Montford Bridge (NS16). From what is presently known of the distribution of *H. mengei* and *H. montivagus* in Britain, it seems most likely that this specimen was the former species. We found specimens of *Trichoniscoides saeroeensis* under large stones at the top of the shoreline near Shalunt (NS07) and under a large stone embedded in gravel at the top of the beach at Ettrick Bay (NS06). The three locations where we found *Trichoniscus pygmaeus* were all at the top of the shoreline. *Androniscus dentiger* is widespread along the shoreline, especially on the east side of the island, and was also found inland, e.g. by the dams at Loch Fad and Loch Ascog (both NS06).

**Table 1**

Woodlice records from Bute, August 1999 - October 2003, by Ordnance Survey 10km grid squares.

Grid square	<i>Ligia oceanica</i>	<i>Androniscus dentiger</i>	<i>Haplophthalmus mengei</i> agg.	<i>Trichoniscoides saeroeensis</i>	<i>Trichoniscus pusillus</i>	<i>Trichoniscus pygmaeus</i>	<i>Oniscus asellus</i>	<i>Philoscia muscorum</i>	<i>Porcelio scaber</i>	<i>Cylisticus convexus</i>
NR96	+				+		+	+	+	
NR97	+				+	+	+	+	+	
NS05	+				+		+	+	+	
NS06	+	+		+	+		+	+	+	+
NS07	+	+		+	+	+	+	+	+	
NS15	+				+		+	+	+	
NS16	+	+	+		+	+	+	+	+	

**ISLAY**

Table 2 shows the distribution of woodlouse species on Islay, based on records published in Harding and Sutton (1985) and our own records from two brief visits in August of 2000 and 2001.

*C. convexus* was found at two sites, both in NR16. It was abundant among building rubble dumped above the shoreline in front of Bruichladdich distillery, and it was also found further inland in a derelict cottage used as a cattle shelter, surrounded by poor quality grazing land. The distillery site was re-examined in 2001, albeit with limited time, and none could be found. *T. pygmaeus* was found at two sites, at Ardnave (NR27) and at Laggan Bridge (NR35) in both cases in non-shoreline sites under old wood and other agricultural debris. *A. dentiger* was found at two non-shoreline sites: Laggan Bridge (NR35) and Bridgend (NR36), in both cases associated with old mortared brickwork.

**Table 2**

Woodlice species from Islay by Ordnance Survey 10km grid squares. **O** indicates records from Harding & Sutton (1985), + indicates our own records from 2000 and 2001.

Grid square	<i>Ligia oceanica</i>	<i>Androniscus dentiger</i>	<i>Haplophthalmus mengei</i> agg.	<i>Trichoniscoides saeroeensis</i>	<i>Trichoniscus pusillus</i>	<i>Trichoniscus pygmaeus</i>	<i>Oniscus asellus</i>	<i>Philoscia muscorum</i>	<i>Porcelio scaber</i>	<i>Cylisticus convexus</i>
NR15	⊕				+		3	+	+	
NR16	O				+		+	+	+	
NR24	+				+		+	+	+	
NR25	+				+		+	+	+	
NR26	+				+		⊕	+	+	+
NR27	+				+	+	+	+	+	
NR34	⊕				+		+	+	+	
NR35	+	+			+	+	⊕	O	+	
NR36	+	+			+		⊕	+	⊕	
NR37	+				+		+	+	+	
NR44	+				+		+	+	+	
NR45	+				+		⊕	+	+	
NR46	+				+		⊕	+	+	
NR47	+				+		+	+	+	

## ISLE OF MULL

Records of woodlice from the Isle of Mull were reviewed by Scott-Langley (2002). On the basis of records in Harding and Sutton's (1985) Atlas, unpublished records from Gordon Corbett, and his own records from a visit in the summer of 2001, Scott-Langley was able to report that eight species were known from Mull and associated islands. A visit to the island in August 2002 enabled us to add *T. pygmaeus* to the species list, and a number of 10km square records for the other species (Table 3). *T. pygmaeus* was found at two locations: inland in Glen Gorm (NM44) under a boulder in scrubby woodland in a stream gully, and near Fishnish (NM64) under a boulder at the top of the shoreline.

