HETEROPTERA STUDY GROUP

Newsletter No.9 February 1990

Beginning with this issue, the newsletter is under new editorship. I hope I shall be able to do justice to the task. I have made use of the Christmas break to gather most of this newsletter together. This seems to me to be quite a good general policy. Christmas is a fairly predictable event, and falls sufficiently late in the year for news of many of the year's highlights to have surfaced. Accordingly, I plan to produce one regular newsletter per year for distribution early in the new year. If sufficient material accumulates to justify it, or if there is urgent news to convey, I shall consider preparing a mid-year newsletter. Information of any kind in any quantity and any form will be welcomed with open arms at any time. Anything from a small scrawled snippet to a long typed article can be easily accomodated.

In this issue I have included a "News Digest". This aims to summarise the more important discoveries which have been made or revealed during the year. This year's digest is something of a trial run. As a newcomer to the editorship of the newsletter, I have not been accumulating information specifically for inclusion over the past year, and hesitate to use information supplied to me for quite different reasons. The news is therefore largely confined to information published in national journals. I hope even this limited information will be useful: not everyone has easy access to a full range of national journals.

If the idea of a news digest meets with general approval, I would hope to extend it in the future to include information published in local journals, and will willingly include unpublished records which anyone may wish to publicise, but does not feel inclined to write a longer note about. The extent to which this happens will depend on the amount of feedback I receive. It would be particularly helpful to receive news of information on Heteroptera published in local journals. It is not feasible for me to read through all possible sources of information, and not particularly easy to discover the existence of some. If anyone cares to send me titles, precises or copies of articles published in the last few years I would be delighted to use the newsletter to draw them to wider attention. It would be unreasonable to attempt to cover every note and record, but new county records and major reviews would be worth bringing to a wider audience. I already have a few such articles on file, and would like to gather some more together with a view to producing a list next year.

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News Digest **Peter Kirby**

Much of interest has been happening amongst the Heteroptera recently. The latest edition of Entomologists' Monthly Magazine contains an account by Roger Hawkins of an addition to the British fauna, the lygaeid *Orsillus depressus*, found on Lawson's cypress at Woking, Surrey. An article in this newsletter reveals the discovery of a second Surrey locality. Now that it is established, there seems no reason why it should not spread more widely in south-east England. It is a distinctive insect, and it would be useful if Heteropterists could keep an eye open for it. It is all too rarely that the progress of a new arrival in Britain is fully documented.

By a remarkable coincidence, two new records of *Temnostethus tibialis* from the British Isles have been published within a few weeks of one another. J.P. O'Connor, in EMM, reports a specimen from Co. Kildare in the National Museum of Ireland, taken in 1929. A.A. Allen, in Entomologist's Record, records the finding of a specimen in Oxleas Wood, W. Kent (S.E. London) in 1986. It is clearly worthwhile to pay very careful attention to *Temnostethus* wherever they may be found.

Another note by Roger Hawkins in EMM reports a second locality for *Placochilus seladonicus*, in Oxfordshire. Prior to this find only one breeding colony of the species was known in Britain, in Bedfordshire. At the annual exhibition of the British Entomological and Natural History Society in November Peter Hodge exhibited a specimen of *P. seladonicus* from a third British locality, Beachy Head, Sussex. The distribution of *P. seladonicus* as currently known is certainly interesting. If the insect is a recent arrival which is actively spreading, it is difficult to see what pattern its spread is taking, and far from obvious why its point of arrival should apparently have been a disused railway in Bedfordshire. If it has been widely overlooked elsewhere in south-eastern England, it is not obvious why it should have been so. It is quite easy to find, and feeds on a conspicuous plant. It would seem to be anybody's guess where it will turn up next, so a careful examination of field scabious next year is certainly called for.

Peter Hodge's box at the BENHS exhibition also contained a specimen of *Capsus wagneri* from Somerset. This is one of several new county records for this insect, but is certainly the furthest flung from its previously known sites in Cambridgeshire, Huntingdonshire and Yorkshire. It has also turned up in the last two years in Lincolnshire, Norfolk and Northamptonshire (v.c. 32, but in modern Cambridgeshire). An interesting spin-off from recent discoveries is that Yorkshire *C. wagneri* appear normally, perhaps always, to have black femora and red-banded black tibiae, whereas more southern populations contain a good proportion of individuals with almost entirely red legs (var. *rufescens* Remane). Indeed, the Somerset, Lincolnshire, Norfolk and Northamptonshire populations are currently known only as var. *rufescens*, but the numbers involved are very small. Populations at Wicken Fen, Cambs., and Woodwalton Fen, Hunts., contain both the typical form and var. *rufescens*.

