

BRITISH ISOPOD STUDY GROUP

NEWSLETTER 36

December 1993

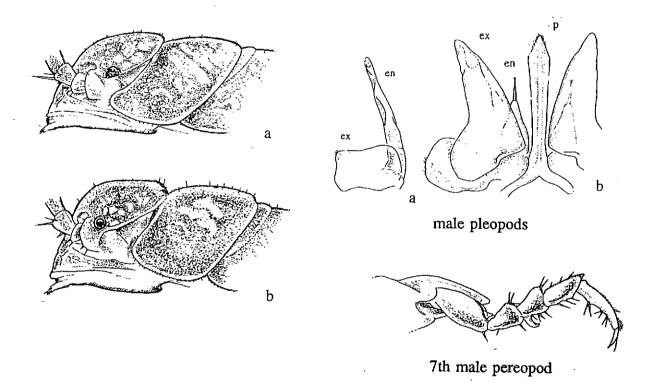
Edited by David Bilton

Editorial

Many thanks as always to everyone who has sent in cards in the last few months. I have recently received all the cards and correspondence people have sent to BRC during my absence in foreign parts. All those of you who had wondered what had happened to your specimens or queries should have heard from me by now! If you have any outstanding records, especially of rarer species, please try to send them in ASAP, as Steve Hopkin and I are still hoping to produce new maps in the near future. As you will see below, two recent finds have modified our view of the ecological range of Trichoniscoides saeroeensis somewhat. The high altitude records from northwest England and Ireland do help to make more sense of the early subterranean records from Warton Crags and the Burren, but beg the question of what do a wide variety of coastal sites have in common with exposed hilltops? Are we really dealing with the same species? As Jon Daws notes, I did initially have doubts! Martin Cawley states below that he thinks T. saeroeensis and Trichoniscus pygmaeus compete with each other, since he finds that the latter is scarce or absent where the former is present. At the Westmorland limestone sites, however, T. pygmaeus was very abundant, though not under the same stones as T. saeroeensis, suggesting some sort of microsite specialization. One thing that coasts and these hilltops may have in common is a long history of exposure and erosion, and perhaps these factors favour T. saeroeensis. Another interesting find recently was that made by Steve Gregory, who took Trichoniscoides helveticus from a disused railway line, rather overturning the suggestion that this species was restricted to ancient woodland/grassland. Details of next year's meeting, organised by Charles Rawcliffe in eastern Scotland should now be with you also. Let's hope for an early start to Spring in 1994!

Hyloniscus in Hiding??

Amongst recently received reprints is a note by H. Wijnhoven (1993. Hyloniscus riparius: een lang onopgemerkte landpissebed in Nederland (Crustacea, Isopoda: Trichoniscidae)? Nederlandse Faunistische Mededelingen 5: 63-64) reporting that the small trichoniscid Hyloniscus riparius (Koch) has recently been collected from the Polders. It is suggested that the species may have been overlooked in the past due to its superficial resemblance to Trichoniscus pusillus. Both species are of similar size, shape and colouration, but can be separated on the basis of the single ocellus of Hyloniscus (three in T. pusillus), and male sexual characters. I have reproduced Wijnhoven's figures below, since there is a strong possibility that the species may be "hiding" in the UK, especially in synanthropic sites such as gardens and glasshouses. Despite the false alarm reported by Jon Daws below, I still don't think our trichoniscid list is exhaustive!



Of the pictures of ocelli, a) represents T. pusillus, and b) H. riparius

Request for Armadillidium species

Robin Lawson of the California Academy of Sciences has recently written with a request for live material of European Armadillidium species for use in a molecular systematic study his lab is conducting on the genus. If you think you can help with population samples of species, particularly any from the Mediterranean region, or Armadillidium album, depressum, nasatum or pictum from the UK, in the first instance contact Robin at the address below:

Dr. R. Lawson, Osher Laboratory for Molecular Systematics, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118 4599, USA.

Upland populations of Trichoniscoides saeroeensis Lohmander in North West Ireland.

Martin Cawley, 26 St. Patricks Terrace, Sligo, Ireland.

