The Coleopterist

Volume 12 Part 2 • September 2003

Cover: *Otiorhynchus salicicola* Heyden on Cherry Laurel, Chelsea Harbour, July 2002. Photo Harry Taylor

The Coleopterist

Volume 12 Part 2 • September 2003

***Otiorhynchus armadillo* and *O. salicicola* established in Britain**
***Scolytus pygmaeus* new to Britain**
***Prionychus melanarius* in Gloucestershire**
Continued spread of the Lily Beetle
***Triotemnus coryli* rediscovered**
The identification of Hyperinae
Notes Review Literature

The Coleopterist

Board of Governors **Dr R.G. Booth** (Secretary), **C. Johnson, H. Mendel, Prof. M.G. Morris** (Chairman), **Dr R.C. Welch**

Editorial Panel **Dr K.N.A. Alexander, A.J. Allen** (editor), **M.J. Collier, P.J. Hodge** (Hon. Treasurer), **Dr R.S. Key, Dr D.A. Lott, D.J. Mann**

Addresses

Papers, notes, reviews, notices, advertising:

A.J. Allen, 56 Windsor Way, Alderholt, Fordingbridge, Hants SP6 3BN
E-mail: allentonyallen@aol.com

Subscriptions, back issues, missing issues, change of address:

P.J. Hodge, 8 Harvard Road, Ringmer, Lewes, East Sussex BN8 5HJ
E-mail: peter.j.hodge@tesco.net

Subscription rates for 2003

Three issues per year, carriage included. Payment to P.J. Hodge in sterling.
Individuals: £8. Libraries, institutions, businesses: £10

Web site

www.coleopterist.org.uk

Instructions for authors

The Coleopterist publishes material about the Coleoptera and Strepsiptera recorded from, or likely to occur in the British Isles. General articles, news items and letters on subjects of relevance to British and Irish coleopterists are also welcome. Suitable subject areas include systematics, nomenclature, identification, first country or county records, recording schemes, conservation, ecology, biology, behaviour, sampling and collecting techniques, rearing, specimen preparation, curation, field meeting news and reviews. Material accepted for publication must not be submitted in a similar form to any other journal. Main papers are automatically refereed.

Material should preferably be submitted in either Microsoft Word or ASCII format and sent as an e-mail attachment, or on a DOS formatted computer diskette, or typewritten. Only one copy is required. Authority names and names of journals should be given in full. Nothing should be underlined and footnotes avoided.

Illustrations should be in black ink, hand drawn or laser printed and scaled to allow for 50% reduction. Inkjet printer output and photocopies are unsuitable. 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 their loss or damage.

Authors of papers of two or more pages in length will be provided with 20 free reprints (to be shared between joint authors).

Opinions expressed in the *Coleopterist* are not necessarily shared by the Board of Governors, Editor or Editorial Panel.

 ISSN 0965-5794

Otiorhynchus (s. str.) armadillo (Rossi, 1792) and *Otiorhynchus (s. str.) salicicola* Heyden, 1908 (Curculionidae: Entiminae: Otiorhynchini) - two European vine weevils established in Britain

Maxwell V.L. Barclay
Department of Entomology, The Natural History Museum, London SW7 5BD

Abstract

Otiorhynchus (s. str.) armadillo (Rossi, 1792) and *Otiorhynchus (s. str.) salicicola* Heyden, 1908 (Curculionidae: Entiminae: Otiorhynchini) are brought forward as new to the British Isles on the basis of breeding populations in south-west London and elsewhere. Both species appear to have been introduced from southern Europe with ornamental plants. They are apparently able to breed outdoors in Britain, and can survive a British winter; in all likelihood, both species are established and will persist in this country. An illustrated key, summary of UK records to date, and notes on their biology and European distribution are provided.