The Freshwater Biological Association has published a new key, by Dr A.A. Savage, to the adults of the British aquatic and semi-aquatic Heteroptera. This key includes the two subspecies of *Glaencorisa propinqua* and *Corixa iberica* which I drew attention to in the last newsletter. Dr Savage retains *Sigara concinna* in its familiar genus, rather than following Jansson in placing it in *Paracorixa*. To balance this welcome retention of a familiar name, we must now get used to the fact that the insect which used to be called *Microvelia umbricola* is now to be called *M. buenoi umbricola*, having proved to be conspecific with the American *M. buenoi* Drake.

Thanks are due to Alan Savage for drawing my attention to an error in my "corixid update" in Newsletter no. 8. The labels for the diagrams of the two subspecies of *Glaencorisa propinqua* are reversed. Buying a copy of the FBA key will get you better illustrations and more through proof reading!

Recent Publications on British Heteroptera

Alexander, K.N.A. 1989. A second Gloucestershire locality for *Macroplax preyssleri* (Fieber) (Heteroptera: Lygaeidae). **British Journal of Entomology & Natural History**, 2: 92-93.

Allen, A.A. 1989. Beetles and bugs on a Thames-side wall in autumn. **Entomologist's Record & Journal of Variation**, 101: 47 - 49.

Allen, A.A., 1990. A third British capture of *Temnostethus tibialis* Reut. (Hem.: Anthocoridae). **Entomologist's Record**, 102: 21-23.

Hawkins, R.D. 1989. *Miridius quadrivirgatus* (Costa) (Hem., Miridae) found inland in Surrey. **Entomologist's Monthly Magazine**, 125: 174.

Hawkins, R.D. 1989. A further record of *Placochilus seladonicus* (Fallen) (Hem., Miridae). **Entomologist's Monthly Magazine**, 125: 205.

Hawkins, R.D. 1989. *Orsillus depressus* Dallas (Hem., Lygaeidae), an arboreal groundbug new to Britain. **Entomologist's Monthly Magazine**, 125: 241-242.

Horsfield, D. 1989. *Lamproplax picea* (Flor) (Hem., Lygaeidae) on the Isle of Skye. **Entomologist's Monthly Magazine**, 125: 182.

Horsfield, D. 1989. Two records of *Saldula opacula (Zett.) (Hem., Saldidae) from the Scottish Highlands.* ***Entomologist's Monthly Magazine,*** *125: 249.*

Lane, S.A. 1989. Agnocoris reclairei (Wagner) (Hem., Miridae) in Warwickshire. **Entomologist's Monthly Magazine**, 125: 36.

O'Connor, J.P. 1989. Notes on the Irish *Temnostethus* (Hem.-Het., Anthocoridae) in the National Museum of Ireland. **Entomologist's Monthly Magazine**, 125: 206.

Savage, A.A. 1989. Adults of the British aquatic Hemiptera Heteroptera: a key with ecological notes. **Freshwater Biological Association Scientific Publication No. 50.**

Whitehead, P.F. 1989. The most northerly breeding colony of *Dichrooscytus valesianus* (Hemiptera: Miridae) Meyer-Dur in Britain. **Entomologist's Monthly Magazine, 125:** 49-51.

The status of *Orthotylus virens*

B.S. Nau

In Southwood and Leston the distribution of this bug is given as "....only recorded from Cumberland and Westmorland .... it is associated with bay willow, a low shrub of upland peat mosses". If one looks at a map of the distribution of bay willow (*Salix pentandra*) it is evident that the shrub is widespread in northern England, southern Scotland and the northern half of Ireland. This set me wondering whether *O. virens* has a wider distribution than appears in S & L.

The obvious approach was to start with the known sites. Butler in 1923 gives more details of the then known localities in "A biology of the British Hemiptera-Heteroptera". He gives Cumwhitton Moss, Woodside Moss, Newton Reigny Moss and 'Spa Well on the River Eden'. In fact three of these sites are in the Eden Valley, which separates the Lake District from the Pennines, while Newton Reigny is only a few miles from the valley. The plan was to take a couple of days to visit the Eden Valley in mid-July 1988, establish that the bug was to be found where it was expected and then try to extend its known range by working south-eastwards up the valley into the Pennines and across into the Yorkshire Dales.