The small white trichoniscid *Trichoniscoides saeroeensis* Lohmander is known to occur widely in a variety of coastal habitats in Britain and Ireland, and in a few coastal cave systems (Harding and Sutton, 1985). It was therefore with some surprise that I found it to be common on the summit of Copes Mountain, Co. Sligo (G72-40-) in April 1993. I subsequently found it to be common on mountain summits in the carboniferous Dartry range of North Sligo and North Leitrim, occurring at altitudes of 350-450 metres, and up to 12km inland. At these sites *T. saeroeensis* occurs on damp peaty soil where limestone rocks and gravels break the summit blanket bog. Associated woodlice were *Oniscus asellus* L., *Trichoniscus pusillus* Brandt, and *Porcellio scaber* Latreille, as well as the occasional individual of *Trichoniscus pygmaeus* Sars. At these sites *T. saeroeensis* occurs with relict arctic-alpine plants such as *Arenaria ciliata* Ostenf and *Silene aucalis* (L.).

There are a number of potential explanations for these upland *T. saeroeensis* populations, the one I favour being that at lower altitudes it is outcompeted by *T. pygmaeus*, but that the greater frost and exposure sensitivity of this species leave some upland habitats vacant which *T. saeroeensis* can then exploit.

Certainly where T. saeroeensis is common, at coastal erosion banks and these upland sites, T. pygmaeus is rare or absent.

Reference

Harding, P.T. and Sutton, S.L. 1985. Woodlice in Britain and Ireland: Distribution and habitat. ITE.

Almost a new species for Britain.

Jon Daws, 19 The Portwey, Leicester.

On 6/10/1993 I visited Hutton Roof Crags - a large area of limestone pavement on a hill east of the M6 between junctions 35 and 36 - for a couple of hours as I headed home from Cumbria. After an hour of turning over pieces of stone and finding little of interest I pulled up an embedded rock and found a white orange eyed woodlouse, about four millimetres in length, which was flushed orange towards the rear. At the time I believed the specimen to be *Trichoniscoides helveticus* (a species I hadn't collected before) by consideration of the habitat, and the fact that this was a natural, not a synanthropic site.

Once back in Leicester I posted the specimen off to Dave Bilton, with the usual details. A week or so later he 'phoned to say it was female, but he wasn't sure which genus it belonged to, since it seemed to have a waist, and there were rows of strong tubercles on its dorsal surface. We arranged a collecting trip to find male specimens of this possibly new species for Britain for the following weekend.

I spent the Saturday morning collecting in the same area I had found the first specimen and after several hours pulling up embedded rocks I found a further four orange eyed woodlice. The other notable species discovered in this area was Armadillidium pulchellum, which was also found under several embedded rocks. After lunch I decided to collect on the opposite side of the lane I had parked on (this was Newbiggin Crags) which, unlike the area I had surveyed in the morning, was heavily grazed by sheep. It took several more hours of rock moving before another embedded stone revealed a further specimen. Other nearby pieces of limestone were movable, and a further four specimens were added to the collection. As I made my way back to the car I came across a dung heap, from the surrounds of which Haplophthalmus mengei and Androniscus dentiger were added to the list. These species were probably introduced with dung from a local farmyard, since they were not found anywhere else.

The following morning I met Dave at the site and after a cup of tea we headed onto Newbiggin Crags and started collecting. *Porcellio spinicornis* was under the first few stones we moved, but again it took several hours before the first orange eyed woodlouse was found. The species was found in small numbers, either under a single rock or adjacent stones, with the small groups being many hundreds of metres apart; but this may simply reflect the collecting method. Having taken about 17 specimens and convinced ourselves that we must have at least one male amongst them, we made our way back to the cars. On the return journey we found a group of over 25 *A. pulchellum* huddled together beneath a large piece of limestone; the group consisting of a range of different sized specimens.

Dave took all the orange eyed woodlice back to York with him, and 'phoned several days later to give me the bad news that the woodlice were in fact *Trichoniscoides saeroeensis*. He told me that the first specimen I had sent him was the most unusual looking of the group collected, but that there were several specimens which were intermediate between the usual fairly smooth *T. saeroeensis* and the first female which was heavily tuberculate. The most important point though was that the genitalia of the many males we had collected were identical to *T. saeroeensis*.

This is still a very interesting record since Hutton Roof and Newbiggin Crags are 10km

from the nearest stretch of coast, with T. saeroeensis being collected from above 200m. So this species should perhaps be expected at other similar sites even further inland.