Introduction

The genus *Otiorhynchus* Germar (Curculionidae: Entiminae: Otiorhynchini), which has its centre of diversity in the Palaearctic, includes over 1000 species (Magnano, 1998). Larvae of most species are polyphagous soil-dwelling root-feeders and the adults are long-lived, generally polyphagous, very robust, and, although flightless, very mobile. Because of these features, *Otiorhynchus* species are good colonists, and representatives have been spread widely by man. Several species are now established in North America, and *Otiorhynchus sulcatus* (Fabricius), which has the additional advantage of being parthenogenetic, has become established in Australia, New Zealand, North and South America. Morris (1997) lists 22 species of *Otiorhynchus* as occurring in the British Isles, of which at least four are certainly non-native (i.e. *O. aurifer* Boheman, *O. crataegi* Germar, *O. setosulus* Stierlin and *O. coecus* Germar). Some of the supposedly native species, especially the more synanthropic *O. sulcatus, O. rugosostriatus* (Goeze) and *O. porcatus* (Herbst), may represent established historic introductions to Britain. Morris (*op.cit.*) implies this of *O. porcatus*. Occasional imported specimens of other species have been noted in the UK, e.g. *O. parvicollis* Gyllenhal (Allen, 2000) at Kew Gardens and *O. corruptor* (Host) (e.g. Barclay, 2001) in supermarket produce. The Europe-wide trade in potted ornamental shrubs has no doubt aided the spread of several members of this genus.

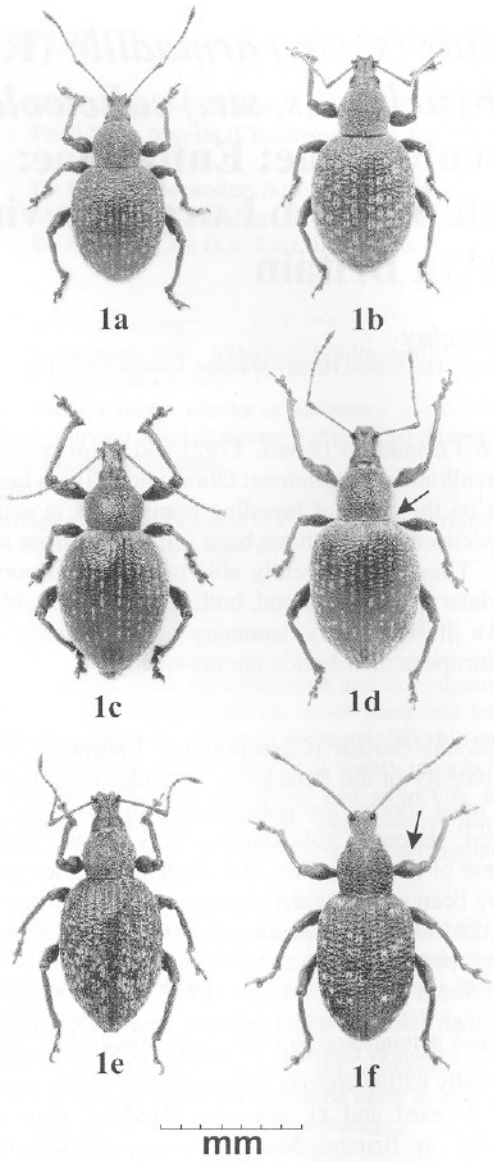


Figure 1 Habitus figures of adult *Otiorhynchus* spp. **(a, b)** *O. armadillo* (Rossi). **(a)** ♂, Chelsea Harbour 27/viii/01, A. D. Esin. **(b)** ♀, Pimlico, 11/06/02. **(c, d)** *O. salicicola* Heyden, Chelsea Harbour, 16/vi/02. **(c)**, ♂. **(d)**, ♀. **(e)** *O. aurifer* Boh. ♀, ITALY, Abrezzi-Chieti, vi/33, det. F. Solari. **(f)** *O. sulcatus* (F.) ♀, Wiltshire, Bradford on Avon. All specimens are from BMNH Coll. Photo Harry Taylor (NHM).

