HETEROPTERA STUDY GROUP

Newsletter No. 13 **March 1996**

Editor: Peter Kirby, 21 Grafton Avenue, Netherton, Peterborough, Cambs., PE3 9PD.

There has been a long gap since the last newsletter. So long, indeed, that I must have spent considerably more time apologising and explaining why there hasn't been another one that it would have actually taken me to write the several that there should have been. Meanwhile, of course, the supply of information and articles has diminished, because there's no point in sending articles to somebody who never gets them printed. Well, who knows, this might be a new leaf I'm turning over. More probably, it's just a brief remission from editorial incompetence. It is, however, worth waiting for, because so much has happened and quite a lot more could, with your assistance, happen soon.

News Digest

The last few years have seen some dramatic changes in British Heteroptera, both in the lists and in the distribution of individual species. The changes continue apace: so much so, indeed, that I am reduced to the briefest of summaries of new information (probably in any case very incomplete and already out-of-date).

Nysius senecionis, recorded from mainland Britain for the first time in 1992 (Hodge & Porter 1997), is now a fairly common insect in south-east England and extends as far north as south Yorkshire. *Metopoplax ditomoides*, after being found in Middlesex in the 1950s, then in Oxfordshire in 1992 (see Newsletter 12) has decided that Britain is rather to its fancy, and has turned up (often in large numbers) over a fairly wide area in the south-east under mayweeds (and often with *N. senecionis*) - it is established, probably by the million, beside the M25 in Surrey, so is well-positioned for rapid transport to much of the rest of Britain. *Emblethis denticollis* has quietly added itself to the British fauna and, if rather local, has turned up on dry ground in a variety of circumstances as far north as Cambridgeshire (where, no doubt amongst many other places, it can be found just outside the capybara enclosure at Willersmill Wildlife Park). *Stictopleurus abutilon* and *S. punctatonervosus* are no longer extinct, *S. abutilon* in particular turning up rather widely in the south-east. *Pyrrhocoris apterus* now lives in Surrey. *Liorhyssus hyalinus* has turned up breeding and inland (Hampshire & Bedfordshire).

Species which have shown fairly clear signs of increase and spread include *Aelia acuminata, Acetropis gimmerthali, Arenocoris falleni, Chorosoma schillingi, Dolycoris baccarum, Megalonotus dilatatus* (which has re-appeared in Oxfordshire for the first time in several decades (J.M. Campbell pers. comm.) and has been found for the first times in Warwickshire in 1996 and Nottinghamshire in 1997), *M. praetextatus, M. sabulicola, Neides tipularius, Palomena prasina*, and *Spathocera dahlmanni*. The list could be extended, but it's not always easy to distinguish the spread of species from the good luck of the collectors.

If current climatic trends continue, we can expect some more additions and spreads. It is certainly well worthwhile to visit dry places with incomplete vegetation cover, even if they are small, superficially unpromising, or previously closely examined. Whatever gloom global climatic change may be destined to bring, it certainly seems to be doing no harm to the British Heteroptera at the moment. The increasing species, not surprisingly, are ones of dry open habitats, often with ruderal vegetation. A corresponding decline in wetland species might perhaps be expected, but I don't know of any record of it yet. Entomologists have for some time suggested that insects ought to be very sensitive indicators of the impacts of climatic change. Should anyone be in need of proof, or of suitable species to help in monitoring, it looks as though ground and near-ground Heteroptera should be amongst the front line of species for consideration.

The identification of most of the species which are either new or are suddenly quite likely to be found is already dealt with in Southwood and Leston, in past newsletters, or in papers notified in past newsletters. Provided one is aware they are out there, they shouldn't pose any major problems in identification, but beware of confusing *Liorhyssus* and *Stictopleurus* with *Rhopalus*, and give *Nysius* even more careful

examination than usual. *Metopoplax* is fairly unmistakeable; *Emblethis denticollis* is very much the same as *E. griseus* (formerly mis-identified in Britain as *E.verbasci*), and will key out to it in S&L; if you're not in one of the classic localities for *E. griseus*, then what you've got is almost certainly *E. denticollis*.

O'Connor & O'Connor (1993) add a species of Empicoris to the list for the British Isles. The few irish specimens previously identified as *E. culiciformis* appear instead to be *E. thermalis*. *E. thermalis* is very similar to *culiciformis*, but has a small blunt-tipped protrusion towards the rear of the pronotum (where E. *baerensprungi* bas a large one). Also, the projection on the scutellum of *thermalis* is brown rather than white, the front coxa is white with a weakly indicated black spot rather than with a dark ring, and is supposed also to differ in the colouring of the front femur. The authors cautiously say that "it is possible that *thermalis* is merely a variety of *culiciformis* but with the paucity of available Irish material, its status is impossible to ascertain". Clearly, more people need to look at their specimens. In checking my own material, I've not found it easy to be definite about the characters supposed to separate the species. I only have one specimen which shows a strong tendency towards *thermalis*, but I'm far from convinced about it. Unfortunately, I have rather little *culiciformis* material. They look so sweet I find it hard to take reference specimens.

