

THE BRITISH ISOPODA STUDY GROUP  
NEWSLETTER OF THE ISOPODA SURVEY SCHEME

No. 11

January 1977

The Newsletter is appearing rather early this year to take advantage of being mailed with the Atlas. The novelty of the Atlas is perhaps diminished by the discovery in 1976 of two species of woodlice new to the British Isles, details of which are given below. Also included are items on "Woodlousing in Scotland" and a small selection of recent papers on Isopoda.

Provisional Atlas of the Distribution of Oniscoidea (Woodlice)

The long awaited Atlas has finally appeared after a series of technical hitches. Despite the long time in preparation, the Editor still managed to make some mistakes and a corrigenda slip should be included with every Atlas. One copy is being sent gratis with this Newsletter to all recorders who returned the form enclosed with Newsletter No. 10.

Additional copies may be purchased by B.I.S.G. members (Newsletter recipients) for their personal use at a reduced price of £1.50 + 27p postage and packing, each. The Atlas will also be on general sale at £2.00 + 27p postage and packing, each.

Sales are being handled by:  
P. Harding,  
60 Boxworth Road,  
Elsworth,  
Cambridge.  
CB3 8JQ

Remittances should be made payable to "Isopod Survey Scheme", and all profits will go to B.I.S.G. funds.

Two New British Woodlice

Only one native species of woodlouse (Trichoniscoides saeroeensis in 1966) had been found new to the British Isles since 1913. The finding of two new species in 1976 highlights the activity and efficiency of our recorders!

Miktoniscus sp.

A species of Trichoniscid which is apparently new to the British Isles was discovered at several localities in September 1976. Adrian Rundle and Adrian Norris found specimens at the landward end of an estuarine saltmarsh at Yarmouth, Isle of Wight, on 21st and at 4 similar localities on the Hampshire shore of the western Solent on 24th. By coincidence P.T.H. found specimens of what appears to be the same species on vegetated sea cliffs at Lansallos, Cornwall on 22nd. A single female, possibly attributable to the same species had been found by P.T.H. at Chatham Ness, Kent, in May 1971.

S.L.S. has been working on specimens from the Yarmouth site and is able to confirm our early impression that they belong to the genus Miktoniscus Kesselyak. This is an interesting genus as it lies in an intermediate position between the two sub-families of the Trichoniscidae (Trichoniscinae and Haplophthalminae) - see

Vandel 1946 (Anais Facul. Cienc. Porto, 30 : 135-427).

The question of which species is present has not been finally settled, but S.L.S. reports that, from his examination of the genitalia and 7th pereopods of several males, it is probably M. arcangeli Vandel 1960 (Mem. Mus. Nat. Hist. Paris, 22 : 1-155) or M. patiencei Vandel 1946 (above). M. arcangeli is known from Madiera, M. patiencei is recorded from a few localities on the Channel coast of France.

The animal is small, only 4-5 mm long. It is white or almost pigmentless, with black eyes, each composed of a single large ocellus. The general shape is distinctive being longer and more parallel sided than other British Trichoniscinae. The dorsal surface is covered with spiny tubercles.

The habitats at the Isle of Wight, Hampshire and Kent localities were similar - under drift line litter, rubble and other debris at the landward end of estuarine salt marshes. In most cases the animals were in soil under such material. The Cornwall locality presented a different habitat - among sandy loam soil under mainly Festuca litter on a steep, densely vegetated cliff face, about 2 m above the bare rock of the sea shore.

It is probable that this species occurs in other localities in southern England. S.L.S. and P.T.H. would be eager to examine any unusual Tridioniscids that may be found in the future.

A full description of the new species will be published in due course.

#### Stenophiloscia sp.

Another apparently new species for the British Isles has been found at two localities. Three specimens were discovered in a collection of woodlice from Slapton Ley, Devon, sent by Dr. M.J. Cotton for identification. These specimens comprise one male and two females collected from the "foreshingle" in March 1974 and February 1976. A single female, of apparently the same species, was found by Adrian Rundle on 5/12/1976 at the top of a narrow gravel beach, just below high water mark, in the estuary of the River Blackwater, Essex.

The animals are small (all appear to be adult and do not exceed 5 mm length) and look not unlike immature Halophiloscia. However, the dorsal surface is covered with minute tubercles and the antennae are fairly short and distinctly spiny. Preliminary work on the single male specimen suggests that it is probably a member of the genus Stenophiloscia Verhoeff but P.T.H. is unable to suggest a specific name at present. Clearly it would be advisable to wait until more specimens are available for examination before attempting to name the animal.

#### Woodlousing in Scotland

Glyn and Dawn Collis have, for the last year, been running the Non-marine scheme in Scotland. Their success and that of their recorders in covering much of western Scotland has been a notable asset to the scheme. Glyn and Dawn have kindly written a note on the "thrills" of Scottish woodlousing.

