Het News

Newsletter of the UK Heteroptera Recording Schemes

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Editors:

We hope you find lots to interest you in this Issue of *Het News*. As always your input is our output and we thank you again for your emails, notes and longer articles - they are much appreciated.

Have an enjoyable, fruitful and bug-infested Summer and let us know if you encounter any of the new species!

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A lygaeid and two mirids new to Britain

Bernard Nau

In the last two or three weeks I 've had 3 requests to check bugs which proved to be new to Britain - a lygaeid & 2 mirids; each was a species established just across the Channel. I give brief details here pending formal publication by the respective finders.

Rhyparochromus vulgaris (Schilling, 1829): non-heteropterist Neil Harvey forwarded a photo of this lygaeid, taken on Rainham Marshes in south Essex (VC 18). It is very similar to *R. pini* but, in his *Faune de France* monograph, Péricart distinguishes it by the lateral edges of the pronotum: narrowly pale along their entire length in *pini*, not so in *vulgaris*; also, the membrane of *vulgaris* usually has a clear apical mark. The normal habitat is similar to that of *R. pini*, but rather more humid.

Dicyphus pallidus (H.-S., 1836): on 18th July 2009 Rob Ryan found dozens of macropters & brachypters of a *constrictus*-sized *Dicyphus* on Hedge Woundwort (*Stachys sylavticus*) in Homefield Wood near Medmenham (Bucks, VC24). Apparently 'not right' he put them aside until recently when he sent a male & 2 females to me. I recalled that *D. pallidus* is widespread in The Netherlands, so I checked this in Wagner & Weber, & found that the bugs fitted this well, notably the black pubsence of the upperside & black bristles along the underside of the hind femur.

Conostethus venustus (Fieber, 1858): Jim Flanagan found this in late May at Centenary Park, Rotherham, a brownfield site in SW Yorkshire (VC63). He swept numbers from 'mayweed' *(Matricaria/Tripleurospermum)*. It is a pretty pale green bug, similar in size & form to our other *Conostethus*, but with rufous brown on clavus, cuneus & internal angle of corium. Originally a Mediterranean species, in recent years it spread up the Atlantic coast of France to The Low Countries & Germany. Jim has since found *venustus* at two more sites in VC63 & Michael Talbot has found it on a brownfield site in the city of Lincoln.

Figure 1 - Yorkshire *Conostethus venustus*, ♀ (centre) & 2♂.

Heteroptera Recording Scheme - the future!

Bernard Nau

In 1983, Brian Eversham (then at BRC, Monks Wood) triggered a debate on how interest in British Heteroptera could be stimulated. This lead, in September 1983, to a newsletter - becoming the 1st of 14 issues of the '1st Series' - and, in October 1983, a 'committee meeting' attended by 13 of us, to discuss what might be done.

'What might be done' included possible publications such as a 'son of Southwood & Leston' , *Roy. Ent .Soc.* keys, a recording scheme for terrestrial Heteroptera - the aquatic Heteroptera scheme already existed; and field meetings & workshops. There was general agreement on what was desirable, several field trips ensued, and a couple of months later I offered to look after the proposed Terrestrial Heteroptera Recording Scheme, on a care & maintenance basis, until a permanent Organiser could take over. As Xmas 2009 approached, I got to thinking that as 26 years had now passed by, the time to hand over had really come!

However, in the interim there had been significant developments. Firstly there are now several illustrated identification guides to 'Shieldbugs & Allies' and this has spawned an upsurge of interest, & records, in this now popular group. There is therefore a good case for a separate recording scheme for this group of bugs.

Secondly, the *Catalogue of Palaearctic Heteroptera* now defines a widely accepted taxonomic sequence and, in this, traditional waterbugs lie awkwardly between several dipsocorid species on the one hand and a couple of dozen saldids on the other - all three associated with humid if not aquatic habitats. For recording purposes it is therefore sensible to group dipsocorids and saldids with the traditional waterbugs - as the Dutch have done in their recent atlas.

Those of us directly involved, and BRC, discussed these various issues and decided that henceforth Heteroptera recording will be based on three recording groups:

'***Waterbugs & allies***' - Organiser: Sheila Brooke

'***Plantbugs & allies***' (*) - Organiser: Jim Flanagan

'***Shieldbugs & allies***' - Organiser: Tristan Bantock.

I would like to thank Jim & Tristan, the two new scheme Organisers, for agreeing to take on this task, their contact details are given page 14. Henceforth please send your records to the appropriate Organiser. Tristan has plans for setting up an online recording facility for *Shieldbugs & Allies* and has applied for an *Opal* grant to finance this - watch out for more on this..

As if these changes were not exciting enough, there is major progress to report on computerisation of the terrestrial het records! First, BRC has undertaken to computerise the backlog of records on the printed recording cards & I have delivered these to BRC for this to be begin. Second, John Partridge, who has much experience of processing large sets of records, has very kindly taken on computerisation of the backlog of other terrestrial het records. These are in miscellaneous non-standard formats such as letters, reports and e-mails. He has already made considerable progress with these. This is a demanding task for which John deserves our undying gratitude!

Identification workshops

From time to time, identification workshops for various groups of hets, are put on by organisations in different parts of the country. For example, Sheila Brooke has led several 1-day water-bug identification workshops for BCNPWT, our local Wildlife Trust. These comprise an introductory talk, an hour or two in the field, then labwork, microscopes & other equipment usually provided. A couple of years ago she led one for the Freshwater Biological Association at their HQ beside Lake Windermere. This is to be repeated this autumn, on 9th October, for details check *www.fba.org.uk/index/training.html*. On 7th-8th Aug.2010 Jim Flanagan (*Plant Bugs & Allies Recording Scheme*) is leading a 2-day Het Bug Identification Workshop for the Sheffield based Sorby Natural History Society. Details from *jimflanagan@btopenworld.com.* Finally, on 18th Sept.2010 Tristan Bantock (*Shieldbugs & Allies Recording Scheme*) is leading a 1-day course for the National Trust ('Bugs & Beetles') at Sheringham, N Norfolk. Details from *tristanba@googlemail.com*.

The aforementioned BCNPWT has also organised workshops for *Shieldbugs & Allies* - I led a couple & Roger Hawkins led one. Also, several years ago, Roger led a plant-bug identification workshop for the *British Entomological & Natural History Society*, at their nice facility at Dinton Pastures Country Park, near Reading.

Sheila is willing to act as an initial contact for any het courses we know about. So contact her if you want to be alerted to forthcoming workshops; or, if you have a workshop planned, send Sheila details to pass on to interested parties.

[* Pending a definitive name.]

BRECKLAND BIODIVERSITY AUDIT

The Breckland bio-geographic region is a biodiversity hotspot, about 1000 km^2 of East Anglia. The semi-continental climate & poor soils support species characteristic of steppe, Mediterranean, coastal dune and lowland heathland – many unique to Breckland in Britain. Currently, Breckland habitats are largely managed for a few vertebrates that we know a lot about, e.g. Stone Curlew, or are small sites managed for rare plants. But the region is also important for rare invertebrates & we know little of their distribution, or even continued presence. In July 2009, a University of East Anglia team was commissioned to review the status of Breckland biodiversity & evidence basis for its management. This brought together the recording effort of many recorders & others, and has already improved our knowledge & highlighted the importance of Breckland to UK biodiversity. Continuing work & project output involves:-

- Identify groups of species based on habitat & process requirements.
- Relate these requirements to practical management actions
- Map priority species (1km x 1km scale) to identify hotspots & key areas for different groups.
- Identify the potential for ecological networks

If you are interested or can help, contact Paul Dolman, Hannah Mossman, or Chris Panter at:-

School of Environmental Sciences, University of East Anglia, Norwich, NR4 7TJ

p.dolman@uea.ac.uk, h.mossman@uea.ac.uk, c.panter@uea.ac.uk

Closterotomus trivialis (Costa) in north London

Tristan Bantock

Towards the end of 2008 I was asked to identify some unfamiliar and rather striking mirids which Laurence Counter, had photographed in his north London garden during the summer. The bugs were closely associated with a popular ornamental shrub, the cultivar *Hypericum* 'Hidcote'.

