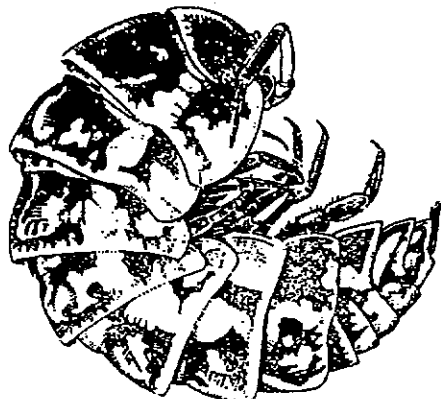


British Isopod Study Group



Newsletter 39

Autumn 1996

Edited by David Bilton

Editorial

- *New Address.* Please note that the editor has moved yet again—address at the end of the newsletter. mail to the old address has been forwarded (eventually!).
- *New Woodlouse Atlas.* This is still subject to delay at BRC due to a lack of available staff to enter corrections to the preliminary maps and undertake some basic checking of data. Hopefully we can try to resolve this problem at our next BISG meeting at Easter.
- *Records Received.* Thanks to everyone who has sent in records recently. Everything to date will hopefully be added to the dataset (see above), but we'll probably use Easter 1997 as a cut-off point for inclusion in any forthcoming atlas. That doesn't mean you should stop sending me records, but please do forward anything outstanding before then! Martin Cawley has been busy, with an *Armadillidium* species new to Ireland, but I'll leave the exact details for him to present in due course. Jon Daws has also made his mark on his return to Leicestershire (see below).....

Armadillidium pictum in Leicestershire

Armadillidium pictum was discovered new to Leicestershire amongst pitfall material collected at Buddon Wood in January 1996.

Buddon Wood SSSI is an ancient woodland with open heathy areas on a large granitic outcrop on the eastern edge of Charnwood Forest in northwest Leicestershire. The wood is mainly sessile oak/birch with areas of small leaved lime and alder in the wetter parts. Sycamore is also invading in places, the thin soils being slightly acidic in nature. The flora is diverse, Buddon holding the highest number of higher plants of any wood in the county. The site was clear felled for the first time in the 1940s and then allowed to regenerate naturally. In the early 1970s Redland Roadstone Aggregates were given permission to quarry the underlying granite for roadstone. Today less than one quarter of the pre 1970 woodland survives, this being in the form of a fringe up to 200m wide on three sides of the quarry. In the second half of 1995 an ecological survey was made of the remaining woodland as part of Redland's efforts to extend the area of mining activity. The survey concentrated on groups of plants and animals for which pre-mining data was available, including beetles, moths and spiders. As part of this assessment 5 lines of pitfall traps (8 beakers, 2m apart) were set in a variety of situations. The trap in which *A. pictum* was recorded was set at the side of a wide ride containing heathy grassland with occasional gorse bushes, adjacent to fairly open oak woodland.

Traps were serviced monthly until October 1995 but then left in place for three months due to a lack of resources, being collected up in January 1996. A male *A. pictum* was discovered in this batch of samples, mixed in with the usual *Oniscus* and *Porcellio*.

This is a rare species in Britain, usually found in ancient woodland, scree and upland limestone areas, being recorded recently from around 5 sites in the Lake District, 2 other

sites in northwest England, and a number of sites in the Welsh border area. The species is listed as Red Data Book category 3 (rare). The species can be difficult to find and collect, which probably partly explains its scarcity. There seems no reason why it should not be found in several other woodlands in the Charnwood Forest area [or further afield?-Ed.]

Jon Daws, 19 the Portwey, Leicester LE5 0PT

Armadillidium pictum in the Lake District

Unlike most British Woodlouse 'rarities' *Armadillidium pictum* Brandt is associated with semi-natural habitats and consequently is one of only two woodlice listed in the British Red Data Book. This species is known to occur in a handful of sites in northern England and mid Wales where it is usually found on rocky terrain within or near deciduous woodland.

One of the objectives of Jon Daws and myself during the 1995 BISG meeting at Rowrah was to add to the known distribution of *A. pictum*. Following consultation with David Bilton we headed for the hanging oak woods of the Borrowdale Valley, where three woodlands were visited, together with a fourth near Buttermere. All sites are SSSIs, and were hand searched for at least one hour. The only numerous woodlouse species at all sites was *Oniscus asellus*, reflecting the acidic nature of the bedrock.

The first site, Troutdale Wood (NY2516) was west-facing and appeared 'neat and tidy' with an open canopy dominated by birch. *A. pictum* was not found. At Lodore Wood (NY2916) a west-facing boulder slope dominated by sessile oak rises above the main road. The ground layer was dominated by a thick carpet of mosses. Two specimens of *A. pictum* were found, one in the centre of a red-rotten fallen birch stump, and the other amongst frass and debris within a rotten fallen oak limb. The upper boulder-strewn slopes of Great Wood (NY2721) are also west-facing sessile oak woodland. Searching in similar microsites to Lodore Wood did not reveal *A. pictum*, but eventually a specimen was found amongst accumulated peaty debris under a flat stone in a small area of scree, and another nearby beneath moss carpets. No further specimens turned up in an hour of searching. The final site, Scales Wood (NY1616), lies on a north facing boulder slope with a more open canopy of sessile oak than the previous two localities. *A. pictum* was not found, but time did not permit a thorough search of the wood. The slug *Limax cinereoniger*, a good indicator of undisturbed woodland, did turn up.

