HETEROPTERA STUDY GROUP

Newsletter No. 12 August 1993

Those of you who feared that the Newsletter had become biennial may now be re-assured. Though I have racked my brains for an excuse, I can blame the unprecedentedly late appearance of this issue on nothing but personal inefficiency. Having failed, through prevarication, to organise the Newsletter before the start of the field season, it became inevitably relegated to the bottom of the "action" tray (in my experience always a misnomer) beneath the accumulating lists and heaps of insects. I now devote the necesssary time to it chiefly because of a growing awareness that if I don't do so soon, the 1993 season will be over before I get round to writing about 1992.

Despite the late appearance of the newsletter, it deals chiefly, as have other recent issues, with the calendar year preceding its appearance. I have, however, included a few snippets of information revealed or published in 1993 where it has seemed particularly relevant or important to do so.

It is no doubt best not to dwell on failures, but readers with good memories and sharp eyes may notice that what this newsletter conspicuously fails to deal with is the Saldidae. This in spite of my experimental selection of this group as a theme for this year. If I were a true scientist I would no doubt repeat the experiment before attempting interpretation of the results. I shall not, however, do so.

It would be wrong to suggest that no saldid offerings at all have come my way. Steve Hewitt has sent me a tantalisingly text-free set of maps of recent saldid records from the north of England and Scotland, which I hope it will be possible to include in a future Newsletter. I have ill-paid Steve for his efforts in sending me this and other information by producing the newsletter too late to include mention of a field trip he has organised on the England/Scotland border. Sorry, Steve.

Finally, the annual prize for the sending on of information on regional lists and publications is awarded to Paul Stebbings, who has sent me the following reviews of Heteroptera in Cambridgeshire (v.c. 29).

BEDWELL, G.C. 1938. Hemiptera. Victoria County History of Cambridgeshire 1: 96-103.

HARRIS, W.V. 1928. Hemiptera-Heteroptera. Part 2. Polyneura, Dychiophora and Anonychia. pp. 324-328 in Gardiner, J.S. (ed.) The natural history of Wicken Fen (part 4). Cambridge.

HUTCHINSON, G.E. 1926. Hemiptera-Heteroptera. Part 1. Hydrobiotica and Sandaliorhyncha. pp. 234-252 in Gardiner, J.S. (ed.) The natural history of Wicken Fen (part 3). Cambridge.

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News Digest

The addition of *Megalonotus emarginatus* and *Trigonotylus caelestialium* to the British list (Aukema & Nau 1992, see literature list below) should, as forewarned in Newsletter 10, have sent people rushing to check their *M. chiragra* and *T. ruficornis*,. Neither of the new species seems likely to prove rare. Aukema & Nau report specimens of *T. caelestialium* from Middlesex and Surrey. Additional records have been published by A.A. Allen (Ent. Rec. 105: 37-38) (West Kent and West Sussex) and R. Crossley (Ent. Rec. 105: 176) (East Yorkshire). I have specimens from Derbyshire, South Essex, East Kent, Northamptonshire and Nottinghamshire. My specimens of *T. caelestialium* tend to come from disturbed areas (including waste ground and *Lolium perenne* leys, while all *Trigonotylus* I have from unimproved grassland are *T. ruficornis*. However, I don't have very many specimens.

Aukema & Nau report *M. emarginatus* from Berkshire, Dorset, Essex and Kent. Allen (loc. cit.) reports further specimens from East and West Kent, notes my own captures of the insect in North and South Essex, and points to a possible preference by *M. emarginatus* for heavier soils than those frequented by *chiragra*. John Campbell, in the Oxfordshire Biological Records Centre Newsletter no. 17, reports *M. emarginatus* from Oxfordshire.

Orsillus depressus appears to have taken note of Roger Hawkins astonishment at its apparent lack of spread from Surrey, reported in Newsletter 10. Allen (1992) reports it from West Kent. I have found it in South Essex, Bernard Nau has found it in Bedfordshire, and John Bratton has found it in Northamptonshire (in Peterborough in fact, in a bit which is in modern Cambridgeshire but v.c.32).

John Campbell has been having considerable good fortune in Oxfordshire of late. The Oxfordshire BRC Newsletter 17, besides adding *M. emarginatus* to the county list (the Records Centre deals with the modern county, not the vice-county), also adds *Elatophilus nigricornis* and *Lygus maritimus* and reports the first record of *Aquarius paludum* from the county since World War 2. Most interestingly of all, it reports the capture of *Stephanitis rhododendri* from a garden at Boars Hill, on the edge of Bagley Wood (v.c. 22). The dearth of recent records of this species has received comment in past issues of this Newsletter. More recent Oxfordshire records include the first records for many years from the county of *Graptopeltus lynceus* (also caught nearby by Simon Grove) and *Lasiosomus enervis* and the most surprising finding of *Metopoplax ditomoides* at Tickhill Meadow (v.c. 22) on 18.vi.92.

The annual exhibition of the British Entomological and Natural History Society produced a small crop of interesting Heteroptera. The National Trust Biological Survey was operating in Northern Ireland in 1992, and Keith Alexander and Andrew Foster showed specimens of *Liorhyssus hyalinus, Pachybrachius fracticollis, Neides tipularius* and *Metatropis rufescens* from that under-recorded country. Peter Hodge displayed specimens of *Eurydema dominulus* from Holman Wood, East Sussex, and of *Megalonotus dilatatus* from the New Forest.