The images seemed to show a *Closterotomus* (*Calocoris*) species, markedly sexually dimorphic and quite unlike any of the British species. Males were very dark with largely blackish forewings & dark antennae, contrasting with a bright red cuneus and membrane veins. Females were pale green with mottled blackish markings covering much of the corium, a uniformly green cuneus, reddish membrane veins & two dark spots on the pronotum.

Laurence had tentatively identified them as *Closterotomus trivialis* (Costa, 1853), since both sexes closely resembled images captioned as this species which he found on the internet. However, this presented an ecological paradox as *C. trivialis* has only been reported to feed on olive (*Olea europaea)*, on which it is well-known as a pest in many parts of the eastern Mediterranean (Perdikis et al, 2009).

In 2009 Laurence contacted me in early June with the news that adults were once again present on the 'Hidcote' bushes in his garden. Large numbers of both sexes were feeding on the buds and resting conspicuously in the yellow flower heads.

'Hidcote' is widely planted in the general area and we soon found further bugs in the neighbouring streets, and we noted a definite preference for well-established, larger bushes. Surprisingly, the distribution was very localised, a wider survey revealing that colonies were confined to a small number of streets and seemingly absent from suitable bushes outside this core area. I continued to observe the colonies throughout the summer and noted individuals throughout most of July; by early August the season for the bug seemed to be over.

Comparison with specimens in the NHM and reference to Stichel (1956) confirm the identity of the bugs as *C. trivialis*. Evidently host-switching has taken place in the absence of the normal foodplant. *C. trivialis* nymphs are known to be catholic feeders, utilising a range of herbaceous weeds before the adults move onto olive trees (Perdikis et al, 2009). Chris Malumphy at FERA informed me that, in the UK, *C. trivialis* had never been intercepted on olives. The species has been recorded in Holland (Aukema, 2004).

The discrete nature of the population described here is as intriguing as its choice of foodplant and it seems surprising that the species has not managed to establish itself more widely. This suggests either that it has only recently become established, or (perhaps more likely) that winter mortality of eggs is high due to low temperatures and pruning of bushes, holding populations in check and inhibiting dispersal. Although it must be at the limit of its climatic tolerance in the UK it is clearly capable of surviving on large bushes, although whether it will have survived the cold winter of 2009/2010 remains to be seen. It is, however, hard to believe that independent introductions have not taken place in other parts of London or indeed anywhere the climate is sufficiently mild and I would encourage all to check for this large & distinctive species on their local 'Hidcote' during mid-summer.

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Bantock Tristan <tristanba@googlemail.com>

Figure 1 (top left) - Male *Closterotomus trivialis*

Figure 2 (top left) - Female *Closterotomus trivialis*

Figure 3 (below right) - Host shrub *Hypericum* 'Hidcote'

Range expansion of the southern green stink bug *Nezara viridula* (Heteroptera: Pentatomidae) in response to the rapid climate change in Japan

Dmitry L. Musolin

Climate warming is unequivocal (IPCC 2007). The average global temperature has increased by about 0.8°C since the beginning of its instrumental measurements in 1880, and the 2000–2009 decade was the warmest decade since then (GISS 2010). The linear warming trend for the last 50 years (0.13°C/decade) is nearly twice that for the last 100 years and a further warming of about 0.2°C/decade is projected for the next two decades (IPCC 2007). There is now considerable attention directed to how the global biota are and will be responding to global warming (Bale et al. 2002; Parmesan 2006; IPCC 2007; Deutsch et al. 2008).

The southern green stink bug, *Nezara viridula* (L.) (**Fig. 1**), is apparently responding rapidly to climate warming (Musolin 2007; Yukawa et al. 2007; Tougou et al. 2009). The species occurs in an ever-widening range throughout tropical & subtropical regions and Japan is at the northern margin of its Asian range (**Fig. 2**). In the north, *N. viridula* is replaced by a congeneric species, the oriental green stink bug, *Nezara antennata* Scott. Both species, and especially *N. viridula*, are major agricultural pests.

In the early 1960s, Kiritani & co-workers conducted a wide-scale field survey and mapped the northern limit of the range of *N. viridula* in central Japan (**Fig. 3a**; Kiritani et al. 1963). They showed that the northern limit of the species' distribution in central Japan occurred in Wakayama Prefecture (latitude approximately 34.1°N). *Nezara antennata* dominated in northern and central parts of the prefecture, whereas coastal and the southern parts of the prefecture were mostly or completely occupied by *N. viridula* (**Fig. 3a**). In general, *N. viridula* was found to occur sympatrically

Figure 1 - *Nezara viridula*, **(a) adult in flight; (b) nymphs of different instars in laboratory culture.**

Photographs: (a)P. Weissbach, (b) D. Musolin.

Figure 2 - Outline of current ranges of *Nezara viridula* **&** *N. antennata* **in Japan, & location of surveys (see Fig. 3).**

in the warmer parts of the range of *N. antennata*. The area of co-existence of the two species was shown to lie on the +5°C isothermal line for mean temperature of the coldest month (usually January), therefore January temperature was proposed as the principal factor determining the northern limit of *N. viridula*'s distribution (Kiritani et al. 1963).

Since the 1960s, several records have been published documenting a presence of *N. viridula* at locations in central Japan further north from the previously established limit of the species' distribution (Musolin 2007; Ohno & Nakamura 2007; Yukawa et al. 2007, 2009). Isolated records, however, can neither reveal the current limit of the *N. viridula* range in the region nor show its dynamics. The objectives of this study were to determine the current northern limit of *N. viridula* in central Japan, compare it with the unique 45-year-old data available from the survey of the early 1960s and assess, using historical climate information as well as recently published ecophysiological data on the overwintering of *N. viridula*, what factors could have promoted the change in the ranges of *N. viridula* and *N. antennata* in the region. The results of the study were published elsewhere (Tougou et al. 2009) and briefly summarised below.

To determine the current northern limit of *N. viridula*, an extensive field survey was conducted in six prefectures in central Japan in 2006–2007 (Tougou et al. 2009). At the three northernmost locations in Wakayama Prefecture, only *N. antennata* was recorded in the early 1960s (Fig. 3a; Kiritani et al. 1963). In contrast, *N. viridula* was not only present but even dominated there in the 2006–2007 field survey (Fig. 3b). Inspections in Osaka Prefecture (north of Wakayama Prefecture) showed a wide distribution of *N. viridula*. It was found in 11 of 14 locations and dominated in eight of 10 locations where both species were found. In the three more northern & inland prefectures, viz., Nara, Kyoto, & Shiga Prefectures, only *N. antennata* was recorded in spite of an intensive search. Finally, in the easternmost of all visited prefectures, viz., Mie Prefecture, out of nine locations surveyed, *N. viridula* was present and dominated only at one, situated southernmost and approximately 16 km from the Pacific Ocean (Fig. 3b). Thus, the new survey demonstrated that the

Figure 3

Distribution & relative abundance of *Nezara* spp. in central Japan.

(a) early 1960s (Kiritani et al. 1963)

(b) 2007 (Tougou et al. 2009)

Species:

black = *N. viridula*

white = *N. antennata*

Sample size:

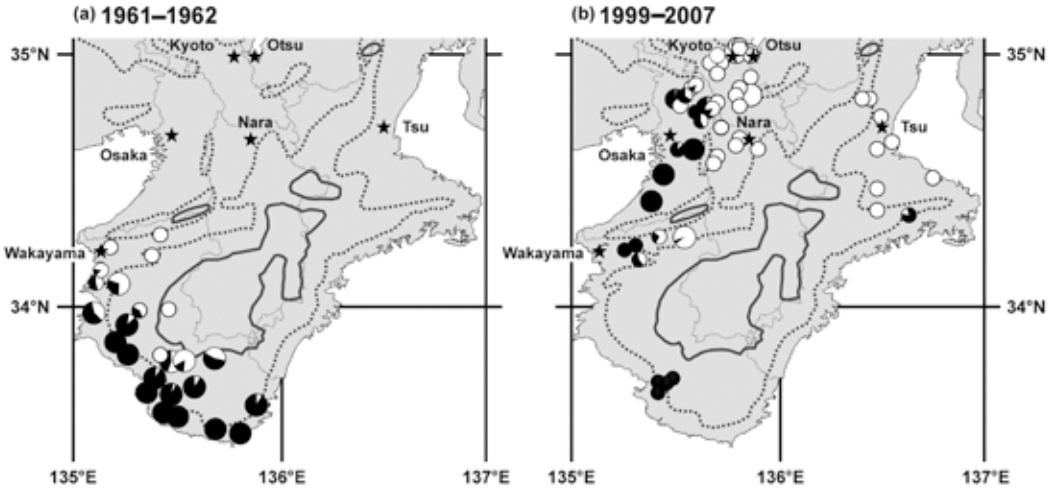
small circle= 1–50

large circle= over 50

Contours:

dotted = 500 m a.s.l.;

solid = 1,000 m a.s.l.



northern limit of *N. viridula*'s distribution range had shifted northward by about 85 km from the early 1960s (Fig. 3).

