

## D.J. & D. Henshaw

stock a large range of the Special Stainless Steel  
**HENSHAW-KE**

entomological pins

(in lengths of 10, 12.5, 15, 27, 38 and 40mm)  
at very competitive prices

and

other equipment for the entomologist, including  
Genitalia tubing, plastic and glass tubes and containers,  
mounting media, tweezers, scissors and chemicals.

Come and visit us on the

**MARRIS HOUSE NETS' STAND** at:

The Amateur Entomologists' Society Annual Exhibition

Kempton Park Racecourse, Sunbury, Middlesex

on Saturday 7th October, 1995, and

The Leicester Entomological Fair

Granby Halls Leisure Centre, Leicester

on Sundays the 26th March, and 3rd December, 1995

Please write, telephone or FAX for our lists to:

**34, Rounton Road**

**Waltham Abbey**

**Essex EN9 3AR**

**FAX/Answerphone 0992 717663**

We are also agents for the supply of North Korean Insects,  
particularly Coleoptera. Write for details.

January 1995

ISSN 0965-5794

Volume 3, Part 3

## THE COLEOPTERIST

### CONTENTS

Editorial	65
<i>Cassida nebulosa</i> L. (Chrysomelidae) in Somerset. I. S. Menzies	66
<i>Cassida nebulosa</i> L. (Chrysomelidae) in South Somerset. A. G. Duff	66
<i>Cassida nebulosa</i> L. (Chrysomelidae) in Hampshire. A. J. W. Allen	67
<i>Cassida nebulosa</i> L. (Chrysomelidae) from two sites in East Anglia. M. J. Collier	67
<i>Cassida nebulosa</i> L. (Chrysomelidae) reared from larvae. J. A. Owen	68
The distribution and ecology of <i>Cassida nebulosa</i> L. (Chrysomelidae) in Norfolk and Suffolk Breckland in 1994. B. C. Eversham	70
Three species of Coleoptera new to Ireland. J. A. Owen	77
Habitat records of <i>Amischa</i> C. G. Thomson (Staphylinidae: Aleocharinae) from Ireland. J. A. Good	77
<i>Geodromicus nigrita</i> (Müller, P. W. J.) (Staphylinidae): a second Irish record. T. D. Harrison	80
A new locality for <i>Hydnobius spinipes</i> (Gyllenhal) (Leiodidae) in Derbyshire. K. N. A. Alexander	80
Subscriber's notice	81
<i>Copris lunaris</i> (L.) (Scarabaeidae) in Sussex. P. J. Hodge	82
<i>Epuraea distincta</i> Grimmer (Nitidulidae), a second Kent occurrence. N. F. Heal	83
Rose chafer, <i>Cetonia aurata</i> (L.) (Scarabaeidae) in North Wales. M. Joan Morgan	84
<i>Stenagostus rhombeus</i> (Olivier) (Elateridae) in north-west England. K. N. A. Alexander	85
Records of Curculionidea from Cumbria and Dumfriesshire in 1994. R. W. J. Read	86
<i>Gibbium aequinoctiale</i> Boieldieu (Ptinidae) in coal mines: further information.	87
Review - Glow-worms by John Tyler	91
Journal contents (Coleoptera). M. J. Collier	
<i>British Journal of Entomology and Natural History</i> , 7(3 & 4)	92
<i>Entomologist</i> , 113(1-4)	93
<i>Entomologist's Gazette</i> , 45(4)	93
<i>Entomologist's Monthly Magazine</i> , 130 (Sept-Dec)	93
<i>Entomologist's Record and Journal of Variation</i> , 106 (9-12)	94

Author index, Contents & Species index to *Coleopterist*, 3(1-3)

Editor: H. MENDEL

## THE COLEOPTERIST

**Editor (this issue)**

H. Mendel

**Editor (from volume 4 onwards)**

Dr A. G. Duff, 2 Weavers Court, Frome, Somerset BA11 4EJ.

### Editorial Panel

Dr. K. N. A. Alexander M. J. Collier J. Cooter  
Dr. A. G. Duff P. J. Hodge Dr R. S. Key Prof. J. A. Owen

*Copy to the editor for the following issue by:  
1st March, 1st July, 1st October*

### Where to write

**Subscription details (cheques payable to 'The Coleopterist'), back issues, non-arrival of journal, changes of address**  
- The Hon. Treasurer, P. J. Hodge, 8 Harvard Road, Ringmer, Lewes, East Sussex BN8 5HJ.

**Articles for publication (2 copies), books for review, trade advertisements**  
- The Editor, Dr A. G. Duff, 2 Weavers Court, Frome, Somerset BA11 4EJ.

**Wants, Sales & Exchanges, scientific papers to be noticed**  
- M. J. Collier, 67 Church Lane, Homersfield, Harleston, Norfolk IP20 0EU.

### Subscription rate for 1995

Ordinary (Individual)	- Britain and other E.E.C countries	£7.00
	- Other countries	£10.00
Corporate (libraries, institutions, businesses, etc.)		£10.00
	(payment in £ sterling)	

© The Coleopterist

The copyright of the figures remains with the artists.

### EDITORIAL

My editorial in *Coleopterist* 3(1) explained the need to take steps to secure the long-term future of our journal. With that in mind, the editorial panel and other interested parties met in the Council Room of the Royal Entomological Society on Saturday 22nd October 1994. In attendance, in addition to myself, were Dr K. N. A. Alexander, Dr R. G. Booth, Mr M. J. Collier, Mr J. Cooter, Dr A. G. Duff, Mr P. J. Hodge, Mr D. A. Lott, Professor M. G. Morris and Professor J. A. Owen.

The Hon. Treasurer presented his Financial Statement showing a healthy balance to date of £1139-09, sufficient to allow for development without having to increase the subscription for 1995. The principal item on the agenda was to decide what form the future management of *The Coleopterist* should take. The choice was between a board of governors providing overall direction and control of the journal, at arm's length, and a formally constituted society with a much wider remit than just journal production. Following discussion, a vote was taken and it was decided to opt for the board of governors. The discussion was constructive and good-natured, and even though the vote was very close, all parties pulled behind the final decision. To allow for the possibility of change in the future, it was agreed that the board of governors and other interested parties should reconvene in three years time (Autumn/Winter, 1997) to judge the success of the chosen management strategy and reconsider any possible benefits (or otherwise) from forming a society.

Professor Mike Morris was then invited to chair the new board of governors and, with the support of those present, graciously accepted. A secretary and three ordinary board members will need to be appointed and it was left to Mike to approach suitable candidates who had the long-term interests of *The Coleopterist* at heart.

As previously announced, I stand down as editor now that this issue is published. Dr Andrew Duff, perhaps best known for his *Beetles of Somerset*, takes over, under the general direction of the board of governors. To give the new editor the freedom to enlist his own editorial team, as necessary, the existing editorial panel must be dissolved. Please, in future, send your papers and notes to:-

**Dr A. G. Duff, 2 Weavers Court, Frome, Somerset BA11 4EJ.**

I welcome this last opportunity as editor to thank each and every member of the editorial panel, and Peter Hodge as Hon. Treasurer, for unstinting support during my three year term. Special thanks to John Owen for preparing the indexes. Thanks also to Carol Green for her help with the word processing and Martin Sanford, of the Suffolk Biological Records Centre, for his support in producing the journal. I wish Andrew Duff every success in further developing *The Coleopterist* and hope that he enjoys his time in office as much as I have done.

**CASSIDA NEBULOSA L. (CHRYSOMELIDAE) IN SOMERSET****I. S. Menzies**

Two examples of this tortoise beetle (1 male, 1 female) were obtained while collecting on Walton Heath, near Meare, Somerset (ST394453) on 18th July 1989. Both the beetles were swept simultaneously, on a hot sunny morning, from herbage growing on a stretch of peat that had been cut during the previous 18 months. It seemed likely that they came from a large clump of a *Chenopodium* sp. (probably *C. murale* L., nettle-leaved goosefoot) which had been in that particular 'run'. The species was sought, unsuccessfully, in the same area during late May the next year (1990).

I. S. Menzies, Villiers Lodge, 1 Cranes Park, Surbiton, Surrey KT5 8AB.

**CASSIDA NEBULOSA L. (CHRYSOMELIDAE) IN SOUTH SOMERSET****Andrew Duff**

Talk about beginner's luck. My five-year-old daughter, Lucy, has a 'bug box' in which she saves for my inspection any interesting small creatures that she finds. Usually these turn out to be small spiders or woodlice but, on 19th August 1994, she showed me a beetle that she'd found while helping to prepare some organic spinach that had been bought from a local greengrocer. You may imagine my astonishment when it proved to be *Cassida nebulosa* L., a nationally rare and little-known species, rated RDB I (Hyman, 1992). The spinach was readily traced to Merrick's Organic Farm near Langport (ST409260) where, on the evening of 24th August 1994, I found another specimen by sweeping *Chenopodium album* L. (fat-hen). I could find none on the spinach or other crops and it is likely that fat-hen was the main host at this site. This constitutes only the third Somerset record and a new vice-county record for South Somerset (VC 5) (Duff, 1993). As Merrick's Farm is run on organic lines there is every chance that this population will persist and the farmer seemed quite interested to have such a notable insect on his land (although he would also like to have less fat-hen). It is certainly evidence of the benefit of organic farming techniques for helping to conserve some of our rarer insects associated with arable weeds.

**Acknowledgements**

My thanks to Simon and Jane Brook for affording me access to their field, and of course to Lucy Duff for discovering the first specimen.

**References**

- DUFF, A. G. 1993. *Beetles of Somerset*. Taunton: Somerset Archaeological & Natural History Society.
- HYMAN, P. S. (revised PARSONS, M. S.), 1992. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 1. UK Nature Conservation: 3. Peterborough: UK Joint Nature Conservation Committee.
- A. G. Duff, 2 Weavers Court, Frome, Somerset BA11 4EJ.

**CASSIDA NEBULOSA L. (CHRYSOMELIDAE) IN HAMPSHIRE****Tony Allen**

I swept a single example of this species near Fordingbridge (SU11) on 19th June 1994. It was found on a small patch of *Chenopodium* sp. (goosefoot) growing on a recently disturbed roadside verge. My friend John Owen visited the spot a few days later but failed to find any more specimens.

A. J. W. Allen

56 Windsor Way, Aldershot, Fordingbridge, Hants. SP6 3BN.

**CASSIDA NEBULOSA L. (CHRYSOMELIDAE) FROM TWO SITES IN EAST ANGLIA****Martin Collier**

On 7th June 1994 a single specimen of *Cassida nebulosa* was found in one of a series of pitfall traps set at Cranwich Heath, West Norfolk (TL7792): the traps had previously been emptied on the 15th May 1994. The traps were being used to sample the carabid fauna and thereby help monitor the effectiveness of five different management regimes being operated by Forest Enterprise, in their attempt to re-create an area of grassland heath after the clear-felling of a coniferous plantation. Subsequent hand searching and sweeping failed to reveal any further specimens and the suspected foodplant, *Chenopodium* sp. (goosefoot), could not be found. No further specimens were found in the pitfall traps, which were finally removed on 13th November 1994.

A very sandy roadside verge near Wangford, West Suffolk (TL7583) attracted the attention of my friend John Owen and myself on the 3rd July 1994 because of the healthy growth of *Descurainia sophia* (L.) Webb ex Prantl (flixweed) it supported. Closer examination also revealed a colony of *Atriplex patula* L. (common orache) and several specimens of *C. nebulosa* were quickly detected. The *Descurainia* failed to yield the hoped for *Psylliodes sophiae* Heikertinger, although the very local weevil *Ceutorhynchus pulvinatus* Gyllenhal was quite abundant. A number of rare carabids have also been found at this small but interesting site which hopefully has been afforded some measure of protection, having been designated as a 'protected roadside verge' by the Suffolk Wildlife Trust/Suffolk County Council.

