



Beetle News



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Editorial

Richard Wright

Welcome to the fourth issue of *Beetle News*. This is the final issue for 2009, albeit slightly late, and represents the completion of the first year of publication.

On the whole, the first year appears to have been successful. I have managed to produce four issues and there has been enough content to make this worthwhile. However, continuation of *Beetle News* depends on sufficient content being submitted. It has so far been dependent on a relatively small number of contributors, some of whom have produced several articles. For this issue, I have had to provide a large proportion of the content myself. For *Beetle News* to continue in the long term, it will require a larger number of contributors.

I would also appreciate any more feedback, positive or negative. So far the few comments I have received have all been positive! If you have any suggestions as to how *Beetle News* could be improved, please let me know. I would also be particularly interested to hear from any relative beginners to beetles and what they would find useful. I hope that the inclusion of *Beetle News* on the Amateur Entomologists' Society website has made it available to a wider selection of entomologists and I would again like to thank the AES for this service.

Finally, the snow is disappearing, at least for the time being, so may I wish everyone good beetling for 2010.



Silpha carinata

In the guide to British Silphidae in *Beetle News* 1:3, I pointed out that I did not have a specimen of *Silpha carinata* to photograph.

Many thanks to David Nash for supplying a photograph of this species which is shown above.

Some Beetle Species New to Warwickshire in 2009

Not altogether unexpected was the first recorded occurrence of *Panagaeus bipustulatus* (Fabricius) in Vice-county 38. The exact details of the location have yet to be received by the author, but the record concerns a single specimen pitfall-trapped by Robin Cure in July on a grassland road verge close to the Worcestershire border.

The ladybird *Rhyzobius chrysomeloides* (Herbst) is another expected coloniser in Warwickshire, so I was not entirely surprised when I beat three specimens out of Scot's Pine at the edge of a sandy track at the approach to farm buildings near Lime Bridge (SP0652) on 5th October. I dissected a male specimen to be certain of the identification, although even in the field, the dark marks on the elytra immediately set them apart from typical *R. litura* (Fabricius) and the elytral puncturation and thoracic characters mentioned by various authors are easy to appreciate under magnification.

A third species worthy of note is *Podagrira fuscicornis* (Linnaeus). I swept a solitary specimen of this beetle in

grassland at Brandon Marsh NR (SP3875) on 8th August. The absence of the foodplant *Malva* in the immediate area suggests that it may have been a dispersing individual.

Steve Lane



*Panagaeus
bipustulatus*

On the food plants of *Gymnetron villosulum*.

When writing about any species of beetle, one has to take notice of what has previously been written, particularly on food plants. It is very easy to add an additional food plant for any species, but much more difficult to remove any previously published record.

My concern is over *Gymnetron villosulum*, the larvae of which cause a distinctive gall in the seed heads of its food plant. This food plant is given as *Veronica anagallis-aquatica* by Fowler 1891, and by Joy 1932; just as *Veronica* by Walsh, *A Coleopterist's Handbook* 1954; as *Veronica anagallis-aquatica*, *V. catenata*, *V. scutellata* & *V. beccabunga* by Redfern & Shirley, *British Plant Galls* 2002; and as *Veronica anagallis-aquatica* & *V. catenata* by Philp, *A Coleopterist's Handbook*, Cooter & Barclay 2006.

With my own observations I have only ever found this beetle on *Veronica catenata* and never on *V. anagallis-aquatica* or on the hybrid between these two species. In conversation with Dr. Joyanneke Bijkerk, a Dutch gall expert, she confirmed that she had only ever found this gall on *V. catenata* in the Netherlands. The two plants are very similar, were not recognised as distinct in the days of Fowler, and great care is needed to distinguish between them.

The purpose of this note is to suggest that the larvae of *Gymnetron villosulum* feed only on *Veronica catenata*, and I would be pleased to hear from any observers who have recorded otherwise.