Overwintering is a critical phase of the seasonal cycle of *N. viridula*. Data on mean monthly temperature during the overwintering period (October–March) at six meteorological stations over the range of the field survey show that at five locations, mean January and February temperature was 1.03–1.9˚C higher during the last decade (1998–2007) than it was during the decade of the previous field survey (1960–1969; Fig. 4). The mean temperature increased much less (0.1˚C in January and 0.4˚C in February) only in Otsu City, though for this location the data set for 1978–1987 was used instead, thus shortening the period for comparison to only 20 years. In the 1960s, the lowest month's temperature exceeded the critical for *N. viridula* +5˚C level only in Wakayama City. Due to warming during the last 45 years, the mean January temperature has exceeded the +5˚C level in Osaka and Tsu, and Kyoto is also very close (4.8˚C; Fig. 4).

The mean number of cold days (i.e. days with daily mean temperature below +5˚C) in January–February significantly decreased at five locations from 1960–1969 to 1998–2007 (Fig. 5a). This parameter tended to decrease in Otsu as well, though the difference was not statistically significant. The mean annual lowest temperature significantly increased at five locations from 1960–1969 to 1998–2007 (Fig. 5b), with the mean temperature increase ranging between 1.4 and 3.0˚C.

A comparison of the recent climatic and distribution data revealed that the incidence of *N. viridula* tended to be low or the species was absent north of the latitude 34.6ºN, at the locations where the mean January temperature was below +5.0ºC, annual lowest temperature was below –3.0ºC, and the number of cold days exceeded 26. The constructed general linear model (incorporating three climatic parameters and their interactions) revealed that the mean January temperature and the number of cold days significantly control the northern limit of distribution of *N. viridula*. The effect of the annual lowest temperature is not significant (Tougou et al. 2009).

Thus, the survey demonstrated that the northern limit of *N. viridula*'s distribution had shifted northward by 85 km from the early 1960s to 2006–2007, at a mean rate of 19.0 km/decade (Fig. 3). Analysis of climatic data shows that the mean January–February temperature in the region was 1.03–1.9ºC higher in 1998–2007 than in 1960–1969. Altogether, the climatic data suggest that over the last 45 years environmental conditions have become more favourable for overwintering of *N. viridula* at many locations in central Japan. This has likely promoted the northward spread of the species, representing a direct response to climate warming. A sympatrically distributed congeneric *N. antennata* seems to respond to the warming by a retreat from the ocean coast towards cooler elevated habitats, which might be a complex response to elevated temperature and interspecific mating with *N. viridula* (Musolin 2007; Tougou et al. 2009).

It has been repeatedly suggested that insects as well as other biota would respond to climate warming both directly and indirectly (e.g., Harrington & Stork 1995; Bale et al. 2002; Musolin 2007). *Nezara viridula* is clearly expanding its range northwards and, as this study shows, provides an example of a direct response to increased temperature. It remains unknown whether the overall range of the congeneric species, *N. antennata*, is changing or

Figure 4

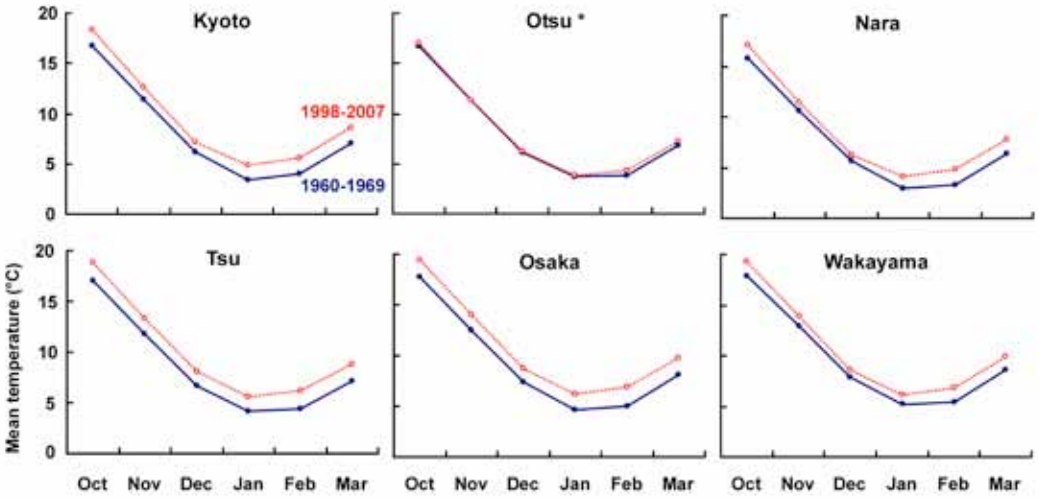
Average monthly mean temperature in capital cities of 6 prefectures in central Japan

blue : 1960–1969

(but Otsu: 1978-1987)

red : 1998–2007

(Tougou et al., 2009)



not, but within its range *N. antennata* retreats from ocean coastal areas towards cooler hills and bottoms of mountains and, thus, might represent a more complex response including, but probably not limited to, reaction to elevated temperature and interspecific mating with *N. viridula*.

In the near future, as global warming continues, *N. viridula* will most probably continue its northward expansion starting along the coast (where winters are milder) and in the urban areas (due to the 'heat island' effect). Establishing new permanent populations will greatly depend on winter climatic conditions and the ability of the species to adjust its physiological mechanisms of diapause induction (Musolin 2007).

Acknowledgements

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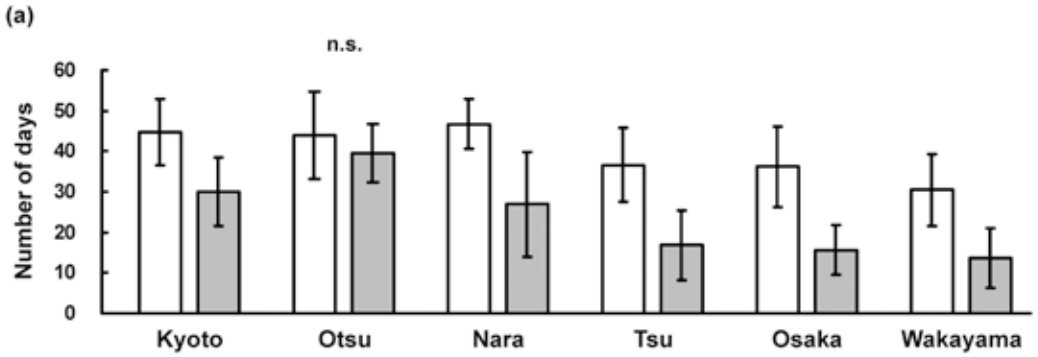
Figure 5 - Winter conditions (mean± std. dev.) at six cities in central Japan.
White:1960–1969
(Otsu 1978–1987)
Grey:1998–2007

Differences significant, except Otsu. t-test, P<0.001 ; 'n.s.'=not significant

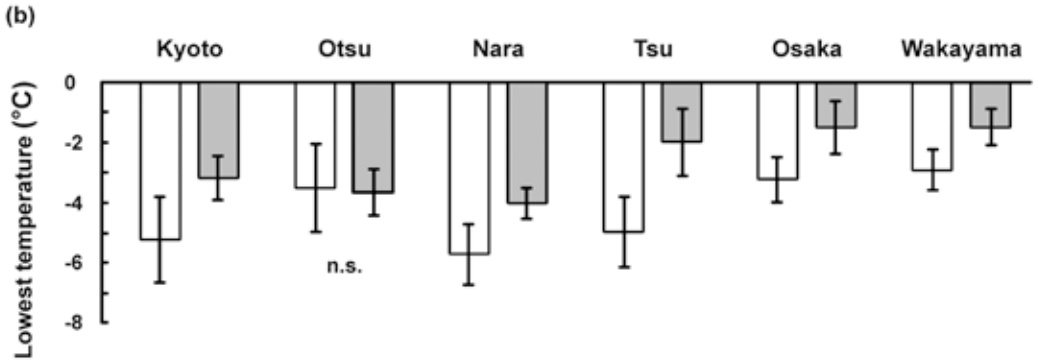
(Tougou et al..,2009)

a) 'Cold days' (Jan–Feb).