M. J. Collier

67 Church Lane, Homersfield, Harleston, Norfolk IP20 0EU.



**CASSIDA NEBULOSA L. (CHRYSOMELIDAE) REARED FROM LARVAE****John Owen**

On 3rd July 1994, my friend Martin Collier and I came across a manure heap near Mildenhall Warren (TL 77), Suffolk, on which was growing a strong colony of *Chenopodium album* L. (fat-hen). The leaves of some of the plants were intensively perforated and, from these, I swept a number of *Cassida* larvae which were retained. They varied in size but were all less than half grown. They were supplied with leaves of *C. album*, initially in the form of plants collected at the site. Within four days, all the larger larvae proved parasitised. The smaller larvae, however, continued to grow and within a week most had pupated, eventually producing adults of *C. nebulosa*.

The larvae of *C. nebulosa* are of typical cassidine shape (van Emden, 1962). When fully grown, they are about 6 mm long, excluding the apical spines, and widest (about 3.5 mm) about 1/3 back from the head. They are bright green in colour with an obvious paler streak on the dorsum on either side of the midline. The two brown apical spines are about 2.5 mm long and form, in life, a fork bent forwards over the rear part of the larvae. As noted by van Emden (1962), this fork normally carries only exuviae which is in contrast to the larvae of many *Cassida* species which use the terminal fork to carry large masses of excrement. Donisthorpe (1922) reported that a single larva which he presumed to be of *C. nebulosa* carried quantities of excrement on its fork but the larva was not reared and may not have been that species. All of the larvae which escaped being parasitised, successfully pupated.

The pupae are about 5.5 mm in length, bright green with a pattern of small creamy areas showing through the cuticle on the dorsum and corresponding to the lighter streaks on the dorsum of the larvae. The most prominent of these light patches are two at the base of the pronotum and two on the 1st abdominal segment. There is a pair of less prominent light areas on the dorsum of each of the other abdominal segments, forming as a whole a streak on each side of the midline. The pupal pronotum is in the form of a wide semicircle with rounded hind angles and is truncated briefly at the front. The abdomen immediately behind the pronotum is much narrower than the pronotum but gradually increases in width to a maximum of about 3 mm about 1/3 back from the head. The margin of the pronotum is fringed with transparent 'fingers' and the sides of abdominal segments 2 - 6 are furnished at each side with a small, forward-pointing, transparent 'wing'.

With one exception, all of the pupae gave rise to adults which emerged about a week after pupation. About 30 were obtained altogether. There is no obvious darkening within the pupa prior to emergence and the vacated pupal case is transparent and colourless. The cause of death in the exception was not determined.

Immediately on emerging, the adult is bright green except for two cream-coloured spots at the base of the pronotum. Within hours, however, dark spots start to appear on the green background of the elytra and these become black in the next few days.

The overall greenish appearance of the insect is gradually replaced by the typical olive colour of mature adults over the ensuing two weeks and the white spots at the base of the pronotum gradually disappear.

Within a few days of emerging, the adults started eating leaves of *C. album* as well as leaves of *Beta vulgaris* ssp. *vulgaris* (culinary beetroot), another member of the Chenopodiaceae. During their first two weeks, adults ate vigorously but then became quieter, most of the time hiding in folds of leaves as if seeking a place to hibernate. Mating was observed on a few occasions when the adults were 2 - 3 weeks old.

The bodies of parasitised larvae comprised the hardened, segmented skin of the larvae within which the parasitoids developed. These bodies were about 4 mm long, excluding the apical spines, by about 2.5 mm wide and were attached loosely to stems of the foodplant. Some were noticed in the field on stems of the plants from which the larvae were swept. Adult parasitoids, subsequently identified as *Holcotetrastichus rhosaces* (Walker) (Hymenoptera: Eulophidae), emerged through one or two irregular holes on the dorsum of the larval shell about 10 days after the larvae became immobilised. An accurate count of the numbers which emerged from individual parasitised larvae was not made but the total number of parasitoids obtained indicated an average of about eight. The dark colour of the parasitised larvae made them quite conspicuous on the plant in contrast to the cryptic coloration of beetle larvae and pupae. This conceivably could be of advantage to the beetle in making the bodies in which the parasitoids were developing more obvious to predators such as birds.

*H. rhosaces* is known as a parasitoid of several *Cassida* spp., including *nebulosa* (Domenichini, 1966; Graham, 1991; Cox, 1994). The larval population at the site was clearly heavily parasitised. It may be that adults were successfully reared from larvae collected at this site only because the smaller ones were removed from their natural environment before they were large enough to be attacked. Obviously, parasitism of this degree will have a significant effect on populations and may well account for the rarity of *C. nebulosa*.

**Acknowledgements**

My thanks are due to Martin Collier for providing transport on my visit to the Breck, to Dr J. LaSalle and Dr M. L. Cox, of CAB International Institute of Entomology, for identifying the parasitoids and providing information on them and to the Enquiry Unit, Royal Botanic Gardens, Kew for identifying as *C. album* the plant on which the larvae were found.

**References**

- COX, M. L., 1994. The Hymenoptera and Diptera parasitoids of Chrysomelidae. In Jolivet, P. H., Cox, M. L. & Petitpierre E. (eds.), *Novel aspects of the biology of Chrysomelidae* (pp. 419-467). Netherlands: Kluwer Academic Publishers.



- DOMENICHINI, G., 1966. *Index of palaearctic Tetrastichinae*. In: DELUCCHI, V. & REMAUDIERE, G. (eds.), *Index of entomophagous insects*. Paris: Le Francois.
- DONISTHORPE, H. St. J. K., 1922. A few notes on Coleoptera in 1922. *Entomologist's mon. Mag.* 58: 52-55.
- GRAHAM, M. R. de V., 1991. A reclassification of the European Tetrastichinae (Hymenoptera: Eulophidae): revision of the remaining genera. *Mem. Amer. entomological Inst.*, 49: 1-322.
- VAN EMDEN, H. F., 1962. Key to species of British Cassidinae larvae (Col., Chrysomelidae). *Entomologist's mon. Mag.* 98: 33-36.
- John Owen, 8 Kingsdown Road, Epsom, Surrey KT17 3PU.

# THE DISTRIBUTION AND ECOLOGY OF *CASSIDA NEBULOSA* L. (CHRYSOMELIDAE) IN NORFOLK AND SUFFOLK BRECKLAND IN 1994

Brian C. Eversham

## Introduction

*Cassida nebulosa* is a small tortoise beetle which is golden-bronze with blackish speckles when mature; the greenish individual illustrated in Harde (1984) may be somewhat teneral. Although not listed in the 'Insects Red Data Book' (Shirt, 1987), it was later considered to merit inclusion by Hyman (1992), although its precise category is 'Indeterminate' due to insufficient information.

Morris (1989) reported four records of *C. nebulosa*, one specimen from Icklingham, West Suffolk (TL77, 28.v.1962) and three records from Dorset: a roadside at Coombe Keynes (SY88, 20.viii.1981 and 27.viii.1981), abundant; Lydlinch Common (ST71, 4.ix.1981), several on *Chenopodium* sp. (goosefoot); and Gore Heath (SY99, 18.vii.1985), one swept from ruderals in a firebreak. At the time, these were the only post-1950 British records.

In the 1940s, several records of *C. nebulosa* were published. Turk (1942) found several in frass in an old, decayed tree stump at Menabilly, Fowey, Cornwall, on 12th July 1941, and suggested that exceptionally bad weather might have forced the beetles back into a hibernating site. Dinnage (1949) took over 60 specimens on *Chenopodium* sp. at Stoughton, near Guildford, in Surrey. Buck (1949) reported three specimens from Esher Common, Surrey, one beaten from pine, and two swept from scrub birch, heather and young bracken. Allen (1950) took a single specimen in a sandpit near Oxshott, Surrey, in May 1949, and found the species 'in plenty...by sweeping goosefoot and beet near Burwell, Cambs., toward the end of June, 1947, where Mr. Donisthorpe had taken it freely during the previous September'. Interestingly, Allen (1950) remarks that *C. nebulosa* had 'been on the increase in the last decade, and is now no longer the rarity it once was, though always very local; its typical habitat is waste land and the borders of fields, and I believe it to be confined to Chenopodiaceae'.

Given this background, I was pleased to find several adults, and larvae of *C. nebulosa* in abundance at a roadside verge near Lakenheath, Suffolk (TL7583), on 13th June 1994. I collected 2 adults and 30 larvae, which I subsequently reared (see below). On a second visit to the site on 3rd July 1994, *C. nebulosa* was extremely abundant; over 200 larvae and 5 adults were swept in 10 minutes from mixed Chenopodiaceae. In late July and August adults were even more abundant, one minute's sweeping regularly producing 30-40 specimens, along 200m of road verge.

## Distribution of *Cassida nebulosa*

Having established that a large breeding population was present at one site, I examined each patch of Chenopodiaceae (goosefoot) and related plant species that I encountered in Breckland during the summer. Feeding damage usually revealed the presence of the species. If adults or larvae could not be located, larval or pupal exuviae could usually be found in a few minutes' searching. These could be identified using the keys provided by van Emden (1962).

During July, August and September 1994, I found *C. nebulosa* at 22 sites, in eight 10km squares and two vice-counties, West Suffolk (26) and West Norfolk (28). Seven different foodplants were involved. Most sites were visited several times in an attempt to establish the extent to which each foodplant was being used. Table 1 gives the localities, an indication of the habitat at each site, the potential host-plants present, and whether parasitised larvae/pupae were found.

In Breckland, about half the stands of suitable foodplant which were examined supported *C. nebulosa*. Several sites north of Swaffham were searched without success. The accompanying simplified map shows the location of sampling sites for *C. nebulosa*, and of stands of Chenopodiaceae which did not produce the beetle. Several large patches of *Chenopodium album* and *Atriplex patula* in the counties of Cambridgeshire, Huntingdonshire and Northamptonshire were also examined, without success.

## Field observations on foodplants

The recent literature gives a range of Chenopodiaceae as the main foodplants of *C. nebulosa*, though Harde (1984) hints at a broader choice of hosts by noting that the beetles 'sometimes are pests in beet and turnip fields'. I found the beetle on seven plant species which might be potential hosts.