O. armadillo (Rossi) (Figure 1 a, b) and *O. salicicola* Heyden (Figure 1 c, d) occur naturally in central and southern Europe, including Switzerland, Austria, northern Italy and in parts of France. They are important pests in Switzerland (Bassangova & Grunder, 1997), and are, along with the ubiquitous *O. sulcatus*, among the most serious pests in plant nurseries in Italy (Landi, 1990, 1991; Bene & del Parrini, 1986; Deseö & Costanzi, 1987). As many Italian nurseries export large numbers of plants internationally, it would be reasonable to expect both species to have been dispersed widely throughout Europe. In confirmation of this, *O. armadillo* has been recently reported in northern Germany (Esser, 1998; Eifler, 1996; Gollkowski, 1990), and both *armadillo* and *salicicola* were introduced into Stockholm, Sweden via a 'Mediterranean glasshouse' (Borisch, 1997). There is also a specimen of *armadillo* in the collections of the Natural History Museum, London, from an ornamental plant in Spain (Zaragoza, iv/1996) where it is not native, and Palm (1996) refers to earlier records from northern Germany (Niederaschen, Berlin) and Poland (Warsaw). In this paper, colonies of *O. armadillo* and *O. salicicola* are reported for the first time from Britain, where both species appear to be well established outdoors on ornamental plants in gardens and parks. Records from more than one year demonstrate the ability of both species to survive a British winter. To date, in Britain, *Otiorhynchus armadillo* has been noted from eighteen localities in seven vice-counties of England, Wales and Scotland. *O. salicicola* has been noted from five localities in two vice-counties in southern England. A precise summary of all known records is given in Appendix 1.

Recorded distribution: *O. armadillo*

The first British specimen of *O. armadillo*, a single teneral female, was collected at night on King's Road, Chelsea in 1998 (Barclay, 2000); because no other specimens were known at that time, and because it was on the outside window of a department store that sold imported house plants, it was initially treated as a 'vagrant' (Mann, 2002). The identification was confirmed by R. T. Thompson and L. Magnano. Three years later, three specimens (including a pair *in cop.*) were noticed on the wall of the railway bridge at Chelsea Harbour (27/viii/2001) by Sasha Esin (Barclay, 2002); over the next weeks many further examples were found on the same wall, along with *O. singularis, O. sulcatus* and *O. rugosostriatus*. The wall is overhung with ivy (*Hedera* sp.: Araliaceae) and Chinese Bramble (*Rubus* sp.: Rosaceae). It was initially speculated that *O. armadillo* had been introduced with trains from Europe, which use the line that runs through Chelsea Harbour. However, in June 2002, a strong colony was found on imported ornamental plants within the Chelsea Harbour complex, away from the railway; importation of the weevils with imported ornamental plants seems the more plausible explanation. In June 2002, Mrs. Janice Taverne, a volunteer at the Natural History Museum, London, brought me two examples of *O. armadillo* from her Pimlico roof garden. On visiting this garden the following evening, and searching vegetation between 9.30 and 10.00 p.m, I collected 69 specimens of *armadillo*, along with three specimens of *O. sulcatus*. The roof garden, which consists of three

large circular planters with herbaceous plants, vines and small trees, had been designed and built, using all new materials and plants, during April 2002. The owners had noticed no damage to the garden in late May, but when I visited in June, several bedding plants, *Bergenia* spp. (Saxifragaceae) had been almost completely defoliated, and large numbers of weevils, including teneral examples, were present. It is apparent that these had emerged from the planters, which must have already been infested with larvae or pupae at the time of delivery. The garden centre where they were purchased was contacted, and said that such a situation was 'common', suggesting that the artificial spread of *O. armadillo* may be very rapid.

The single Scottish example of *O. armadillo* was sent to me for identification by J.A. Owen; it had been taken in Dalry, Edinburgh in July 2000 by B. Saville, and then passed to M. Sinclair. This is apparently the most northerly outdoor record of the species (as the Swedish examples are from a glasshouse). The Welsh example was included in a box of undetermined weevils passed to me by J. Maté. He had received it from A. Sanborn, who had collected it on 12 September 1999 in Cardiff. The first Surrey colony was located during the '*2nd Symposium on the Conservation of Saproxylic Beetles in Ancient Trees*' at Royal Holloway College, Egham; I collected a single female on 25 June 2002 by shaking ornamental *Viburnum tinus* L. (Caprifoliaceae) planted by the roadside, which showed characteristic *Otiorhynchus* feeding damage. The following evening, 26 June 2002, a further seven specimens were collected by myself, R. Angus, A. P. Fowles and P. M. Hammond from a large plant pot containing *Viburnum tinus*. A photograph of one of these specimens was later published (Sutton, 2002).