Mean temperature <5.0 ºC.



b) Mean annual minimum.



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Obituary — Pablo Javier Perez Goodwyn, 1971–2009

Heteropterist

Dr. Pablo Javier Perez Goodwyn, a young but highly competent expert on aquatic Heteroptera, tragically died on the Sagami Bay shore of the Pacific Ocean on 8th August, 2009. We lost a respected, knowledgeable colleague, a reliable friend and a nice, honest, sensitive person. His main interests were evolution, systematics, ecology, & biomechanics of aquatic Heteroptera, but he most enjoyed the combination of these when he could study water striders & other aquatic true bugs.

Born in Banfield, Buenos Aires Province, Argentina, on 16 November, 1971, he grew up happily, always exploring his surroundings. He loved fishing, hunting, & archery. From an early age he was amazed by nature's beauty, plants & animals. As a 9-year-old schoolboy he patiently prepared his first insect show case, presenting various insects he had collected in the neighborhood.

During his university courses, Pablo made his first acquaintance with the giant water bugs of genus *Lethocerus*, which put a spell on him. Thereafter, water bugs were his passion. He received his Licentiate in Biology with Ecological Orientation in 1996, & Ph.D. in Natural Sciences in 2000, from the ***National University of La Plata (Argentina)***. Fascinated by natural & biological science, he took diverse postgraduate courses, ranging from *Aquatic Insect Bionomics* to *Evolution & Desert Ecology*. His Ph.D. thesis, "*Systematic revision of the genus Lethocerus Mayr, 1853 (Heteroptera: Belostomatidae) in America*", was later developed into a comprehensive taxonomic revision of the world Lethocerinae (2006).

As early as 1995, he started work as an assistant at the *Institute of Limnology "Dr. R. Ringuelet"*, participating in field trips & helping maintain aquatic insect collections. Soon he started his own research on the ecology & evolution of belostomatids, working on development of predator-prey & sexual selection models. From 1994 to 2001, he first assisted with, & then supervised courses in *Invertebrate Zoology & Population Ecology* at the *National University of La Plata*; enjoying teaching & sharing his knowledge with students.

He was a "cosmopolitan" who loved travel, exploring countries, learning languages & cultures, working in new places, meeting new people. New friends & colleagues were important for him: he was happy when he could connect with people.

In 2001, he worked on evolution of flightlessness in water bugs, as a guest scientist in Prof. Robert Smith's laboratory in the ***Dept. of Entomology, University of Arizona (Tucson, U.S.A.)***. Later that year he received a fellowship from the German Academic Exchange Service (DAAD)

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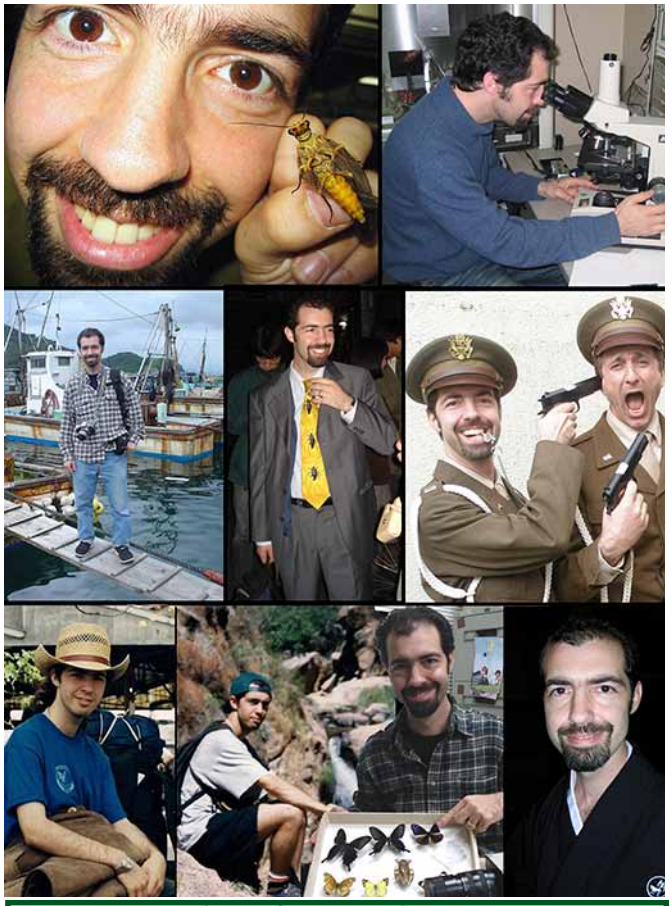

Photos of some typical moments:

Row 1:

Love of insects (Stuttgart, 2003).

In the lab (Kyoto University, 2007).

Row 2:

Sea & fishing (Japan, 2005).

Favourite tie at conference (Kyoto, 2008).

Movie extra (Kyoto, 2008).

Row 3:

Field trips in Misiones & Salta (Argentina, 2000).

Bugs & high-speed video equipment (Kyoto, 2008).

In traditional Japanese kimono (Kyoto, 2008).

& for the first time visited the laboratory of Dr. Stanislav Gorb at the ***Max Planck Institute for Developmental Biology, Tübingen (Germany)***. Until 2004, he was a post-doctoral fellow in Gorb's group, working on different topics of biomechanics in insects - from 2003, at the ***Max Planck Institute for Metals Research, Stuttgart (Germany)***.

During this period he became interested in Japan, its culture & language, and particularly the traditional Japanese art of archery (kyudo). In 2003, he enjoyed the Intercultural Japan-Competence Program for Postgraduates between the University of Tübingen (Germany) & ***Doshisha University, Kyoto, (Japan)***, which inspired him to apply for a post-doctoral fellowship of The Japan Society for the Promotion of Science, to study functional morphology & biomechanics of water striders in the Laboratory of Insect Ecology directed by Prof. Kenji Fujisaki at Kyoto University. He was awarded a fellowship and soon moved to Kyoto. He loved the city, its history, & people.

After finishing this 2-year project, and 3-months as an invited guest researcher at the lab of Prof. Zhendong Dai, ***Institute of Bio-Inspired Structure & Surface Engineering, Nanjing University of Aeronautics & Astronautics (China)***, he continued his research at Kyoto University under the The 21st Century Center of Excellence Program. His sincere involvement gave an international flavor to the Program: this well-educated, hard-working guy who knew almost everything about water bugs and spoke fluent Spanish, German, English & Japanese was a fine role model for Japanese students & a much admired colleague & friend for co-workers.

For his taxonomic research he also visited, & worked in, major insect collections in Argentina, Austria, Brazil, Germany, U.S.A., & Venezuela; and participated in numerous conferences & workshops around the world.

He loved life in Japan and found time for hard work in the laboratory & a happy family life, as well as travel to learn culture, language & traditions, guiding numerous foreign friends visiting Japan & even for having fun as an extra in a few movies! But the sea was his passion and he undertook sea trips to study water striders & other marine organisms.

He is survived by his loved wife Mayumi in Japan, his endearing parents Graciela & Carlos, his younger sisters Romana & Melisa and their children Celeste, Lucas, & Agustina in Argentina, & many other relatives & friends all over the world.

Science is not only about learning but also writing. It is equally important to discover new facts & to pass these on to others. Pablo is not with us anymore but his papers will be used and he will be long remembered as a scientist. His major Heteroptera publications are listed on page 7.

We should probably call him "Dr. Perez Goodwyn", but an ever smiling friend with a few silver hairs in his beard & a cup of matte in his hand – this is how we remember him. Too young to be adressed as "Doctor" he will forever be "Pablo" … and greatly missed by all of us.

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With special thanks to Mr. Carlos Roman Perez, Argentina, for information & photographs.