I arranged with Lloyd and Maudie Lloyd-Evans to execute this plan, starting from their home in south Yorkshire. However, we had a spare day before setting out in earnest so we decided to use this to visit a site just north of Leeds, in Wharfedale, where Roy Crossley had found the bug on a lone Bay Willow about ten years earlier. We followed Roy's detailed instructions only to reach the conclusion that the lone tree had since died. However Lloyd knew of a small marsh a couple of miles distant in the village of East Keswick where he had seen bay willows. So we went along and behold, there was the marsh in the middle of the village, there were the bay willows, and there was *O. virens* in abundance! This was a promising start, our timing at least was right.

The following day we drove north to Carlisle and began our search of the Eden Valley. Our first objective, Cumwhitton Moss, proved elusive - evidently not easy to spot from the road, so we worked up the valley loking for bay willow. After ten or twelve miles we spotted a couple of bushes in a small marsh by the river, west of Langwathby. We investigated and were immediately rewarded with a male and a female, despite an almost total covering of orange rust on the leaves. It then appeared that this marsh was just the tip of a fairly extensive area of marsh and fen. There were other bay willows, mostly not readily accessible, however one in a pasture near the Edenhall was accessible

and had the bug in some numbers. It is likely that Butler's 'Spa Well'was in this vicinity though not marked on our map. We next headed toward Newton Reigny Moss but this proved a disappointment, it was not readily accessible and from a distance appeared to have developed into woodland, we could see no likely willows and at the end of a long day decided not to press the matter further.

Next day, confident in our ability to find *virens*, we continued the search further into the Pennines. At three sites in the upper reaches of the Eden Valley, south of Appleby, we found Bay Willow and each time found the bug. Our only negative that day was a straggling bay willow high on the Pennines. Continuing into Yorkshire, down into Wensleydale to Aysgarth, we found the river bank lined with bay willow, after a long search we eventually found one female.

It seemed that *Orthotylus virens* was probably more-or-less ubiquitous on bay willow. Only once had we searched a tree and not found the bug. Also, the bug was not really an upland peat species, most of our bay willow was actually in fen or on riverbanks in rather sheltered sites.

Following this expedition, the Lloyd-Evans checked several other bay willow sites. They found three females on trees at Buckden in Wharfedale, and one on its host in the industrial heart of Yorkshire at Bradley in the suburbs of Huddersfield. Extensive bay willow round Semer Water in Wensleydale proved surprisingly negative as did two sites in the Derbyshire Peak District. I checked the only Bedfordshire site for bay willow but was not too surprised that I found only *O. flavinervis*. Perhaps other entomologists will be stimulated to extend the range northwards into Scotland and westwards to Ireland.

Orsillus depressus **R.D.Hawkins**

I now have a second site for this, at Frimley in Surrey, eight miles west of the original site in Woking. While examining a hedge of Lawson's cypress alongside a back road into a new estate, I saw an adult *Orsillus*, which escaped before I could get it into a tube. After much further searching, for almost half an hour, I was becoming increasingly embarassed and conscious of suspicious eyes in the surrounding houses. Finally I decided that the only solution was to beat the trees (an even more doubtful activity), secure the insect and rapidly depart from the area. Beating produced a shower of adults and larvae of *Elasmostethus tristriatus*, and a single tiny larva of *Orsillus*. This was reared to adult through three moults, using as a pabulum small sprays of Lawson's cypress with freshly opened cones, changed every few weeks. Although this insect was alive in captivity for two months, I never once saw it feeding or even attempting to feed. Another example of this species that I took in central Spain in July 1989 was active well after midnight on a spray of Lawson's cypress with unripe cones.

Gonocerus acuteangulatus **R.D. Hawkins**

Ian Menzies and I searched for this on box on the tenth of June, failed to find it but took *Anthocoris butleri* instead. On 27th August a fine fresh adult was beaten from yew by two eleven year old girls participating in the Juniper Hall ladybird course. Having identified the insect when alive, I did not intend to keep this example of a Red Data Book species, but while being transferred from a round tube to a square one, it took off and soared high into the sky, towards the top of an oak tree. Finding a single highly mobile adult on yew is not of course evidnce that this was the larval foodplant, but Butler quotes Bedwell as having "found the larva in some numbers on yew trees, in which the attraction seems to be the berries, which he has seen them sucking".