In October 2002, coverage in the national press prompted several hundred specimens of *Otiorhynchus* spp., of seven species, to be sent to me for identification by members of the public. Most were in response to articles in the Daily Telegraph (O'Brian 2002), Daily Express (Ingham, 2002), The Guardian (Meek, 2002) and The Daily Mail (Chapman, 2002), especially the last, which made a specific request for specimens. Unfortunately this article also mistakenly published a photograph of the widespread *O. sulcatus*, leading many gardeners to believe they had found one of the so-called 'newcomers'. The public response to this media coverage, which will be discussed in a future note (Barclay, in prep.), produced eight additional records of *armadillo* (see Appendix 1). The following comments and observations are from members of the public:- Surrey, Battersea, Condray Place "*large numbers present in (urban) garden for at least 4 years, attacking ivy and basil*", Mrs. V. Thomas (pers. comm.): Staffordshire, Burton on Trent "*10-15 specimens found*": Surrey, Camberley, "*found entering house*": Middlesex, Whetstone, "*approx. 30 killed in front garden in 2 weeks*" (Mr. R. Hull-McCracken pers. comm.): Bedfordshire, Biddenham, "*we are infested here in Biddenham*" (Mr.& Mrs. Harrison pers. comm.): North Hampshire, Farnborough, "*we have been trying to control the pests all summer, as nearly every shrub in our garden is infested with them, as is the case with the gardens of our neighbours*" (Mrs. E. Simmons pers. comm.): Middlesex, St. James's Place, "*I purchase house plants regularly and it is in their vicinity that I find*

many such insects" (Mr. A. Morgan pers. comm.). These comments confirm my own experience, that *armadillo* has been dispersed widely, and is able to form very large populations compared to many of its congeners.

Recorded distribution: *O. salicicola*

The presence of *Otiorhynchus salicicola* Heyden in Britain was first noted by S. Cole, who collected a single dead example in December 2000 in his office, which adjoins the roof garden of his workplace in Victoria Street, London. He recognised it as a new species to Britain, and correctly identified it using the Natural History Museum (BMNH) collection. Subsequently, he found 3 further examples outside the office, and on the terrace itself, one of which he exhibited at the British Entomological and Natural History Society (Cole, 2002), and generously presented to the Natural History Museum (BMNH) British Isles Collection. Other users of the roof terrace commented that they had seen the weevil there often (S. Cole pers. comm.). I located a second colony at Chelsea Harbour, feeding on cherry laurel *Prunus laurocerasus* L., in company with *O. armadillo* and *O. sulcatus*. This colony appears to be confined to a single large hedge of cherry laurel, but on this hedge it is much more abundant than other species, and the population must number at least several hundred. On 4 August 2002, at 11.45 p.m., D.J. Mann and I noted over 40 individuals of *salicicola* in a single square metre of hedge, feeding on new apical shoots ('Lammas growth') of cherry laurel, which were still soft and a pale yellow colour. A statement by Landi (1991) that *salicicola 'does not display the lucifugous habit of other members of the genus'* is not supported by my observations at Chelsea Harbour, where specimens have only been noted feeding openly at dusk and after dark. The species has also been recorded from Townmead Road, Fulham. Although very close, this colony seems to have a distinct origin from the well-established colony at Chelsea Harbour, as it was located on newly delivered and planted *Photinia* plants. Public response to press coverage produced a further two records of *salicicola*: from a garden in Banstead, Surrey, and an infestation in a garden in Bayswater, Middlesex: "*this summer... Our garden has been invaded by thousands of vine weevils.. it is the first year we have noticed such enormous numbers*" (S. Ross pers. comm.). Like *armadillo*, *salicicola* seems able to form very large populations where it occurs.