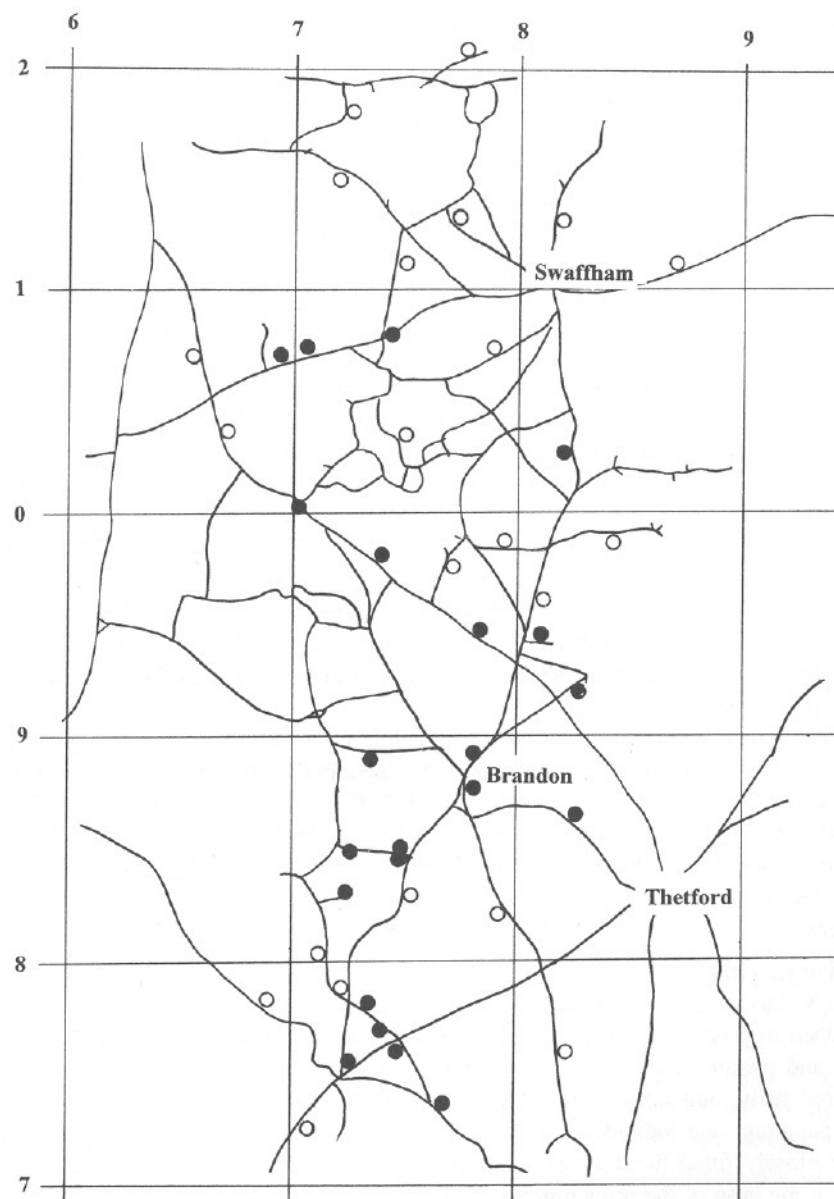
Because of the difficulty establishing the nature of the association between a phytophagous insect and the plants on which it occurs (Ward, 1988), I recorded occurrences of adults, larvae and pupae separately in the field, and also noted the extent of feeding damage.

**Table 1.** Sites for *Cassida nebulosa* in Breckland, noting habitat, potential host-plants and whether or not parasitised larvae/pupae were found.

Chenopodiaceae: *Atriplex patula* L. (common orache), *Atriplex littoralis* L. (grass-leaved orache), *Atriplex prostrata* Boucher ex DC (= *hastata* auctt.) (spear-leaved orache), *Chenopodium album* L. (fat-hen), *Chenopodium rubrum* L. (red goosefoot) and *Beta vulgaris* ssp. *vulgaris* L. (sugar beet)

Amaranthaceae: *Amaranthus retroflexus* L. (common amaranth)

N.G.R.	VC	Site	Host-plant	Parasitised (P)
TL7274	26	Barton Mills, picnic site	<i>A. patula</i>	
TL7377	26	Foxhole Heath, roadside	<i>C. album</i> , <i>A. retroflexus</i>	P
TL7476	26	How Hill, beet field	<i>C. album</i> , <i>A. retroflexus</i>	
TL7575	26	A11/B1112, beet field	<i>C. album</i> , <i>A. patula</i> , <i>A. retroflexus</i> , <i>B. vulgaris</i>	P
TL7772	26	Icklingham, roadside	<i>C. album</i>	P
TL7282	26	Maidscross Hill, roadside	<i>A. patula</i> , <i>C. rubrum</i>	P
TL7384	26	Wangford Fen, roadside	<i>C. album</i>	
TL7488	28	Hockwold, roadside	<i>C. album</i> , <i>A. littoralis</i>	P
TL7583	26	Lakenheath, roadside	<i>C. album</i> , <i>A. patula</i>	
TL7583	26	Wangford, set-aside	<i>C. album</i>	
TL7785	26	Brandon industrial estate	<i>C. album</i> , <i>C. rubrum</i>	P
TL7989	28	Emily's Wood, picnic site	<i>A. patula</i>	
TL7597	28	Northwold, beet field	<i>C. album</i>	P
TL7894	28	Cranwich, beet field	<i>A. prostrata</i> , <i>C. album</i>	P
TL8286	26	Thetford Lodge Fm, roadside	<i>C. album</i>	P
TL8194	28	Lynford Hall, roadside	<i>C. album</i>	
TL8392	28	West Tofts, roadside	<i>C. album</i>	
TF6906	28	Fincham Hall, roadside	<i>C. album</i>	P
TF7000	28	Stoke Ferry, beet field	<i>C. album</i> , <i>A. littoralis</i>	P
TF7006	28	Broadland Farm, roadside	<i>C. album</i>	P
TF7408	28	Devil's Dyke, roadside	<i>C. album</i>	
TF8202	28	Rowley Corner, roadside	<i>C. album</i>	P



Map showing location of sites for *Cassida nebulosa* (●) and sites where suitable foodplants were examined but no *C. nebulosa* were found (○).

The following summarises my field observations.

Plant species	Evidence of feeding
<i>Atriplex patula</i>	Adults and larvae observed feeding; adults and larvae found in large numbers; very extensive feeding damage; many pupae found
<i>Atriplex littoralis</i>	A few adults found; slight feeding damage
<i>Atriplex prostrata</i>	Several adults and a few larvae found; slight feeding damage
<i>Amaranthus retroflexus</i>	Adults observed feeding; slight feeding damage
<i>Beta vulgaris</i>	A few adults found; no feeding damage
<i>Chenopodium album</i>	Adults and larvae observed feeding in large numbers; very extensive feeding damage; many pupae found
<i>Chenopodium rubrum</i>	Adults and larvae found; extensive feeding damage; a few pupae

Most of these plant species are ruderals which often grow closely together. *Chenopodium album* was the commonest chenopod in Breckland in 1994, and *Atriplex patula* was also abundant at many sites, so the strong association with these plants may be partly an effect of availability of plants for sampling. The patch of *Atriplex littoralis* which contained *C. nebulosa* was mixed with abundant *Chenopodium album*. Likewise, the *Amaranthus* and *Beta* were growing among *Chenopodium album* and/or *Atriplex patula*, so it is possible that the adult beetles had strayed. *Beta* is a member of the Chenopodiaceae, and has been recorded as a foodplant of *C. nebulosa* previously. However, this appears to be the first record of *C. nebulosa* eating a member of the Amaranthaceae, a family close to the Chenopodiaceae.

In addition to the above possible hosts, adult *C. nebulosa* were swept from the following plants which were growing near chenopods; there is no evidence that they were being eaten: *Descurainia sophia* (L.) Webb ex Prantl (flixweed), *Sisymbrium altissimum* L. (tall rocket), *Sinapis arvensis* L. (charlock), *Medicago sativa* L. (lucerne), *Anthriscus caucalis* M. Bieb. (bur parsley), *Ligustrum vulgare* L. (wild privet), *Arrhenatherum elatius* (L.) P. Beauv. ex J. S. & C. Presl. (false oat-grass).

#### Captive rearing

The 30 larvae collected on 13th June 1994 were mostly small (second-instar). They continued to feed on *Chenopodium album* in captivity, grew rapidly, shed their skin once, and pupated over the following three weeks. Any freshly formed pupae were removed daily, and tubed individually. Most adults emerged between 4 and 7 days after pupating, one individual spending no more than 2 days as a pupa. Larvae and pupae closely fitted the description given by Owen (1995). The two prominent pale spots at the base of the pronotum of newly emerged adults remained visible for 15-25 days after emergence. The adults did not develop the bronze coloration until 30-40 days after emergence. Although the captive-reared adults were entirely normal in appearance, and behaved in the same way as teneral adults taken from the field, most

captive-reared beetles were somewhat smaller than wild-caught specimens: the following measurements are based on 10 specimens each.

Captive: 5.7-6.6 mm long, 4.3-4.8 mm wide, mean 6.2 x 4.5 mm.

Wild-caught: 6.1-7.4 mm long, 4.5-5.2 mm wide, mean 6.8 x 4.8 mm.

In captivity, in addition to the foodplants recorded in the field, adults and larvae fed voraciously on *Chenopodium polyspermum* L. (many-seeded goosefoot). If no other food was provided, adults, but not larvae, ate *Amaranthus retroflexus*. Neither adults nor larvae ate *Beta vulgaris* in captivity.

#### Parasitoid infection

Some larvae and pupae of *C. nebulosa* at most sites were killed by a parasitic eulophid wasp, believed to be *Holcotetrastichus rhusaces* (Walker), as reported by Owen (1995). Although accurate counts are not available, more parasitised than healthy larvae/pupae were found at several sites; at Thetford Lodge Farm, 16 larvae/pupae were found in total, all parasitised, and no adults were seen.

#### Discussion: the habitats and resurgence of *C. nebulosa*

There is too little information available to define the habitat requirements of *C. nebulosa* precisely. Its host-plants are abundant throughout Britain, but the beetle is not. All the sites where it was found in Breckland were on very well-drained, sandy soils. Most of the patches of *Chenopodium* and *Atriplex*, beyond the limits of Breckland, which produced negative results grew on heavier, clay soils. Over half the previous published records also appear to suggest an association with heathy locations. The Dorset records from the 1960s and 1970s were close to areas of sandy heathland and two of the three Surrey records from the 1940s were from heathland or a sand-pit. It seems almost certain that *C. nebulosa* is a long-established resident of Breckland. The Burwell records from the 1940s were just a few miles to the west of Breckland, and Morris's 1962 record is from Icklingham, a locality where the species was abundant in 1994.

The fluctuating status of *C. nebulosa* calls for comment. It was abundant at sites over a large part of Breckland in 1994 and there have been several scattered records elsewhere in the southern half of England in recent years. Although ruderal vegetation on roadsides and among crops is not well-sampled by coleopterists, it seems unlikely that *C. nebulosa* would be overlooked for very long at present population levels. Its independent discovery by the author and others, within a few weeks, suggests strongly that it has increased recently. Several of the sites in the Wangford-Lakenheath areas, where *C. nebulosa* was very abundant in 1994, had been sampled by the author on several occasions in 1993 without finding the species. Allen (1950) observed that the species had become much more abundant in the 1940s, but there were only three records in the following three decades.



The high level of parasitism observed in many populations of *C. nebulosa* suggests a mechanism which could cause rapid population crashes (as have been documented in *Celastrina argiolus* (L.) (holly blue butterfly), for instance. It will be instructive to follow the fate of the Breckland populations in future years.

#### Acknowledgements

Mark Telfer helped considerably with fieldwork and provided helpful and stimulating discussion throughout the year. I would also like to thank Henry Arnold and Stuart Green for help with fieldwork. Henry also supplied foodplants for captive stock. Chris Preston confirmed certain plant identifications.