Recording *Gastrodes abietis* **P. Kirby**

This bug is usually rather difficult to find. Although it is widespread and probably fairly common on Norway spruce, the bugs live inside the cones, which are usually high on the trees. I had looked vainly for the bug on many occasions without success. On the rare occasions when the cones were low enough to reach, they invariably seemed to have no bugs in them. The insects quickly leave fallen cones, and I never seemed to reach them in time. I finally struck lucky in February 1989. Mid-winter entomology withdrawal symptoms were beginning to show, and in the course of a chilly country walk I tapped a few fallen spruce cones in a desparate attempt to see a living insect. I was rewarded with several *G. abietis*. Subsequently, I was able to find the insect during every visit made to any site with Norway Spruce throughout the remainder of the winter (admittedly a small number of localities). The trick seems to be to go out in cold weather, preferably shortly after storms or strong winds, and look for cones which have recently fallen. In cold wet weather, cones age visibly rather quickly. Tapping such cones sharply against the knee produced, in the spruce plantations near Peterborough, between one and six bugs from almost every cone. Presumably in such weather the bugs are too cold to leave their cones after they have fallen.

National Conservation Review of Heteroptera: Progress Report **P. Kirby**

Newsletter no. 8 contained news of this project of the Nature Conservancy Council, together with a plea for assistance. The review is now written and awaits publication. The provisional list of rare and notable species has changed somewhat. Several species initially included in the list have been dropped under the weight of records, and a number of status changes are clearly needed. Happily, these are for the most part the result of species proving to be less rare than was once thought. Many thanks are due to those Heteropterists who have responded to my plea for help. They will be responsible to no small extent for what good qualities the review may prove to possess. I am acutely aware that I have by no means exhausted all possible sources of information on

the rarer British Heteroptera. There has not been time to go through museum collections, nor to check back through full runs of the journals and newsletters of the many local natural history societies which Britain supports. Indeed, until I began working on the project I don't think I had fully realised how much information on the group there actually was. The known distribution of several species on the provisional list of notable species has changed dramatically since I began working on the review, and further surprises must surely be yet to come. If anyone has information which they think I may have missed, or which they know perfectly well that they have been keeping to themselves, please scrabble through your files for the postage-paid label addressed to me which was sent out with Newsletter no. 8 and send me the details. Though, as mentioned above, the review is written and awaiting publication, it is conveniently contained in the Invertebrate Site Register computer database and in readily accessible word processor files. Information arriving soon, and which may change the face of Heteroptera as we know them, can still be incorporated. More generally, the NCC Terrestrial Invertebrate Branch will continue to welcome news of the rarer species even after the review has appeared.

The Bug Book **P. Kirby**

It seems hard to believe that four years have passed since a note under this heading appeared in Newsletter no. 6, assuring the readership that "plans for a new identification manual" were "now in hand", with authors myself and Bernard Nau, and illustrator John Read. The speed with which time seems to have passed must, I suppose, at least mean that life has not been dull in the period since. Not surprisingly, entomologists casually ask from time to time whether the book is still being written. It is clearly time to break the silence and to declare in print that, though progress has been rather slower than was originally envisaged, the book is still on its way, and that the British Entomological and Natural History Society continues its support for the work. By way of proof of progress, a sample species account is included in this newsletter to illustrate the sort of information and layout which the main part of the text will have.

The lay-out is largely self-explanatory, but one or two notes may help. In addition to the current name of the bug, synonyms used in major publications are also given, together with the BRC number. The mysterious A1:A2:A3 etc. refers to the relative lengths of the antennal segments. The map is intended to give only a very broad picture of the distribution of the species. Since the recording scheme is actively gathering records, it is clearly pointless to attempt to produce a detailed distribution map.

