MYRIAPODS ON THE OUTER HEBRIDES

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INTRODUCTION

Published records of myriapods from the Outer Hebrides are scanty and are summarised in three sources. Waterston (1981) recorded 15 species, with a list of islands from which each had been recorded. This incorporated records from Barra in 1935 reported by Waterston (1936). The provisional atlases (British Myriapod Group, 1988 for millipedes, Barber & Keay, 1988 for centipedes) recorded seven species, adding two to the total, but did not claim to be comprehensive with regard to earlier published records. In addition there are unpublished records of millipedes rising from a survey of invertebrates conducted in 1976 by the Institute of Terrestrial Ecology (ITE, 1979). This included pitfall-trapping at 18 sites on Lewis/Harris, North Uist, Benbecula and South Uist, but produced only *Cylindroiulus latestriatus* (at every site), plus a single *Polydesmus inconstans* on North Uist.

I visited the Outer Hebrides from 3rd to 13th June 2003 and recorded myriapods on the following islands: Lewis/Harris, Great Bernera (bridged), Scalpay (bridged), South Uist, Eriskay (bridged), Barra and Vatersay (bridged). Recording was solely by hand searching in leaf-litter and under stones, wood and refuse. The general impression was that myriapods were scarce, with a large proportion of turned stones revealing nothing. In contrast earwigs, *Forficula auricularia* were unusually abundant.

MILLIPEDES

Waterston (1981) recorded six species, including one, *Cylindroiulus britannicus*, from St Kilda only. The provisional atlas recorded four species post-1970 adding *Ophyiulus pilosus*. Of these seven species I recorded four in 2003 without adding anything new for the Outer Hebrides, although there were several new records for individual islands.

Nanogona polydesmoides

Not found in 2003. Recorded by Waterston (1936) from Barra, 1935.

Cylindroiulus punctatus

Lewis: Lewis Castle, Stornoway, NB 4132. 1f in litter of deciduous woodland.

South Uist: Loch Druidibeg NNR: NF 7838, 1m, 1f in roadside grass (no trees); NF 8038, 1m in litter under pines and rhododendrons.

Recorded by Waterston (1981) from south Uist and Barra.

Cylindroiulus latestriatus

Lewis/Harris: Butt of Lewis, NB 5166, on cliff-top pasture; Eoropie, NB 5164, dunes; Back, NB 4841, coastal grass; Tolsta, NB 5349, dunes; Seilebost, Harris, NG 064976, dunes.

Great Bernera: Bosta, NB 136400, dunes.

South Uist: Howmore, NF 7536, road verge; A'Mheallach, NF 7222, dunes; Orisay, NF 7217, grazed coastal grass.

Eriskay: NF 783115, grazed grass.

Barra: Loch Ob, NF 708018, garden; Borg, NF 6503, dunes.

Vatersay: NL 658959, grazed grass.

This was recorded from S Uist and Barra (and the isolated Monach Islands) by Waterston (1981), and was by far the most widely recorded millipede in the atlas, from all the main islands except Barra. It was also

recorded, sometimes abundantly, at all 18 pitfall sites in 1976 (ITE, 1979).

Ophyiulus pilosus

Barra: Shiarabhaigh, NF 699033, 1f, mixed woodland; Loch Ob, NF 708019, 1f,1j in garden. The only previous record for the Outer Hebrides appears to be that for NB43 [Stornoway, Lewis] in the provisional atlas.

Polydesmus angustus

Lewis/Harris: Miavaig, Lewis, NB 090346, 1m under rubble on jetty.

Shown in the provisional atlas (post-1970) from NB 43 [Stornoway, Lewis], and NF 72 [S Uist]; it was also recorded in a pitfall trap at Robach, North Uist in June/July 1976 (ITE, 1979).

Polydesmus inconstans

Not found in 2003. Shown in the provisional atlas (post-1970) for NB 43 [Stornoway, Lewis] and NF 87 [North Uist].

It was probably this species that was recorded, as *P. coriaceus*, from South Uist (post-1959) and from Barra (July, 1935) by Waterston, the Barra record derived from Waterston (1936) determined by R.A.Bagnell. Blower (1985) considered *P. coriaceus* of Blower (1958) and other authors to be *P. inconstans*, and recorded this species for the Outer Hebrides, while the name *P. coriaceus* Porat is correctly a synonym of *P. gallicus*, which has not, with one possible exception, been recorded in Scotland.

Brachydesmus superus

Lewis/Harris: Back, Lewis, NB 4841, 3f in coastal grass; Borvas, Lewis, NB 3551, 1m,1f in garden; Gosla, Little Loch Roag, Lewis, NB 127257, 1f in garden; Crowlista, Lewis, NB 040335, 2m on road verge at croft. **South Uist**: Loch Aineort, NF 7828, 2m,1f in leaf-litter in deciduous wood.

Recorded by Waterston (1981) from South Uist (post-1959) and Barra (1935).

CENTIPEDES

Waterston (1981) recorded nine species of centipede and the provisional atlas four, adding *Lithobius crassipes*. Of these ten species I recorded five, and added one apparently new for the Outer Hebrides, *Schendyla nemorensis*.

Strigamia maritima

Not recorded in 2003. Waterston (1936) recorded it from Barra, collected July 1935.

Schendyla nemorensis

Lewis/Harris: Crowlista, Lewis, NB 040335, 1m, 1f under roadside rubble at croft.

New for the Outer Hebrides, but found widely in the Inner Hebrides and on the West-Highland coast (author's unpublished records).