Incidentally, a question on the status of *E. culiciformis*: in my experience this is almost entirely a synanthropic species - I have only seen a single specimen away from buildings and very artificial habitats - brick walls, wooded sheds, thatch, hay and straw stacks - and that was on a rock in a quarry, itself not desperately natural. On tree-trunks it is replaced by *E. baerensprungi*, in dry twiggy places (hedges, ivy, rhododendron) by *E. vagabundus*. Is this the experience of other people as well, or does it also turn up in more natural situations? Also, though I see it sufficiently infrequently to be always pleased when it turns up, I have found it in every house that I have ever lived in for any extended period (admittedly only ten in all and in only four towns). Since there is nothing special about any of these houses, and since *culiciformis* has a very wide distribution, this suggests that it may live in or on every house in Britain. This would make it, in practice, a very common species indeed. Can anyone offer evidence to support or refute this suggestion?

Erratum
Adrian Fowles has been good enough to point out an error, stemming from my inability to read my own writing of vice-county numbers, that crept into the "news digest" of newsletter no. 12. Banc-y-Mwlden, where Adrian caught *Adelphocoris seticornis* in 1992, is in Cardigan, not Glamorgan as reported.

The distribution of aquatic bugs in Britain

Included with this newsletter is a separate document produced by Thomas Huxley, who for several years has been very actively gathering information on the aquatic Heteroptera, initially in Scotland but now in England and Wales as well. One of the more startling discoveries from his work using the available records is how few recent records of aquatic Heteroptera have been sent into the recording scheme. The aquatic species must, on balance, be the most widely and thoroughly investigated of the British Heteroptera, so where's all the information? There are a lot more records out there somewhere. There is certainly a lot more recording that can be done. The mapping work is happening now, and with co-operation from recorders can proceed rapidly. I should perhaps admit that I write all this with the hypocrisy of one who has a five-year backlog of unsent records. I'm going to do my best to get up to date. If everyone with records can do the same, there's the potential for some good maps, soon.

Regional lists, publications and initiatives

Lancashire & Cheshire
Once again, there is a single of the prize for sending information on regional lists and publications: Stuart W. Campbell has drawn the following references on the Heteroptera of Lancashire and Cheshire to my

attention:

Judd, S. 1985. Lancashire and Cheshire shieldbugs. *Annual report and Proceedings of the Lancashire and Cheshire Entomological Society*, 108: 168-176.

Judd, S. 1987. A checklist of the Lancashire and Cheshire Heteroptera. *Annual report and Proceedings of the Lancashire and Cheshire Entomological Society*, 110: 60-65.

Warwickshire

Price, J.M. 1996. *A provisional atlas of the true bugs of Warwickshire (Insecta: Hemiptera: Heteroptera: 6433).* Warwickshire Museum Service.

(Available from Warwickshire Museum, Market Place, Warwick, CV34 4SA, price £2.00 including post and packing, cheques payable to Warwickshire County Council.)

This excellent atlas is thoroughly to be commended both to those interested in the distribution of the British Heteroptera and as a possible format for others thinking of embarking on a similar project. It packs much information readably and usefully into a small space and as a result comes out at a very reasonable price. It is A4 format, is 35 pages in length, and its central part consists of maps and species accounts packed at 12 to a page. Each species is within its own square box, so that in spite of the density of information the layout is very clear and there is no clutter. Each map gives the ten-kilometre squares from which each species has been recorded, and the decade of the most recent record from each; the first county record is given in full, and a brief note is given on the habitat and status of the species in the county, including specified localities for some scarcer species. Some might wish for more detailed mapping and information, but I doubt that in practice it would add a great deal for most species. Though geographical coverage is clearly not complete for many species (when is it ever?) the total of recorded species for the county stands at 303, an impressive total for a county in the midlands and with no coast.

Ireland

Checklist

Brian Nelson is producing a checklist of Irish Heteroptera, currently running to 283 species. He is keen to gather any unpublished records (or unsourced published records) to add to his database. Anyone able to help can contact him at: Ulster Museum, Botanic Gardens, Belfast BT9 5AB.

Aquatic Heteroptera: Northern Ireland

Nelson, B. 1995. The distribution of the aquatic and semi-aquatic Heteroptera in Northern Ireland. *Bulletin of the Irish Biogeographical Society*, 18: 66 - 130.

This useful work summarises data on the aquatic heteroptera of Northern Ireland, and includes data from 237 sites surveyed between 1989 and 1993. A total of 40 species are included (compared with 49 in all Ireland, 61 in the British Isles), including *Corixa iberica*, *Limnoporus rufoscutellatus* (seemingly doing rather well), and *Sigara fallenoidea*. For each species there is a map, a summary of statistics on water body size, altitude and habitat types from which it has been recorded, and an account which includes notes on its ecology and further notes on distribution, and there is final section giving accounts of the major habitat types.

Recent literature (1993-7)

As usual, this list does not claim to be comprehensive, but covers some major entomological journals and any other snippets which have come my way. If there are things not in it, because of either my carelessness or my ignorance, let me know about them and they can be put in the next newsletter.

