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# **Beetle News**



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### **Editorial**

**Richard Wright** 

Welcome to the first issue of *Beetle News* for 2010. I am please that we have at least made it into the second year, though a steady flow of contributions will be required to make it worthwhile continuing. Thanks as always to contributors to this issue.

# Sites, field days and mentors.

I would like Beetle News to become a forum where individuals can make contact with others. Examples would be:

Are you a relative beginner who is looking for assistance from more experienced coleopterists?

Are you an experienced coleopterist willing to help beginners in your area?

Is there a site that you know of, and have access to, where you would like some beetle surveying to take place?

Do you belong to an organisation, e.g. a natural history society, which organises field trips and would welcome coleopterists on these trips?

In any such case, send in the relevant information, together with your contact details, and I will include it in Beetle News.

# More websites for coleopterists

In the first issue of *Beetle News*, I pointed out a number of websites of interest. Here are a few more:

Watford Coleoptera Group www.thewcg.org.uk has a lot to offer even to those who live far from Watford! There are many photographs of a range of species, together with tips for identification etc.

Mark Telfer has his own site: markgtelfer.co.uk/. There is a wide variety of material here, difficult to explain in a few words, and best understood by visiting the site yourself.

For those interested in Chrysomelidae, there is a European site with photos of numerous species, including the aedeagi of many. Best place to start is the page with the index of genera:

culex.biol.uni.wroc.pl/cassidae/European Chrysomelidae/list of genera.htm

**Richard Wright** 

# **Collection of Coleoptera from Carrion** Andrew Chick

Many Coleoptera frequent carrion, either to feed on the carrion, or to predate other invertebrates feeding upon the carrion. There are two main ways of studying the Coleopteran fauna of carrion the first is attraction the Coleoptera using carrion bait and the second is to find carrion in situ. With regard to using carrion as a bait it is worth remembering that carrion is a transient eco-system and it attracts a wide variety of animals from Diptera and Hymenoptera all the way to foxes and other vertebrate scavengers, in the summer months Diptera can reduce small carrion to bones before it is suitable for Coleoptera to colonise it. Chick (2009) recommended aging of small carrion in the summer months to prevent Diptera from colonising it. Also foxes and other vertebrates can remove full carrion from a site, while from personal experience this is not a problem with carrion the size of a say a 15Kg pig, such sized carrion is sometimes too large (and costly) to be practical for study. Smaller carrion (i.e. 500g sized rat) can be protected by fashioning a small cage such as was detailed in Chick (2008), the basis of which is a shopping basket that is attached to steel mesh using jubilee clips and padlocks (fig 1) the whole cage can then be attached to the ground using tent pegs, the whole cage can be painted matt black to make it more unobtrusive (and less likely to be noticed by would be vandals).



Figure 1 a simple cage used to protect rat carrion (Chick, 2008)

The cage can then be surrounded by Pit fall traps (see Wright 2009, or Cooter and Barclay, 2006 for more details on pitfall traps) which are periodically emptied. When the carrion is reduced to hide and bones the carcass can be shook over a white tray and small beetles among the carrion can be individually picked off with a moist paintbrush or a pooter.

As regards safety around carrion, common sense should be used. Alcohol hand gel is a small addition to add to the kit bag, rubber gloves are also a good idea. Either a blow pooter or an electric one should be used, a standard suction pooter is not recommended for carrion work due to the possibility of fungal spores. 70% alcohol can be used to preserve larvae and also to wash down tools. Study from carrion is a rewarding area of Coleopterology even if the smell can be a touch much at times (a small amount of vapour rub under the nostrils helps at times!) It is hoped this small paper helps and encourages more people to study in this area.

