HETEROPTERA STUDY GROUP

Newsletter No. 7 - May 1987

Apologies first : no newsletter appeared in 1986, due to several factors, now hopefully resolved. Details of the Oxford and Highland field meetings were circulated rather hurriedly in Spring 1986, and I am sorry if anyone failed to receive the reminder.

Despite the lack of publicity, all three field meetings took place successfully, with much useful recording and, surprisingly, almost uniformly fine and warm weather. Thanks are due to George McGavin, Steve Moran and Rosy & Roger Key for their hard work, which enabled the rest of us to enjoy the meetings with minimal attention to domestic chores.

With this issue...

Pete Kirby has produced a new key to Nabidae, which seems to solve such problems as separating faded specimens of N. ericetorum and N. rugosus, and may well lead to N. pseudoferus being much more widely recorded.

Pete has also illustrated and modified slightly the Nysius part of Bill Dolling's key to Lygaeidae:Orsillinae which was circulated with Newsletter No. 6.

The latest set of illustrations of aquatic bugs, from John Read, provides a new means of identifying corixids, from the shape of the abdominal segments, i.e. without recourse to dissection or examination of forceps.
Particularly with this latter item, which is breaking completely new ground, it is important to find out how widely applicable the characters suggested are. What regional variation is there? Will the keys need modifying if they are to work in the far north of Britain? In the west?
Please make an effort to let the authors/artists know if you encounter problems with the aids to identification, or if you have alternative or additional characters for separating 'difficult' species. Characters easily observed in the field would be particularly welcome for inclusion in the newsletter.

Other items for future newsletters are also welcome.

At the end of this newsletter is an updated circulation list. Please let me know if your address is in any way incorrect or incomplete, or if you know anyone else who should be on the list.

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Field Meetings 1987

North Devon 19-22 June

Based as Hallsannery Hall, a Georgian manor house 2 miles south-east of Bideford, now run as a field centre. Reasonably priced accommodation and food, laboratory facilities etc are available. It is hoped to have a special Heteropterists' Dinner on the Saturday evening.

Roger Key is handling the bookings. Please contact him as soon as possible, preferably **by telephone.** Please specify which evenings you will need accommodation, and whether you will need a meal on Friday evening, and/or packed lunches.

The meeting is being led by Peter Kirby and Sarah Lambert. Areas within easy reach include Dartmoor and the North Devon coastal dune systems.

If interested, contact Roger Key as soon as possible at:

Nature Conservancy Council,
Northminster House,
Peterborough,
PE1 1UA

Tel: Peterborough (0733) 40345

North Norfolk 11-13 September

Based at Lord Melchett's Bunkhouse Barn, near Ringstead. 12 places available; very cheap (c. £10 for the weekend). Within easy reach of North Norfolk coast, and excellent inland heaths. Early booking is requested.

Please contact Dr Peter Kirby (address and 'phone number as for Roger Key).

Have you any spare bugs ? Jonathan Watts

I have been asked to film a half-hour programme on shield-bugs for Survival Anglia. It will, I hope, contain a range of species, both British and foreign, to show their diversity and life histories, together with sequences on parasites, defence, and parental care.

If you know of any intriguing behavioural pastimes of these animals which might be worth including, please do get in touch with me. Filming is already well under way, and I would be most grateful to receive any **live** specimens that you may find and be able to spare. I particularly want the following species :

Sehirus bicolor
Elasmucha grisea
Zicrona caerulea
Palomena prasina
Elasmostethus interstinctus
Pentatoma rufipes
Eurydema oleracea
Thyreocoris scarabaeoides
Acanthosoma haemorrhoidale

(Non-British)
Murgantia histrionica Graphosoma italicum

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Problem solving

Stuart Foster is trying to sort out the taxonomic and identification problems in Monosynamma and Conostethus. He would be most grateful for the loan of specimens of either genus.

Dowrog Common, Pembrokeshire

Dowrog Common lies just over a mile to the north-west of St David's, at SM(12) 772270, and consists of some 200 acres of lightly-grazed common with extensive development of wet grass-heath. In the north-east corner and around the River Alun and Dowrog Pool, tall herb, marsh and fen communities are developed. There are several small pools in addition to the main one, some permanent, some seasonal.

The Common belongs to The National Trust, but is managed by the West Wales Trust for Nature Conservation as a nature reserve. It has been designated an SSSI by the NCC, and has recently been added to the Nature Conservation Review as a Grade 1 Heathland Site, i.e. on a par with sites such as Thursley and Hankley Commons (Surrey), and Morden Bog (Dorset). This recognition is based on vegetation characteristics, but the limited entomological work carried out to date certainly suggests that it is a very important site.

The West Wales Trust are very keen to have further information on the invertebrate fauna, particularly in relation to their management work. It is hoped that a base can be found to support meetings in the area, but in the meantime, if anyone is likely to be visiting West Wales, and would be interested in sampling the Dowrog fauna, they should contact the West Wales Trust for Nature Conservation, 7 Market Street, Haverfordwest, Dyfed SA61 1NF (Tel. Haverfordwest 5462), who will supply a permit, give you details of how to find the site, car-parking, and supply maps to the reserve.