Alexander, K.N.A. 1994. Two bugs found at Porthysgo, Lleyn peninsula, Caer., 15.vii. 1993. Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 173.
(includes *Enoplops scapha*)

Alexander, K.N.A. & Foster, A.P. 1995. A selection of the more interesting bugs found during the work of the National Trust's Biological Survey in 1994. Exhibit at the annual exhibition of the British Entomological and Natural History Society, 1994. *British Journal of Entomology and Natural History*, 8: 207.
(includes *Liorhyssus hyalinus* and *Trapezonotus ullrichi* from Pembrokeshire, *Pionosomus varius* from the Gower peninsula)

Alexander, K.N.A. & Foster, A.P. 1996. Heteroptera recording in Wales during 1993 and 1994. *British Journal of Entomology and Natural History*, 9: 3 - 6.
(includes *Dicranocephalus agilis* from Cardiganshire, *Pachybrachius luridus* from Caernarvonshire)

Allen, A.A. 1993. *Deraeocoris olivaceus* (F.) (Hem.: Miridae) in Kent. *Entomologist's Record*, 105: 30.

Allen, A.A. 1993. Records of two species of Heteroptera (plant bugs) recently recognised as British. *Entomologist's Record*, 105: 37-38.
(*Megalonotus emarginatus* and *Trigonotylus caelestialium* - *T. caelestialium* the common species of the genus in the Blackheath and Charlton area, West Kent; *M. emarginatus* from Thames Marshes in east and wets Kent, *M. chiragra* from dunes in Kent and Cornwall, and gravelly bank near old sandpits in West Kent.

Allen, A.A. 1993. *Dictyonota fuliginosa* Costa (Hem.: Tingidae) rediscovered in S.E. London. *Entomologist's Record*, 105: 279.

Allen, A.A. 1994. *Eurydema oleraceum* (L.) (Hem.: Pentatomidae) in 1992-93. *Entomologist's Record*, 106: 30.

Badmin, J. 1993. A plant bug *Corizus hyoscyami* (L.) new to Kent. *Transactions of the Kent Field Club*, 13 (1): 57.

Chatfield, J.E. 1994. Nonsuch Park and adjacent open spaces in Ewell, Surrey - some data on the flora and fauna. *London Naturalist*, 73: 77-142.
(Heteroptera pp. 109-111)

Cherrill, A.J. & Sanderson, R.A. 1994. Comparison of sweep-net and pitfall samples of moorland Hemiptera: evidence for vertical stratification within vegetation. *Entomologist*, 113: 70-81.

Cherrill, A., Rushton, S., Sanderson, R. & Byrne, J. 1997. Comparison of TWINSPAN classifications based on plant bugs, leaf hoppers, ground-beetles, spiders and plants. *Entomologist*, 116: 73-83.

Crossley, R. 1993. A further county record for *Trigonotylus caelestialium*. (Kirk.) (Hem., Miridae). *Entomologist's Record*, 105: 176.
(East Yorkshire, vc61)

Denton, J.S. 1997a. Recent records of rare and local Hemiptera in Surrey and North Hampshire. *Entomologist's Monthly Magazine*, 133: 79-80
(includes *Sehirus biguttatus* in Surrey; *Spathocera dahlmanni* in North Hants., *Rhopalus maculatus* in Surrey and North Hants., *Rhopalus rufus* in North Hants., and records of a number of other nationally scarce species).

Denton, J.S. 1997b. Notonecta obliqua Gallen (Hem., Notonectidae) persisting in a duneland Chara pond. *Entomologist's Monthly Magazine*, 133: 171.

Denton, J.S. 1997c. Rare and notable Hemiptera in Surrey, Middlesex and North Hampshire 1995-6. *Entomologist's Monthly Magazine*, 133: 175-176.
(includes records of *Aradus cinnamomeus* and Legnotus picipes from Surrey, *Odontoscelis lineola* from North Hants., *Spathocera dahlmanni* in Surrey, *Rhopalus rufus* in Surrey and North Hants., *Stictopleurus abutilon* in North Hants., *Liorhyssus hyalinus* in North Hants., *Emblethis denticollis* in North Hants., *Nysius senecionis* in North Hants. Surrey and Middlesex, *Peritrechus gracilicornis* in North Hampshire, *Metopoplax ditomoides* in Berkshire, Surrey and North Hampshire, *Deraeocoris olivaceus* in North Hants.)

Dolling, W.R. 1997. Two recent immigrants now found north of the Humber (Hym., Vespidae and Hem., Lygaeidae). *Entomologist's Monthly Magazine*, 133: 130.
(*Nysius senecionis* in Yorkshire)

Eversham, B.C. & Telfer, M.G. 1995. Some interesting bugs from Breckland road verges. Exhibit at the annual exhibition of the British Entomological and Natural History Society, 1994. *British Journal of Entomology and Natural History*, 8: 207.

Haes, E.C.M. & Spalding, A. 1996. The insects on a small, isolated, derelict metalliferous mine site in Cornwall. *British Journal of Entomology & Natural History*, 9: 111-115.

Haughton, A. & Bell, J. 1996. *Graptopeltus lynceus* (F.) (Hem., Lygaeidae) in north-west England. *Entomologist's Monthly Magazine*, 132: 16.