#### References

- ALLEN, A. A., 1950. *Cassida nebulosa* L. (Col., Chrysomelidae) in Surrey and Cambs. *Entomologist's mon. Mag.*, **86**: 43
- BUCK, F. D., 1949. *Dromius angustatus* Brullé (Col., Carabidae) and *Cassida nebulosa* (Col., Chrysomelidae) on Esher Common, Surrey. *Entomologist's mon. Mag.*, **85**: 190.
- DINNAGE, H., 1949. *Cassida nebulosa* L. (Col., Chrysomelidae) and other Coleoptera in Surrey. *Entomologist's mon. Mag.*, **81**: 239.
- HARDE, K. W. (edited HAMMOND, P. M.), 1984. *A field guide in colour to beetles*. London: Octopus.
- HYMAN, P. S. (revised PARSONS, M. S.), 1992. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 1. UK Nature Conservation: 3. Peterborough: UK Joint Nature Conservation Committee.
- MORRIS, M. G., 1989. Some recent records of *Cassida nebulosa* L. (Col., Chrysomelidae). *Entomologist's mon. Mag.*, **125**: 168.
- OWEN, J. A., 1995. *Cassida nebulosa* L. (Chrysomelidae) reared from larvae. *Coleopterist*, **3**: 68-70.
- SHIRT, D. B. (ed.), 1987. *British red data books: 2. Insects*. Peterborough: Nature Conservancy Council.
- TURK, F. A., 1942. *Cassida nebulosa* L. (Col., Chrysomelidae) new to Cornwall. *Entomologist's mon. Mag.*, **78**: 72.
- VAN EMDEN, H. F., 1962. Key to species of British Cassidinae larvae (Col., Chrysomelidae). *Entomologist's mon. Mag.*, **98**: 33-36.
- WARD, L. K., 1988. The validity and interpretation of insect foodplant records. *Br. J. Ent. Nat. Hist.* **1**: 153-162.

Brian C. Eversham

Biological Records Centre, ITE Monks Wood, Abbots Ripton, Huntingdon, Cambs. PE17 2LS.

### THREE SPECIES OF COLEOPTERA NEW TO IRELAND

J. A. Owen

In May 1994, my wife and I visited various sites in the southern part of Ireland and came across the following species which have apparently not previously been found in Ireland (Anderson, Nash & O'Connor, 1994).

*Ptenidium intermedium* Wankowicz

Lough Avoher, Co. Clare R6374, 13.v.94. Two examples from reed debris. Recorded from England and southern Scotland (Joy, 1932).

*Dacryla fallax* (Kraatz)

Ballyvergan Marsh, Co. Cork X0876, 14.v.94. One example from reed debris. Recorded from southern England and Wales.

*Biblopectus spinosus* Raffray

Stradbally, Co. Kerry Q5914, 15.v.94. One example from reed debris. Recorded from England and Wales (Pearce, 1957).

#### Acknowledgements

My thanks are due to Dr J. Good and Mr J. Lavery for introducing me to some of the sites visited, to Mr C. Johnson for identifying the *Ptenidium* and to Mr A. A. Allen for checking the other species.

#### References

- ANDERSON, R. A., NASH, R. & O'CONNOR, J. P., 1994. Checklist of Irish Coleoptera. Unpublished ms.
- JOY, N. H., 1932. *A practical handbook of British beetles*. London: H. F. & G. Witherby.
- PEARCE, E. J., 1957. Coleoptera (Pselaphidae). *Handbooks for the identification of British insects*, **4**(9). Royal Entomological Society of London.
- J. A. Owen, 8 Kingsdown Road, Epsom, Surrey KT17 3PU.

### HABITAT RECORDS OF AMISCHA C. G. THOMSON (STAPHYLINIDAE: ALEOCHARINAE) FROM IRELAND

Jervis A. Good

The Fennoscandian species of the genus *Amischa* have recently been revised by Muona (1990), which has resulted in nomenclatural changes - *cavifrons* (Sharp) is now *bifoveolata* (Mannerheim); *soror* (Kraatz) is now *nigrofusca* (Stephens). Of the five British species (Williams, 1969; 1977), four have been recorded from Ireland, all of them associated with grass habitats. *A. analis* (Gravenhorst) is ubiquitous, *decipiens* (Sharp) and *nigrofusca* are likely to be widespread and common because of

their occurrence in disturbed habitats, but *bifoveolata* is local. Voucher specimens have been deposited in the National Museum of Ireland (Dublin).

*Amischa analis* (Gravenhorst)

Widespread (Johnson & Halbert, 1902). I have found it abundantly in both intensively managed cereal fields and grasslands as well as in rough grass tussocks such as *Dactylis glomerata* L. (cock's-foot). Pitfall traps (ethylene glycol) tend to underestimate numbers relative to Tullgren funnels.

*Amischa bifoveolata* (Mannerheim) [= *cavifrons* (Sharp)]

Previously recorded from Donegal by Anderson (1978). It occurred abundantly in The Curragh, Co. Kildare (H19) in 1991 in an area of unfertilized ancient sheep pasture on sand/gravel glacial till (N8109, N8010, N7514). Moss cover dominates in much of the site. The species was also captured in an almost pure sward of *Nardus stricta* L. (mat-grass). Both males and females occurred; all specimens were short-winged. *A. analis* occurred together with *A. bifoveolata* and in similar numbers. Palm (1968) mentions that *A. bifoveolata* possibly prefers dry soils such as sand and gravel moraines, which accurately fits the above habitat. Similarly, Anderson (1978) recorded the species from well-drained brecciated quartzite on Muckish Mt. in Co. Donegal (in *Racomitrium* moss). The species has a mainly northern distribution in Britain and Europe (Williams, 1969; Muona, 1990) and is quite common in Fennoscandia (Palm, 1968). Perhaps it has a wider habitat range further north - Laitinen & Raatikainen (1975) record *bifoveolata* (as *cavifrons*) in abundance (with *analis*) in an oat field in western Finland.

*Amischa nigrofusca* (Stephens) [= *soror* (Kraatz)]

Previously recorded by Good and Giller (1990) from Cork. I now have records from 11 sites (H4, H5, H10, H19, H20, H22, H25, H29), nearly all of which are cultivated land or grassland, usually in the company of *analis*. I have also found this species to be abundant in cultivated land in southern Germany. It has been recorded from a variety of grassy habitats, from moss and grass tussocks (Williams, 1969; Koch, 1989).

*Amischa decipiens* (Sharp)

Previously recorded from Cork and Roscommon (Good & Giller, 1990; Lott & Bilton, 1991). Records from 9 sites (H4, H5, H10, H18, H20, H22, H31), like *nigrofusca*, are from either cereals or grasslands. This species was always found with *analis*, but in lesser numbers, and the co-occurrence of these two species seems to be the rule (Salt *et al.*, 1948; Steel, 1953; Easton, 1965; Williams, 1969). While grass and ruderal/cultivated ground are major habitats for this species, it is also reported from litter in damp woods (Koch, 1989). It does not appear to be uncommon in Central Europe - Adám (1987) states that *decipiens* is the most common *Amischa* species in Hungary. However, Lohse and Lucht (1989) state that the species has only become common in recent years in Central Europe.

I have attempted breeding from the adults of *analis*, *decipiens*, and *nigrofusca* (collected in spring), in clay cells with fresh cut *Tribolium* larvae as food, but failed. Adults were never observed feeding on the *Tribolium*; possibly they are mycetophagous. The larvae remain undescribed. All specimens of these three species, of which several hundred *analis* were dissected, were female, supporting the conclusion that they are parthenogenetic in Ireland (see Williams, 1969).

## References

- ADAM, L., 1987. Staphylinidae of the Kiskungság National Park (Coleoptera). *Nat. Hist. Natl. Parks Hung.*, 5: 126-168.
- ANDERSON, R., 1978. *Stenus glacialis* Heer (Col., Staphylinidae) in West Donegal. *Entomologist's mon. Mag.*, 114: 20.
- EASTON, A. M., 1965. Coleoptera of flood refuse from Montgomeryshire. *Entomologist's mon. Mag.*, 101: 45-46.
- GOOD, J. A. & GILLER, P. S., 1990. Staphylinid beetles (Coleoptera) from cereal and grass fields in south-west Ireland. *Bull. Ir. biogeog. Soc.*, 13: 2-22.
- JOHNSON, W. F. & HALBERT, J. N., 1902. A list of the beetles of Ireland. *Proc. R. Ir. Acad.*, (3) 6: 535-827.
- KOCH, K., 1989. *Die Käfer Mitteleuropas. Ökologie 1*. Krefeld: Goecke & Evers.
- LAITINEN, T. & RAATIKAINEN, M., 1975. Seasonal aspects of beetle fauna occurring in oats in western Finland. *Ann. Agric. Fenn.*, 14: 203-209.
- LOHSE, G. A. & LUCHT, W. H., 1989. *Die Käfer Mitteleuropas. Supplementband mit Katalogteil 1*. Krefeld: Goecke & Evers.
- LOTT, D. A. & BILTON, D. T., 1991. Records of Coleoptera from Irish wetland sites in 1989. *Bull. Ir. biogeog. Soc.*, 14: 60-72.
- MUONA, J., 1990. The Fennoscandian and Danish species of the genus *Amischa* Thomson (Coleoptera, Staphylinidae). *Ent. Tidskr.*, 111: 17-24.
- PALM, T., 1968. Skallbaggar, Coleoptera. Kortvingar: Staphylinidae. Underfam. Aleocharinae (*Deinopsis-Trichomicra*). *Svensk Insektfauna*, no.51: 1-112.
- SALT, G., HOLLICK, F. S. J., RAW, F. & BRIAN, M. V., 1948. The arthropod population of pasture soil. *J. Anim. Ecol.*, 17: 139-150.
- STEEL, W. O., 1953. The entomology of Spurn Peninsula. IX. Coleoptera, Staphylinidae. *Naturalist*, 1952: 173-176; 1953: 125-129.
- WILLIAMS, S. A., 1969. The British species of the genus *Amischa* Thomson (Col., Staphylinidae), including *A. soror* Kraatz, an addition to the list. *Entomologist's mon. Mag.*, 105: 38-42.
- WILLIAMS, S. A., 1977. *Amischa simillima* (Sharp) a synonym of *A. soror* (Kraatz) (Col., Staphylinidae). *Entomologist's mon. Mag.*, 113: 250.
- Jervis A. Good, Glinny, Riverstick, Co. Cork, Ireland.

**GEODROMICUS NIGRITA (MÜLLER, P. W. J.) (STAPHYLINIDAE): A SECOND IRISH RECORD.****T. D. Harrison**

In response to Dr Roy Anderson's requests for records of Irish Coleoptera (Anderson, 1994) I submitted a list of species collected on a visit to Ireland in 1988. The list included a record for *Geodromicus nigrata*, apparently the second for Ireland. Dr Anderson first recorded this species from the shingle banks of the Altnaheglish River, Co. Londonderry, (C7002) on 8th August 1978 (Anderson, 1979). I came across a single male specimen on the gravel bank of a stream which ran through the limestone gorge at Marble Arch, Co. Fermanagh (H1234), on 22nd July 1988.

**References**

- ANDERSON, R., 1979. *Stenus brevipennis* Thom. and *Geodromicus nigrata* (Müll.) (Col. Staphylinidae) new to Ireland. *Entomologist's mon. Mag.*, **114**: 52.  
 ANDERSON, R., 1994. Records wanted. *Coleopterist*, **3**: 29.  
 T. D. Harrison, Field House, Leighton Park School, Shinfield Road, Reading, Berkshire RG2 7DH.

**A NEW LOCALITY FOR HYDNOBIUS SPINIPES (GYLLENHAL) (LEIODIDAE) IN DERBYSHIRE****Keith N. A. Alexander**

The National Trust have been carrying out a moorland restoration project on Kinder Scout in Derbyshire since the acquisition of the Kinder Estate in 1982. Pitfall trapping has formed part of the monitoring programme since 1984 and, in the 1992 'run', a male and a female *Hydnobius spinipes* were captured. This species is listed in Hyman (1994) as 'Red Data Book category I - Indeterminate', i.e. considered to be 'endangered, vulnerable or rare, but where there is not enough information to say which 'Red Data Book' category is appropriate'.