HETEROPTEROLOGEN 2010 - A FIELDTRIP IN GERMANY

The 36th meeting of the *Middle-Europe Heteropterists' Study Group* will be based at SDEI (Senckenberg Deutsches Entomologisches Institut), in Müncheberg (Brandenburg), over the long weekend of 27th-29th (-30th) August 2010.

On Friday 27th, SDEI's library & collections will be open. On Saturday morning there is an indoor session in the conference room & in the afternoon a fieldtrip, a ladies' program is also planned. On Sunday 29th there are morning & afternoon fieldtrips. There is an option to stay on for Monday to do one's own thing.

For an information pack contact: Stephan M. Blank, at SDEI.

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SPECIES NOTES

NEPIDAE

***Nepa cinerea* on the Isle of Man**

Garth Foster — Among 4 water bugs claimed as new (G. N. Foster & T. Huxley, *New records of wetland Coleoptera and Heteroptera on the Isle of Man*. Ent.Mon.Mag., 143, 207-212, 2007) was the water scorpion, found by GNF in Sandygate House Dub (SC 372972), a marshy ornamental pond, formerly a claypit, on 2nd May 2003. Going back through Professor Frank Balfour-Browne's journals (the Balfour-Browne Club owns facsimiles of the real thing in the Royal Scottish Museum), I feel obliged to note the following additional records (apparently in the same hectad as the newer one, i.e. SC39):

26 June 1910 – "pond in an old gravel pit….Ballaugh Parish"
30 June 1910 – "peat cuttings on the Curragh – nr Sulby Glen Station"
3 July 1910 – "near Ballaugh. Pond in Hay-field"

Before anyone asks, these journals do not provide a treasure trove of old bug records: Balfour-Browne occasionally noted the more obvious non-water beetles such as a few damselflies, the water scorpion and the water spider.

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Nocturnal behaviour of *Ranatra linearis*

Andy Harmer — I have gleaned a number of records over the last few years of *Ranatra linearis* by water-netting, but I have found as many again during torchlight surveys of Great Crested nNewts. I noticed that at night the bugs venture away from the safety and/or camouflage of dense vegetation and cross large areas of bare mineral substrate. They even enter bottle traps where they remain until the newt worker releases them in the morning. Makes me wonder whether corixids, such as *Sigara lateralis,* which rest on open sand tempt *Ranatra* out under the hours of darkness. I have asked the freshwater group to report any finds this year.

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BELOSTOMATIDAE

Immigrant water boatmen by the bag!

Chris Malumphy — Just for interest. I was contacted this morning (17th May 20101) by a Food Safety Officer in London and asked if I could identify the insects in Fig.1. Apparently the market sold a range of insects imported from Thailand as food. I assume these are most likely to be *Lethocerus indicus* (Lepeletier & Serville). Do you think they will catch on?

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CORIXIDAE

***Sigara iactans* distribution update.**

Sheila Brooke — In HN14 I reviewed water bugs that had recently arrived in Britain & plotted their known distribution. *Sigara iactans* appeared to be fairly widely distributed over SE England but there were obvious gaps along the Kent and Essex coast. It is thought that the original British *S. iactans* may have come from The Netherlands, if so one would expect to find it in all the coastal counties in SE England. That gap has now been, at least partially, plugged (Fig.1). Martin Drake, while surveying for *Buglife*, found specimens in 2008 in East Kent (VC15) at The Dowels on Romney Marsh (TQ9830); in 2009 in South Essex (VC18) at Aveley (TQ5680) & Fambridge (TQ8597); and in 2008 added another site for E. Sussex (VC14), at Guldeford (TQ9522). I expect more specimens will come to light and more south-eastern counties will be shown to host *S. iactans* - so check your *S. falleni* carefully!

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HEBRIDAE

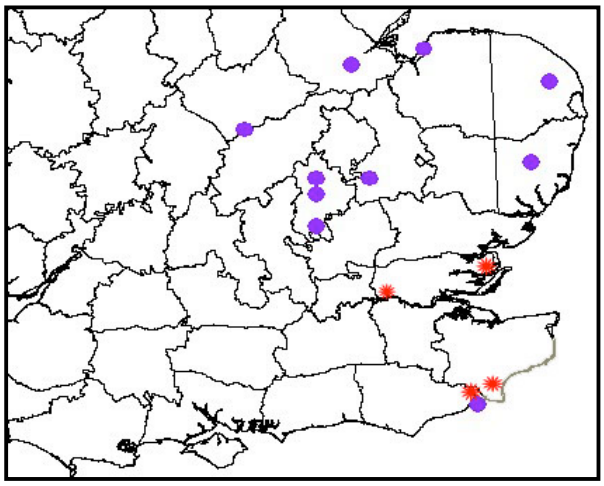

Figure 1 - Updated distribution of *Sigara iactans*, May 2010

***Hebrus ruficeps* living in high pH conditions.**

Jonty Denton — Peter Kirby summarised the habitats utilised by *Hebrus ruficeps* (*BJENH*, **12**, pp235-237). These included not only *Sphagnum* but *Amblystegia* and *Polytrichum* mosses, the pH of water bodies utilised was not restricted to acidic levels. On 29th April 2009 I found several adult *H.ruficeps* amongst partly submerged moss, *Calliergonella cuspidata*, growing at the margins of the Mill Pond in Dinefwr Park, Carmarthenshire (SN6222, VC44). This pond is fed by springs from the Llandeilo Limestone with a mean pH of 8.1 in 2009. The pond is base-rich supporting a mean conductivity of 352µS/cm.

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VELIIDAE

***Velia caprai* - winter activity**

Adrian Chalkley — Winter 2009-2010 really was a long, cold winter. I noticed that *Velia caprai* on the stream in my garden vanished during the heavy snow, & subsequent stream surge on 19th January. They reappeared en masse one night in late March. I presume they hibernated among plant roots etc. on the bank. I have watched this colony since 1984, when we moved here, & I've never noticed them completely disappear in winter before. They normally disappear when it is in spate & reappear when it subsides & have always been visible on the water on bright winter days, until this year!

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TINGIDAE

***Agramma laetum* - an overlooked species**

Rob Ryan — In August 2007 I chanced upon an *Agramma laetum* on Shotover Hill, on the E edge of Oxford (SP5606, VC23). But as I did not realise I had it until I got my catch under the microscope, I did not know precisely where I caught it. Since then I have tried to refind it, without success, until late August 2009 when I took one near a sand pit (having followed the Sand Pit Walk!).

I promised myself I'd come back this year to find more & today (19th May 2010) I did - in large numbers. From a single sweep I counted over 90 specimens! The bugs were in a clearing immediately below the sand pit, where grasses were interspersed with patches of moss,. Precisely where I found the 2009 specimen, & possibly that in 2007.

This site is significant because, according to S&L, little

is known of the life history of this bug. Anyone wishing to study the beast has here a large population in a small area, and plenty of individuals for filling a vivarium.

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MIRIDAE

Interesting Dicyphini from South Devon (VC 3).

Berend Aukema — During a short stay on the SE coast of Devon in October 2009 I found two Dicyphini worth mentioning.

Adults of ***Dicyphus escalerae*** Lindberg, 1934 were present in small numbers on *Antirrhinum majus* in large concrete flowerboxes in the centre of Teignmouth (SX9572) on 22nd October. This introduced species is also known from London & Leicester (Kirby et al., 2009).

Secondly, adults & nymphs of all stages of ***Macrolophus*** cf ***pygmaeus*** (Rambur, 1839) were collected from *Geranium macrorrhizum* at several places in parks & gardens in Newton Abbot (SX8671) on 15th October. Its identity could not be established with certainty as there is a possibility that it is ***Macrolophus geranii*** Josifov, 1961, which was described, from *Geranium macrorrhizum* in the Rhodopy Mountains of Bulgaria, as a subspecies of ***M. pygmaeus*** (then known as ***M. nubilus*** (Herrich-Schaeffer)) & considered a good species by Grozeva et al. (2007). Thus far, however, they can only be distinguished by chromosome numbers. Also, the morphological distinction between ***M. pygmaeus/ M. geranii*** & ***M. melanotoma*** (A. Costa, 1853) (= ***M. caliginosus*** Wagner, 1951) is sometimes problematic, as illustrated for British material by Nau (2007).