Hawkins, R. 1994. Significant finds of 1993. Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 173.
(includes *Adelphocoris seticornis* from Llangloffan Fen, Pembs., and *Deraeocoris olivaceus* from Nonsuch Park, Surrey)

Hawkins, R.D. 1995. *Elasmostethus tristriatus* and related shieldbugs in the Sheffield area. *Sorby Record*. 31: 66-67.

Hodge, P. 1994. Seven species of Heteroptera found in Sussex during 1992 and 1993. Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 174.
(includes *Nysius senecionis* from Holman Wood, near Brede, E. Sussex, the first record for mainland Britain, see Hodge & Porter 1997)

Hodge, P. 1995. Two species of bugs. Exhibit at the annual exhibition of the British Entomological and Natural History Society, 1994. *British Journal of Entomology and Natural History*, 8: 207.
(includes *Physatocheila smreczynskii* from the New Forest)

Hodge, P. & Porter, D.A. 1997. *Nysius senecionis* (Schilling) (Hemiptera: Lygaeidae) new to the British Isles. *British Journal of Entomology and Natural History*, 10, 1-2.

Huxley, T. 1997. *Plea leachi* McGregor & Kirkaldy (Hemiptera, Heteroptera: Pleidae) in Scotland. *Entomologists Record*, 109: 300.

Jones, R.A. 1994. Three species of rhododendron-feeding bug from Dulwich Park, London SE21 (VC17, Surrey). Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 174.
(includes *Stephanitis rhododendri*)

Judd, S. 1996. An annotated checklist of British and Channel Island Lygaeidae (Hemiptera: Heteroptera). *Entomologist's Gazette*, 47: 123-137.

Kirby, P. 1994. A selection of interesting Heteroptera taken in 1991 and 1992. Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 174-5.
(includes *Orsillus depressus* from Essex, *Megalonotus sabulicola* and *Eremocoris podagricus* from Northants, *Capsus wagneri* from Middlesex, Dumfriesshire and Northumberland, *Teratocoris caricis* from Northumberland)

Kirby, P. 1996. New and interesting records of Essex Hemiptera. *Essex Naturalist* (new series) 13: 32-34.
(includes *Brachysteles parvicornis, Orius laticollis*, new to Essex, and records of *Trigonotylus caelestialium* and *Megalonotus emarginatus*)

Kirby, P. 1997. Essex Heteroptera: report for 1996. *Essex Naturalist* (new series) 14: 18-20.
(includes *Arenocoris falleni, Stictopleurus abutilon, Drymus pumilio, Agnocoris reclairei*, new to the county)

Lansbury, I. 1996. Notes on the types of *Notonecta halophila* Edwards (Hem., Notonectidae). *Entomologist's Monthly Magazine*, 132: 45-47.

Lees, D.C. 1995. BENHS field meetings. Mount Caburn NNR, Glynde, Sussex, 19 June 1993. *British Journal of Entomology & Natural History*, 8: 88-90.

Menzies, I. 1993. Hemiptera-Heteroptera. In: Survey of Bookham Common. Fifty-first year. Progress report for 1992. *London Naturalist*, 72, 108.

Menzies, I.S. 1994a. Hemiptera Heteroptera. In: Survey of Bookham Common. Fifty-second year. Progress report for 1993. *London Naturalist*, 72, 171.
(*Gonocerus acuteangulatus* recorded away from Box Hill)

Menzies, I. 1994b. Heteroptera from Surrey. Exhibit at the annual exhibition of the British Entomological and Natural History Society 1993. *British Journal of Entomology and Natural History*, 7: 175.
(includes records of *Gonocerus acuteangulatus* from Bookham and Epsom commons, and in the absence of box)

Moulet, P. 1995. *Hémiptères Coreoidea Euro-méditerranéens*. Faune de France vol. 81. 336pp. Paris: Fédération Français des Sociétés de Sciences Naturelles.

Nau, B.S. 1994. Notes on *Placochilus seladonicus* (Fall.) (Hem., Miridae) in Britain. *Entomologist's Monthly Magazine*, 130: 209-210.

Nau, B.S. 1995. Status of *Atractotomus parvulus* Reuter (Hem., Miridae) in Britain. *Entomologist's Monthly Magazine*, 131: 64.

Nau, B.S. 1995. Notes on *Holcostethus vernalis* (Wolff) (Hem., Pentatomidae) in Britain. *Entomologist's Monthly Magazine* 131: 159-161.

Nau, B.S. 1997. Range-changes in some species of Hemiptera-Heteroptera in Bedfordshire. *Entomologist's Monthly Magazine*, 133: 261-262.
(includes ten species new to Bedfordshire: *Chlamydatus pulicarius, Stictopleurus abutilon, Spathocera dahlmanni, Ceraleptus lividus, Nysius senecionis, Metopoplax ditomoides, Emblethis denticollis, Arenocoris falleni, Megalonotus praetextatus, Neides tipularius*)

Nelson, B.H. 1995. The distribution of the aquatic Heteroptera in Northern Ireland. *Bulletin of the Irish Biogeographical Society*, 18: 66-130.
(an excellent and extensive piece of work which includes records of such interesting species as *Limnoporus rufoscutellatus* (doing quite nicely, by the looks of it), *Glaencorisa propinqua*, *Corixa iberica*, *Sigara fallenoidea*; a maps and notes are given on a total of .)