Eric Philp

Some Scottish ladybird records

Aphidecta obliterated (Linnaeus) Loch Lubnaig, NN5811 (adult drowning in flotsam at edge of loch - JD) and Cambusbeg, NN6604 (beating *Pinus sylvestris* L. and *Larix* sp. - SD), West Perthshire [VC 87], 2.ix.2009.

Coccinella hieroglyphica Linnaeus Cambusbeg*, NN6604 swept off open mire by JD, 2.ix.2009.

Calvia quattuordecimguttata (Linnaeus) Milton Lockhart*, NS8149 Lanarkshire [VC 77], beaten from *Ulmus glabra* Huds by SD, on 1.ix.2009.

Halyzia sedecimguttata (Linnaeus) Bankhead of Tinwald*, NY0583, Dumfriesshire [VC 72], larvae beaten from *Fagus sylvatica* L. by SD, 30.viii.2009. Milton Lockhart*, NS8148 Lanarkshire [VC 77], larvae and adults beaten from various deciduous trees by both JD and SD, 31.viii.2009

= First published record for vice-county?

JONTY DENTON, Old Hall Place, Hussell Lane, Medstead, Hampshire, GU34 5PF & SCOTTY DODD, 1 Pine Cottages, Harpers Road, Ash, Surrey, GU12 6BZ.

Additional records of *Diaperis boleti* (Linnaeus) (Tenebrionidae) from Surrey [VC17] during 2009.

Scotty Dodd

1 Pine Cottages, Harpers Road, Ash, Surrey GU12 6BZ

This note summarises further Surrey [VC17] site records of *Diaperis boleti* (Linnaeus) [RDB2] during 2009, confirming that this species is now well established and locally common on the heathlands and commons of west Surrey (Dodd & Denton, 2008). It would also suggest that the RDB2 (Vulnerable) status is no longer justified for this species. To the best of the author's knowledge, there are currently no records from neighbouring Berkshire [VC22]. All records are from 2009 and made by the author unless otherwise stated.

- Brentmoor Heath, West End (SU9361). 27.v. & 17.vi. In *Piptoporus betulinus* brackets.
- Chobham Common (SU9763). 01.vi. In *Piptoporus betulinus* brackets. Rec: R.S.O'Hara. Det: S.G.Dodd.

- Whitmoor Common, Worplesdon (SU9853). 10.vi. In *Piptoporus betulinus* brackets.
- Little Pond, Frensham (SU8641). 13.vi. In *Piptoporus betulinus* bracket.
- Stanners Hill, Chobham (TQ0062). 23.vii. In *Piptoporus betulinus* brackets.
- Bagmoor Common, Elstead (SU9242). 14.viii. In *Piptoporus betulinus* bracket.
- Stanford Common, Pirbright (SU9454). 31.x. Elytron in *Piptoporus betulinus* bracket.
- Little Pond, Frensham (SU8641). 13.vi. In *Piptoporus betulinus* bracket. With G.A.Collins.

References

DODD, S.G. & DENTON, J.S. 2008. Recent records of *Diaperis boleti* (Linnaeus) (Tenebrionidae) in Surrey and North Hampshire with an update on the current British distribution. *The Coleopterist* 17 (3): 155 – 160.

Review : Guides to British Beetles by John Walters

These are a series of A4 fold-out sheets, with detailed information, drawings and photographs of the species in the wild.

Further information can be obtained from:
<http://www.johnwalters.co.uk/pubs/GBB.php>

Three sheets are available at present, the one shown here, another covering the Cicindelinae, and the third on the Dor beetles, Geotrupidae and Bolboceratidae.

These would undoubtedly be useful for the less experienced coleopterist, and those who wish to identify some of the larger and more distinctive species in the field.

Priced at £2 each plus postage.