#### References

Chick, A.I.R., 2008, Some novel suggestions for the collection and study of Diptera from carrion. Bulletin of the Dipterists forum **65** 24-26

Chick, A.I.R. 2009, Aging of small carrient to collect Coleoptera is summer. Beetle News 1:3 2

Cooter, J and Barclay, M.V.L (eds) (2006) A Coleopterists Handbook 4<sup>th</sup> ed Amateur Entomological Society

Wright, R (2009) Cheap and simple materials for pitfall traps. Beetle News 1:4 4

# Aberrant antennae on a specimen of *Kibunea minuta* (L.)

Amongst a number of *Kibunea minuta* taken in pitfall and flight intercept traps on Parsonage Down , Wiltshire, run between 8 April and 1 May 2009, was a single specimen in which the antennae showed a predilection to become 13 jointed. I enclose a photograph to alert other Coleopterists to the possibility of finding specimens in which the aberrant segments have become completely separated. Michael Darby



# Bembidion fluviatile and other river-edge carabids in N. Wales.

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Inspired by Bryan Formstone's talk on Denbighshire ground beetles at the 4 April 2009 Lancs & Chesh. Ent. Soc. exhibition, Wendy McCarthy and I stopped on the way home at the Afon Clwyd near Pont Dafydd to try to add to his dataset. The good news is: the sheep-trampled gravel-and-sand river edge immediately downstream of the bridge (SJ044748) produced the Nationally Notable Bembidion fluviatile and the inevitable Agonum albipes, plus the bonus of the scarab Onthophagus similis in the adjacent pasture; and Clivina collaris on a sandy beach 100 metres upstream of the bridge (SJ044746). This places a dot in a large gap in the distribution maps of *B*. fluviatile, C. collaris and O. similis, according to the NBN. And the bad news, at least for Bryan, is that when we checked the vice-county map, we found we had been collecting in Flintshire.

# Cheshire

# **Clive Washington and Rachel Hacking**

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Platyderus depressus (Fig. 1) is a Notable B species which Luff (2007) lists as being more frequent in the south of the UK. Northern records are comparatively rare. It was therefore with some surprise that one of us (C.W.) found it frequently in his garden in Appleton, North Cheshire. In 2009 it was the most commonly encountered small Carabid at that site, with over 20 individuals being caught, the majority at a single spot (under a discarded railway sleeper at the foot of a Chamaecyparis hedge).

A number of other records for *P. depressus* are held by rECOrd, the Cheshire biodiversity recording centre, although the Cheshire Carabid Recorder (R.H.) believes that the majority of these are not well substantiated or supported by vouchers. It has been found reliably in Wallasey and Manchester (D. Stenhouse Pers. Commun.) and appears to be synanthropic, as a large concentration of records on the NBN Gateway occur in and around London. The authors would be interested to receive any records for Cheshire, in order to ascertain its abundance in the area, and to determine if it is locally frequent as at the Appleton site.

Thanks are due to Mike Denton for checking the identities of the Bembidion and Clivina.



Occurrence of Platyderus depressus (Carabidae) in P. depressus is readily identifiable using Luff, but after practise it can be recognised simply from the size, pale colour, and characteristic pronotal shape.

> The authors would like to thank Don Stenhouse and Mike Denton for initially confirming the identification of specimens.

Platyderus depressus © Richard Wright

# British Coleopterists represented in the collections of the Bombay Natural History Society

I recently accompanied my younger son on a cricket tour to Mumbai and in a gap between games I visited the Bombay Natural History Society. Five of the original founders in 1883 were British and the Society's prestigious Journal contains numerous references to British Coleopterists, so I was keen to see the collection and gather information for my Biographical Dictionary.

Because the Society advertises itself as one of the largest non-Governmental organisations in India engaged in conservation and biodiversity research, I anticipated something similar to a British provincial museum or university. Several staff care for the beetles, and were very helpful, but they had almost no entomological knowledge and standards of curatorship are very different from those in the UK. All the beetles are kept higglety piggedly in old wooden store boxes. A Register of the collection was started a few years ago but is no more than a manuscript copy of the labels in the drawers. I saw no microscopes. Air conditioning was installed in the large Victorian building with a grant from central government, but is not turned on because the Society can't afford the electricity bill.