Of the considerable number of interesting recent records of uncommon species that have been made, some are included in publications with self-explanatory headings (or brief accompanying notes) listed below; others are included later in this newsletter in an article updating the Hemiptera Review. There is a small number of 1992 records, however, which I cannot resist giving in more detail here. Adrian Fowles has added another Welsh vice-county to the distribution of *Adelphocoris seticornis* by findig it in the flush fens of Banc-Y-Mwlden, Glamorgan. Tony Warne has caught *Holcostethus vernalis* in Marley Wood, Winfrith, Dorset. This year's additions to the known distribution of *Capsus wagneri* are my own: two sites along the northern margin of Kielder Water, Northumberland (in one case accompanied by *Teratocoris cariciś*, another interesting record) and from beside Eve's Water, Langholme, Dumfriesshire.

Cardigan

Recent (1992) Literature

This list does not claim to be comprehensive, but covers the major entomological journals and any other snippets which have come my way during the year.

ALLEN, A.A. *Elasmostethus (Cyphostethus) tristriatus* (F.) (Hem., Pentatomidae) on *Thuja plicata* D. Don. Ent. mon. Mag. 128: 136.

ALLEN, A.A. *Eurydema oleracea* L. (Hem.; Pentatomidae) recurrence in N.W. Kent and its localisation. Ent. Rec. 104: 79-80.

ALLEN, A.A. *Orsillus depressus* Dallas (Hem.; Lygaeidae) in S.E. London, and probably new to Kent. Ent. Rec. 104: 252.

AUKEMA, B. & NAU, B.S. *Megalonotus emarginatus* (Rey) (Lygaeidae) and *Trigonotylus caelestialium* (Kirkaldy) (Miridae) (Hem.- Het.) new to Britain. Ent. mon. Mag. 128: 11-14.

ERLANDSSON, A. & GILLER, P.S. Distribution and feeding behaviour of field populations of the water cricket *Velia caprai* (Heniptera). Freshwater Biology 28: 231-236.

HANCOCK, E.G. Asymmetrical antennae in the hawthorn shieldbug *Acanthosoma haemorrhoidale* (L.) Br. J. Ent. Nat. Hist. 5: 93-94.

[JONES, R.A.] 1991 Annual Exhibition: Hemiptera. Br. J. Ent. Nat. Hist. 5: 77-78.

JUDD, S. & ROTHERAM, I.D. The phytophagous insect fauna of *Rhododendron ponticum* L. in Britain. Entomologist 111: 134-150.

KIRBY, P. *Hydrometra gracilenta* Horvath (Heniptera: Hydrometridae) in East Sussex. Br. J. Ent. Nat. Hist. 5: 128.

KNILL-JONES, S.A. A swarm of *Callicorixa praeusta* (Fieber) (Heniptera: Corixidae) in the Isle of Wight. Ent. Gaz. 43: 150.

MAKINGS, P. *Ranatra linearis* (L.) (Heniptera: Nepidae) on the Gower Peninsula, South Wales. Ent. Gaz. 43: 114.

READ, R.W.J. Records of *Piesma quadratum* Fieber (Hem.; Piesmidae) from West Cumbria. Ent. Rec. 104: 8

READ, R.W.J. *Troilus luridus* Fab., (Hem.; Pentatomidae) in Cumbria. Ent. Rec. 104: 42.

SANDERSON, R.A. Heniptera of naturally vegetated land in north-west England. Ent. Gaz. 43: 221-226.

WHITEHEAD, P.F. An unusual invertebrate habitat at Dumbleton, east Gloucestershire (SP03). Ent. Gaz. 43: 66. (*Lasiosomus enervis* amongst rank tussocky grassland.)

WHITEHEAD, P.F. *Megalonotus antennatus* (Schilling) (Heniptera: Lygaeidae) new to the West Midlands, and a mechanism to limit winter mortality. Ent. Gaz. 43: 219-220. (*M. antennatus* in Worcs.)

WHITEHEAD, P.F. Fruit trees, orchards and their rare invertebrates. Ent. Gaz. 43: 303-304. (*Anthocoris visci* in Worcs.)

Notes on collecting the genus *Acalypta*

Stephen Moran

Over the last three years I have begun to find four of the members of this genus with increasing frequency by the simple expedient of shaking moss, whilst *in situ*, over a white plastic container (such as a microwave dish or an ice-cream box) using my fingers. The process leaves the moss relatively intact and is, I think, preferable to taking home large chunks of the countryside for future analysis. Admittedly, there may be *Acalypta* lurking in every shred of moss in Britain but for the purposes of understanding their distribution and something of their habitat requirements the "shaking" method should do.

I find most *Acalypta* on drying or fading patches of whichever moss they are inhabiting. This may be a genuine preference by the bug but on the other hand it may simply be that the looser texture of the dry patches offers less protection against "shake-out". At first I had some difficulty in picking out *Acalypta* specimens in amongst the litter shaken out of the moss but soon the shape becomes unmistakeable. They look rather like small flattened seeds from an umbellifer with the antennae resembling the styles. However, seeds do not generally try to walk away and so any possible confusion does not last for long. The smoothness of the plastic container can cause some problems as the wind can easily sweep off these rather flat bugs.