*H. spinipes* was described as new to Britain on the basis of a single specimen taken at Cannock Chase, Staffs., by S. O. Taylor of Leicester on 24th August 1930, by evening sweeping (Donisthorpe, 1931). Since then it has only been reported in the literature once, by Smith (1991) from siliceous grassland. Smith (pers. comm.) tells me that his specimen was swept from a patch of *Juncus* sp. (rush) among very coarse grasses in the remains of a derelict walled enclosure, at an altitude of 400m in Alport Dale, Derbyshire (SK139914) on 14th October 1979. The site faces south-west and is rough-grazed by sheep and occasionally cattle. The Kinder Scout site (SK072873), on the western slopes of the massif at an altitude of about 500m, has soils derived from millstone grit and is vegetated by tall *Vaccinium myrtillus* L. (bilberry) and *Deschampsia flexuosa* (L.) Trin. (wavy hair grass). The trap-line of 10 pitfalls had been in operation from 29th September 1992 until 10th December 1992.

I understand from J. Cooter that there are as yet unpublished records from Snowdonia and elsewhere along the western fringes of the Pennines in Cheshire and Cumbria. The details of these will appear in another publication in due course (Cooter, in press).

*H. spinipes* is assumed to breed in subterranean fungi, but little else is known or suspected of its ecological requirements. All of the records come from late in the year and it is reasonable to assume that this is characteristic. It may also suggest under-recording, as few coleopterists will be working the moors at this time of year. All localities known to me are on poor acidic, sandy or gritty soils, and have open heathy or grassy vegetation. Both Derbyshire localities lie within the upland rough pastures of the Dark Peak SSSI and have a western aspect. Cannock Chase is a rather different situation, however. The soils are derived from Triassic sandstone rather than millstone grit, and the heathland is more 'lowland' in character although intermediate between that of northern, upland England and that of the southern counties.

**Acknowledgements**

My thanks to R. J. Marsh for identifying all of the Staphylinidae material from the 1992 pitfall traps and for spotting the *Hydnobius* as something unusual. Thanks also to J. Cooter for naming the specimen and providing information from unpublished records.

**References**

- COOTER, J., in press. An annotated key to the British Leiodinae, part 1. Introduction and tribes Sogdini and Pseudoleiodini. *Entomologist's mon. Mag.*  
 DONISTHORPE, H., 1931. *Hydnobius spinipes*, Gyll., a species of Coleoptera new to the British list. *Entomologist's Record*, **43**: 33.  
 HYMAN, P. S., (revised PARSONS, M. S.), 1994. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 2. UK Nature Conservation: 12. Peterborough: UK Joint Nature Conservation Committee.  
 SMITH, E. J., 1991. Preliminary notes on the Coleoptera fauna of a south Pennine valley. *Sorby Record*, no 28: 26-31.  
 K. N. A. Alexander  
 National Trust, 33 Sheep Street, Cirencester, Gloucestershire GL7 1QW.

**SUBSCRIBER'S NOTICE**

Please note Tony Drane's new address - Rocklands, 19 Station Road, Cogenhoe, Northampton NN7 1LT. Tel. (01604) 890499.



**COPRIS LUNARIS (L.) (SCARABAEIDAE) IN SUSSEX****Peter J. Hodge**

Fowler (1890) gives 'Shoreham' as one of the British localities for this spectacular and now very rare scarab. In the Sussex Victoria County History list (Fowler, 1905) the record reads 'Shoreham; Lewes, once'. There do not appear to be any subsequent published records of its occurrence in Sussex. Jessop (1986) merely gives Sussex as part of its known distribution.

In the late 1940s *Copris* was found regularly in parts of Surrey (Whicher, 1948; Allen, 1956) but it evidently declined in the early 1950s. The last recorded occurrence of the species in Britain was at Juniper Hall, near Box Hill, Surrey, when a specimen flew into the entrance hall at 10.30pm on 27th May 1955 (Cloudsley-Thompson & Sankey, 1956). This record is repeated by Hyman (1992). There is a Dorset record for July 1954 (Frewin, 1992).

In 1994, Mike Edwards was invited to Lancing College in West Sussex to examine their insect collections. Among a pile of drawers and boxes was a cardboard glass-topped display case containing about 20 beetle specimens, most of which were accompanied by data. Labels, written in ink, were glued to the lining paper of the display case and the carded specimens were pinned through the labels. Mike passed me the display case and asked if I could name a large scarab beetle which he did not recognise. It was instantly determined as a male *Copris lunaris*, labelled in faded ink: 'Lancing Ring, 19.9.60, Lancing', with another label bearing the correct species name. There is absolutely no doubt that the date was 1960 (not 1860) because the beetles were mounted on the back of printed conference cards. One card, used for mounting a female stag beetle, referred to a conference at Cavendish Square on 21st May 1960.

According to Tim Mansfield, the lab technician at Lancing College, the collection was probably acquired during the 1960s. He suggested that the former science master, Dr G. W. Shaw, might remember how the specimens were obtained. Dr Shaw's prompt reply to my letter of 12th September 1994 added something to the story. He thought that the widow of a Mr H. J. Gray, a local amateur entomologist who used to collect at Lancing Ring, presented her late husband's collections of snails and beetles to Lancing College, but the exact date that this took place is uncertain.

This Sussex specimen of *Copris lunaris* appears to be the only county record since 1905 (and probably this century) and is also the most recent record for the British Isles. It is now in my personal reference collection of Coleoptera.

**References**

ALLEN, A. A., 1956. *Copris lunaris* L. (Col., Scarabaeidae) in the Box Hill area of Surrey. *Entomologist's mon. Mag.*, **92**: 382.

CLOUDSLEY-THOMPSON, J. L. & SANKEY, J. H. P., 1956. Some aspects of the fauna of the district around Juniper Hall, Mickleham, Surrey-III. *Entomologist's mon. Mag.*, **92**: 132-134.

FOWLER, W. W., 1890. *The Coleoptera of the British Islands*. Vol 4. London: L. Reeve & Co.

FOWLER, W. W., 1905. A history of Sussex Coleoptera. In: PAGE, W., (ed.), *The Victoria history of the counties of England. Sussex*. Vol 1. London: Constable.

FREWIN, G. L., 1992. A belated record of *Copris lunaris* L. (Col., Scarabaeidae) from Dorset. *Entomologist's mon. Mag.*, **128**: 58.

HYMAN, P. S., (revised PARSONS, M. S.), 1992. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 1. UK Nature Conservation: 3. Peterborough: UK Joint Nature Conservation Committee.

JESSOP, L., 1986. Dung beetles and chafers. Coleoptera: Scarabaeoidea. New edition. *Handbooks for the identification of British insects*, **5**(11). Royal Entomological Society of London.

WHICHER, L. S., 1948. *Copris lunaris* L. (Col., Scarabaeidae) in Surrey. *Entomologist's mon. Mag.*, **84**: 187.

P. J. Hodge

8 Harvard Road, Ringmer, Lewes, East Sussex BN8 5HJ.

**EPURAEA DISTINCTA GRIMMER (NITIDULIDAE), A SECOND KENT OCCURRENCE****N. F. Heal**

On a visit to Ham Fen with the Kent Field Club on 9th June 1991, I dislodged a single *Epuraea* specimen from the branches of a large willow at TR3355 which, upon later examination, proved to be *E. distincta*. There is only one other published occurrence in the county, that by A. A. Allen on 29th April 1968 when two males were extracted from reed litter, also at Ham Fen (Allen, 1971). The species is said to be associated with the bracket fungus *Daedaleopsis confragosa* (Bolt. ex Fr.) Schroet, but I can find no published confirmation of this.

**Reference**

ALLEN, A. A., 1971. *Epuraea distincta* Grim. (Col., Nitidulidae) new to Kent. *Entomologist's mon. Mag.*, **107**: 36.

N. F. Heal

44, Blenheim Avenue, Faversham, Kent ME13 8NW.

ROSE CHAFER, *CETONIA AURATA* (L.) (SCARABAEIDAE) IN NORTH WALES

M. Joan Morgan

Mr Colin Johnson recently passed on to me a sighting of *Cetonia aurata* by Mary Black on a visit to Anglesey. A single specimen was found on the path to the lighthouse at South Stack on 29th August 1994. On consulting my records it was apparent that there had been a small colony there for many years. The species was first recorded at Llanfwrog (6 miles east of South Stack) in June 1947 by C. C. Townsend (1947) who found a single specimen.

D. J. Hodnott found another on the path to the lighthouse on 24th July 1966. In early July 1972 one was seen on flowers of *Angelica sylvestris* L. (angelica). Others were seen near the steps in June 1973, 1974 and 1977 (Bruce Ing). K. C. Side recorded it there on 17th June 1973. A specimen was seen on the slopes above the car park on 18th June 1978 (D. Hackett).

The RSPB Warden for the area, Ian D. Bullock, found a larva 'probably fully grown' in loose sandy soil at the edge of the cliff in December 1978. In mid-February 1979 he identified the remains of adult beetles in chough droppings. E. and H. Howe saw two adults on heather, one on 23rd July 1987 and another on 20th May 1990. R. E. N. Smith found a specimen on the sea cliff on 1st June 1991.

I know of no other sightings of the beetle in Anglesey nor any other records of this striking beetle in any of the six North Wales vice-counties. As almost all the South Stack records are of single specimens one must hope that North Wales' only colony of the rose chafer will remain viable and escape too heavy predation by that other scarce species, the chough.

Two other beetles were also recorded in Anglesey by Mary Black: *Timarcha tenebricosa* (F.) (1 male, 1 female) at Trearddur, in August 1994 (known from 5 other coastal sites in Anglesey) and *Dytiscus marginalis* L. (1 male) at Rhoscolyn, near Trearddur on 29th July 1994. A previous Anglesey record for the latter species at Beaumaris reservoir in 1965 (M. Lazell) is the only other one from the island known to me.

The specimens of *C. aurata* and *T. tenebricosa* are now in Manchester Museum.

## Reference

TOWNSEND, C. C., 1947, *Cetonia aurata* L. (Col., Scarabaeidae) in Anglesey. *Entomologist's mon. Mag.*, **83**: 278.

M. Joan Morgan, School of Animal Biology, University of Wales, Bangor, Gwynedd LL57 2UW.

Dr A. G. Duff tells me that he visited South Stack on 23rd July, 1994 and found, without difficulty, at least five specimens on the cliff tops south of the lighthouse.  
- Ed.

## STENAGOSTUS RHOMBEUS (OLIVIER) (ELATERIDAE) IN NORTH WEST ENGLAND

K. N. A. Alexander

A single early instar larva of *Stenagostus rhombeus* was discovered beneath loose bark on a dead oak branch in Stockton's Wood, Speke Hall (SJ422828, VC 59), on 8th February 1994. This site is ecologically interesting in that it supports an unusually rich and diverse saproxylic fauna for northern England (T. Eccles, pers. comm.), and appears to be a relict old pasture-woodland on what must have been medieval manorial waste. The area has been modified by fellings and re-planting over the intervening centuries, resulting in today's visually uninspiring woodland.

The only previous records of *S. rhombeus* from the North-west come from Dunham Park, Altrincham (VC 58), where it has been known for nearly 100 years. It was first reported here by Chappell (see Fowler, 1890), later by H. R. P. Collett in 1934 and C. Johnson during the period 1962-1977 (Johnson *et al.*, 1977). Johnson (1992) has subsequently found it widely in the Dunham area - at Dunham New Park, North Park and Redmoor Covert in 1992. I found a larva in the Deer Park, on 12th May 1993. Johnson *et al.* (1977) drew attention to the fact that Dunham was at the time the northernmost British locality for the species and that it was the only site in North-west England. Since then, however, it has been found a little further north, by P. Skidmore, on the east side of the country at Barrow Hills, Nottinghamshire (S. G. Ball, pers. comm.) and Temple Newsam Park, Leeds (Skidmore, 1979).