On the plus side my expectation of finding only a scattering of British names proved quite wrong, the vast majority were from British collectors. Most surprising of all, however, was that only a handful dated from after Independence in 1947, and most were from 1907-1920. There was no evidence at all of any recent interest in Beetles and many families were not represented, particularly those comprising smaller specimens, although some of these holes could have been filled quickly by a visit to the local Sanjay Gandhi Nature Reserve.

Knowing that two Czech entomologists had been jailed in 2008 for collecting without permits, I made strenuous efforts before leaving the UK to obtain permissions to collect in the Reserve. These included offering to donate



specimens to the Society. Initially I received an enthusiastic response, but final approaches to the Chief Wildlife Warden were met with a wall of silence. The problems, apparently, involve the Indian Wildlife Act of 1972, the Biological Diversity Act of 2002, and concerns about bio-piracy (although these don't explain the earlier lack of specimens). How the Society is able to carry out the research it proudly boasts without collecting remains a mystery.

A randomly chosen selection of drawers produced the following names:

H.E.Andrews, G.J.Arrow, M.W.Bell, E.C.Beeson, T.R.Bell, G.E.Boyd, P.Briscoe, N.S.Brodie, B.S.Carter, H.Chippendale, Maj. F.P.Connor, W.D.Cumming, C.H.Dracott, H.R.Fagan, Lt. R.Francis, E.B.Frederick, J.Gabriel, J.C.M.Gardner, F. Gleadow, P.F.Gomes, E.E.Green, C.D.Gregson, E. Henricks, A.R.Hughes, J.Japson, J.Johnson, L. Harrison, W. Hewit, Capt. G.G.Jolly, Col. Kennion, N.B.Kinnear, L.A.Lampard, P.M.R.Leonard, W.M.Logan-Home, A.G.Lyell, Col. Manners-Smith, C.M.McCann, R. McMullen, Maj. Mayor, L.E.Middleton, W.S.Millard, L. Newcome, L. Newton, O'Brien, R.E.Parsons, Capt. W. Patton, Capt. S. Pershouse, Lt. Philby, S.H.Prater, C. Rodgers, S.K.Rodgers, G.Rose, W.H.Rowson, P.M.Sanderson, I.C.Shortridge, A.K.Small, F.H.S.Stone, F.E.Venning, Maj. Ward, Col. C.H.Ward, Mr Wells.

Specimens were collected from all over India as well as Ceylon, Burma, Singapore, Shanghai, Mesopotamia and Mauritius.

I thank Mr Ninod T. Patil and his staff for their kindness and courtesy in allowing me to study the collections about which they care passionately.

Michael Darby 25 March 2010



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# Scarab dung beetles (Scarabaeidae and Geotrupidae) on Great Orme, VC 49, including Aphodius conspurcatus

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In 2001 I spent two days searching for dung beetles on Great Orme, Llandudno (SH78, VC 49), hoping to add to the meagre total of two scarabs previously recorded according to the Countryside Council for Wales' data: *Onthophagus joannae* in 1929 by F.H. Day and 1996 by JHB; *Aphodius sphacelatus* in 1991 by M.S. Parsons. Such a large block of unimproved, permanently grazed, well drained, lowland calcareous grassland seemed likely to hold a rich dung-beetle fauna. Unfortunately, 2001 was Foot and Mouth year: no sheep were turned out on to the unenclosed turf, so the only dung was from goats, rabbits and dogs. The last was the most obvious but was not closely examined. Only three species were found, in goat dung (*O. joannae, A. ater* and *A. contaminatus*), bringing the scarab dung beetle total to four species.

During irregular visits since 2001 I have added *Typhaeus typhoeus* (2008), *Aphodius prodromus* (2009) and most recently, 7 November 2009, a single *Aphodius* 

### **Beginners' Guide The British species of** *Agriotes* (Elateridae) Richard Wright

Most coleopterists quickly learn to recognise the commoner species of click beetles on sight. However, life is not so easy for the beginner. There are no recent keys to the British fauna, and formal keys through subfamily, tribe and genus tend to use rather obscure characters, particularly of the underside, which are scarcely necessary for the practical identification of British species.