Mineralized woodlice from Leicester.

٠٠٠ والماس المعاملية والمراجع والمراجع والمراجع

Jon Daws, 19 The Portwey, Leicester.

Earlier this year I had the opportunity to look at some mineralised woodlice from two archaeological digs that took place in Leicester's city centre over the last few years. Some of the material dated from Roman times (50 AD), but the bulk of the specimens were from the Medieval period (pre 1100 - pre 1400 AD). All the woodlice were excavated from either rubbish or dung pits. Unfortunately the older material consisted of fragments, whereas there were several whole specimens from the Medieval remains. The extremities of the specimens suffered the most damage during the sorting process, with no complete antennae, and only two telsons that projected beyond the end of the pleonites surviving intact (Armadillidium species were OK since their telsons don't project).

There were five species of woodlice present in the material: Oniscus asellus, Philoscia muscorum, Armadillidium vulgare, Porcellio scaber and Porcellio dilatatus. The first four species are widespread and common in a variety of habitats in Leicestershire today,, including compost and dung heaps. Although recorded at 40 sites in the county in the last few years (mostly dairy farms and stables) the sight of a mineralised telson of P. dilatatus from pre 1100 AD was quite exciting. There were also several pieces of pereonite from this species with the characteristic pattern and colour in the same sample, and in another from the same period.

The other species of woodlice were found in varying numbers and from different periods, with O. asellus and P. scaber recorded from Roman times and throughout the Medieval period. A. vulgare was found in reasonable numbers, but only from the Medieval, and a single P. muscorum was recorded from the Roman deposits of the High Street cellars dig.

The pirate BISG/BMG meeting in Lincolnshire.

Jon Daws, 19 The Portwey, Leicester.

The Lincolnshire meeting took place on 15-17/10/1993 and was attended by a hardcore of four members (Steve Gregory, Richard Jones, Andy Keay and myself) who have left no stone unturned throughout the county. The weather conditions were just right for bringing isopods and myriapods to the surface, with the previous few weeks having had continuous rain. Fortunately the weather cleared up for the meeting, and we enjoyed three days of sunshine, with clear skies and sharp frosts at night.

The meeting got underway on Friday afternoon,, when Steve Gregory and I started pulling up stones and pieces of wood on the Lincs Trust reserve at Raunceby Warren. This old sand and gravel pit revealed eight species of woodlice, the best of which were several specimens

of Haplophthalmus mengei found under a piece of dead wood.

The other notable site of the day was Timberland Churchyard, where we added Trichoniscus pygmaeus, Haplphthalmus danicus and Porcellionides pruniosus to the list. These were found in the grass heaps around the churchyard, with H. danicus in huge numbers in the largest and oldest of them. Bristly millipedes were also found here, under the metal vases which form part of the modern gravestones; I saw several hundred specimens in this microsite, where ants sometimes build their nests and Platyarthrus hoffmannseggi can be found.

As the sun set we visited Metheringham Delph (LWT reserve). As the temperature dropped we pulled up embedded bricks and concrete from around the bridge that spanned the water channel. We found more specimens of *P. hoffmannseggi* and *H. megei*, but failed to see either the Kingfisher or the Barn Owl that often puts in an appearance at dusk. As the light faded we headed off to a B&B in Lincoln.

Having dined on fishcake and chips, we went looking for *Porcellio spinicornis* on Lincoln Cathedral and the surrounding mortared walls by torchlight. We not only failed to find the species there, but also at any other site we visited during the weekend.

After a good night's sleep we arrived at 9.00am at Roughton Moor Wood to meet Richard and Andy who had spent a freezing night (-3) in Richard's new camper van. I gave them a cup of tea from my flask since Richard had forgotten to pack a kettle or anything else which would boil water, and learnt that Dave Bilton wouldn't be joining us due to going down with flu. We spent over an hour collecting in the wood before splitting up to survey further nature reserves and churchyards.

Our first reserve was Keal (alder) Carr on the southern Wolds, where a single specimens of *Trichoniscoides albidus* was found under a rotten branch, half buried in the soil, in the company of several *Trichoniscus pusillus*. On returning to the car we found it unwilling to start, so Steve had to push start it. After this we resolved to survey only reserves on the tops of hills, not an easy thing in Lincolnshire! Close to the village of Willoughby we spotted a large muck heap at the side of a field, and leaving the engine running we climbed onto the heap and pulled up huge chunks of straw and muck to reveal about 100 *P. pruniosus*. I usually find this species is present in about half of the heaps examined, although the numbers found are very variable.