## Acknowledgements

My thanks to Tom Eccles for drawing my attention to this interesting woodland, to Ted Green and Barry Nicholson for their company, to Howard Mendel for confirming my identification, and to Stuart Ball for information held by the Invertebrate Site Register (Joint Nature Conservation Committee).

## References

- FOWLER, W. W., 1890. *The Coleoptera of the British Islands*. Vol. 4. London: L. Reeve & Co.
- JOHNSON, C., ROBINSON, N. A. & STUBBS, A. E., 1977. *Dunham Park: a conservation report on a parkland of high entomological interest*. CST Notes No. 5. Nature Conservancy Council.
- JOHNSON, C., 1992. *List of deadwood beetles of Dunham Massey (main park excepted)*. Unpublished Report to The National Trust.
- SKIDMORE, P., 1979. A possible old-forest insect fauna on the outskirts of Leeds. *Naturalist*, **104**: 165-167.
- K. N. A. Alexander  
National Trust, 33 Sheep Street, Cirencester, Gloucestershire GL7 1QW.

## RECORDS OF CURCULIONOIDEA FROM CUMBRIA AND DUMFRIESSHIRE IN 1994

R. W. J. Read

The following local and uncommon weevils were found during survey work carried out in 1994 at various sites within vice-counties 70 (Cumberland) and 72 (Dumfries).

## ATTELABIDAE

*Rhynchites cupreus* (L.): Two female specimens were beaten from *Sorbus aucuparia* L. (mountain ash) in a small area of mixed woodland by the edge of Hayton Moss (NY526558), VC 70, 28th August 1994.

## APIONIDAE

*Trichapion simile* (Kirby, W.): A single individual was beaten from *Betula pendula* Roth (silver birch) on Scaleby Moss (NY432635), VC 70, 27th August 1994.

## CURCULIONIDAE

*Omiomima mollina* Boheman: One specimen was beaten from mixed herbage on the bank of a drainage ditch by the edge of Brugh Marsh near Bowness-on-Solway (NY286593), VC 70, 31st May 1994. This species appears to be uncommon in the county. Day (1923), in his list of Cumberland Coleoptera, recorded it from Newton Marsh (NY15), and Cross Fell (NY63) where it was found by H. Britten.

*Sitona ononidis* Sharp: Two specimens were tapped from *Vicia cracca* L. (tufted vetch) on a grassy bank by a coastal footpath at Browhouses (NY281649), VC 72, 27th August 1994 and two specimens were tapped from the same plant species along a shore path at Newbie (NY182643), VC 72, 27th August 1994.

*Limobius borealis* (Paykull): Two specimens were tapped from *Geraneum sanguineum* L. (bloody cranesbill) on a cliff-top bank on South Head, St Bees (NX954117), VC 70, 6th August 1994. This is possibly a first record for VC 70. Hyman (1992) recorded the weevil from Cumberland but Dr Roger Key (pers. comm.) advises that the exact origin of the record is unknown.

*Microplontus triangulum* (Boheman): The elytral remains of a dead specimen were found in deep litter and humus beneath gorse bushes on South Head, St Bees (NX956117), VC 70, 22nd January 1994. A live specimen was tapped from *Achillea millefolium* L. (yarrow) at the same site on 6th August 1994.

*Thamiochilus viduatus* (Gyllenhal): Two specimens were tapped from *Stachys palustris* L. (marsh woundwort) at Browhouses (NY280649), VC 72, 27th August 1994 and one on the same plant species by the River Eden near Armathwaite (NY506445), VC 70, 30th August 1994.

*Pelenomus zumpti* (Wagner): Larvae of this weevil were found in small numbers around the terminal leaves of *Glax maritima* L. (sea milkwort) on the saltmarsh at Campfield Marsh near Bowness-on-Solway (NY207619), VC 70, 31st May 1994. Larvae were also found on *G. maritima* on a small area of saltmarsh at Browhouses (NY281649), VC 72, 27th August 1994. A few larvae collected from the Campfield site were kept in captivity on a potted foodplant and were successfully reared through to the adult stage. Eight specimens emerged on the 14th June 1994.

*Drupenatus nasturtii* (Germar): This weevil was found in small numbers on *Rorippa nasturtium-aquaticum* (L.) Hayek (water cress) growing in a shallow ditch on the edge of Cumwhitton Moss (NY515516), VC 70, 30th August 1994. Day (1923) recorded this weevil from Great Salkeld (NY53).

*Furcipes rectirostris* (Linnaeus): Six adults were beaten from the low foliage of some large *Prunus padus* L. (bird cherry) trees growing by the River Gelt near Binney Bank (NY573538), VC 70, 1st June 1994.

## Acknowledgements

I wish to thank Dr Roger Key for information regarding the status and distribution of certain species recorded here. I also thank Mr John Miles for information about some of the sites visited in North Cumbria and the Cumbria Wildlife Trust for permission to visit and collect on their nature reserves in the county.

## References

- DAY, F. H., 1923. The Coleoptera of Cumberland. *Trans. Carlisle nat. Hist. Soc.*, 3: 99-105.  
HYMAN, P. S. (revised PARSONS, M. S.), 1992. *A review of the scarce and threatened Coleoptera of Great Britain*. Part 1. UK Nature Conservation: 3. Peterborough: UK Joint Nature Conservation Committee.  
R. W. J. Read, 43 Holly Terrace, Hensingham, Whitehaven, Cumbria CA28 8RF.

## GIBBIUM AEQUINOCTIALE BOEILDIEU (PTINIDAE) IN COAL MINES: FURTHER INFORMATION

Barry Constantine

A recent note in the *Coleopterist* (Lyszkowski *et al.*, 1994) finished by warning '....it is always difficult to know what has recently been recorded and some caution in wording reports for publication would seem prudent.' In my case this warning was particularly appropriate. The same issue carried my paper (Constantine, 1994) on *G. aequinoctiale* in a coal mine, and the week that I received it I was given access to the biological records database at Clifton Park Museum, Rotherham. The database contained a record of Peter Skidmore's dated January 1968 for *G. psylloides* (Czenpinski) and *Niptus hololeucus* (Faldermann), both found underground at



Manvers Main Colliery, about 5 miles north of Silverwood. I later examined the *Gibbium* specimen from Manvers and found it to be *G. aequinoctiale*. Two specimens collected by Henry Beaumont on the 17th December 1968 from the Silkstone Seam at Wath-on-Dearne were also found to be *G. aequinoctiale*, as were nine other examples dated January 1979 and labelled 'Doncaster area, in coal mine'.

My brother collected more specimens from Silverwood for me, *N. hololeucus* as well as *G. aequinoctiale*. In order to collect specimens and check for myself what other species were underground I applied to British Coal to visit Silverwood. Permission having been granted, I went down the mine on the 24th October 1994. Although born and brought up in a South Yorkshire pit village, this was my first trip down a coal mine. I can thoroughly recommend it to any coleopterist as a fascinating way of spending a few hours.

I decided to collect all of the beetles from each pile of human excrement examined, in part to obtain an idea of numbers involved but also to see whether or not both species of *Gibbium* might be inhabiting the same microhabitat. Not enough is known about the biology of the two species to know if this occurs (Halstead, pers. comm.). The excrement was beaten over a sheet of paper until all the beetles were out of it. The beetles were then put into tubes, separate tubes being used for each sample taken. Three tubes of beetles collected from the main area that the miners use as a latrine contained totals of 52, 75 and 104 specimens. All specimens were found later to be *G. aequinoctiale*.

A number of specimens in each sample (about 10%) were different from the rest. Instead of being the usual dark red colour they were light brown and only half the size of the others. *Gibbium* can be variable in size. Howe and Burgess (1952) noted that in breeding experiments *G. aequinoctiale* females had irregular weights and that males were heaviest when breeding at temperatures of about 30°C. D. G. H. Halstead (pers. comm.) has suggested other reasons for the size differences, including the nutritional value of the food consumed. Larval development is known to be retarded when beetles breed in groups (Gunn & Knight, 1945) by almost a week (Howe & Burgess, 1952). It may be that the piles of excrement are not sufficient to fully support the size of *Gibbium* populations breeding in them and some beetles experience a 'deprived larvahood'!

All the faeces were riddled with tunnels bored by the beetles, which appeared to invade them when they had partially dried out and hardened slightly. No specimens were found on fresh or totally dried out excrement. A bristletail (Thysanura: probably *Lepisma saccharina* L.) was found in one of the samples.

Whilst underground I decided to search other likely areas for beetles and began with a short tunnel, joining two roadways together, in which were stacked piles of old sacks and tarpaulins. These were examined but produced only four *G. aequinoctiale* (2 alive, 2 dead) plus another bristletail, probably *L. saccharina* again.

The only other area to produce beetles was a roadway housing a conveyor belt where, again from faeces, I obtained 42 examples of *Niptus hololeucus*. Here also, there were two distinctly coloured groups. Many specimens were dark brown rather than golden, possibly representing an earlier generation. This tunnel was appreciably cooler than the site where the *Gibbium* were collected. Howe and Burgess (1952) make the point that *Gibbium* has the highest temperature range (33°C optimum) and *N. hololeucus* the lowest temperature range (just above 20°C optimum) of the five species of Ptinid under study. This large temperature differential would explain why the two species seem to be breeding well apart underground, even though this summer my brother did find 3 examples of *Niptus* on the same faeces as the *Gibbium*. The miners, however, undoubtedly transport eggs and possibly other developmental stages of the beetles on their boots and clothes.

Earlier this year, Dr Xavier Bellés of Barcelona sent me several of his papers on *Gibbium*. One of these (Bellés, 1985) confirmed the subterranean affinities of this subfamily. Species of *Gibbium* and *Mezium* have been found in caves in Israel, the Canary Islands and various countries in north, south and west Africa. Bellés (1975-6) even records *G. psylloides* found underground in southern Spain, although all the other underground records that I have so far for *Gibbium* (admittedly not many) are for *G. aequinoctiale*. All the above records of Bellés were in association with bat droppings.

M.A.F.F. have many records of *Gibbium* down coal mines in Britain (F. A. Hunter, pers. comm.). Unfortunately, at the time of collection it was assumed that only *G. psylloides* occurred in Britain (Bellés & Halstead, 1985). Thus all records refer to this species and because of this assumption voucher specimens were only kept in a few cases. One of these, from Llayhill Colliery at Cefn-y-bedd in North Wales (Richard Adams, pers. comm.), was checked by Halstead and found to be *G. aequinoctiale*.

Research by Osborne (1983) has shown that other Ptinids also live on human faeces. In an attempt to verify that archaeological features thought to be cesspits on the basis of their beetle faunas, were in fact cesspits, he studied samples of modern material. These were taken from an area of his garden where the contents of an 'Elsan' chemical toilet had been emptied over a period of ten years. Two 2-3 kg samples were taken, a fortnight apart, washed over a 300 micron sieve and subject to paraffin flotation, to isolate the beetle remains. Both samples contained specimens of *N. hololeucus*, *Tipnus unicolor* (Piller & Mitterpacher) and *Ptinus fur* (L.) along with over 60 other species of beetles. The latter two named species are almost always found in archaeological features presumed to be cesspits and their coprophilous nature is not, therefore, a new phenomenon.