Grid square	<i>Ligia oceanica</i>	<i>Anchoniscus dentiger</i>	<i>Haplophthalmus mingei</i> agg.	<i>Trichoniscoides saeroeensis</i>	<i>Trichoniscus pusillus</i>	<i>Trichoniscus pygmaeus</i>	<i>Oniscus asellus</i>	<i>Philoscia muscorum</i>	<i>Porcelio scaber</i>	<i>Cylisticus convexus</i>
NM21										
NM22	○				+		○	○	○	
NM23										
NM24	○				○		○	○	○	
NM31	+				⊕		○		○	
NM32	○				+		○	○	○	
NM33							○	○	○	
NM34	+						+		+	
NM35	○						+	+	⊕	
NM41	○			○	○		○	○	○	
NM42	+			○	○		○	○	○	
NM43	○				○		○	○	○	
NM44	+				+		⊕		+	
NM45	+				+	+	⊕		+	
NM51							○	○	○	
NM52	○	○			○		○	+	○	○
NM53	○				○		○	○	○	
NM54	○				○		○	○	○	
NM55	○				○		○	○	○	
NM61										
NM62	○				⊕		⊕	+	⊕	
NM63	○				+		⊕		⊕	
NM64	⊕				○	+	○	○	○	
NM72	○				○		○	○	○	
NM73	○			○	○		○	○	○	

**Table 3**

Woodlouse records from the Isle of Mull by Ordnance Survey 10km grid squares. Symbols: ○ indicates records summarised from Scott-Langley (2002), including records from Harding & Sutton (1985) and Corbet's unpublished records as well as Scott-Langley's; + indicates our own records from August 2002.

**UNUSUAL COLOUR FORMS OF *PORCELLIO SCABER***

On Mull we found two unusual colour forms of *Porcellio scaber*, neither of which we had seen before. On the north side of Loch Spelve (grid ref NM675269) we found a specimen with a colour that might best be described as aquamarine or royal blue, with the meeorest hint of slatiness. It was very similar in colour to the cushioned finger grip on a Pilot ‘super grip’ propelling pencil. The colour did not fade in alcohol. Presumably this individual was infected with *Iridovirus*, but it did not have the purplish hue seen in *Trichoniscus pusillus* when infected with *Iridiovirus*. On the south shore of Loch Spelve (grid ref NM679261) we found an albino, completely lacking pigment even in the eyes. Just the gut contents showed as a dark stripe. At both these sites, other well-grown individuals were all the usual slaty grey colour. We are aware of other reports of albino and other abnormal colour forms of this and other species (e.g. Hopkin, 1989; Wijnhoven & Berg, 1999), but we were most surprised that these two very unusual finds were in close proximity to one another, especially as there is no indication that the two rather different conditions could be caused by the same factors.

**DISCUSSION**

It should be noted that the records cited for Islay and Bute refer only to those islands, whereas Scott-Langley’s records refer not only to Mull but also to the associated islands of Iona, Ulva, Staffa and Lunga. Woodlice species known from Bute, Islay and Mull are compared in Table 4. Thus far, in the profile of species found, the similarity between the three islands is more striking than the differences. Our expectation is that the lack of records of *Haplophthalmus* from Islay and Mull, and *Trichoniscoides saeroeensis* from Islay, will turn out to be a consequence of sampling limitations rather than a true absence. We also speculate that *Porcellio spinicornis* may be found on Bute. There is an old but unverified record of its presence in Rothesay (Patience, 1906) and, although the distribution of this species in Scotland is heavily biased toward the East, it has been found at several locations in Glasgow (Collis & Collis, 1978) and rural Lanarkshire (our own records in Harding & Sutton, 1985).

Island	<i>Ligia oceanica</i>	<i>Androniscus dentiger</i>	<i>Haplophthalmus mergei</i> agg.	<i>Trichoniscoides saeroeensis</i>	<i>Trichoniscus pusillus</i>	<i>Trichoniscus pygmaeus</i>	<i>Oniscus asellus</i>	<i>Philoscia muscorum</i>	<i>Porcelio scaber</i>	<i>Cylisticus convexus</i>
Bute	*	*	*	*	*	*	*	*	*	*
Islay	*	*			*	*	*	*	*	*
Mull etc	*	*		*	*	*	*	*	*	*

**Table 4**  
Summary of woodlouse records from Bute, Islay and Mull.

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