I have kept rough notes on the habitat for each sighting and, although it is as yet only a small sample size (31) it may still be of interest.

I would like, if possible, to add to this sample size and to start looking a factors such as altitude. If anyone has notes on *Acalypta* finds which they do not mind sharing with me I would be most grateful.

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Habitat preferences of the Genus Acalypta (Hemiptera,Tingidae)

brun. = A. brunnea
car. = A. carinata
nig. = A. nigrina
parv. = A. parvula

"SUBSTRATE"	brun.	car.	nig.	parv.	
ROCK	3	2	6	2	13
SAND	-	-	-	2	2
GRASS TUSSOCK	-	3	-	-	3
MOSS HUMMOCK	-	-	3	2	5
EARTH	-	-	2	1	3
TREE TRUNK	4	-	-	1	5
	7	5	11	8	31

MOSS	brun.	car.	nig.	parv.	
Rhacomitrium	-	-	10	3	13
Hypnum	7	5	1	5	18
	7	5	11	8	31

HABITAT					
MOORLAND	-	-	8	4	12
DUNES	-	-	2	1	3
BOG/REED BED	-	2	2	-	4
DECID.WOOD	7	3	-	1	11
CONIF.WOOD	-	-	1	1	2
	7	5	11	7	31

Review: WHEELER, A.G., Jnr., & HENRY, T.J. 1992. A synthesis of Holarctic Miridae (Heteroptera): Distribution, Biology and Origin, with emphasis on North America. 306 pp. Thomas Say Foundation, vol 15. v + 282 pp.
Available from the Entomological Society of America, P.O. Box 177, Hyattsville, MD 20781-0177, USA., price $50 plus $3 postage.
Peter Kirby

The charge of parochialism has quite often been laid against British entomologists. The charge is perhaps less fairly made now than in the past, but it is one to which I at least would have to plead guilty. My knowledge of the Heteroptera faces away shamefully quickly away from the Channel coast into Europe, and the world outside Europe is an almost complete unknown to me. It was a pleasure, therefore, to receive for review a book which forced to appreciate just how relevant a knowledge of the New World fauna is to fully understanding our own Heteroptera. This book, descibed as "the most comprehensive assessment of Holarctic members of any North American insect family" describes the distribution, host plants and habits of 98 species of Miridae occurring in North America which are common to Old and New Worlds. Of these 98 species, 72 occur in Britain; 21 of these are believed to be indigenous to North America, the remaining 51 to be introductions. This represents a considerable proportion of the British fauna. True to the general trend of trans-Atlantic faunal movements, only one of the indigenous American species, *Neodicyphus* (or, in Wheeler & Henry, *Dicyphus*) *rhododendri* has successfully established in Britain.

The bulk of the book is occupied by accounts of the 98 species under consideration. In these accounts a considerable amount of information is included, especially for well-studied species, and is presented in probably as readable a form as the subject matter permits. North American distribution is shown in map form; the remainder of world distribution is summarised; a well-referenced account is given of host plants and habits, and the likely origin of the North American populations of the species is discussed. There is a brief introduction, and a short "summary and conclusions" chapter discusses the nature and origins of the Holarctic mirid fauna. It is perhaps a reflection of my own ignorance rather than a commendation of the book that I learnt from it a number of facts already published in quite accessible parts of the European literature which I have never read. There are illustrations of a number of the species but, though these help to break up the text, they were to me the least successful aspect of the book. Some of the illustrations are very good, but others are of poorer quality. It a book which is not intended to be used for identification purposes accurate portrayal is not essential, but there are several species which I would not have recognised from their illustrations in this book, and some where the relative proportions of body parts seem to be considerably distorted. The illustration of *Leptopterna ferrugata* I would unhesitatingly have identified as *L. dolabrata*.

For most British heteropterists this book will be interesting rather than essential reading. Also, though not over-priced by today's standards for a well-produced, well-bound hardback book on a specialist topic, it could not be said to represent especial value for money. Nonetheless, I would certainly reckon it a useful addition to the shelves of serious students of the group and those with international interests, and would recommend to others as a useful book to at least read and take notes from.

Catalogue of Palearctic Heteroptera

Many of you will already have received notification of this important work. The information below is quoted directly from the pre-publication leaflet;

For many years there has been a growing need for an updated faunal list and revised data on the Heteroptera of the Palearctic Region. The previous work covering this region was published by Oschanin in 1912; the more recent 'Katalog' included in Stichel's 'Heniptera Heteroptera Europae', published between 1955 and 1962, dealt with only part of the Palearctic Region.

The 'Catalogue of Palearctic Heteroptera', to be edited by Berend Aukema (Wageningen, The Netherlands) and Christian Rieger (Nürtinge, Germany), will be published by the Netherlands Entomological Society (N.E.V.)

The catalogue will be published between 1993 and 1998 in five separate volumes, each containing a bibliography and an index. More than 7000 species are included in about 2000 pages.