Feeding preferences and potential pest status

Adult *Otiorhynchus* are leaf-feeders, with a preference for woody plants with tough, waxy leaves. Members of the genus are remarkably resistant to plant secondary toxins, attacking toxic plants avoided by many other herbivores; both *armadillo* and *salicicola* were observed to prefer fresh new leaves, which are more tender, but often contain the highest concentrations of secondary toxic compounds. Most species of the genus are highly polyphagous, for example, Bene & del Parrini (1986) list over 100 plant species and cultivars in 50 genera (mostly of woody plants) that were found to be susceptible to attack by adult *Otiorhynchus*. Naturally, some members of the genus are serious pests of horticulture; for example, *O. sulcatus* has been

estimated to cost the British horticulture industry '*up to £30 million a year*' (Anon., 2002).

A summary of plant species noted so far to be utilised as food by adults of *armadillo* and *salicicola* in Britain is given in Appendix 2. To date, *armadillo* has been recorded in Britain attacking twelve plant genera in nine families. This is, of course, only a tiny fragment of the known dietary range of these species. Di Marco & Osella (2001) give a long list of plants attacked by *armadillo* in Italy, which includes gymnosperms as well as many families of angiosperms. They discuss extensive damage to young plantations of Douglas fir *Pseudotsuga douglasii* Carr (Pinaceae), where adults feed on the needles and bark of the young trees. In Pimlico, in spite of the size of the infestation, no damage from *O. armadillo* was noted on *Euphorbia* sp. (Euphorbiaceae), *Helleborus* sp. (Ranunculaceae) or *Vitis coignetiae* Pull. (Vitaceae). Possibly some plants are avoided, especially if more palatable alternatives are available. The lack of damage to the *Vitis* (a grape vine) is surprising, given the genus's common name of 'vine weevils'.

From the limited British data, *O. salicicola* appears to be more restricted than *armadillo* in the range of plants it will attack; to date it has been recorded on only two species of Rosaceae, *Photinia* sp. and cherry laurel *Prunus laurocerasus*. In Chelsea Harbour, the species is apparently confined to one hedge of cherry laurel, unlike *armadillo*, which is widespread all over the site and in nearby gardens, on a wide range of plants. Di Marco & Osella (*op. cit.*) observe a strong association between *salicicola* and cherry laurel, but otherwise list only *Bergenia* (Saxifragaceae), *Ligustrum* (Oleaceae) and *Salix* spp. (Salicaceae). However, it has been recorded as a pest of Kiwi Fruit *Actinidia deliciosa* Chev. Liang et Ferg. (Actinidiaceae) in Italy (Trematerra, 1994), and Landi (1991) list plants of seven families that are attacked by this species, including two families of deciduous trees (Betulaceae, Aceraceae) and two of gymnosperms (Taxodiaceae, Taxaceae). Possibly *salicicola* is more arboreal than *armadillo*.

Leaves of garden plants showing characteristic *Otiorhynchus* feeding damage are shown in Figure 2. This feeding damage, which consists of notching around the edges of leaves in light infestations (e.g. Figure 2f), and of deep vermiculate incisions in heavier infestations (e.g. Figure 2 c, e), is characteristic, and may be the first and most obvious evidence of the presence of *Otiorhynchus* spp.

Biology

Because of their pest status, the biologies of *O. armadillo* and *O. salicicola* have been moderately well researched, particularly in Italy. Bene & del Parrini (1986) state that *O. armadillo*, like *O. sulcatus*, has a life cycle of 1 year in outdoor conditions and overwinters as a larva. This is supported by Di Marco & Osella (2001), who state that *armadillo* adults emerge in early spring and are present until autumn. However, Palm (1996) suggests that adults are present from August to June, implying that they overwinter. Landi (1991) researched the biology of *O. salicicola*, and observed that it has 1-2 generations per year. Landi states that in the univoltine