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Lygus wagneri in Oxfordshire

John Campbell — found a male of *L. wagneri* in Wychwood Forest (SP3417, VC23, Oxfordshire) on 7th September 2009 and sent it to BSN for a second opinion. This is one of two northern species of this difficult genus.

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Psallus montanus more British records

1) Jim Flanagan— collected a male from Birch (*Betula*) on 18th July 2009 at Barrow Pit, a former colliery near Worsborough, Barnsley (SK3502, VC 63, SW Yorks). This is the first Yorkshire record, & the most northerly in Britain so far, although there are probably specimens in collections waiting to be recognised. He identified it by the short apical process of its aedeagus & sent it to BSN, who concurred.

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2) Bernard Nau — On 12th June 2010 I beat a male & two female *P. montanus* from Silver Birch (*Betula pendula*) at Rye Meads, Hoddesdon (vc20, Herts)

Stenodema calcarata with malformed spurs

John Campbell — I found a specimen with two small spines and a larger spine between them on the right hind leg. The late Dr W. J le Quesne told me that he took a similar one but I have no details . Mine was taken in Wychwood Forest (SP3417, VC23, Oxfordshire) on 15th June 2009.

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ANTHOCORIDAE

Anthocoris amplicollis, 1st Oxfordshire record.

John Campbell — on 7th September 2009 in Wychwood Forest (SP3417, VC23, Oxfordshire), I found a female (det.BSN) of this oddly distributed species. For some years known in Britain only from Ash (*Fraxinus*) in a few square km at the south edge of the North Yorkshire Moors (VC 62, NE Yorks). More recently Roger Hawkins sent one to BSN from Surrey (VC17), and in 2007 BSN found two males at Twywell, E of Kettering (Northants, VC32). It seems that it is probably distributed very sparsely but quite widely in England.

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Buchananiella continua in Yorkshire again.

Jim Flanagan — reports this from a garden compost heap of coleopterist Eric Smith, in central Sheffield (SK3387, VC 63, SW Yorks), in August 2009 - the same site as the 1st record for VC63, in 2008. It is also known from VC61 (SE Yorks) where Bill Dolling recorded it several years ago.

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LYGAEIDAE

Megalonotus antennatus in Kent, after 50 years.

Tony Witts — There was a live *M. antennatus* in a snail shell I collected on the 9th March 2010 from Lorenden Park near Faversham (TQ9959, VC15, East Kent). Eric Philp & Tristan Bantock confirmed its identity. This is the first Kent record for over 50 years according to Eric.

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REDUVIIDAE

Dispersal of *Empicoris culiciformis* in Scotland.

David Horsfield — While working through an invertebrate collection taken in a water trap located near Ben Lawers, part of a project on montane invertebrates, I identified a ♀ *Empicoris culiciformis*. The trap was situated within an expanse of mat-grass (*Nardus stricta)* at 1010 m a.s.l. (NN628406, VC 88, Mid Perthshire) - on the east-facing slopes of Beinn Ghlas, a subsidiary summit 1.6 km SW of the summit of Ben Lawers (1214 m a.s.l.) The trap was in operation between 24 June & 7 July 2009.

The first published record of *E. culiciformis* in Scotland was under the name *Ploiariole culiciformis* by Slack (1937) for VC 83 (Edinburgh), taken at the Institute of Animal Genetics, University of Edinburgh. The National Museums of Scotland collections at Granton hold two *E. culiciformis* taken in the attic of a house in George Street, Edinburgh on 3 July 1952 by E.C. Pelham-Clinton. More recently, during a Heteropterists' field meeting in Perthshire from the 27th July to 3rd August 1990 a specimen of *E. culiciformis* was taken by Pete Kirby from straw bales in an open-sided barn at Stormont Loch (grid reference NO 1942, VC 89 East Perthshire) near Blairgowrie (Nau, 1991; with further information from Bernard Nau). Stormont Loch is in the lowlands but on the edge of the Highlands, 56 km east of Ben Lawers.

S&L(1959) states that *E. culiciformis* is usually taken on old walls or thatch & has been recorded from granaries, amongst faggots, & in disused sparrows' nests; also, several specimens have been collected on oak trees far from buildings, and amongst low herbage on cliff ledges. Butler (1923) also gives thatch, of houses & ricks, and also faggots as the habitat of this species. According to S&L(1959) *E. culiciformis* is widespread in England & recorded from Wales, but they were not aware of any Scottish records.

There are cliff ledges in the vicinity of the traps on Beinn Ghlas , these provide a possible habitat on the hill. Butler (1923) states that although it occurs through the greater

part of Europe, it does not extend further than 61° N, while its current known distribution in GB and its usual habitat do not suggest a likely candidate for a species living at high altitude. This is a delicate species with a narrow body about 5 mm long, and long, slender legs. However, according to Butler (1923) (quoting De Geer) it flies readily. Therefore I suggest that it is more likely that this species was carried up to the traps by air-currents from the Perthshire lowlands or even further afield, perhaps aided by its own flight, rather than that it has a montane population in the Highlands. The observations support the occurrence of long distance dispersal in *E. culiciformis*.

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Acknowledgements: I am grateful to Richard Lyszkowski for information from the Royal Museums of Scotland at Granton, Edinburgh.

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RHOPALIDAE

An early *Corizus hyoscyami*

Alan Stubbs — I was surprised to find a specimen of this colorful bug (photo rt.) on 10th April 2010 in my Peterborough garden (TL197997, VC32, Northants) . This is the first I have seen anywhere near here.

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Liorhyssus hyalinus in Berkshire & Oxfordshire.

1) John Campbell — found 3 ♂♂ of this increasing but rather scarce species on 18th August 2009, at Gozzard's Ford, west of Abingdon (SU4698, VC22, Berks - admin Oxfordshire). They were in a sandy field that had been ploughed in the spring, BSN confirmed the identity.

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2) Rob Ryan— In *HN14* you asked for records of ***Liorhyssus hyalinus***. I have just found three specimens hiding within my collection of '*Rhopalus subrufus*'. They were all caught on 14th August 2006 by sweeping waste ground by the B4009 road between Goring and South Stoke, (VC23, Oxon). The 'waste ground' was an excavation site, amid farmland beside a road, where a pipeline had been buried. Also present were ***Nysius senecionis, N. graminicola***, ***Stictopleurus punctatonervosus*** and ***S. abutilon***.

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COREIDAE

An abundance of *Enoplops scapha.*

Bryan Pinchen — On 28th September 2009, I visited the Winspit Valley, Worth Matravers, Dorset (SY9777761); primarily to look for departing migrant birds, something I have been doing for a number of years now. As anticipated there were good numbers of warblers feeding-up on late flying insects & autumn berries. On reaching a quarry at the southern tip of the valley, I sat in the sun to watch the sea for passing seabirds. Periodic glances at the stone walls of the quarry were rewarded with sightings of Wall Lizards (*Podarcis muralis muralis*).

At around 10.00 BST, at the base of the quarry walls in the warm morning sunshine, my attention was drawn to a 'leatherbug' crawling up the vertical stone wall about 50mm from ground level. It was *Enoplops scapha*. After photographing the specimen I was intrigued to see another a few inches away. Then, during the course of the next three hours, I saw a succession of *E. scapha* crawling out of the vegetation, up the vertical stone walls of the quarry to a height of approximately 0.6-1.0m, before disappearing from view into cracks in the stone. During the course of my observations along a length of approximately 50 m of exposed, south-facing stone I saw at least forty individuals!

After 13.00 BST I was unable to find any further *E. scapha*, bird migration had eased and I left the valley.

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Leptoglossus occidentalis distribution consolidating.

We have heard of several records of this bug from counties across the south Midlands of England:

1) John Widgery wrote: My daughter Karen Andrews, was attending a seminar at the Birmingham NEC in September 2009. On the evening of 14th she found a live *Leptoglossus occidentalis* in her room at the adjacent Hilton Metropole Hotel(Grid ref. SP1983). Knowing my interest, she brought it to me next day for identification. It is well known that this species is attracted to light & it is assumed that it had flown into the room for this reason whilst the window was open. Interestingly, the room was on the fifth floor which suggests that the insect was flying, presumably nocturnally, well above ground level. Chris Malumphy confirmsthat it is the first record of this species in **Warwickshire**(VC38).