Twenty well-known specialists from all over Europe, assisted by many local experts from all parts of the region, will contribute as follows;

VOLUME 1: General introduction (P. Štys & I.M. Kerzhner), Enicocephalomorpha and Dipsocoromorpha (P. Štys), Nepomorpha (A. Jansson, I. Lansbury, Chr. Rieger & P. Štys), Gerromorpha (N. Møller Anderson) and Leptopodomorpha (P. Lindskog).

VOLUME 2: Nabidae (I.M. Kerzhner), Microphysidae, Anthocoridae & Cimicidae (J. Péricart), Tingidae (J. Péricart & V. Golub), Joppeicidae (P. Štys), and Reduviidae & Pachynomidae (P.V. & V.G. Putschkov).

VOLUME 3: Miridae (2 parts) (I.M. Kerzhner & M. Josifov).

VOLUME 4: Aradidae (E. Heiss & T. Vásárhelyi), Piesmatidae (E. Heiss), Colobathristidae and Malcidae (P. Štys), Berytidae (J. Stusák), Lygaeidae (J. Péricart) and Pyrrhocoridae & Largidae (J. Stehlík).

VOLUME 5: Coreoidea (W. Dolling), 'Cydnoidea' (J. Lis), Scutelleridae & Acanthosomatidae (U. Göllner-Scheiding), Pentatomidae & Tessaratomidae (L. Hoberlandt) and species incertae sedis (W. Dolling).

Detailed up-to-date information on nomenclature, distribution and main references on taxonomy and biology of family, genus and species group taxa will be included. At species level special attention will be given to type material, type localities and depositories of types.

Information on relevant extralimital taxa will be given as well.

The distributional information will be given by country in three main parts; Europe and the palearctic parts of Africa and Asia. For larger countries more detailed information will be given (e.g. Russia and China). Extralimital distribution will be included.

The 'Catalogue of Palearctic Heteroptera' is primarily intended for both amateur and professional heteropterists, and is also indispensible for entomological research institutes, museums keeping entomological collections, and libraries of universities.

It is still possible to subscribe to the Catalogue at the reduced rate of Hfl 500 (including postage) for the entire five-volume work (post-publication price is expected to be Hfl 700). Subscriptions should be sent to: Catalogue of Palearctic Heteroptera (attn B. Aukema & Chr. Rieger), Plant Protection Service, P.O. Box 9102, NL-6700 HC Wageningen, The Netherlands.

HEMIPTERA REVIEW: INFORMATION UPDATE

P. Kirby

In Newsletter 11 I proposed to provide updates on the Heteroptera sections of the National Review of Hemiptera in this issue. Listed below are all additional references, changes to distribution, and information on biology made necessary by information which I have been sent or have come across pertaining to records up to the end of 1992 (occasionally 1993). The changes mostly result from recent finds and publications, but there is also older information previously overlooked, and the correction of one act of culpable carelessness; the omission of information on A.A. Allen's recent capture of *Tennostethus tibialis*. The information given here is of necessity presented very concisely. More detailed information (where available) of the data on which this summary is based is lodged with the Invertebrate Site Register of the Joint Nature Conservation Committee, and with Bernard Nau for the National Recording Scheme. In the following list, species are arranged in alphabetical order. Note that the references listed are not necessarily relevant to additional information on biology and distribution given for the same species; more often, they are published records of information included in the Review on the basis of personal communications.

Adelphocoris seticornis: add Carmarthen and Glamorgan to distribution. Refs.: [Jones] (1991); Kirby (1991).
Agnocoris reclairei: Ref.: [Jones] (1991).
Anthocoris visci: Ref.: Whitehead (1992c).
Aphanus rolandri: recent Dungeness records are of bugs from beneath dense gorse bushes, where they occurred in considerable numbers and ran rapidly and efficiently amongst masses of dry gorse litter.
Berytinus hirticornis: add Bedfordshire to distribution.
Capsodes sulcatus: Ref.: Alexander & Grove (1991).
Capsus wagneri: add the following counties to distribution: Middlesex, Northumberland, Dumfries-shire; add Wilbraham Fen to Cambridgeshire sites. Refs.: Bratton, Brierley & Kirby (1989); Hodge (1990b); [Jones] (1991).
Chlamydatus pulicarius: add Perthshire to distribution; add Lakenheath to list of Suffolk sites. Refs.: [Jones] (1991); Nau (1992).
Cimex columbarius: Ref.: Kirby (1988).
Corixa iberica: Ref.: Savage (1991).
Dicranocephalus agilis: Refs.: Alexander & Grove (1991); [Jones] (1991); Kirby (1991).
Dicranocephalus medius: a recent record from a coastal site in Pembrokeshire may be an error for *D. agilis*. Refs.: Alexander & Grove (1991); [Jones] (1991); Skidmore & Burn (1983).
Emblethis verbasci: Ref.: Alexander & Grove (1991).
Eremocoris plebejus: add Cumberland to distribution; found by Steve Hewitt in May 1993 in mature Scots pine plantation at Whinfell Forest.
Eysarcoris aeneus: Ref.: Kirby & Lambert (1990).
Globiceps cruciatus: Refs.: Kirby (1988); Kirby (1991).
Globiceps flavomaculatus: Ref.: Kirby (1988).
Globiceps juniperi: delete Carmarthen from distribution. Refs.: Kirby (1988); Kirby (1991).
Gonocerus acuteangulatus: Ref.: Menzies (1991).
Hebrus pusillus: to 'habitat and ecology' should be added that the species also occurs on flushes on soft-rock cliffs.
Holcostethus vernalis: add Dorset to distribution.
Hydrometra gracilenta: NCC East Anglian Fen Survey added a further Norfolk locality, Reedham Marsh, 1989. Ref.: Kirby (1992).