Geophilus easoni

Lewis/Harris: Nearseam, E Harris, NG 081858, 1f on disturbed grassland (legs 2x51).

Eriskay: NF 793098, 3m under stones on pier (legs 2 x 47, 47, 49).

'L. carpophagus', recorded from a plantation on Barra, July 1935 by Waterston (1936), is likely to refer to this species which is widespread in Scotland, in contrast to L. carpophagus ss. which so far has only been confirmed from some coastal cliffs in Fife (Arthur et al., 2002). An early record of 'G. carpophagus' from St Kilda (Evans, 1906) remains indeterminate.

Geophilus insculptus

Lewis/Harris: Lews Castle, Stornoway, NB 4132, 1 under deciduous leaf-litter; Port of Ness, NB 5363, 1 on sea-cliff.

Recorded by Waterston (1981) from S Uist (post-1959).

Brachygeophilus truncorum

Lewis/Harris: Crowlista, Lewis, NB 040335, 2m on road verge at croft. **South Uist**: Loch Sgioport, NF 8238, 1 on mortared wall close to shore.

Eriskay: NF 783115, f in churchyard. **Barra**: Loch Ob, NF 708019, f in garden.

Recorded from South Uist, Barra and the offshore Monach Islands by Waterston (1981), all post-1959.

Lithobius variegatus

Not found in 2003. Waterston (1981) recorded it from South Uist and Barra, both post-1959.

Lithobius forficatus

Lewis/Harris: Miavaig, Lewis, NB 090346, f on jetty; Cuidhtinis, Harris, NG 095869, 1 on road verge.

Scalpay: NG 218960, 1f at jetty. Eriskay: NF 793098, 1m at jetty.

This species was surprisingly difficult to find, considering how ubiquitous it usually is and how well recorded it has been in the past (although that has no doubt been helped by the ease of identifying it in the field).

Waterston (1981) recorded it from the Monach Islands, North Uist, South Uist and Barra; the provisional atlas from these and Stornoway.

Lithobius melanops

Lewis/Harris: Taobh Tuath, Harris, NF 980911, 1m on dune grass.

South Uist: A'Mheallach, NF 7222, 2m in dune grass.

Recorded by Waterston (1981) from the Monach Islands, North Uist and South Uist, all post-1959. In addition the provisional atlas shows a record from Barra (post-1963).

Lithobius borealis

Not found in 2003. Waterston (1981) recorded it from South Uist, post-1959, as L. lapidicola.

Lithobius crassipes

Not found in 2003, but the provisional atlas shows it in North Uist (NF 86?). This is a scarce species in the west of Scotland in contrast to the east (and far north) where it is ubiquitous.

Lamyctes fulvicornis

Not found in 2003 (but rarely found anywhere before July). It was recorded in South Uist (post-1959) by Waterston (1981) and Barra, 1935 by Waterston (1936).

CONCLUSIONS

The most surprising absentee is *Ommatoiulus sabulosus*, especially in view of its wide distribution in dune grassland and moorland elsewhere in Scotland, and its ease of recognition. However it appears also to be absent from Orkney and Shetland, and I have searched for it in vain on the island of Arran. *Julus scandinavius* is another widespread moorland species that appears to be absent, but could be more easily overlooked.

Some other apparently absent species are woodland ones, e.g. *Proteroiulus fuscus* and *Cylindroiulus britannicus*. There is very little woodland on the Outer Hebrides, and the few plantations visited were not studied intensively. However the presence of dense woodland — apparently hazel, rowan and willow — on tiny islands in the freshwater lochs (not examined) suggests that such woodland was probably widespread before the introduction of domestic stock, and these remnants would be worth examining.

Only one species recorded in 2003 was an addition to the known fauna of the Outer Hebrides: the geophilomorph centipede *Schendyla nemorensis*. This is an expected but elusive species, easily passed over as an immature of one of the larger geophilids.

REFERENCES

Arthur, W., Johnstone, J. & Kettle, C. (2002) Ecolological and behavioural characteristics of *Geophilus easoni* Arthur *et al.* and *G. carpophagus* Leach. *Bull. Br. Myriapod and Isopod Group* **18**: 26-31.

Barber, A.D. & Keay, A.N. (1988) Provisional atlas of the centipedes of the British Isles. BRC, Huntingdon.

Blower, J.G. (1958) British millipedes (Diplopoda). Synopses of the British Fauna 11. Linnaean Soc.

Blower, J.G. (1985) Millipedes. Synopses of the British Fauna (NS) no.35. Linnaean Soc./ Brill.

British Myriapod Group (1988) Preliminary atlas of the millipedes of the British Isles. BRC, Huntingdon.

Evans, W. (1906) Some invertebrates, including *Ixodes borealis*, from St Kilda. *Ann. Scot. nat. Hist.* **15**: 83-88.

ITE (1976) *Invertebrate fauna of dune and machair sites in Scotland*, vol.1 (2), *The Outer Hebrides, site dossiers*. Unpublished report to Nature Conservancy Council (NCC.CSD report no. 255).

Waterston, A.R. (1936) Diplopoda and Chilopoda, p.271 in Waterston, A.R. & Watson, E.V. (1936) The natural history of Barra, Outer Hebrides. *Proc. R. phys. Soc.* **22:** 241-296.

Waterston, A.R. (1981) Present knowledge of the non-marine invertebrate fauna of the Outer Hebrides. *Proc. R. Soc. Edinburgh* **79B**: 215-321 (myriapods p.232).