2) Graham Wallhead (non-heteropterist) wrote: I found a specimen of *L. occidentalis* in my garden on 13th June 2009. My good friend John Meiklejohn tracked you down & suggested I send the enclosed photos. I live in the garden of Abbotswood about 1km NW of Stow-on-the-Wold (SP187262, VC33, E Gloucs.). A small arboretum - I believe we have *Pinus monticola* growing here.

3) Iohn O'Sullivan forwarded details (& photos) of a ***Leptoglossus*** found in the offices of the RSPB at The Lodge, Sandy (TL1948, VC30, Beds) on 20th October 2009 - recognised & photographed by Fiona Hunter & Ian Dawson..

BSN

PENTATOMIDAE

Aelia acuminata in Warwickshire

John Widgery — One in dry grassland on S facing earth hill, Mancetter Quarry (SP309954, VC 38) on 23rd May 2007.

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Eysarcoris venustissimus in Yorkshire

Alex Ramsay — Many adults on Nettle (*Urtica dioica*) beside Goole river at Tickhill (SK589929, VC 63, SW Yorkshire) on 20th May 2009. First Yorks record was 1992, by Peter Skidmore at Hatfield Moor; then Goole in 2006 by Bill Dolling.

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AROUND THE BRITISH ISLES

West Cornwall .....VC 1
John Widgery

A selection from 35 species recorded in Cornwall by JW in mid July 2009, dates given with grid references below.

Henestaris laticeps - Penrose Estate (21st, SW642242).

Calocoris roseomaculatus - Predannack (12th, SW667171).

Eurygaster testudinaria - Goonhilly NNR (24th, SW7320).

Aelia acuminata - Sennen Cove (20th, SW3599268).

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Berkshire .....VC 22
Rob Ryan

I caught the Box Bug ***Gonocerus acuteangulatus*** on 21st May 2010 at The Holies (National Trust), a grassy coomb at Streatley (SU5881). It was swept from low vegetation in the shade of a row of Beech trees. This is my first away from Box Hill, Surrey (also National Trust ... but I think this a coincidence!). ***Scolopostethus grandis*** & ***Plinthisus brevipennis*** completed a very pleasant day in the sunshine.

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Bedfordshire .....VC 30
Bernard Nau

[Based on BSN's 2009 annual report for *The Bedfordshire Naturalist*.]

Features of 2009 in Bedfordfshire

As in the last two years the cool, rather wet, summer & autumn of 2009 were unfavorable for lygaeids, coreids & shield-bugs, at least. Hence, in 2009 my fieldwork produced only 492 records covering 177 species, the lowest for a decade. However, there were three additions to the county list - a mirid & two coreids (see below). The county's species total now stands at 66% of the steadily increasing national total.

ADDITIONS TO BEDFORDSHIRE LIST

Miridae

Macrotylus horvathi — On 11th September 2009 1♂ was swept from its usual host, Black Horehound (*Ballota nigra*), beside the River Flit on Flitton Moor. As the first British record was from the Isle of Sheppey and subsequent scattered records are from the London conurbation, this record is a considerable northwards extension of its British range.

Coreidae

Leptoglossus occidentalis — (see page11)

Gonocerus acuteangulatus — This fine bug is spreading in southern England & was expected to reach Beds, it has now arrived. At Totternhoe Quarry on 31st July 2009, Sheila Brooke noticed one on a leaf of Purging Buckthorn (*Rhamnus catharticus*). On closer inspection several nymphs & a few eggs were seen. A search of other known hosts in the area proved negative. However, on 22nd August, a few km away, just in Buckinhamshire (VC 24), we found a flourishing colony on a thicket of Box (*Buxus sempervirens*), neatly filling a gap in the bug's range.

COMMENTS ON OTHER SPECIES

Corixidae

Corixa panzeri: since the 1960s the status of this large boatman has changed very noticeably in this part of England. It used to be quite scarce, a red-letter day if one was encountered. Now it is possibly more common than *Corixa punctata,* which used to be of everyday ocurrence but is now less so.

Sigara iactans: On 10th October 2009, SEB & I visited new drainage lagoons on Oxford Clay near Wilstead. We were surprised to find individuals of this recent addition to the British fauna already in two of the lagoons - among water-plants recently planted in the margins. But we could not find any on 4th November at the original county site at Meadow Lane Quarry about 5km away.

Gerridae

Aquaris paludum: this large southern water-skater was first found in Beds in 2000, when it was in considerable abundance on various lakes & quarry lagoons - usually where floating water-plants were present; on windy days the bugs rest on these. Subsequently the numbers have not maintained their initial abundance but seemed to level out at a rather modest level. Occasionally it is seen on quite small ponds, e.g. singles twice, three years apart on a 10m diameter peat pond at Flitton Moor (3rd October 2006 & 19th May 2009). At Bromham Quarry NR I saw few my first of the year on 30th May 2009, while the reserve manager, Peter Almond, saw his last of the year in mid-October.

Miridae

In 2009 the following mirids were among 62 species of Heteroptera colected from a'Rothamsted' light trap at Cockayne Hatley, in Ian Woiwod's garden; and identified by SEB & myself. The trap is run right through the season.

Deraeocoris scutellaris — 1♂ of this scarce species on 18th June; it ocurred in 2008 too.

Brachynotocoris puncticornis — 1♂ on 19th September is the first in the county away from the original British site at Priory Park, Bedford.

Placochilus seladonicus — 1♂ of this chalk grassland species on 31st July.

Psallus mollis — more than usual; ♂♂ (confirmed by aedeagus) on 5 nights from 27th June to 11th July.

Psallus montanus — 1♀ on 17th June; this species was only split from *Ps. betuleti* in 2006 so there are few British records as yet.

Pyrrhocoridae

Pyrrhocoris apterus — in fair numbers at its Beeston site on 16th August 2009, mainly on or near mallow (*Malva sylvestris*), which is widespread on this site. The bugs were along the margins of a tarmac access road, on a concrete turning area at the W end of the road, and on mallow at the edge of an adjacent potato field.

Alydidae

Alydus calcaratus — at Cooper's Hill on 20th September 2009 Keith Balmer drew our attention to an unusual abundance of this usually sparse pompilid wasp mimic, on open heathy ground created by tree clearance. On the same day a few were also seen 0.5km away on a roadside sand bank-bank, where Gorse had been thinned to create heathland habitat.

Pentatomidae

Eurydema oleracea — scarce in 2009.

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Gloucestershire.....VC 33, 34

John Widgery

[Based on JW's 2009 annual report for *The Gloucestershire Naturalist*.]

Recent cooler, wetter summers halted range expansion of species beginning to spread into the county, species of *Coreidae, Rhopalidae* & *Lygaeidae* were badly affected. For instance, ***Coreus marginatus***, first found here in 1997 has become quite scarce with only a few records in 2009. The rhopalids ***Stictopleurus punctatonervosus*** & ***S. abutilon*** have not been seen since 2006. The 'cupressus' lygaeid ***Ortillus depressus*** spread strongly into the UK two decades ago, it was well established in Gloucs but has been found just once since 2007 and not at all in 2009. The shieldbug ***Aelia acuminata*** has only been seen once since 2006 , one in 2007. Another recent arrival, ***Lygus pratensis***, produced no records in 2009. To add to this tale of woe, the nationally scarce thyme bug, *Heterogaster artemesiae,* refound on Cleeve Hill in 2006 & 2008 could not be found here in 2009.

The exception to this trend is ***Corizus hyoscyami***, this arrived in 2003 and was seen at three sites in 2009, two of them new.

To put the above into context, my observations are based on ca. 50 'field' searches between April & October, usually covering wide areas.

Other significant records for 2009 are summarised below, (apart from ***Leptoglossus occidentalis***, covered earlier in this issue). References to 'county' below mean the administrative county of Gloucestershire, which comprises two vice-counties.

MIRIDAE

Macrotylus solitarius **-** This 'county scarce' species which feeds on Hedge Woundwort (*Stachys sylvatica*) was found at a further 7 sites over a wide area in 2009 suggesting that it is more common than previously thought. It has possibly been overlooked before.