cycle, adults emerged in April-May, larvae appeared in June and overwintered as large larvae. In the bivoltine cycle, 1st generation adults emerged in October and oviposited in November, giving rise to overwintering larvae of the 2nd generation. Adults of the 1st generation could survive the winter in the greenhouse, but not in the field. However, Di Marco & Osella (*op. cit.*) state that adult *salicicola* overwinter under leaf litter, in soil and in logs (presumably in the field). Possibly, there is considerable regional variation in these life cycles, and, as all the information above is based on Italian data, life cycles may be quite different in this country. To date, adult *salicicola* have been recorded in Britain in January (indoors), May, June, August, October, November and December (indoors). It would be interesting to see if this species can successfully overwinter as an adult in Britain. Adult *armadillo* have been noted in June, July, August, September, October and November; specimens in Pimlico emerged in late May- early June, and many teneral examples were present on 10th June. A single teneral example of *armadillo* was noted in King's Road in August, and another in Fulham Road in early November (although the latter example quickly died when taken into captivity); these two anomalous records suggest that at least a few individuals of a second generation may have emerged, although *armadillo* has not been recorded to be bivoltine.

Taxonomy and identification

Both *Otiorhynchus armadillo* and *O. salicicola* are members of the nominate subgenus *Otiorhynchus sensu stricto*, which is characterised, among other things, by the absence of teeth on the underside of the femora. The subgenus is well represented in Britain, comprising 13 of the 22 *Otiorhynchus* recorded from the British Isles prior to this paper (Morris, 1997). Reitter (1913) further divided *Otiorhynchus s. s.* into species groups (subsequently here called '*Reitter Groups*'), of which both *armadillo* and *salicicola* belong to *Reitter Group 2* ('Rotte 2', p.42), a taxon of rather large, dark weevils that is poorly represented in Britain. Only two other *Reitter Group 2* species have been recorded in the British Isles, the imported *O. aurifer* Boheman, and *O. auropunctatus* Gyllenhal, a species known from Ireland, and from a single Scottish example (Morris, *op. cit.*). A third member of this species-group, *Otiorhynchus caudatus* (Rossi) is represented by a single specimen in the Stephens-Marsham Collection (BMNH). This example, which is the holotype of *Otiorhynchus lima* (Marsham) (= *O. caudatus* (Rossi)), is of ostensibly British origin, but no other British specimens are known, and, in the absence of further evidence, it should be dismissed as a casual import or foreign example.

Separation of *armadillo* from *salicicola* can be difficult, and the two species are frequently confused (Di Marco & Osella, *op. cit.*). An unusually high level of misidentification between these two species, now rectified, was noted in the collections at the Natural History Museum (BMNH) (R.T. Thompson pers. comm.). Reliably named reference material is extremely useful for confident separation. Dissection of male genitalia, which are very distinct (Figure 4 a,b), is strongly recommended. Males are recognised by the impressed venter, i.e. the underside of

the abdomen is very concave, forming a hollow to admit the back of the female during mating; the underside of the female is evenly convex. The first elytral stria (Figure 5; Lona, 1937), and the relative lengths of antennal segments (Figure 3), may also be useful for identification. The structure of the female genitalia, including the ovipositor and spermatheca, were judged too variable to be useful for the purposes of this paper; a range of these structures is illustrated by Di Marco & Osella (2001).

Both species under discussion secrete a waxy exudate (pruina or pulverulence), similar to that formed by *Lixus* spp. (Curculionidae: Lixinae). This is easily removed by rubbing, condensation or chemicals, but will re-appear in live specimens after about a week. The colour and distribution of the exudate are useful for identification, and care should be taken to retain it when specimens are prepared.

Of the species already known from the UK, the additional species are only likely to be confused with *O. aurifer* (Figure 1e) and possibly *O. auropunctatus*. However, in both of these species the rings of spines around the apices of the tibiae ('corbels') are red-brown, while in *armadillo* and *salicicola* they are absolutely black. The abundant and familiar *O. sulcatus* is immediately distinguished by the presence of teeth on all femora (see Figure 1f, arrow), which are visible to the naked eye.