Heteroptera are particularly under-recorded; the most interesting to date are Fieberocapsus flaveolus and Hebrus ruficeps.

Status and decline in British Heteroptera : some problems P Kirby

In an attempt to assess the status of the British Heteroptera, I found there were a good number of species for which I could offer little more than educated guesses. In many cases, this is for good reasons :some have only recently been recognised in Britain; others have a well-documented but scattered distribution that is hard to interpret; still more are of small size and cryptic habits, so it is difficult to separate under-recording from real rarity. Discounting these categories, however, I was still left with a hard core of uncertainties. These fell, or at least could be gently pushed, into two broadly overlapping classes : species which seemed to be recorded less often now than in the past, to judge from literature references, and may thus have declined substantially in recent years; and species which I personally would regard as local or rare, but for which I lack concrete information to support or refute my impression. Here, then, are my final lists.

Heteroptera which may have declined in recent years

It is inevitable that many species of Heteroptera, in common with other Orders, have declined in recent years as a result of habitat loss. The species on this list are those which it appears may have declined even more rapidly than their major habitat, perhaps because changes within the habitat have removed the niches to which the species are particularly adapted. They are in addition to species known to have declined dramatically or vanished in recent years (Chlorochroa juniperina, Dichrooscytus valesianus, Eremocoris fenestratus, Eremocoris plebejus, Eurygaster austriaca, Stephanitis rhododendri). The list is largely guesswork, and I would be pleased to be proved wrong about some of these species.

Alydus calcaratus : is it still present in its more northerly sites, or has it contracted to a far more eastern and southern range, where its strongholds have always been?

Capsodes flavomarginatus : Has this species declined through shading of woodland rides due to lack of recent management?

Dicranocephalus medius : Particularly associated with large stands of wood-spurge after clearance or coppicing - has it declined through cessation of management of old coppice woodlands?

Globiceps cruciatus : seems far less frequently recorded than in the past - is this so? Is it a consequence of habitat loss?

Globiceps flavomaculatus : as for G. cruciatus.

Onchochila simplex : a wood-spurge feeder - has it declined through lack of management of old coppice woodlands, has it always been as rare as now, or is it simply over-looked?

Rhopalus rufus : has this species declined, am I (and others) over-looking it, or has it always been as uncommon as now?

Scoloposthethus pictus : seems less often recorded than in the past - it this a true reflection of greater rarity, do heteropterists not look in the right places now, or is the bug as common as ever "in the wild" but less often seen because large piles of dry vegetation are less often left out for it to congregate in?

Sehirus biguttatus : a cow-wheat feeder - has it declined due to shading of cow-wheat in unmanaged woods? Or for some other reason? Or not at all?

Sehirus luctuosus : apparently very rarely recorded at present, though suitable host-plants (forget-me-nots) and habitats are frequent. Has it declined, and if so, why? Or has it always been rare?

Systellonotus triguttatus : a heathland species : have the changes in British heathlands in recent decades reduced this species particularly severely? What is its current range?

Thyreocoris scarabaeoides : this has always been a very local species of dry places, but is it more so now than before?

Zicrona caerulea : this bug seems very widely distributed, and to occur at many sites at low density : has it always been as local as it is now?

Physatocheila smreczynskii : the vice-county distribution is quite wide, but recent records seem rather few. Has it always been rare? Has it been mis-identified in the past? Is it difficult to find? Or are people finding it somewhere in the country?

Psallodema fieberi : has Dutch Elm Disease affected this species at all?

Heteroptera of unclear status

This category is potentially a very elastic one. There are certainly many more species than I have placed on the list about whose status I am far from wholly clear; and equally, I may be deluding myself in other cases by thinking I have an objective view of species status when in fact I am hopelessly biassed by my own experience, which has been concentrated in the south-east and East Midlands. The suggestion that some of the species on the list are uncommon may seem hilariously funny to people with different experience. The list nonetheless gives those species about which I am most hazy.

Acalypta brunnea
Acalypta platycheila
Amblytylus delicatus
Campylosteira verna
Halticus lutelcollis
Legnotus picipes
Orthotylus rubidus
Tingis angustata

Acalypta carinata
Amblytylus brevicollis
Brachyarthrum limitatum
Halticus apterus
Halticus saltator
Miridius quadrivirgatus
Nabis brevis
Tingis reticulata

Comments on the species on the two lists, or suggested additions to the lists, would be extremely welcome : indeed, if no comments are forthcoming, this note will have been somewhat pointless. Negative information would be as useful as positive : if you have never seen any of the species on the list, and know absolutely nothing about them, I would be very pleased to hear of the fact.

Possible additions to the British List

Dr Beran Aukema has kindly supplied much detailed information about the status and distribution of Heteroptera in the Netherlands. The following lists of species widepread and well established or common in the Netherlands may be useful in pointing to species worth watching for in Britain.