The final site of the day was Hoplands Wood, a damp Oak/Ash woodland, which we walked through to survey the banks of the Burland Beck for *T. albidus*. This species was found by pulling embedded stones out of the streambank and from under a pile of bricks that had been dumped close to the beck.

We arrived in Mablethorpe - which looked like a ghost town where someone had forgotten to turn out the arcade lights - to meet Richard and Andy at the B&B. After getting our daily fix of chips we retired to a pub and sampled most of their malt whiskies (well I think we did, but for some reason I'm just a bit hazy about the details) before getting to bed sometime in the early hours. We awoke to the smell of frying bacon and after breakfast found that my starter motor had decided not to work. We then said farewell to Richard and Andy, who headed south whilst we headed west.

We next consulted our OS maps for churchyards with adjacent streams or dykes, so that we could look for *T. albidus*, as well as the more common species. With this method we managed to find this species in four 10km squares (TF 28, 38, 48 and 58). The fifth church we arrived at looked rather shaded, with few gravestones to turn over, but the farm on the opposite side of the road seemed much better (we could see and hear cattle in the barns). An

amused farmer was quite happy for me and Steve to look around the outside of the buildings, so we set to work delving into neglected corners and looking under farm junk. Steve soon came up with several specimens of Cylisticus convexus from beneath a stone, and I found a couple of H. danicus under a piece of wood near a haystack, in the company of T. pusillus and Trichoniscus pygmaeus. We moved a gate that hadn't been shut for several years to discover P. pruniosus amongst the old straw and dung. I then dismantled a five foot high pile of breezeblocks to reveal several specimens of Porcellio dilatatus, taking the meeting's list to 14 species. The final word however came from Steve who found the eleventh species for the farm when he lifted up a piece of concrete to reveal two specimens of T. albidus - proof, as if it were needed, that this species was introduced by the Romans!?

Trichoniscoides albidus in Leicestershire.

Jon Daws, 19 The Portwey,, Leicester.

法申请 (1945年)

Having found *Trichoniscoides albidus* in Dorset, Sussex and Lincolnshire, I thought it was time I made a concerted effort to put it on the map in Leicestershire. I started my search in Rutland by visiting several streams and ditches where *Trichoniscus pusillus* and *pygmaeus* were found to be plentiful, but *T. albidus* remained elusive. My collecting method was to wander along the watercourse, pulling embedded stones out of the banks, and carefully dismantling any bridges I came across.

Having failed to find any *T. albidus* on Saturday, and having had an extra hour of sleep due to the end of British Summer Time, I set off for the countryside just to the east of Leicester on Sunday. The second site I visited was a stream at Baggrave Hall (Azil Nadir's old place) where it runs under a minor road. Here there were plenty of stones and bricks which had fallen out of an old drain and the bridge itself. After approximately thirty minutes of searching I prised a brick up (which itself had been beneath a large piece of concrete) to reveal a large specimen of *T. albidus*. A further specimen was found later on the other side of the road, beneath on of the loose bricks that lined the ditch.

Other woodlice that occurred under stones in just under half of these sites were *Haplophthalmus* species, with *H. mengei* being by far the commonest. So the next time I visit a site I will put Steve Gregory's advice into action, and climb into the nearest stream or ditch!

And Finally.....

Steve Gregory has sent in the following surreal cartoon and announcement. He would like to point out that the competition winner is no relation!!

FOOTROT FLATS











BECKY'S LOUSY WIN

A COVETED prize in a pets competition has been won by a woodlouse. The louse called Gerald — entered by eighty-ar-old owner Rebecca Gregory — took third place in the school contest at Chipping Sodbury, Avon. "He's the best pet in the world," said Rebecca.

Addresses

Record Cards, correspondence, articles for next newsletter etc.:

Dr. D. T. Bilton, Department of Biology, University of York, Heslington, YORK YO1 5DD Tel. (0904) 432947 Fax. (0904) 432860 E Mail DTB2 @ Ac. UK. York

Blank record cards from:

Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, Cambridgeshire PE17 2LS Tel. (04873) 381 Fax. (04873) 467