Sample species account

Legnotus picipes Fallen) 00602

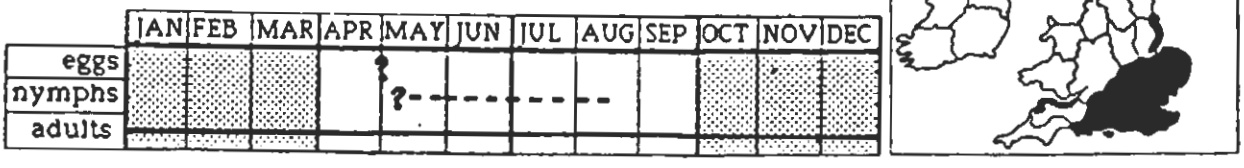
S&L: *ibid.* Butler, Saunders, D&S: *Gnathoconus picipes.* D&S:

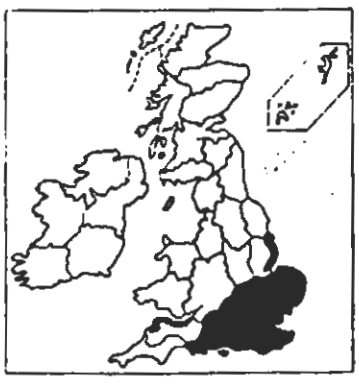
Habitat: associated with bedstraws (*Galium* spp.). Recorded in Britain from *G. saxatile* and *G. verum.* Confined to open habitats, usually on sandy substrates, but on vegetated coastal shingle in Kent and Sussex; particularly frequent near the coast, but also recorded from inland heaths, breckland, etc.
Status: Very local: confined to southern Britain, most of the records coming from south-east England.
Bionomics: one generation per year. Adults overwinter, and have been found in sand at the roots of plants growing on dunes. Adults can be found in all months. The timing and duration of the nymphal stages is uncertain, but the life history is probably similar to that of *L. limbosus.*
Description: a short-oval shining black insect, fairly densely punctured. *Forewings* with a narrow white band along the costal margin, which stops well short of the end of the corium. *Membrane* shining greyish. *Head* with clypeus and paraclypeal lobes approximately equal in length. *Pronotum* with a narrow raised margin. *Scutellum* elongate rounded-triangular, extending for roughly three-quarters the length of the pronotum. *Legs* dark brown or black, spiny; tarsi brown or yellow-brown. *Rostrum* brown, reaching to mid-way between the fore and mid-coxae. *Antennae* A1,A2 brown, A3,A4,A5 dark brown to black.

A1: A2: A3: A4: A5 = 1: 1: 1.7: 2.2: 2.7

Variation: slight variation in the extent of the white wing marking.
Nymphs: probably similar to those of *L. limbosus.*
Identification: distinguished from *L. limbosus* by the shorter white marking on costa of wing, which does not reach the membrane; by the clypeus being roughly equal in length to the paraclypeal lobes rather than shorter, and by the shorter rostrum, which in *limbosus* reaches the mid-coxae. The colour character alone should not be relied on to separate the two species, since the apical part of the marking in *L. limbosus* can be obscure. Other shining black shieldbugs of similar size lack the white marginal wing marking.

L = 3.0-4.4 mm.





Scottish Field Meeting, 28.7-3.8.1990

Stephen Hewitt has generously offered to organise a week-long meeting in Perthshire in 1990. It will be based in Perth, where the Museum can provide workspace and four microscopes in the evening. The Museum contains Buchanan White's collection of British Heteroptera, with some 3000 specimens. It should be possible to make a block booking in bed and breakfast accomodation close to the Museum, provided numbers are known fairly soon. A provisional programme is given below. If interested, please contact Stephen Hewitt as soon as possible.

Provisional Programme

Sat 28 : Arrive p.m. Kinnoull Hill SSSI (open woodland and heath); chance to look at Perth Museum Heteroptera Collection.

Sun 29 : Craiglush SSSI/SWT (mire + woods); Ballinluig Shingle Island SSSI/SWT; Balnaguard Glen SSSI/SWT (juniper wood).

Mon 30 : Black Wood of Rannoch SSSI (Caledonian Pine wood); Dunalastair Water (Fen and tall herb grassland); Linn of Tummel NTS (herb rich birch/hazel woodland); Loch an Daim SSSI.

Tues 31 : Milton Wood NNR (alder/birch wood); Straloch Morraines SSSI (unimproved grassland + heathland); Stormont Loch and Hare Mire SSSI/SWT.

Wed 1 : Ben Lawers NNR; Croch na Keys Wood SSSI, Glen Lyon (pine wood and acid mire); Glen Quaich.

Thur 2 : Loch Moraig SSSI (mesotrophic loch); Glen Tilt SSSI (wooded gorge); River Gary north of Calvine (wooded gorge, moorland).

Fri 3 : Methven Wood SSSI (ancient deciduous woodland); Methven Moss SSSI (lowland raised bog); Loch Leven NNR (eutrophic loch).

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