Ischnodemus quadratus: recent (1990; P.J. Hodge) record near Dover extends distribution, but still limited to South Kent coast. This record necessitates deletion of the "possibly extinct" status. The 1990 specimens were swept from long grass; this is contrary to previous records from short grassland on the sheltered cliff base at Folkestone Warren, so the exact habitat requirements of the species in Britain are not entirely clear. Refs; [Jones] (1991).
Lasiacantha capucina; Refs; Alexander & Grove (1991); [Jones] (1991).
Lasiosomus enervis; add Gloucestershire to distribution. Refs; Whitehead (1992a).
Legnotus picipes; Ref.; Kirby (1988).
Megalonotus antennatus; add Worcestershire to distribution. Ref.; Whitehead (1992b).
Megalonotus dilatatus; add Pembrokeshire to distribution. Ref.; Skidmore & Burn (1983).
Megalonotus praetextatus; add Merioneth to distribution. Refs.; Alexander & Grove 1991; Kirby (1991); Skidmore & Burn (1983).
Megalonotus sabulicola; add Northamptonshire to distribution.
Micracanthia marginalis; add Cumberland to distribution (Glasson Moss, Steve Hewitt 1991; a considerable northward extension of the known range). Ref.; Kirby & Lambert (1990).
Microvelia buenoi umbricola; NCC East Anglian Fen Survey has added a further Norfolk locality, Reedham Marsh, 1988 & 1990; Bernard Nau adds three further Norfolk sites, Thompson Common, Thompson Water and Foulden Common.
Monosynamma sabulicola; add Oxfordshire to distribution.
Myrmedobia coleoptrata; add Suffolk (NCC East Anglian Fen Survey) and Bedfordshire to distribution. Refs.; Alexander & Grove (1991); Kirby (1988).
Odontoscelis fuliginosa; I found this species to be strongly associated with *Erodium cicutarium* in Pembrokeshire in 1990. Ref.; Skidmore & Burn (1983).
Odontoscelis lineola; Ref.; Alexander & Grove (1991).
Ortholomus punctipennis; Ref.; Kirby (1988).
Orthotylus fuscescens; Refs.; [Jones] (1992); Nau (1992).
Pachybrachius luridus; Ref.; Kirby & Lambert (1990).
Pachycoleus waltli; add Bedfordshre to distribution. Ref.; Kirby & Lambert (1990).
Peritrechus gracilicornis; Ref.; [Jones] (1992).
Physatocheila sareczynskii; Refs.; Alexander & Grove (1991); [Jones] (1991).
Pionosomus varius; this species may be numerous within its colonies. Refs.; [Jones] (1991); Skidmore & Burn (1983).
Placochilus seladonicus; Bernard Nau has found a further Bedfordshire locality, and one in Hertfordshire. Refs.; Hawkins (1989); Hodge (1990a).
Rhopalus rufus; Peter Hodge has found this species under corn spurrey *Spergularia arvensis* in Dorset, suggesting this as a possible host plant.
Rhyparochromus pini; Refs.; Alexander & Grove (1991); [Jones] (1991); Skidmore & Burn (1983).
Saldula arenicola; now known to be well-established on Dungeness; several were taken in pitfalls during NCC survey; I found large populations beside two gravel pits on Dungeness in 1991. Refs.; Alexander & Grove (1991); [Jones] (1991).
Saldula fucicola; Refs.; [Jones] (1992); Nau (1992).
Saldula opacula; Essex records are confirmed; apparently quite frequent beside brackish ditches in grazing levels in Essex; there are recent records from East Anglian fenland; also recently recorded from washland and beside permanent water on the Ouse Washes, Cambridgeshire; can occur on bare mud, but is also found amongst tall vegetation, e.g. *Scirpus maritimus*, where it may easily be overlooked.
Sciocoris cursitans; Refs.; Alexander & Grove (1991); [Jones] (1991).
Scolopostethus pictus; add Worcestershire and Dumfries-shire to distribution. Refs.; Whitehead (1991a,b)
Sehirus biguttatus; Refs.; Alexander & Grove (1991); [Jones] (1991).
Stictopleurus abutilon; a recent record, Dungeness, Kent, 1992, presumably a vagrant; add June to months in which this insect has been recorded in Britain.

Systellonotus triguttatus; Refs.; Kirby (1988); Kirby (1991).
Temnostethus tibialis; there is a more recent record than is given on data sheet - Oxleas Wood, W. Kent, 9.7.86, A.A. Allen, on sap-run on oak; also now recorded from Ireland. Refs.; Allen (1990); O'Connor (1989).
Teratocoris saundersi; overall distribution should be changed to 'Scotland and northern England'; Kielder Water, Northumberland, should be added to list of sites. Refs.; Nau (1992); [Jones] (1992).
Trapezonotus ullrichi; recorded from cliff slopes as well as cliff tops; National Trust survey in 1990 added two more Cornish localities and one in Devon; I found a further Cornish locality in 1992; National Trust Biological Survey found a close association between this insect and ox-eye daisy *Leucanthemum vulgare*; *T. ullrichi* was found on this plant in Pembrokeshire also. Ref.; Alexander & Grove (1991).
Trigonotylus psammaecolor; Refs.; Kirby (1988); Kirby (1991); Kirby & Lambert (1990).
Tytthus gemmus; Refs.; Kirby (1988); Kirby & Lambert (1990).