Oncotylus viridiflavus - This 'county rare' species of Knapweed (*Centaurea nigra*) was seen at Coln St. Dennis (SP0911, VC33) on 7th August and the second near Snowshill (SP1333, VC33) on 27th August - the 6th & 7th records for the county.

Miridius quadrivirgatus - This scarce grass bug was found at three new locations – Aston Magna (SP2035, VC33) & near Paxford (SP1937, VC33) on 2nd August, and near Bourton-on-the-Hill (SP1432, VC33) on 27th August. This brings the county records to ten.

Pilophorus clavatus - This local bug is usually found on willows (Salix spp.) & had only been found once before in the county, at Ashleworth Ham (SO8125, VC34) in 2002, so it was a surprise to beat it from Scots Pine (Pinus sylvestris, at Walton Cardiff (SO9032, VC33) on 31st August. I expected it to be the very similar Pilophorus cinnamopterus, normally found on Scots Pine & itself scarce in Gloucs. However, it proved to be P. clavatus, there was willow in the area.

ANTHOCORIDAE

Anthocoris butleri — This lives on Box (*Buxus sempervirens*) & was found for the third time in the county on Box at Snowshill (SP1033, VC33) on 27th August. It is probably under-recorded.

LYGAEIDAE

Gastrodes abietum **-** This shelters in cones of Norway Spruce (*Picea abies*) after nocturnal feeding . It is probably widespread in the county but under-recorded due to the inaccessible height of cones. Two were found in a freshly fallen cone after windy weather at Woodmancote (SO9727, VC33) on 18th January, the 4th record for the county.

RHOPALIDAE

Corizus hyoscyami - Found at three sites: Gotherington (SO9629, VC33) on 24th April, the same site as in 2007; Kildanes Bottom, near Bourton-on-the-Hill (SP1432, VC33) on 27th August, swept from grass; & near Laverton (SP0636, VC33) on the very late date of 31st October.

PENTATOMIDAE

Rhacognathus punctatus **-** Scarcest of the county's shieldbugs, previously known only from two sites in the Forest of Dean (VC34). Colin Twissell found it at a third site in the Forest, at Edgehills (SO6615) on 18th July.

Acknowledgements - Thanks to all who submitted records, particularly David Iliff, Colin & Ingrid Twissell, Graham Wallhead & Kenneth Heron.

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East Norfolk.....VC 27

John Widgery

A selection of the species recorded by JW in early September 2009 (except where stated otherwise), dates given with grid references below.

Stenodema trispinosum - among Phragmites at three sites near Cley (6th: TG051441 & TG043440; 9th TG055441).

Orthotylus rubidus - brackish pool by shingle beach, East Bank,Cley (9th , TG0554410).

Trapezonotus dispar - 4 in leaf litter, Holt Lowes NR (9th, TG088378)

Nabis lineatus - Blakeney Eye (6th , TG043450).

Stictopleurus punctatonervosus - Glandford (1st October 2008, TG046413).

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West Norfolk .....VC 28

John Widgery

A selection of the species recorded by JW in early September 2009, dates given with grid reference in parentheses.

Coranus subapterus (s.l.) - common on sea-defence bank at Snettisham RSPB Reserve (11th, TF648317)

Lygus pratensis - Snettisham RSPB Reserve (11th, TF651329, VC28).

Stenodema trispinosum - among Phragmites: at Wells-next-the-sea (7th , TF912455); at Titchwell RSPB Reserve (10th , TF74944).

Orthotylus moncreaffi - Blakeney Point (8th, TF996463) & Burnham Overy Marsh (10th, TF857457).

Nabis lineatus - Titchwell (10th , TF751449).

Chorosoma schillingii - two sites near the end of Blakeney Point (8th, TG0046) & Holkham Dunes (7th, TF871456).

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For the next issue of Het News, please send contributions by 30th September 2010

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Recorders listed are either the designated County Recorder, or an acting recorder who accepts records for the county.

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GUIDELINES FOR SUBMITTING RECORDS

Preferred format - spreadsheet (e.g. Excel): one record per row, essential columns:

1-species name| 2-date (dd/mm/yyyy)| 3-site name|
4-grid ref(XX######)| 5-VC| 6-recorder| 7-determiner|
extra columns (optional):
admin region | abundance | age | sex | habitat | …etc.

Alternative format - word processor file (e.g. Word): columns as above & tabs separating columns - never use 'spaces' or punctuation marks for this. Save as rtf or a tab-delimited-text file.

Organisers have check for errors & omissions, & to ensure that formatting meets BRC/NBN requirements - this can be quite time-consuming, so please try to keep to the guidelines.

Western Conifer Seed Bug

Leptoglossus occidentalis

PLANT PEST FACTSHEET

Figure 1. Adult *Leptoglossus occidentalis* resting on a conifer

Background

Leptoglossus occidentalis (Heidemann) (Hemiptera: Coreidae) is a Nearctic leaf-footed pine bug that has recently arrived in the UK (Figure 1). In its native North America, where it is commonly known as the Western Conifer Seed Bug, this insect is a relatively serious pest of conifer seed nurseries, particularly Douglas fir (*Pseudotsuga menziesii*). It was first detected in Britain in 2007, when a single adult was found in a classroom at Weymouth College, Dorset. In the late summer of 2008 there were more than 45 reported sightings of this insect. Since July 2009, Fera and Forest Research have received details of more than 100 sightings, predominantly from along the south coast, but also inland from across much of England (Bedfordshire, Berkshire, Cornwall, Cumbria, Derbyshire, Devon, Dorset, East and West Sussex, East Yorkshire, Essex, Gloucestershire, Hampshire, Isle of Wight, Kent, Leicestershire, London, Merseyside, Norfolk, Nottinghamshire, Suffolk, Surrey, Warwickshire, West Yorkshire, Worcestershire), in south Wales (Swansea) and the Channel Islands (Jersey, Guernsey). Nymphs have been found at one location, which suggests that a breeding population has established.

Geographical Distribution

Leptoglossus occidentalis was originally restricted to western parts of the United States, Canada and Mexico, but in recent decades it has spread eastward and can now be found over almost the whole of North America. It was accidentally introduced into Europe in 1999, to northern Italy, and has since spread rapidly, being recorded from Switzerland in 2002, Spain and Slovenia in 2003, Croatia and Hungary in 2004, Austria in 2005, Germany, France, Serbia and the Czech Republic in 2006, Belgium, Britain and Slovakia in 2007, and from Montenegro and Poland in 2008. In the UK, the majority of records have been of adults observed at light traps along the south coast of England, clearly indicating a large migration across the English Channel.

Forest Research

fera
The Food and Environment Research Agency

Wheat Bug
Nysius huttoni

PLANT PEST FACTSHEET

Figure 1. Adult *Nysius huttoni* collected by Nigel Cuming
Photo copyright James Turner - National Museum Wales

Background

While surveying North Warren RSPB Reserve, Suffolk, in September 2007, Heteroptera recorder Nigel Cuming found large numbers of an unfamiliar species of ground bug. Heteroptera experts Bernard Nau and Bill Dolling confirmed the identity of the bug as *Nysius huttoni* White (Heteroptera: Lygaeidae). Commonly known as the Wheat Bug, this New Zealand endemic is a polyphagous pest of large number of weeds and crops. Currently on the EPPO Alert List, *N. huttoni* is established in parts of Northern Europe. This was the first discovery of this pest in the UK.

Geographical Distribution

Nysius huttoni is endemic to New Zealand where it is widespread and has a wide ecological distribution from coastal locations to altitudes of over 1800 m. In 2002, *N. huttoni* was found at different localities in the extreme south-west of the Netherlands (province of Zeeland) and the adjacent north-western part of Belgium (provinces of West-and Oost Vlaanderen and Brabant). The initial observations were close to Antwerp harbour, so accidental arrival on shipments from New Zealand was suggested. In the autumn 2005 edition of Het News, Dutch heteropterist Berend Aukema suggested that this pest might reach UK shores. Since his first east Suffolk find in 2007, Nigel Cuming has surveyed further sites along the coast in consecutive years and discovered large numbers of adults and nymphs. In July 2009 it was found at a gravel pit in Essex by Jerry Bowdrey, Colchester Museum's Natural History curator. He noted that he hadn't previously recorded the insect during his many previous surveys of the site in the past 10 years so believes it to be a very recent arrival.

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