O'Connor, J.P. & Ashe, P. 1996. *Elasmostethus tristriatus* (F.) (Hem., Acanthosomatidae) confirmed as an Irish Species. *Entomologist's Monthly Magazine*, 132: 314

O'Connor, J.P. & O'Connor, M.A. 1993. Notes on the Irish Reduviidae (Hemiptera). *Entomologist's Record*, 105: 49-52.

Parsons, M.S. 1996. Hemiptera recorded at light traps operated in Richmond Park, Surrey during 1994-5: *Reduvius personatus* (L.) (Reduviidae). Exhibit at the Annual Exhibition of the british Entomological & Natural History Society, 1995. *British Journal of Entomology & Natural History*, 1: 236.

Price, J.M. 1997. Heteroptera from Hartlebury Common L.N.R., Worcestershire. *Entomologist's Monthly Magazine*, 133: 17-26.

Read, R.W.J. 1993. *Himacerus mirmicoides* Costa (Het.: Nabidae) in West Cumbria. *Entomologist's Record*, 105: 284-285.

Read, R.W.J. 1994. *Chartoscirta elegantula* (Fln) (Hem., Saldidae) in West Cumbria. *Entomologist's Monthly Magazine*, 130: 158.

Schuh, R.T. & Slater, J.A. 1995. *True bugs of the world*. New York, Cornell University Press.

Waring, P. 1995. BENHS field meetings. Abernethy Forest RSPB reserve, Inverness-shire, 13 August 1994. *British Journal of Entomology & Natural History*, 8: 92-96.

Whitehead, P.F. 1993. Some records of British terrestrial Hemiptera. *Entomologist's Monthly Magazine*, 129: 60.
(includes *Rhacognathus punctatus* from Cheshire; *Megalonotus dilatatus*, *Scolopostehus puberulus*, *Chlamydatus wilkinsoni*, *Pachytomella parallela* from Worcestershire)

Whitehead, P.F. 1997. The climate of 1995 and its impact on insects in central England, including assemblages at artificial light. *Entomologist's Gazette*, 48: 23-33.

Williams, G.M. 1993. The colonisation of mining subsidence ponds by water boatmen (Hemiptera: Heteroptera). *Entomologist's Gazette*, 44: 67-78.

Williams, G.M. 1995. Investigations into the distribution of selected species of water-boatmen (Hemiptera: Heteroptera) in relation to habitat. *Entomologist's Gazette*, 46: 221-225.

A nature reserve dedicated to lygaeid bugs

John M. Campbell

Oxfordshire County Council Museums Service Store has recently been built in an old, shallow gravel pit in the Windrush valley north of Standlake. The area around the building was turfed in 1994. One area of turf has not taken very well and a variety of plants including *Erodium cicutarium*, *Geranium molle* and *Sherardia arvensis*, have become established.

The area was searched in May 1995 when the temperatures were very high. An initial search revealed *Graptopeltus lynceus* and *Sehirus luctuosus* in reasonable numbers. The former has been recorded twice in recent years some five miles to the south east in the Tubney area on the Corallian sands. *S. luctuosus* has been found in two nearby disused gravel pits. Further searching produced *Stygnocoris fuligineus* which is known from several locations in Oxfordshire, and also *Pasatus lundi*, kindly identified by Dr Peter Kirby. *P. lundi* has only been recorded once in recent years, from a heap of soil and gravel on the edge of Oxford Downs Cricket Club ground, just a mile from the Store.

Bordering one edge of the grass area is a car park of paviour bricks laid on soft sand. These three inch bricks could well be an important hibernation site.

On the strength of these finds the area of lawn, an oval of some fifteen by seven metres, has been set aside as a nature reserve dedicated to lygaeid bugs. Areas of turf have been stripped off and the underlying gravelly soil loosely forked over. The hope is that the *Erodium* and other species will increase naturally. It is planned to keep about a third as bare earth by forking it over every year.

Within Oxfordshire it has been agreed to create a category of "Invertebrate Nature Reserves". This is the first and the intention is to create other similar small sites specifically for invertebrate conservation. The proposal will be promoted as part of the Oxfordshire Agenda 21 and Biodiversity Challenge.

We believe this to be the first nature reserve dedicated to Heteroptera and certainly the first for Lygaeid bugs.

More on Nepa cinerea on land

A.K. Chalkley

P.F. Whitehead's piece about *Nepa cinerea* (Newsletter 12) echoes behaviour I have been observing for a number of years now. I am lucky enough to have a small stream running through my garden which has a resident population of *Nepa*, as well as *Velia caprai* and *Hydrometra stagnorum*. The banks of the stream are steep and have loose rocks, a stone wall and clay banks at various places along its course.