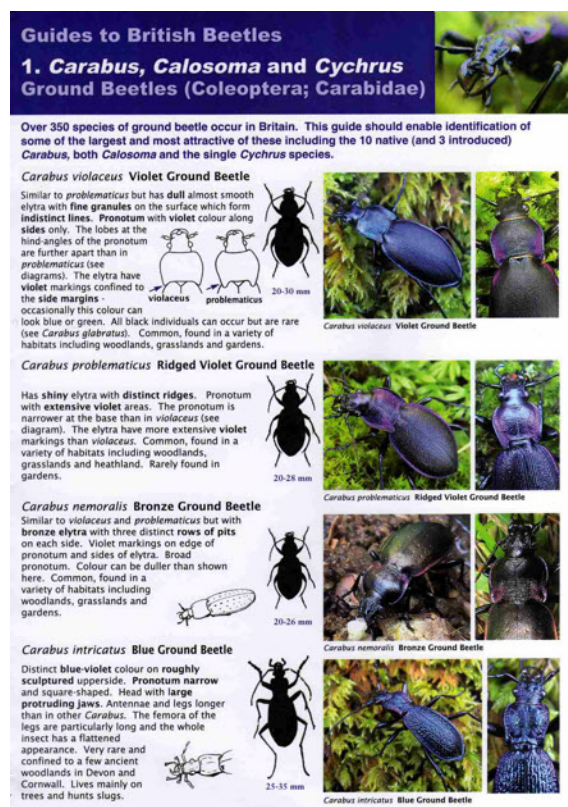
John has shown me drafts of two further sheets covering more Carabidae and informs me that some future sheets will be available for free download from his site.

Richard Wright

New Shropshire Beetle Recording Group

Following a number of training events led by Don Stenhouse (county recorder for Lancashire and Cheshire) for the Biodiversity Training Project (BTP), the Shropshire Beetle Recording Group is being launched at the inaugural Shropshire Entomology Day at Preston Montford Field Centre, near Shrewsbury on Saturday February 20th 2010. More training and recording days are being held in 2010 funded by the BTP and led by Don, in an effort to attract more people to record Coleoptera in the county. Shropshire has for many years been a black hole

for recording but with encouragement from the BTP and with the recent establishment of the Shropshire Environmental Data Network (a virtual local records centre for the county), there has been a surge in interest in entomology. It is hoped that this can be sustained for some time to come. If you would like more information about the Shropshire Entomology Day or the Shropshire Beetle Recording Group the contact for both is Pete Boardman, Biodiversity Training Project Officer who can be contacted at pete@field-studies-council.org



Cheap and simple materials for pitfall traps.

Richard Wright

I have made extensive use of pitfall traps for many years. After trying numerous different methods and materials, I believe I have discovered a combination which is:

- very economical
- quick to insert and to service
- effective

For the traps themselves, I have now settled on half pint flexible plastic disposable “glasses”. I obtained mine from Party Plastics <http://www.partyplastics.co.uk> where they are priced at £36.13/1000 or £2.49/50. A box of a thousand will last for many years and could be shared among several people. I have found these flexible glasses, which appear superficially flimsy, to be much more robust in use than rigid ones since they bend and flex when trampled on, rather than breaking.

The glasses have a top diameter of 8cms, which means that they fit perfectly into the holes made with a standard garden bulb-planter. These planters can be obtained easily for about £5 - £6 from garden centres etc. They vary considerably in strength, which is not proportional to price. I have found that painted metal planters with wooden handles are generally stronger than shiny metal ones with plastic handles. They work well except on very hard ground where a trowel is needed.

It is essential to cover pitfall traps in some way for two reasons. Firstly, they invariably trap small vertebrates, particularly shrews, if left uncovered. It is illegal (and immoral) to allow protected species such as shrews to be trapped by not taking reasonable precautions. Secondly, a cover prevents leaves, grass etc from falling into the trap which will greatly reduce its efficiency. Chicken wire has been suggested, but I have found the best material to be mesh sold for making rabbit and guinea pig runs. This has a square mesh and is much stronger and more rigid than chicken wire. It can be obtained from any “Wilkinsons” hardware store. A roll costing £4.99 can be cut up, with strong kitchen scissors or wirecutters, into covers for 90 traps. I have not found it necessary to fix these covers to the ground as they fit flat and are not easily disturbed. The cut ends can be pushed into grass roots etc.