These observations suggest that *A. pictum* can be found in a variety of microsites within rocky deciduous woodland, but is either very elusive or occurs at low densities. Experience in Wales (see Newsletter 24) suggests that the former is more likely. The species is possibly widespread within suitable habitat in the Borrowdale area. Reference to OS maps reveals that most other 'deciduous' woodland elsewhere in the Lake District has been coniferised. It is possible that the species may persist along some of the wooded becks which dissect both plantations and open moorland. In addition has anyone ever looked in conifer plantations? Further afield the species may occur in suitable sites in SW England (e.g. Dartmoor) or further north in Scotland. On present evidence *A. pictum* seems to warrant inclusion in the Red Data Book.

Steve Gregory, Northmoor Trust, Manor House, Little Wittenham, Abingdon, Oxfordshire OX14 4RA.

Fourth Symposium on the Biology of Terrestrial Isopods

This will be held at Haifa, Israel, 2-7 February 1997, and will include sessions on biogeography, evolution and genetics, ecology, ecotoxicology and physiology. The symposium will also offer the opportunity to visit the Golan Heights and the Negev, on mid and post-meeting trips respectively. Late-comers may be able to be accommodated. Anyone interested should contact Prof. Michael Warburg (Dept. of Biology, Technion, Haifa,

32000 Israel; Fax 972-4-8225153; Email warburg@techunix.technion.ac.il) as soon as possible.

BISG/BMG meeting 1997 - St. Johns Town of Dalry.

This will be at the usual time just after Easter. A booking form is included with this newsletter, and you are encouraged to attend what is sure to be an enjoyable event. Let's hope for a relatively early Spring....

Alikhan, M.A. (ed.) 1995. Terrestrial Isopod Biology. Crustacean Issues 9: 204pp. Available @ £75 from: A.A. Balkema Uitgevers B.V., Postbus 1675, NL-3000 BR Rotterdam, Nederland. (Listed at £108 by Natural History Book Services!!). This is the fourth collection of papers to appear on woodlouse biology in recent years, the first being the result of a Zoological Society Symposium, which appeared in 1984. The present volume consists of ten papers based on material presented at a meeting of the American Society of Zoologists at Laurentide University, Ontario, jointly organised by M.R. Warburg and M.A. Alikhan. Topics covered in the volume include ecology, physiology and genetics as follows: Metal bioaccumulation in isopods (Alikhan), comparative anatomy of isopod digestive systems (Strus *et al.*), water vapour absorption and ammonia volatilization (Wright & O'Donnell), *Ligia* as a prototype terrestrial isopod (Carefoot & Taylor), turning in *Armadillidium* (Bo-Ping *et al.*), reproduction in woodlice (Dangerfield & Telford), isopod distribution at different scales (Hornung & Warburg), woodlouse community structure (Szlavec), effects of temperature and photoperiod on breeding patterns (Warburg & Weinstein), food allocation in *Oniscus asellus* (Usebeck & Topp), microhabitat selection in *Armadillidium vulgare* (Heinzelmann *et al.*), and population genetics of *Armadillidium vulgare* in Europe and North America (Garthwaite *et al.*). The quality of individual contributions is rather mixed, as is usual in a work of this nature, although I think there are a number of instances where the editing could probably have been tightened up. The contributions on digestive anatomy (Strus *et al.*), water vapour absorption (Wright & O'Donnell), *Ligia* (Carefoot & Taylor) and woodlouse reproduction (Dangerfield & Telford) were particularly interesting and should be largely accessible to a more general reader. The final paper by Garthwaite *et al.* presents fascinating data on the population genetics of native and introduced populations of *A. vulgare*, these data representing some of the results of a 12-year study involving over 10,000 animals. Fifty-four pages (more than a quarter of the vol!) are taken up by this paper however, which includes 27 pages of primary data tables which may have been better listed as 'available on request'. Obviously the volume is rather costly for its size and content, and is only likely to appeal to those who wish to have every work on terrestrial isopods on their bookshelves!

BISG/BMG Meeting 1996

This was held at the Kingcombe Centre, Dorset 11-14 April 1996. Of those present it was nice to see Steve Hopkin again, and Jonathon Wright who had flown over from South Dakota especially for the meeting! Will he be back this year?? The records we produced are valuable gap-fillers, but nothing to compare with the Cumbrian *Eluma* of 1995 turned up, which is reflected by the fact that I have only had records in from four stalwarts. Jon Daws had to disappear unexpectedly on the Friday of the meeting, and I'm sure he'd point out that finds may have been different had he hung around! *Armadillidium depressum* was found in Bridport Churchyard (SY4692) and Abbotsbury Subtropical Gardens (SY5685), a site which also produced *Porcellionides cingendus*. *Trichoniscoides albidus* proved to be quite widespread in the area, appearing at Lower Kingcombe Meadows (SY5599), Abbotsbury

widespread in the area, appearing at Lower Kingcombe Meadows (SY5599), Abbotsbury Beach (SY5684), Burton Bradstock (SY4789), and Eypes Mouth (SY4590). Eypes had the best list for the weekend, a combined effort by David Bilton, Steve Gregory, Paul Lee and Paul Richards producing 13 species including *Cylisticus*, *Halophiloscia*, *Haplophthalmus mengei* and *Trichoniscoides saeroeensis*. Thanks go to Paul Harding for organizing what was an enjoyable weekend.

Woodlice on the World Wide Web

A comment from Paul Harding led me to find the following site:

<http://info.ex.ac.uk/~gjranel/isopoda.html>

Some nice extracts from Steve Hopkin's AIDGAP work (with permission!) plus sections on woodlice as pets and a key to commoner species, illustrated with b/w photos. Links to some excellent insect pages as well.

Woodlouse stamps

Also on the WWW I find that a recent 53p stamp from St Helena bears the endemic spiny yellow woodlouse *Lauriola atlantica*. Is this a first? I haven't seen the stamp, but details can be had from St Helena Philatelic Bureau, Post Office, Jamestown, St Helena Island, South Atlantic.

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