During the day *Nepa* may well be found in the stream or under damp to wet stones out of the water. However at night it is almost always possible to find some at least of the population prowling the walls and banks. They appear to enter and leave the water at will during hunting sessions and seem to be equally at home in the cool damp air as under water. Whilst out of the water they frequently are probing around in crevices, especially in my garden along the stone-walled section of the stream bank. When walking over the muddy, clay-lined areas they become coated with mud until they are a matt brown and seem to be unaffected by this.

Walking on land is accomplished either by lowering the front legs and using them to assist in balance or motion, or on occasions the front legs are held up in the air, in a similar position to that used underwater, and the insect walks on four legs with its body parallel to the surface it is on. Predation out of the water appears to me to be based on chance encounters. I have seen them take small beetles, newly emerged caddisflies and caterpillars, which had dropped from overhanging oak tress. I also wonder if the host of woodlice on the walls are a prime target - I think they should be but have not actually seen them being eaten. However, I've often seen a *Nepa* "bump" into some other invertebrate, seemingly at random, and wander off in another direction without any culinary interest being shown at all.

A final observation on these creatures is that when some years ago I put a pond into my garden, some twenty feet horizontally away from the stream and ten feet higher than the running water, *Nepa cinerea* was the first creature I found in the pond the next morning after filling it. Did they fly in, or were they exploring the garden "on foot" that night? A steep, well-planted bank, a path and a flower border separated

the stream and pond.

It might also be of interest that *Hydrometra* exhibits very similar behaviour at night on my garden stream to *Nepa*. Although it does move about on the water surface quite a lot, it spends a lot of time patrolling the walls by the stream in particular, although I have not seen it feeding its behaviour does suggest that it is searching for prey. During the day both on my home stream and in other local sites I often find *Hydrometra* well above the water on concrete and stone walls. This is often in the full sun. Indeed since the access points to many of the rivers in my locality are often limited to their intersections with roads I always make a point of searching the concrete of road bridges for *Hydrometra*.

Ranatra linearis - in flight!

A.K. Chalkley

I have been recording *Ranatra linearis*, the water stick insect, for many years, yet have never seen one in flight. The question as to whether or not this aquatic big can fly is puzzling. Many references suggest that *Ranatra* cannot fly, despite having small wings. I myself have never accepted that this is the case nor that the allied *Nepa cinerea* is flightless. The field guide to insects by Michael Chinery for example states that "both species are winged but cannot fly as the flight muscles are poorly developed". Some other works echo this or simply do not mention flight.

The question has now been answered by a fascinating observation by Suffolk Naturalists' Society member Joan Hardingham. Whilst working on the strawberry crop at her farm near Needham Market on the 7th of June 1996 she saw a specimen of *Ranatra linearis* fly across the field and land on some black plastic sheeting, presumably mistaking it for the reflective surface of a pond. She reported to me that its wings were of a "russetty" colour and rather like an earwig's. It flew holding its body at an angle of about 60 degrees and she felt that it resembled a praying mantis in flight. When it took off again it did so vertically. It was certainly less ungainly in flight than a cranefly, indeed she described as quite a strong flier.

The observation is all the more remarkable in view of the weather conditions on June 7th. This was one of the hottest days of the year with temperatures of 31 degrees Celsius and the insect was seen flying at 11am., almost the hottest period of the day. That evening saw quite violent thunder storms over much of the country at the end of a 72 hour period of falling air pressure. Many other aquatic bugs of course are caught in light traps because they fly at night, when the air is cooler and more moist, but this specimen seemed content in the heat.

Did the impending thunder, the drop in air pressure or the heat trigger its flight? It is said that *Gerris*, the pondskaters, overwinter as fully winged forms but the summer population reabsorb their wing muscles, perhaps to increase the available protein for egg laying (Guthries 1989). Was Joan's specimen dispersing prior to egg laying? Another piece of research (Savage 1989) suggests that there is evidence that temperatures over 24 degrees Celsius may trigger the development of full wing muscles in the corixid bug *Sigara scotti*. Perhaps the high temperatures that week led to it taking flight?. As usual in natural history, the more you find out the more questions there are to answer. I would very much appreciate any observations members might have on this matter, especially if they have seen *Ranatra* fly.

References

Guthries, M., 1989. *Animals of the surface film*. (Naturalist's Handbooks no. 12.) Slough, Richmond Publishing Co. Ltd.

Savage, A.A. 1989. Adults of the British aquatic Hemiptera-Heteroptera. *Freshwater Biological Association Scientific Publication*, 50.

Address for observations: 337 Brook Hall Road, Boxford, Sudbury, Suffolk, CO10 5HS. Tel: 01787 210 140; Fax: 01206 864226; EMail: 100776.1221@Compuserve.com

[Adrian Chalkley has also sent a number of observations on aquatic Heteroptera in Suffolk, which it may be of interest to others to include here:

Ilyocoris cimicoides: "I do not find *I. cimicoides all that often*. However, at the few sites I have found so far it is present in very large numbers. It almost suggests to me that the populations are fairly self-contained and stable with limited movements for dispersal to other sites. I have however collected one lone individual from a puddle on a school playground where it presumably died after diving in at night in the middle of a flight. Does anyone in the group have any information about this species?"