Among the commonest click beetles are the species of *Agriotes*, 5 of our 6 species being often very abundant, at least in England and Wales. The species of *Agriotes* can be distinguished by:

- claws simple, not pectinate
- antennae slender, joint 2 longer than 3, as long as or longer than 4
- pubescent scutellum

A. acuminatus and A. pallidulus are of quite different shape from the other species. However, they can quite easily be mistaken for two similar species, *Dalopius* marginatus and Adrastus pallens.

Adrastus pallens. and the rare A. rachifer, have:

- pectinate claws
- scutellum shining, not pubescent

*conspurcatus* from fresh pony dung in the recently declared Maes-y-facrell nature reserve, SH770829.

The database of North Wales invertebrate records compiled by the late Joan Morgan at Bangor University includes an undated record (probably pre-1960) of *A. conspurcatus* from Llandudno. The only additional information is the comment "marsh", which makes it unlikely to have come from the rather arid Great Orme. More likely it was from the low-lying land around Llandudno which is now completely engulfed by buildings, roads and golf courses. Thus it is satisfying that this Nationally Notable beetle (Hyman & Parsons 1992) can still be found in this area.

I am grateful to Dr Mike Howe, CCW, for access to CCW data, including Joan Morgan's dataset.

### Reference

Hyman, P.S., & Parsons, M.S. 1992. A review of the scarce and threatened Coleoptera of Great Britain. Part 1. Peterborough, JNCC. (UK Nature Conservation, no. 3.)

Dalopius marginatus has::

- joint 2 of antennae much shorter than 4
- pronotum much more densely punctured

Colour can be variable in some species of *Agriotes* and the pictures on the next page should be seen only as a guide to shape and general appearance.

A. acuminatus and A. pallidulus reach their peak of abundance in late spring and early summer, May and June, and are rarely found before April or after July. They appear to be active higher in the vegetation and are most often found by sweeping.

The other species appear to generally stay lower down. They are quite often swept, but are also commonly found in pitfall traps. While their peak of abundance is in late spring and early summer, they may also be found in smaller numbers at other times of the year.

The key characters are rather comparative. However, in most parts of the country in the appropriate season, the beginner should be able to easily collect a good number of specimens of the five commoner species (excluding *A. sordidus*), together with *Adrastus pallens* and *Dalopius marginatus*. As with so many beetles, the differences become clear once one has a number of specimens for comparison!

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### Key to Agriotes

1. More slender and elongate species. Elytra normally reddish with area along suture darker. Pubescence denser and more erect.

Broader species. Colour from pale to almost black, not normally as above. Pubescence more sparse and recumbent. 3

2. Larger species, 6.5 - 7.5 mm. Elytral striae with rather fine punctures. acuminatus

Smaller species, 3.5 - 6mm. Elytral striae with coarser pallidulus punctures.

3. Elytra with distinct pattern of longitudinal alternating dark and light lines (take care with specimens preserved in fluid in which the pattern may not be visible until the specimen is dried out) lineatus

Elytra without pattern, more or less uniform

4. Generally smaller species (6.5 - 8 mm). Pronotum less densely punctured. Prosternum (underside) finely and sparsely punctured in the middle. Pronotum distinctly longer than wide. sputator

Generally larger species (7.5 - 11 mm). Pronotum more coarsely punctured. Prosternum densely punctured throughout. Pronotum shorter and wider. 5

5. Broad species, elytra about twice as long as together wide. Elytral striae fine. Pronotum wider than long, very convex. obscurus

More elongate species, elytra more than twice as long as wide. Elytral striae deeper and with dense punctures. Pronotum more elongate. sordidus

(A. obscurus is a very common species and one is likely to collect very many specimens before coming across the rare A. sordidus which has mainly been recorded from southern coastal regions.)



A. acuminatus

2

4



A. lineatus

A. sputator



A. obscurus

A. sordidus