## Acknowledgements

I would like to thank Dr X. Bellés for providing me with copies of his *Gibbium* papers; W. A. Ely for access to the Clifton Park Museum database; F. A. Hunter for information about *Gibbium* in mines generally and Dr Richard Adams of C. S. L., Slough for specific information about the Cefn-y-bedd record; Dr D. G. H. Halstead for giving so freely of his expert knowledge and Colin Howes of Doncaster Museum for allowing me to use material from the Doncaster collection. I am grateful to Mrs Jean Ripolles for translating Dr Bellés paper from Catalan to English; to Mr G. J. Wilson (Silverwood Colliery manager) and Mr Graham Jay (personnel manager) respectively for allowing and arranging my visit underground. Finally, I would like to thank my brother Andrew for giving up several hours of his rest time between two 12 hour night shifts to act as my guide down the mine.

## References

- BELLÉS, X., 1975-6. Ptínidos recogidos en cavidades subterráneas ibéricas (Col. Ptinidae). *Speleon*, **22**: 145-147.
- BELLÉS, X., 1985. Hàbitats i Hàbits D'Alimentació dels Gibbiinae (Coleoptera : Ptinidae). *Butll. Inst. Cat. Hist. Nat.*, **50**: 263-267.
- BELLÉS, X. & HALSTEAD, D. G. H., 1985. Identification and geographical distribution of *Gibbium aequinoctiale* Boieldieu and *Gibbium psylloides* (Czenpinski) (Coleoptera : Ptinidae). *J. Stored Prod. Res.*, **21**: 151-155.
- CONSTANTINE, B., 1994. A new ecological niche for *Gibbium aequinoctiale* Boieldieu (Ptinidae) in Britain, and a reconsideration of literature references to *Gibbium* spp. *Coleopterist*, **3**: 25-28.
- GUNN, D. L. & KNIGHT, R. H., 1945. The biology and behaviour of *Ptinus tectus* Boieldieu (Coleoptera: Ptinidae), a pest of stored products. VI. Culture conditions. *J. Exp. Biol.* **21**: 132-143.
- HOWE, R. W. & BURGESS, H. D., 1952. Studies on beetles of the family Ptinidae. VII. The biology of five Ptinid species found in stored products. *Bull. Ent. Res.*, **43**: 153-186.
- KLOET, G. S. & HINCKS, W. D. (revised POPE, R. D.). 1977. A check list of British insects. Coleoptera and Strepsiptera. *Handbooks for the Identification of British Insects*, **11**(3) 2nd ed. Royal Entomological Society of London.
- LYSZKOWSKI, R. M., OWEN, J. A. & SINCLAIR, M. 1994. *Dyschirius angustatus* (Ahrens) (Carabidae) in Scotland and Northern England. *Coleopterist*, **3**: 22.
- OSBORNE, P. J., 1983. An insect fauna from a modern cesspit and its comparison with probable cesspit assemblages from archaeological sites. *J. Arch. Sci.*, **10**: 453-463.
- B. Constantine, 4 The Green, Skipsea, North Humberside YO25 8SZ.

## REVIEW

**Glow-worms.** John Tyler. 48pp, 20 colour and 2 b&w photographs, 12 figs. Sevenoaks: privately published, 1994. Paperbound A5 (150 x 210 mm). ISBN 0 9523526 0 5. Price £5.00 post free. Available from John Tyler, Tadorna, Bradbourne Vale Road, Sevenoaks, Kent TN13 3DH.

There has long been a need for a popular and informative text about Britain's glow-worms and John Tyler has now provided us with one. A sighting of a glow-worm is always a wonderful event and one which people often want to follow up by reading more about this very unusual beetle. Until now, it has been very difficult to find out very much.

Needless to say, the emphasis of the book is on *Lampyris noctiluca* (L.). *Phosphaenus hemipterus* (Goeze) is briefly discussed but, surprisingly, the author appears to be unaware of the record for a third species in this country, *Lamprohiza splendidula* (L.) (Allen, 1989).

John studied glow-worms for his M.Sc. conservation dissertation at University College, London and went on to publish an important paper on their ecology and conservation in Britain (Tyler, 1986). He is, therefore, the ideal person to have written this book. In it, he covers at some length the species' biology and natural history, drawing on his own previously unpublished experiences as well as published material.

Many readers will be aware of a number of glow-worm surveys carried out over the years, promoted by Tony Wootton through the British Naturalists' Association and more recently by Robin Scagell, mainly through *British Wildlife* magazine. The results of these are presented in the form of 10km square dot-maps. Unfortunately, the results of more local surveys, carried out at the county level in many parts of Britain, have not been collated or included on the maps. Examples are Carmarthenshire (M. J. Morgan, pers. comm.), Cornwall (French, 1991) and Gloucestershire (Alexander, 1992). Neither have the records held by the Cantharoidea and Buprestoidea Recording Scheme been used.

The final three chapters are especially interesting as they cover the identified threats to the species, what we don't know about the glow-worm (hopefully thereby encouraging people to try and find out) and advice on glow-worm watching. There is also a very useful glow-worm site survey recording form which can be photocopied, completed and returned to the author.

There are a few rather minor quibbles. The list of snails eaten in captivity (Table 1) includes some not native to Britain and it is odd that the English names are given for some of the natives but not all. Irish glow-worm records (p. 36) are widely accepted as being the result of failed attempts at establishment. Small populations are not necessarily more susceptible to local extinctions than large ones (p. 38) - ask the passenger pigeon or the great auk! Some of the omissions referred to above may well

be related to the fact that the bibliography contains nothing more recent than 1986, suggesting that there has been no literature search since then.

The author is, however, to be congratulated on providing us with a very readable and authoritative book on this amazing beast. This is a very useful book and well worth having.

#### References

- ALEXANDER, K. N. A., 1992. The glow-worm, *Lampyris noctiluca* (L.), in Gloucestershire and its conservation. *Gloucestershire Naturalist*, no. 5, p. 1-5.  
 ALLEN, A. A., 1989. *Lamprohiza splendidula* (L.) (Col., Lampyridae) taken in Kent in 1884. *Entomologist's mon. Mag.*, **125**: 182.  
 FRENCH, C. N., 1991. Mapping glow worms. *Zoological Cornwall and the Isles of Scilly*, no. 1, p. 21.  
 TYLER, J., 1986. The ecology and conservation of the glow-worm, *Lampyris noctiluca* (L.) in Britain. *Atala*, **10-12**: 17-19.

Keith Alexander

The National Trust, 33 Sheep Street, Cirencester, Gloucestershire GL7 1QW.

#### JOURNAL CONTENTS

M. J. Collier

#### BRITISH JOURNAL OF ENTOMOLOGY AND NATURAL HISTORY VOLUME 7 (1994)

##### Part 3 (September)

##### BENHS Indoor Meetings

- Hister merdarius* Hoffmann, *Quedius ventralis* (Aragona) and *Q. brevicornis* (Thomson) - R. A. Jones .....102  
*Mycetophagus piceus* (F.), *M. quadripustulatus* (L.) and *Philonthus* spp. - R. A. Jones .....103  
*Calopteron discrepans* (Newm.) and *C. terminale* (Say) - R. A. Jones .....106  
*Phytodecta pallida* (L.) - S. Leather .....107  
*Apoderus coryli* (L.) and *Coccinella septempunctata* (L.) - R. A. Jones .....108  
*Trox scaber* (L.) - A. J. Halstead .....108  
 Fieldwork at Dinton Pastures to the end of 1993. P. Chandler .....118-126

##### Part 4 (October)

- 1993 Annual Exhibition - Coleoptera .....167-173

#### ENTOMOLOGIST VOLUME 113 (1994)

##### Number 1

*A directory for Entomologists* by Mark Colvin & Duncan Reavey. REVIEW

- J. M. Ruffle .....82

##### Number 2

- Siagona europaea* Dejean: first results from field collecting, life cycle, and the evidence of a possible myrmecophagous diet (Coleoptera, Carabidae, Siagonini). Tullia Zetto Brandmayr & Roberto Pizzolotto .....120-125  
 An aberrant form of the cream-spot ladybird *Calvia 18-guttata* (Coleoptera: Coccinellidae). M. E. N. Majerus .....85

##### Number 3/4

- Strepsiptera (Insecta) parasitizing *Onychostylus pallidolus* (Shiraki), the blatellid cockroach in south-westernmost Japan. Jeyaraney Kathirithamby & Teiji Kifune .....217-219

#### ENTOMOLOGIST'S GAZETTE VOLUME 45 (1994)

##### Number 4

- Hydrophilus piceus* (L.) (Hydrophilidae) on the Isle of Wight. S. A. Knill-Jones ...254  
 [This specimen was later determined to be *Dytiscus marginalis* L. - Ed.]  
*Coleoptera, Ptinidae, Gibbiinae* by X. Bellés & *Coleoptera, Anobiidae* by F. Español. *Fauna Ibérica*. REVIEW - C. Johnson .....266

#### ENTOMOLOGIST'S MONTHLY MAGAZINE VOLUME 130 (1994)

##### Sept/Oct/Nov/Dec

- A further useful character for the separation of two species of *Ampedus* (Elateridae). A. A. Allen .....204  
*Pyrrhidium sanguineum* (L.) (Cerambycidae) on beech. J. Cooter .....194  
*Apion (Helianthemapion) aciculare* Germar (Apionidae), a weevil new to Britain. A. P. Fowles & M. G. Morris .....177-181  
*Trachys minuta* (L.) (Buprestidae) in Oxfordshire. M. F. Heyworth .....181  
 Female promiscuity maintains high fertility in ladybirds (Coccinellidae). M. E. M. Majerus .....205-209  
 A new hostplant record for *Cionus scrophulariae* (L.) (Curculionidae). M. G. Morris .....186



The role of meteorology in an unusually mixed assemblage of Coleoptera.	
P. F. Whitehead.....	200
<i>The Carabidae (Coleoptera) larvae of Fennoscandia and Denmark</i> by	
M. L. Luff. REVIEW - N. E. Stork.....	182
<i>Ground Beetles in the Yorkshire Museum</i> by Michael Denton.	
REVIEW - M. L. Luff.....	222

## ENTOMOLOGIST'S RECORD AND JOURNAL OF VARIATION

## VOLUME 106 (1994)

## Nos. 9-10 (Sept/Oct)

The genus <i>Apion</i> (Apionidae) on Woolwich Common, S.E. London.	
A. A. Allen.....	159-160
<i>Euplectus brunneus</i> Grimm. (Pselaphidae) and its status in Britain.	
A. A. Allen.....	171-172
On the identification of <i>Cercyon alpinus</i> Vogt. (Hydrophilidae) and its	
occurrence in Scotland. J. A. Owen.....	181-183
Operation stag beetle. D. Dey.....	185
<i>Meligethes rotundicollis</i> Bris. (Nitidulidae) locally outnumbering	
<i>M. aeneus</i> (F.). A. A. Allen.....	187-188
<i>Agelastica alni</i> (L.) (Chrysomelidae) in the New Forest, 1941.	
A. A. Allen.....	188-189
<i>Clambus gibbulus</i> (LeConte) (Clambidae): two more West Kent records.	
A. A. Allen.....	190
<i>Acritus homoeopathicus</i> Wollaston (Histeridae) at Box Hill, Surrey.	
J. A. Owen.....	194

## Nos. 11-12 (Nov/Dec)

<i>Ischnoglossa turcica</i> Wunderle (Staphylinidae) in Britain. J. A. Owen.....	241-244
<i>Phyllodrepa crenata</i> (Grav.) (Staphylinidae) in South Northumberland.	
A. A. Allen.....	247
<i>Dyschirius angustatus</i> (Ahr.) (Carabidae): earlier Scottish finds	
A. A. Allen.....	249-250
<i>Anthribus fasciatus</i> (Forster) (Anthribidae) in Somerset. R. A. Jones.....	254-255