Ranatra linearis: "seems widespread in Suffolk, but not very common. As the literature suggests I find it in ponds and lakes. However I was surprised to find several nymphs of *Ranatra* on the river called the Black Bourne, at Euston (TL896789, 6.8.93). Does anyone have any other records of *Ranatra* in a similar situation? The Black Bourne is a typical Suffolk river, shallow with a moderate flow over a clay and flint bed where I found the specimens which were in grass growing out from the bank and in beds of *Callitriche* sp."

Mesovelia furcata: "I recorded nymphs on the coast in a man-made drainage channel called Dowcra's ditch at the National Trust site of Dunwich Heath. I'd be interested in knowing of other East Anglian records."

English names of British Heteroptera

The use of English names for invertebrates seems to be on the increase. I confess to not liking them at all. There are enough invertebrate names to remember, it seems to me, without inventing a whole new set, and most of the recently invented names that I've seen are a great deal more cumbersome and difficult to remember than the names we already have. However, quite a few of the British Heteroptera have already been given English names at one time or another. In the interests not so much of going with the flow as on the principle of "know thine enemy" I have been gathering together those English names in books and documents within reach of the chair at which I sit at the word processor (it has wheels, so the reach is long enough not to be too exclusive). I have come up with the following set of names. They are limited to names in English, but are necessarily of British origin. Perhaps if anyone knows of more, they could reveal them to me or through the newsletter. While this is not intended as an invitation for people to invent new names, if anyone were to turn a few moments of imaginative thought to some, I don't suppose I would be able to resist pushing them into print. The ones we have at present seem mostly rather dull and worthy, and some which are a little more exciting might be nice. My favourites to date are the fine-streaked bugkin, the masked hunter, and the irresistible timothy plantbug (if only Beatrix Potter were with us now).

Terrestrial species

Acanthosomatidae	**shield bugs**
Acanthosoma haemorrhoidale (Linnaeus)	hawthorn shield bug
Elasmostethus interstinctus (Fabricius)	birch shield bug
Elasmostethus tristriatus (Fabricius)	juniper shield bug
Elasmucha grisea (Linnaeus)	mothering bug
	parent bug
Aepophilidae	**marine bugs**
Aepophilus bonnairei Signoret	marine bug
Alydidae	**broad-headed bugs**
Anthocoridae	**flower bugs**
	minute flower bugs
Anthocoris confusus Reuter	oak flower bug
Anthocoris gallarum-ulmi (DeGeer)	elm gall bug
Anthocoris nemorum (Linnaeus)	common flower bug

Anthocoris sarothamni Douglas & Scott	broom flower bug
Anthocoris visci Douglas	mistletoe flower bug
Lyctocoris campestris (Fabricius)	debris bug
Orius vicinus (Ribaut)	raspberry bug
Xylocoris galactinus (Fallén)	hot-bed bug
Aradidae	**bark bugs**
	flat bugs
Aneurus spp.	bark bugs
Aneurus avenius (Dufour)	common bark bug
Aradus spp.	flat bugs
Aradus cinnamomeus (Panzer)	pine flat bug
Berytidae	**stilt bugs**
Cimicidae	**bed bugs**
Cimex columbarius Jenyns	fowl bug
	pigeon bug
Cimex lectularius Linnaeus	bed bug
	wall-louse
Cimex pipistrelli Jenyns	bat bug
Oeciacus hirundinis (Jenyns)	martin bug
	swallow bug
Coreidae	**leaf-footed bugs**
	squash bugs
Cydnidae	**burrower bugs**
	negro bugs
	shield bugs
Sehirus bicolor (Linnaeus)	pied shield bug
Thyreocoris scarabaeoides (Linnaeus)	negro bug
Lygaeidae	**ground bugs**
	seed bugs
Chilacis typhae (Perris)	reedmace bug
Gastrodes abietum Bergroth	spruce bug
	spruce-cone bug
Gastrodes grossipes (DeGeer)	pine-cone bug
Heterogaster urticae (Fabricius)	nettle ground bug
Ischnodemus sabuleti (Fallén)	European chinch bug
Scolopostethus pictus (Schilling)	corn-stack bug
	hay-stack bug
Microphysidae	**minute bugs**
Miridae	**capsids**
	capsid bugs
	plant bugs
Adelphocoris lineolatus (Goeze)	alfalfa plant bug
	lucerne plant bug
Atractotomus mali (Meyer-Dür)	black apple capsid
Blepharidopterus angulatus (Fallén)	black-kneed capsid
	black-kneed apple capsid
Bryocoris pteridis (Fallén)	fern bug
Calocoris fulvomaculatus (DeGeer)	hop capsid
	needle-nosed hop bug
	shy bug
Calocoris norvegicus (Gmelin)	potato capsid
Campylomma verbasci (Meyer-Dür)	mullein bug
Cyllecoris histrionicus	harlequin bug