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BRATTON, J.H., BRIERLEY, S.J. & KIRBY, P. 1989. Additional records and amendments to the Heteroptera of Lincolnshire and South Humberside. Transactions of the Lincolnshire Naturalists' Union 22: 115-116.
HAWKINS, R.D. 1989. A further record of *Placochilus seladonicus* (Fallen) (Hem., Miridae) Entomologist's Monthly Magazine 125: 205.
HODGE, P.J. 1990a. *Placochilus seladonicus* (Fln.) (Hem., Miridae) in East Sussex. Entomologist's Monthly Magazine, 126: 211.
HODGE, P.J. 1990b. *Capsus wagneri* Remane (Hem., Miridae) in North Somerset. Entomologists's Monthly Magazine 126: 260.
[JONES, R.A.] 1991. The annual exhibition 1990. Hemiptera. British Journal of Entomology and Natural History 4: 43.
[JONES, R.A.] 1992. The annual exhibition 1991. Hemiptera. British Journal of Entomology and Natural History 5: 79-80.
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NAU, B. 1992. Perthshire field meeting, 1990: revised table of records. Heteroptera Study Group newsletter no. 11: 5-7.
O'CONNOR, J.P. 1989. Notes on Irish *Temnostethus* (Hem.- Het., Anthocoridae) in the National Museum of Ireland. Entomologist's Monthly Magazine 126: 206-207.
SAVAGE, A.A. 1991. Variation in the diagnostic morphological features of *Corixa punctata* (Illiger) and *Corixa iberica* Jansson (Hem.-Het., Corixidae). Entomologist's Monthly Magazine 127: 145-149.
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A remarkable encounter with *Nepa cinerea*

P.F. Whitehead

It is well known that water scorpions (*Nepa cinerea* L.) may seek shelter on land within close reach of the water bodies in which they live. It was therefore no surprise to find a number under logs at the River Avon bankside near Bredon, Worcestershire (SO93) on 13 February 1990. Much more remarkable, however, was the individual that had caught, held and predated a terrestrial carabid *Nebria brevicollis* (F.). There is thus a temptation to regard *Nepa* as an amphibious species, actually able to support itself on land.

On Mallorca, Spain, in October 1990, catastrophic floods affected invertebrate communities - many species, including *Nepa cinerea*, were swept into the sea. Later, they were found active in littoral strand, where they may have sustained themselves in a similar way.

[Editor's note - others besides myself have probably come across *N. cinerea* in sufficient numbers in pitfall traps set in soggy places as to suggest that they were up to something. This spring, while on a nocturnal prowl around the garden on a damp evening in an attempt to reduce the burgeoning snail population, I watched a *Nepa* climb out of the pond onto a bordering paving slab and spend fifteen minutes probing into cracks and crevices in a way that strongly suggested malice aforethought, rather than, for example, an attempt to disperse to a new water body. My attention was distracted from the insect by the need to break up mortal, and rather one-sided, combat between a cat and a frog, and I was unable to re-find the *Nepa* to discover the outcome of its search.]

Sunbathing in *Palomena prasina* (L.) and other insects

P.F. Whitehead

After a sharp overnight frost at 1030 BST on 17.10.1992 I noticed a *Palomena prasina* (L.) in a rather odd attitude on a leaf of *Geranium pratense* L. here at Little Comberton. The insect was a perfect colour-match for the leaf, and the immediate site was sheltered. I watched the insect selectively flex its left legs and observed that it was pitched at about 90 degrees to the incoming sunlight; from time to time the insect moved slowly and deliberately on the leaf surface, continually striving to maintain the same angle between its dorsal surface and incident sunlight. This behaviour was maintained for at least an hour (by which time I had more important things to do!) during which time specimens of the delphacid *Stenocranus minutus* (F.), which also intently maximised the surface area of their bodies to solar radiation, joined it. Both of these species overwinter as imagos.

In some climatic conditions, sunbathing by insects is evidently mandatory. Along the sandy banks of the East Siberian Lea River in July 1982, several million dragonflies *Sympetrum sanguineum* (Muller) were observed basking tightly on the warming sand from about 10 a.m. By early afternoon, not one could be seen.

The 1992 Heteropterists' Field Meeting

Bernard Nau

A group of heteropterists, and some lesser breeds of entomologist, spent a week last summer, 19-24 July, in the Moray Firth area of north-east Scotland. This area includes a wide range of habitats, ranging from coastal dunes and cliffs to Caledonian pine forest. A table of species by site is appended, however it is also interesting to compare this list with that for a similar meeting two years earlier (28 July - 3 August 1990) about 100 km to the south in the uplands of Perthshire, separated from the present area by the Grampian Mountains. The two areas yielded 178 species in all, 152 in the southern area and 136 in the north; 110 species were found in both areas. We actually visited more sites in the south (30) than the north (20), but the fieldwork effort and weather were very similar so it is appropriate to make comparisons on a "site occurrence" basis as an indication of relative status.