## Author index

Alexander, K. N. A.	55, 80, 85, 91	Harrison, T. D.	89
Allen, A. A.	13	Heal, N. F.	22, 25, 28, 43, 48, 83
Allen, A. J. W.	67	Hodge, P. J.	28, 49, 82
Booth, R. G.	2, 6	James, T. J.	33
Bowdrey, J. P.	51	Kirk-Spriggs, A. H.	9
Collier, M. J.	30, 59, 67, 92	Lott, D. A.	6
Constantine, B.	25, 87	Lyszkowski, R. M.	22
Drane, A. B.	1	Maynard, G. J.	37
Duff, A. G.	66	Mendel, H.	38
Eversham, B. C.	21, 35, 70	Menzies, I. S.	66
Forsythe, T. G.	49	Morgan, M. J.	84
Fowles, A. P.	15	Owen, J. A.	11, 22, 37, 43, 68, 77
Good, J. A.	77	Read, R. W. J.	23, 50, 86
Halstead, K.	44	Sinclair, M.	22
Hammond, P. M.	40	Telfer, M. G.	21, 35
Hancock, E. G.	45	Welch, R. C.	10

## Contents

British List:-		Ent. mon. Mag 129: (1993)	30
Additions and deletions	2, 4, 6, 33	Ent. Record 105: (1993)	31
Name changes	6, 9	Ent. Record 106: (1994)	64, 94
Change of Address	81	Keys to species:-	
Coleoptera:-		Hypera	15
Anthropotropism	10	Meetings:-	
Cecidogenic species	51	Kent Coleopterists	28
New to Ireland	38, 77	Recording schemes:-	
Showing teratosis	23	Cantharoidea & Buprestoidea	55
County recorders for Coleoptera	28	Reviews/Notices:-	
Editorial	1, 65	Glow-worms	91
Journal contents:-		J.N.C.C.: Scarce and Threatened	
Br. J. Ent. nat. Hist. 6: (1993)	59	Coleoptera	5
Br. J. Ent. nat. Hist. 7: (1994)	61, 92	R.E.S. Handbook 5(3):	
Ent. Gaz. 45: (1994)	62, 93	Dermestidae	5
Entomologist 112: (1993)	62	Use of a Flight Interception Trap	57
Entomologist 113: (1994)	93	Subscriber's notices	29, 58
Ent. mon. Mag 130: (1994)	63, 93		

## Species Index

A		B	
Abdera triguttata	43	Atheta excelsa	32
Acritus homoeopathicus	94	Athous campyloides	60
Actenicerus sjaelandicus	14	subfuscus	37, 38
Acupalpus consputus	21	Atomaria scutellaris	32
Adalia bipunctata	32, 60	Attagenens trifasciatus	7
brevicornis	63	B	
Agapanthia villosa viridescens	59	Bembidion articulatum	21
Agelastica alni	94	clarki	21
Agonum marginatum	21	doris	21
moestum	21	gallicus	22
Agrilus pannonicus	33, 52, 56, 60, 62, 63	longulus	22
sinuatus	22	obliquum	21
sulcicollis	33, 56	octomaculatum	21, 37, 60
viridis	33	Biblopectus delhermi	32
Amara fusca	35	spinosus	77
nitida	35	Bledius arcticus	22
Amischa analis	78	atricapillus	22
bifoveolata	77	Bryoporus rugipennis	61
cavifrons	77	C	
decipiens	78	Calathus fuscipes	49
nigrofusca	77, 78	melanocephalus	63
soror	77	Calopteron discrepans	92
Ampedus elongantulus	60	terminale	92
tristis	32	Calvia 18-guttata	93
Anisodactylus binotatus	21	Cantharis fusca	55
Anitys rubens	59	Carabidae	63
Anthribus fasciatus	94	Carcinops pumilio	10, 11
Aphodius brevis	30	Cardiophorus gramineus	13
subterraneus	31	thoracicus	13
Apion aciculare	93	Carpelimus similis	64
cruentatum	30	Carpophilus sexpustulatus	62
intermedium	60	Cassida nebulosa	66, 67, 68, 70
simile	86	Cercyon alpinus	94
Apoderus coryli	92	Cetonia aurata	84
Arhopalus rusticus	43, 59, 60	Ceutorhynchus spp.	64
Aromia moschata	63	Choleva glauca	64
Aseum striatum	43	Chrysolina cerealis	62
		crassicornis	62
		oricalcia	31

G		H	
Cicindela germanica	59	Halyzia 16-guttata	60, 62
Cionus spp.	62	Harpalus affinis	60
scrophulariae	93	melleti	31
Clambus gibbulus	94	parallelus	31
Clinetoria spilota	31	Hister merdarius	92
Clytus arietis	61	Hydnobius spinipes	80
Coccinella septempunctata	92	Hydrophiloidea	30
Coelambus nigrolineatus	48	Hydrophilus piceus	92
Coeliodes rubicundus	39	Hydroporus glabriusculus	30
Copris lunaris	82	longicornis	32
Corymbites castaneus	14	Hypera spp.	15
cupreus	14	Hypomedon debilicornis	2
pectinicornis	14	I	
tessellatus	14	Ischnoglossa obscura	7
Cratonychus rufipes	14	turcica	94
Cryptolaemus montrouzieri	63	L	
Curculio nucum	52	Lamprohiza splendidula	91
villosus	52	Lampyrus noctiluca	91
D		Lathrobium fennicum	63
Dacrila fallax	77	Limobius borealis	86
Dorcus parallelipipedus	30, 63	Longitarsus clarus	4
Drupenatus nasturtii	87	longiseta	4, 32
Dyschirius aeneus	21	obliteratus	5
angustatus	22, 94	obliteratoides	5
luedersi	21	Lucanus cervus	31, 58
Dytiscus marginalis	84	M	
E		Magdalis memnonia	32
Elaphrus cupreus	21		
riparius	21		
Elateroidea	63		
Elodes tricuspidis	31		
Enicmus rugosus	63		
Epuraea distincta	83		
Ernobius nigrinus	43		
Ernoporus caucasicus	29		
tilliae	29		
Euplectus brunneus	94		
F			
Furcipes rectirostris	87		

Malthinus balteatus	56	Phloeopora bernhaueri	64
frontalis	56	teres	64
Malthodes brevicollis	55	Phloeostiba lapponica	43
crassicornis	55	Phoracantha recurva	45
fibulatus	56	semipunctata	45
guttifer	56	Phosphaenus hemipterus	91
Medon castaneus	32	Phyllodrepa rufula	32
Melanapion minimum	52	Phyllodrepoidea crenata	94
Melanophila acuminata	60	Phymatodes testaceus	60
Melanotus rufipes	14	Phytodecta pallida	62, 92
Meligethes spp.	61	Pityophthorus lichtensteini	32, 64
pedicularius	9	Plateumaris sericea	23
persicus	9	Polydrusus marginatus	40
rotundicollis	94	undatus	41
viduatus	9	Popillia cyanea	31
Micrapate xyloperthoides	31	Ptenidium intermedium	77
Microplontus triangulum	86	Pterostichus cupreus	49
Mordellistena acuticollis	60	nigrita	30
parvula	60	Ptiliidae	31
Mycetophagus piceus	92	Ptinus fur	89
Mycetoporus quadripustulatus	92	subpilosus	63
Myrmecichixenus vaporariorum	2	Pyrrhidium sanguineum	93
Myzia oblongoguttata	32	<b>Q</b>	
<b>N</b>		Quedius brevicornis	92
Nebria brevicollis	59	ventralis	92
Niptus hololeucus	87	<b>R</b>	
Notiophilus rufipes	21, 32	Rhagium bifasciatum	60
<b>O</b>		Rhagonycha translucida	56
Oedemera lurida	61	Rhinocyllus conicus	52
Oligota parva	63	Rhynchaenus avellanae	8
Omiamima mollina	86	calceatus	38
Otiorhynchus singularis	41	erythropus	8
Oulema duftschmidi	6	fagi	63
melanopus	6	lonicerae	8
<b>P</b>		populicola	25
Panagaeus bipustulatus	61	quercus	63
Panspoeus guttatus	49	testaceus	38
Patialus tecomella	62	Rhynchites aeneovirens	49
Pelophila borealis	31	cupreus	49, 86
Pelemonus zumpti	87	germanicus	49

longiceps	49	<b>U</b>	
nanus	49	Uleiota planata	63
pauxillus	49	<b>X</b>	
<b>S</b>		Xyleborus saxeseni	61
Scaphidium quadrimaculatum	60	Xylostiba monilicornis	43
Scarabaeus cristatus	64		
Scarodytes halensis	30		
Sciaphilus asperatus	23		
Scopaeus laevigatus	32		
Siagona europaea	93		
Silpha obscura	60		
Sitona ononidis	86		
Stenagostus rhombeus	85		
Stenus exiguus	7		
pusillus	7		
Stigmodera decipiens	62		
Strangalia aurulenta	44		
quadrifasciata	44		
revestita	32		
Strophosoma capitatum	41		
melanogrammum	41		
<b>T</b>			
Thamioecolus viduatus	86		
Thanasimus formicarius	60		
Thinobius longipennis	7		
Thryogenes fiorii	7		
nereis	7		
Timarcha tenebricosa	84		
Tipnus unicolor	89		
Trachyploeus angustisetulus	7		
bifoveolatus	7		
digitalis	7		
spinimanus	7		
Trachys minuta	93		
troglodytes	56		
Trichiusa immigrata	7		
Trichius fasciatus	14		
zonatus	14		
Trox scaber	92		
Typhaeus typhoeus	59, 60		



## Editorial Policy

Short notes and longer papers about the species of Coleoptera recorded from, or likely to occur in, the British Isles are eligible for publication in *The Coleopterist*. In addition, the Editor invites more general articles, news items and letters which are of relevance to British coleopterists. Authors who intend submitting papers which are longer than 3,000 words should consult the Editor. Selected papers will be submitted to a referee. Subject areas within the scope of *The Coleopterist* include: identification, species new to Britain, 1st county records, recording schemes, conservation, ecology, biology, behaviour, sampling and collecting techniques, rearing, specimen preparation, curation, field meeting news and book reviews. Authors will be provided with 20 reprints of papers of two or more pages in length.

There will be three issues of *The Coleopterist* each year, in April/May (copy date 1st March), August/September (copy date 1st July) and November/December (copy date 1st October). Material accepted for publication will appear in the next issue of the journal, provided that it reaches the Editor before the stated copy date. In this way the majority of submissions will be published within 4 months of receipt. Exceptionally, a paper will be carried over to the subsequent issue. Opinions expressed in *The Coleopterist* are not necessarily shared by the Editor or the Editorial Panel.

## Instructions to Contributors

Manuscripts for publication should be typewritten, double-spaced with 3 cm margins, on one side only of white A4 sized paper. Footnotes should be avoided and pages should be numbered. Only names of species and genera should be underlined. Except for L. (Linnaeus) and F. (Fabricius), species' authorities should be written in full where a species is first referred to.

Illustrations (figures) should be in black ink, boldly drawn and scaled to allow for a reduction to about 50% of original size. They must be the originals and not photocopies. The ideal position of figures should be indicated in the text. Every effort will be made to care for original artwork but the Editor cannot be held responsible for loss or damage. Material submitted on computer disc should be in ASCII format and accompanied by hard copy. Most disc sizes can be accommodated.

References to journals and books should be in the form:

- HEAL, N.F., 1992. The discovery of *Lixus scabricollis* Bohe. (Curculionidae) in Britain. *Coleopterist*, 1(1): 2.  
JOY, N.H., 1932. A *practical handbook of British beetles*. 2 volumes. London: H.F. & G. Witherby.