Dicyphus errans (Wolff)	slender grey capsid
Halticus spp.	garden fleahoppers
Leptopterna dolabrata (Linnaeus)	meadow capsid
	meadow plant bug
Lygocoris pabulinus (Linnaeus)	common green capsid
Lygus rugulipennis Poppius	bishop bug
	European tarnished plant bug
	tarnished plant bug
Malacocoris chlorizans (Panzer)	delicate apple capsid
Miris striatus (Linnaeus)	fine streaked bugkin
Monalocoris filicis (Linnaeus)	bracken bug
	fern bug
Orthotylus marginalis Reuter	dark green apple capsid
Plesiocoris rugicollis (Fallén)	apple capsid
Psallus ambiguus (Fallén)	red apple capsid
Stenotus binotatus (Fabricius)	timothy plant bug
Nabidae	**damsel bugs**
Anaptus major (Costa)	grey damsel bug
Aptus mirmicoides (Costa)	ant damsel bug
Himacerus apterus (Fabricius)	tree damsel bug
Nabicula flavomarginata (Scholtz)	broad damsel bug
Nabicula limbata (Dahlbom)	marsh damsel bug
Nabicula lineata (Dahlbom)	reed damsel bug
Nabis ericetorum Scholtz	heath damsel bug
Nabis ferus (Linnaeus)	field damsel bug
Nabis rugosus (Linnaeus)	common damsel bug
Pentatomidae	**shield bugs**
	stink bugs
Aelia acuminata (Linnaeus)	bishop's mitre
Dolycoris baccarum (Linnaeus)	sloe bug
Eurydema oleracea (Linnaeus)	brassica bug
Palomena prasina (Linnaeus)	green shield bug
Pentatoma rufipes (Linnaeus)	cherry stink bug
	forest bug
	place bug
Piezodorus lituratus (Fabricius)	gorse shield bug
Podops inuncta (Fabricius)	European turtle bug
Zicrona caerulea (Linnaeus)	blue bug
	blue shield bug
Piesmidae	**ash-grey leaf bugs**
	beet bugs
Piesma maculatum (Laporte de Castelnau)	spinach leaf bug
Piesma quadratum quadratum (Fieber)	beet bug
	beet lace bug
	beet leaf bug
Pyrrhocoridae	**cotton stainers**
	fire bugs
Pyrrhocoris apterus (Linnaeus)	fire bug
Reduviidae	**assassin bugs**
Coranus subapterus (DeGeer)	heath assassin bug
Empicoris spp.	thread-legged bugs
Reduvius personatus (Linnaeus)	fly bug
	masked bed-bug hunter

	masked hunter bug
Rhopalidae	**scentless plant bugs**
Saldidae	**jumping bugs**
	shore bugs
Saldula saltatoria (Linnaeus)	common shore bug
Scutelleridae	**shield bugs**
Eurygaster maura (Linnaeus)	European tortoise bug
Stenocephalidae	**spurge bugs**
Tingidae	**lace bugs**
Derephysia foliacea (Fallén)	ivy lace bug
Dictyonota strichnocera Fieber	gorse lace bug
	gorse and broom lace bug
Lasiacantha capucina Germar	thyme lace bug
Stephanitis rhododendri Horváth	rhododendron bug
Tingis ampliata (Herrich-Schäffer)	creeping thistle lace bug
Tingis cardui (Linnaeus)	spear thistle lace bug
Aquatic and semi-aquatic species	
Aphelocheiridae	**saucer bugs**
Aphelocheirus aestivalis (Fabricius)	river bug
Corixidae	**corixas**
	corixids
	lesser water boatmen
	water boatmen
	water crickets
Corixa punctata (Illiger)	common corixid
Micronecta poweri (Douglas & Scott)	water-singer
Gerridae	**pondskaters**
	water measurers
	water striders
	wherrymen
Aquarius najas (DeGeer)	river pondskater
Gerris argentatus Schummel	little pondskater
Gerris costai (Herrich-Schäffer)	moorland pondskater
Gerris lacustris (Linnaeus)	common pondskater
Gerris odontogaster (Zetterstedt)	toothed pondskater
Hebridae	**sphagnum bugs**
	velvet water bugs
Hebrus ruficeps (Thomson)	sphagnum bug
Hydrometridae	**marsh treaders**
	water-measurers
Hydrometra gracilenta Horváth	lesser water measurer
Hydrometra stagnorum (Linnaeus)	water measurer
Mesoveliidae	**pondweed bugs**
	water treaders
Mesovelia furcata Mulsant & Rey	pondweed bug
Naucoridae	**creeping water bugs**
	saucer bugs
Ilyocoris cimicoides (Linnaeus)	saucer bug
Nepidae	**waterscorpions**
Nepa cinerea Linnaeus	waterscorpion
Ranatra linearis (Linnaeus)	larger waterscorpion
	long-bodied waterscorpion
	water stick insect

Notonectidae	**backswimmers**
	boat-flies
	greater water-boatmen
	water-boatmen
Notonecta glauca Linnaeus	common backswimmer
	common water-boatman
Pleidae	**lesser backswimmers**
	lesser water-boatmen
	minute backswimmers
	pigmy backswimmers
Plea leachi McGregor & Kirkaldy	lesser water-boatman
Veliidae	**broad-shouldered water striders**
	riffle bugs
	small water striders
	water crickets
Microvelia reticulata (Burmeister)	minute water-cricket
Velia caprai Tamanini	water cricket