Widespread species known from 14-40 10km squares in the Netherlands, and including post-1960 records :

Stephanitis oberti
Dictyla echii
Dictyla humuli
Loricula bipunctata
Deraeocoris annulipes
Deraeocoris cordiger
Deraeocoris trifasciatus
Alloeotomus germanicus
Amblytylus albidus
Plagiognathus fulvipennis

Capsus pilifer
Acetropis carinata
Stenodema virens
Trigonotylus pulchellus
Nysius senecionis
Geocoris grylloides
Rhyparochromus phoenicus
Sphragisticus nebulosus
Gonianotus marginepunctatus
Aethus nigritus

Dicyphus pallidus	Aelia klugi
Lygus gemellatus	Pitedia pinicola
Adelphocoris annulicornis	Arma custos
Phytocoris intricatus	Elasmucha fieberi

Common species, known from 41-121 10km squares in the Netherlands

Notonecta lutea	Trigonotylus coelestialium

The only other non-British species which are recorded frequently in the Netherlands but have not yet been found in Britain are Orius minutus in the strict sense, and three fairly new additions to the Dutch list :

Conostethus venustus	Psallus pseudoplatani
Kleidocerys alni	

(The latter two are recently-described species.)

Mistletoe bugs in Warwickshire (v.c. 38) J M Price

The 'Computer-mapped Flora of Warwickshire' (Cadbury, D.A. et al., 1971) shows that Mistletoe was found at only ten widely scattered sites comprising a few plants at each, and mostly on cultivated apple trees. Investigation revealed that Mistletoe had disappeared from all ten sites, mainly as a result of removal of the host trees. This necessitated a fresh search, and during the winters of 1984-86, extensive coverage of the county was achieved. In addition, enquiries were directed at many friends and acquaintances, and appeals were included in a number of journals. Eventually, over 450 mistletoe plants, on 14 different hosts, were located, their distribution being virtually confined to a small area at Coventry and the Lower Avon Valley.

The prime objective, to search for the plant bugs Orthops viscicola, Anthocoris visci and Psylla visci, none of which appears previously to have been recorded in Warwickshire, was amply rewarded.

Orthops viscicola was abundant on an allotment site and in a large garden at Coventry. Lack of time, and inaccessibility of host trees, precluded further examination of this area, but most likely viscicola is present in good numbers. Several old apple trees at Halford Churchyard yielded a strong colony, and the species may have been present on other trees in nearby gardens. Small numbers were found on a dying apple tree at Shipston on Stour, and nearby trees bore further mistletoe, too high to examine. At Stratford-upon-Avon, it was found to be abundant in a long-established garden orchard, and also in small numbers on a roadside apple tree near the centre of the town. Other promising sites at Stratford have not yet been examined.

Anthocoris visci has not yet been found. The species may inhabit mistletoe growing too high to examine. Searching of mistletoe on, for example. Acer, Populus, Robinia and Tilia, where it generally grows at a height of over 20 feet, may be more successful.

Psylla visci is associated with Orthops viscicola and is well established at Coventry, Halford and Stratford.

Many mistletoe plants are inaccessible, and this note may well underestimate the frequency of Orthops viscicola and Psylla visci. Anthocoris visci would be a real prize, and the search continues.

SHORT NOTES

Liorhyssus hyalinus : There have been a few more western records of this species in recent years, with Pete Kirby taking one in Cornwall, and Steve Judd finding two at Freshwater West, Pembrokeshire. Pete comments that he took it for "a rather odd Rhopalus" in the field, so it may possibly be over-looked.

Deraeocoris scutellaris : Steve Moran found another specimen in light-trap debris from Inverpolly NNR in north-west Scotland, last year. Other recorders might like to start checking lepidopterists' throw-outs, too.

Shield-bugs on Juniper

Many records of Elasmostethus tristriatus have been received. It is clearly well-established on a wide range of alien conifers over the southern half of England. Hosts mentioned so far include Thuja plicata, Chamaecyparis lawsoniana and Calocedrus decurrens (P F Whitehead). In Surrey, Roger Hawkins has found larvae on C. lawsoniana and Thuja, and has taken adults additionally on Chamaecyparis nootkatensis. Autumn and winter records of adults show the wide range of hibernation sites : in late October, PFW found one among the lower leaf-stalks of a 'January King' cabbage in October, and on Christmas day 1980 in the heart of a 'Webbs Wonderful' lettuce!

There is a suggestion that the species fluctuates greatly from year to year, and PFW reports that conifer screens in Worcestershire that held very large numbers in 1980-1983 have since failed to produce any at all.

Steve Judd has been examining museum collections in the North-West, and has found a series of v.c. 69 records for E. tristriatus on native Juniper in the Witherslack area. In 1985 he was able to refind the species at Arnaside Knott.

Still more remarkable, in the Manchester Museum collection is a specimen of Chlorochroa juniperina collected from 'juniper berries' at S. Heywood, Lancs. in 1925 by a Mr Hilton. Nothing else is known of the record, and the South Heywood area is not known to have supported native juniper in historical times. This may well be the most recent British record of C. juniperina, and it adds support to the suggestion that the species was more northern in its distribution than many juniper insects : the previous latest record was from Derbyshire in 1902.

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