Among the few species occurring only in the north, a curiously mixed bag, are:
Acompocoris alpinus, Aradus betulae, Campyloneura virgula, Stenotus binotatus (!).
Plus of course the sea-shore species, Perthshire lacking a coastline.

Species recorded from multiple sites in the south, but not at all in the north, include:
Chartoscirta cincta, Gerris odontogaster, Lamproplax picea, Lygocoris viridis, Malacocoris chlorizans, Nysius ericae, Piezodorus lituratus, Psallus variabilis, Saldula fucicola, Stenodema laevigatum, Teratocoris saundersi, Teratocoris caricis, Velia caprai.

Spcies having a reduced site-occurrence northwards (at least 50% change) are:
Anthocoris nemoralis, Anthocoris nemorum, Atractotomus magnicornis, Blepharidopterus angulatus, Cyrtorhinus caricis, Drymus brunneus, Leptopterna dolabrata, Lygocoris contaminatus, Lygus rugulipennis, Pachytomella parallela, Phytocoris longipennis, Psallus falleni, Temnostethus gracilis.

Only *Phytocoris pini* shows a higher site-occurrence in the north.

In conclusion, it is appropriate to take this opportunity to thank Stephen Moran who organised the 1992 meeting and Steve Hewitt who organised the 1990 meeting, in each case impeccably. Even the weather was better than we had any right to expect. Those of us attending had the opportunity to visit an amazing list of SSSI's, NR's and NNR's, and in the evenings we had facilities to allow us to sort out the finds from the day's fieldwork. We even managed to snatch a bite to eat occasionally. Well done!

SITES NAMES:

1 Glen Strathfarrar NNR	I	11 Corrimony roadside	I
2 Loch Achilty	R	12 Rogie Falls	R
3 Rosemarkie Cliffs SSSI	R	13 Loch Achanalt	R
4 Dam Wood NR	R	14 Udale Bay NNR	R
5 Coul Links, Loch Fleet	S	15 Tomfat Wood,Drummossie	I
6 Fasnakyle, Strathglass	I	16 Glen Glass	R
7 Tarradale Field Centre	R	17 Shingle Is, Erchless Castle	I
8 Contin Juniper pasture	R	18 Loch Buidhe	S
9 Inchmare, Strathfarrar	I	19 Sidhean Mor	S
10 Balnagrantach Lochs SSSI	I	20 Dornoch Firth , N shore	S

VICECOUNTIES:

I = vc 96, East Inverness ;
R = vc 106, Easter Ross
S = vc 107, EastSutherland

HETEROPTERA : Moray Firth Area, 19th-24th July 1992

Species	UK Status	Site no. : 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	SUM
Leptopterna ferrugata	C	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•	•	•	•	18
Orthotylus virescens	C	•	•	•	•	•		•	•			•	•			•	•	•			•	13
Plagiognathus chrysanthemi	C	•	•	•	•	•	•	•	•	•	•	•		•	•							13
Plagiognathus arbustorum	C	•	•	•	•	•	•	•	•	•		•		•	•							12
Saldula saltatoria	C	•	•		•	•	•			•	•	•		•		•			•	•		12
Anthocoris nemorum	C	•	•	•	•	•	•	•	•	•			•			•						11
Lygocoris pabulinus	C	•	•	•	•		•	•	•	•			•			•	•					11
Mecomma ambulans	C	•	•	•	•		•	•	•				•	•	•							10
Pithanus maerkeli	C	•	•		•	•	•		•		•	•			•		•					10
Stenodema holsatum	C	•	•		•	•	•					•			•	•		•	•	•		11
Trigonotylus ruficornis	C	•		•		•	•		•	•		•	•	•	•			•				11
Asciodema obsoletum	C		•	•	•	•		•				•		•		•	•				•	10
Orthotylus marginalis	C	•	•	•	•	•	•			•	•		•	•								10
Nabicula limbata	C	•	•	•			•		•		•		•	•			•					9
Orthotylus ericetorum	C	•	•		•		•							•			•		•	•		8
Blepharidopterus angulatus	C	•	•	•		•		•	•	•			•									8
Calocoris roseomaculatus	C	•		•		•	•			•		•				•		•				8
Acompocoris pygmaeus	C		•	•	•	•	•									•	•					7
Calocoris norvegicus	C			•	•	•	•	•								•		•				7
Leptopterna dolabrata	C			•	•	•		•	•	•						•						7
Lygocoris contaminatus	C	•	•		•	•			•			•	•									7
Phytocoris pini	C	•	•		•		•	•								•	•					7
Scolopostethus decoratus	C	•	•		•	•	•				•					•						7
Stenodema calcaratum	C	•	•		•	•	•								•			•				7
Stygnocoris sabulosus	C		•	•		•			•		•			•						•		7
Tingis cardui	C	•		•		•		•	•			•		•								7
Loricula elegantula	C	•	•	•				•	•				•									6
Monalocoris filicis	C	•	•	•	•				•				•									6
Pentatoma rufipes	C		•	•		•		•					•									5
Saldula c-album	C	•					•			•	•			•					•			6
Anthocoris nemoralis	C		•	•	•	•		•														5
Atractotomus magnicornis	C		•	•	•			•														4
Capsus ater	C	•		•	•	•			•													5
Nabicula flavomarginatus	C				•				•			•			•			•				5
Plesiocoris rugicollis	C	•			•		•				•	•										5
Psallus haemotodes	C	•	•			•			•		•											5
Scolopostethus thomsoni	C	•	•	•				•		•												5
Dicyphus pallicornis	C	•	•							•				•								4
Elasmucha grisea	C	•	•			•			•													4
Gastrodes grossipes	C	•			•											•	•					4
Heterocordylus tibialis	C				•											•	•	•				4
Loricula pselaphiformis	C	•		•	•						•											4
Lygocoris lucorum	C		•	•						•		•										4
Nabis ericetorum	C	•					•				•											3
Orthops campestris	C			•		•						•	•									4
Orthotylus bilineatus	C	•	•										•									3
Pachytomella parallela	C	•							•									•				3
Phoenicocoris obscurellus	C	•	•	•	•																	4
Polymerus unifasciatus	L		•		•		•		•													4
Saldula orthochila	C	•	•		•	•																4
Acalypta nigrina	L						•				•					•						3
Anthocoris sarothamni	C				•			•	•													3
Calocoris stysi	C			•	•			•														3
Chlamydatus wilkinsoni	L	•				•			•													3
Liocoris tripustulatus	C			•				•		•												3
Myrmecobia exilis	L			•				•														2
Orthops basalis	C							•	•				•									3
Psallus ambiguus	C	•		•						•												3
Saldula scotica	C	•								•				•								3
Temnostethus gracilis	L		•								•	•										3
Teratocoris saundersi	C					•									•				•			3
Trapezonotus dissertus	C	•				•							•									3
Vella saulii	C	•	•								•											3
Acompocoris alpinus	C				•			•														2
Atractotomus mirificus	C		•		•																	2
Campyloneura virgula	C			•				•														2
Charagochilus gyllenhali	L					•			•													2
Chlamydatus pullarius	NB	•							•													2
Chlamydatus pullus	C	•							•													2
Cymatia bonsdorffi	C	•									•											2