For preservative, I now use only a saturated solution of salt. In this case, I am completely in disagreement with the authors of the Natural England document *Surveying terrestrial and freshwater invertebrates for conservation evaluation* who state that a saturated salt solution is “adequate for the short-term exposure of traps but useless for normal weekly or fortnightly periods”. On the contrary, I have found saturated salt solution to be far more effective than e.g ethylene glycol and able to perfectly preserve both insects and spiders for up to two months. I believe the secret is to ensure that the solution is completely saturated (1 kg of salt will make about 3 litres of saturated solution) and then to add an extra teaspoonful

of salt to each trap after it has been placed in position. In case of heavy rain, this extra salt will dissolve and maintain the concentration. A little detergent should be added to reduce surface tension. The main disadvantage of salt is that it may crystallise out on the surface of specimens when they are dried, and therefore any specimens required for card mounting should be soaked in water for a day or two to wash out the salt before they are mounted. A 3 kg bag of cooking salt can be bought for less than £1. This will make about 9 litres of solution, sufficient for about 80 traps, for a cost of just over 1p per trap, far less than using ethylene glycol in the form of antifreeze. In addition, as salt does not evaporate it can be reused.

To empty the traps, I use a plastic kitchen sieve, of the type used for sieving flour etc. The contents of the trap are poured through the sieve and the salt solution collected and reused. I usually combine the catches from a group of traps, and then empty the sieve into a plastic bag, where the specimens will remain in good condition so long as they are kept cool. I sort the catch under the low power of the microscope in a small white plastic dish. To preserve the catch long term, I much prefer isopropanol, diluted to 50%, which is easier to obtain than industrial methylated spirits (it can be bought on EBay), evaporates much more slowly, can be diluted further and does not make the specimens so stiff. The best containers for long term storage I have found to be 90ml translucent flip-top polypropylene containers which I obtained from Alana Ecology (£22.50/100). These are unbreakable, lightweight, do not leak or allow evaporation and the lid cannot be lost. They are unaffected by ethyl acetate and hence can also be used as killing jars.

Using these methods, I have found it possible to set and service large numbers of pitfall traps in short time and at low cost. In addition, the catch seems to be at least as good as, if not better than, more sophisticated and expensive methods that I have tried in the past.

Richard Wright



Beginners' Guide

The species of *Glischrochilus* (Nitidulidae)

Richard Wright

The three British species of *Glischrochilus* are easily recognised. They are rather elongate, parallel-sided beetles, with the typical clubbed antennae of the Nitidulidae. All species have four yellow to reddish spots on the elytra. There are few other British beetles with which they can be confused, except perhaps a couple of the species of *Mycetophagus*, which have similar elytral patterns but lack the strongly clubbed antennae. *Glischrochilus* are associated with trees, usually found under bark or at sap, but can also be found in flight.

With practice, the species can be separated without recourse to a key.

G. quadriguttatus::

- yellowish spots
- anterior spots irregular in shape
- pronotum not contracted basally

G. quadripustulatus:

- reddish spots
- anterior spots irregular in shape
- pronotum contracted basally
- associated with conifers

G. hortensis:

- reddish spots
- all spots more regular
- pronotum not contracted basally

Key

1. More flattened, parallel species. Pronotum contracted in front of the hind angles where it is somewhat narrower than the elytra at the base. Elytral spots reddish, anterior somewhat irregular, posterior more regular *quadripustulatus* (L.)

More convex species. Pronotal base not contracted, as wide as the elytra at the base. 2

2. Elytral spots yellowish, anterior spot irregular in shape. *quadriguttatus* (Fab.)

Elytral spots reddish, all spots more or less regular. *hortensis* (Fourc.)



G. quadriguttatus



G. hortensis



G. quadripustulatus