"A glance at the Provisional Atlas might suggest that woodlousing in Scotland

is rather dull with a relatively narrow range of mostly uninteresting species. Nothing could be further from the truth (imagine the thrill of finding a single Trichoniscus pusillus after an hour's search in some remote Highland square!). The distribution of the commoner species, especially Philoscia muscorum, is of considerable interest. Most records of this species are coastal and even here the distribution is patchy. Inland, the situation is even less predictable. We recently began to clarify the situation in our 'home' 100 km square (26) by showing that the beasts could be found inland if we closely followed the river up the Clyde valley. Most of the inland records of Philoscia in the Atlas are in, or close to, major river valleys. Oddities, such as the recent find at over 800 ft by Loch Laggan (27/58, coll. M. Hunter) are not easily explained but further records may reveal an understandable pattern.

Representatives of the more exciting (in Scotland) species continue to be found north of the border. Since the Atlas went to press we have found Armadillidium vulgare at St. Andrews (37/51), emphasising the possibility of a widespread presence on the East coast, and Haplophthalmus menzei at Armadale, Skye (18/60), its northernmost recent record in the British Isles. Another 'northerliness' record, also in Skye, is a Trichoniscus pygmaeus found at Uig (18/36, coll. A.O. Chater). Porcellio spinicornis is clearly well established in the Moray/Banff area, and two new localities have recently been added: Knockando and Hopeman (38/14 & 38/16, coll. N. Cowham). Outside this area, it has recently turned up in Glasgow (26/56, coll. C.M. Murphy)."

#### Irish Woodlouse recording

Recording only started in earnest in 1975. Up to the spring of 1975 records existed for just over 110 squares, of which less than 25% were of squares with 4 or more species. Since then the situation has improved greatly and records from about 250 Irish squares are included in the Atlas. At the end of 1976, records from over 100 additional squares had been received, mainly via Declan Doogue.

Ireland still compares unfavourably with Britain, however, with coverage of about 35% of Irish squares, whereas for Britain coverage is over 50%. It is hoped that by the end of 1977, or in 1978, sufficient records will have been received to make worthwhile the preparation of a Provisional Atlas for Ireland.

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#### Asellus spp.

Despite the appeal for records/specimens in Newsletter No. 10, Professor Moon reports that very few records were received in 1976. It is to be hoped that many more recorders will be able to extend their interest to include the freshwater species in 1976. You will recall that Newsletter No. 10 included a number of hints on collecting etc.

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#### Marine Isopoda

During the last 3 years R.J.L., Joan Ellis and various assistants at the British

Museum (Natural History) have been gathering together distribution data from the literature and from the Museum collection. Joan is now compiling preliminary maps for most of the littoral species. Unfortunately, this mapping is mainly serving to show how irregular is the coverage for even the commonest species.

R.J.L. and D.M.H. renew their appeal for records and would like to remind you that they are able to provide record cards, instructions on their use and on collecting, and to identify voucher specimens.

We are glad to see D.M.H. back in harness at Nottingham after his eight months of sun, surf and presumably the occasional Isopod, around the Great Barrier Reef.

### Weekend Field Course

It is not too late to think of a field course in 1977 such as that outlined in Newsletter No. 10 (page 6). The response to that notice was not sufficient to make the course worthwhile. Anybody interested in a two day course, to include field collecting, identification practice, a lecture and displays, dealing with Woodlice and possibly Millipedes and Centipedes, is asked to contact P.T.H. immediately.

### Recent publications

A short list of papers published mainly by members of B.I.S.G.:

The Proceedings of the Sixth International Colloquium of the International Soil Science Society Zoology Committee (held in Uppsala in 1976) are to be published shortly. These will include the following 3 papers:-

- (1) Davis, R.C. & S.L. Sutton. Spatial distribution and niche separation of woodlice and millipedes in a dune grassland ecosystem.
- (2) Kozlovskaja, L.S. & B.R. Striganova. Food, digestion and assimilation in desert woodlice, and their relationships with the soil microflora.
- (3) Hassall, M. Consumption of leaf litter by the terrestrial isopod Philoscia muscorum in relation to food availability in a dune grassland ecosystem.

Doogue, D. & P.T. Harding. 1976. Records of uncommon Irish Woodlice for 1975. Ir. Nat. J. 18: 321-4.

Harding, P.T. 1976. Eluma purpurascens Budde-Lund, a woodlouse new to Britain from Norfolk. Trans. Norfolk Norwich Nat. Soc. 23: 267-8.

Hassall, M. & J.B. Jennings. 1975. Adaptive features of gut structure and digestive physiology in the terrestrial isopod Philoscia muscorum (Scopoli) 1763. Biol. Bull. 149: 348-364.

Holdich, D.M. 1976. A comparison of the ecology and life cycles of two species of littoral isopod. J. exp. mar. Biol. Ecol. 24: 133-149.

Holland, D.G. 1976. The distribution of the freshwater Malacostraca in the area of the Mersey & Weaver River Authority. Freshwater Biol. 6: 265-276.

Addresses of Scheme Organisers : Non-Marine Isopoda :- P.T. Harding, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS. Dr. S.L. Sutton, Dept. of Pure & Applied Zoology, Univ. of Leeds, Leeds, LS2 9JT. Marine Isopoda:- Dr. D.M. Holdich, Dept. of Zoology, The Univ, Nottingham, NG7 2RD. Dr. R.J. Lincoln, Dept. of Zoology, Brit. Museum (Nat. History), Cromwell Road, London, SW7 5BD.

Newsletter No. 11 edited by P.T.H.