SPECIES	Status	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Cyrtorhinus caricis	C	•																	•			2
Dicyphus globulifer	C			•				•														2
Drymus brunneus	C	•	•																			2
Empicoris vagabundus	C	•						•														2
Eremocoris plebejus	NB	•														•						2
Gerris costai	L	•					•															2
Gerris lacustris	C	•	•																			2
Nysius thymi	C	•				•																2
Orthops rubricatus	C		•					•														2
Orthotylus fuscescens	NB				•		•															2
Phylus coryli	C	•	•																			2
Piesma maculatum	C		•	•																		2
Polymerus nigritus	C	•								•												2
Psallus falleni	C					•			•													2
Psallus lepidus	C			•				•														2
Psallus varians	C		•										•									2
Salda littoralis	C					•									•							2
Salda morio	L										•					•						2
Salda muelleri	L						•				•											2
Saldula palustris	C					•									•							2
Sigara scotti	C		•				•															2
Tetraphleps bicuspis	C							•	•													2
Acalypta brunnea	L		•																			1
Anthocoris confusus	C					•																1
Anthocoris gallarum-ulmi	C			•																		1
Aradus betulae	NB	•																				1
Bothynotus pilosus	L						•															1
Bryocoris pteridis	C												•									1
Conostethus brevis	L														•							1
Coranus subapterus	L				•																	1
Cryptostemma alienum	L									•												1
Dicyphus stachydis	C			•																		1
Elasmostethus interstinctus	C		•																			1
Elatophilus nigricornis	L				•																	1
Gerris lateralis	L	•																				1
Gerris thoracicus	C						•															1
Glaenocorisa propinqua	L		•																			1
Globiceps dispar	L						•															1
Hallodapus rufescens	L	•																				1
Halosalda lateralis	L					•																1
Kleidocerys truncatulus	C		•																			1
Lygocoris spinolai	C							•														1
Lygus maritimus	C			•																		1
Lygus punctatus	NB						•															1
Lygus rugulipennis	C			•																		1
Lygus wagneri	C			•																		1
Orthocephalus saltator	C	•																				1
Orthops cervinus	C			•																		1
Orthotylus adenocarpi	C							•														1
Orthotylus flavinervis	C											•										1
Orthotylus tenellus	C		•																			1
Phylus melanocephalus	C		•																			1
Phytocoris longipennis	C									•												1
Phytocoris tiliae	C	•																				1
Piesma quadratum	C			•																		1
Plesiodema pinetellum	C				•																	1
Psallus diminutus	C		•																			1
Psallus flavellus	C			•																		1
Psallus mollis	L		•																			1
Sigara distincta	C		•																			1
Sigara nigrolineata	C						•															1
Stenotus binotatus	C						•															1
Strongylocoris leucocephalus	L					•																1
Temnostethus pusillus	C	•																				1
Teratocoris viridis	L													•								1
Tytthus pygmaeus	L			•																		1
Site totals		60	54	46	40	39	34	32	31	21	19	18	18	16	16	15	10	10	7	5	3	494
Total species =	**136**																					