In Morris's (1997) key to the British species of *Otiorhynchus*, both *armadillo* and *salicicola* should key out as far as couplet 16 (p.19) without difficulty, although care should be taken at couplet 15, dealing with pubescence and pulverulence, especially where rubbed or greasy specimens are involved. A replacement for couplet 16, which should reliably separate British specimens of *coecus*, *aurifer*, *armadillo* and *salicicola* is provided below.

Key to non-native members of *Otiorhynchus sensu stricto* recorded from the United Kingdom

This key should be used as a supplement to that of Morris (1997), replacing couplet 16. It is partly based on the work of Hoffmann (1950), Reitter (1913) and Di Marco & Osella (2001), along with new characters.

16 Legs predominantly red, tarsi and apices of tibia darkened.... **coecus** Germar

Known from very few British examples, some of uncertain provenance: O. armadillo *var.* obsitus *Gyllenhal also has red legs, with knees and tarsi darkened; this form is as yet unknown from Britain.*

\- Legs uniformly black or dark brown.....16a

16a Funicle of antennae with first two segments subequal, the second at least as long as the first (Figure 3a); comb-like rings of spines at apices of front tibiae reddish brown; pronotum small, its length much less than one-third of length of elytra; elytra with irregular patches of golden-brown wiry

pubescence, but without obvious removable 'bloom' or pulverulence. .....**aurifer** Boheman

Habitus figure 1e, 8-13mm

\- Funicle of antennae with second segment clearly longer (at least 1/3) than the first (Figure 3b,c); comb-like ring of spines at apex of front tibia black; pronotum larger, length usually one-third or more of the length of the elytra; elytra with regular patches of fine pubescence and, in fresh specimens, with easily removed dusty 'bloom' or pulverulence.....16b

16b Funicle with 4th, 5th and 6th segments more or less conical, much narrower at base than at apex, generally less than twice as long as wide (Figure 3b); rostrum as broad as long from the antennal insertion to the base of the eye; elytra rugose with coarsely punctured striae, with expanded recesses, in which are patches of yellowish brown pubescence, which accumulates the waxy pulverulence; pulverulence coarse, ochreous brown, in fresh examples distributed over entire upper surface; first elytral stria joined to second in a 'hairpin' shape before apex (Figure 5a, see arrow).....**armadillo** Rossi

Habitus Figure 1a,b; aedeagus distinct (Figure 4a); 7.7 to 12 mm. Elytra short, rounded-oval, shoulders rounded, pubescence grey or yellowish, condensed in numerous small patches in the elytral striae. Derm black, but general appearance greyish or ochreous brown due to pubescence and pulverulence. Thoracic granules quite strong and even, those of the elytra irregular, coarse. Generally smaller than O. salicicola, *but much more variable in size: 90% of London examples of* armadillo *were 9.5-11.5 mm, but three dwarf specimens, 7.7-8.5 mm, were noted (approximately 1% of 300 or so adults noted in total). As these were taken in crowded conditions, and were teneral later in the season, it is suggested that their small size may be due to adverse developmental conditions.*

\- Funicle with 4th, 5th and 6th segments elongate, at least twice as long as wide, more or less parallel sided (Figure 3c). Rostrum slightly longer than wide in the area between the base of the eyes and the antennal insertion; elytra less rugose, shining, with uniformly punctured striae and very light, almost uniform pubescence, more dense at base and sides of elytra; pulverulence sulphur-yellow, concentrated at base of elytra and base of pronotum (Figure 1d, see arrow); first elytral stria continued to border of elytra, where it terminates in a small fovea (Figure 5b) .....**salicicola** Heyden

Habitus Figure 1c, d; aedeagus asymmetrical, very distinctive (Figure 4b); 11-13.5 mm. Larger and more heavily built than armadillo*; elytra with stronger shoulders; shining glossy black with strongly contrasting sulphur-*

coloured pulverulence at base and sides of elytra and pronotum, and very copious on underside. Striae of elytra well marked with regular small patches of whitish-yellow pubescence. Generally larger than armadillo, *and of more constant size (90%+ of London individuals from 11.5-13 mm).*

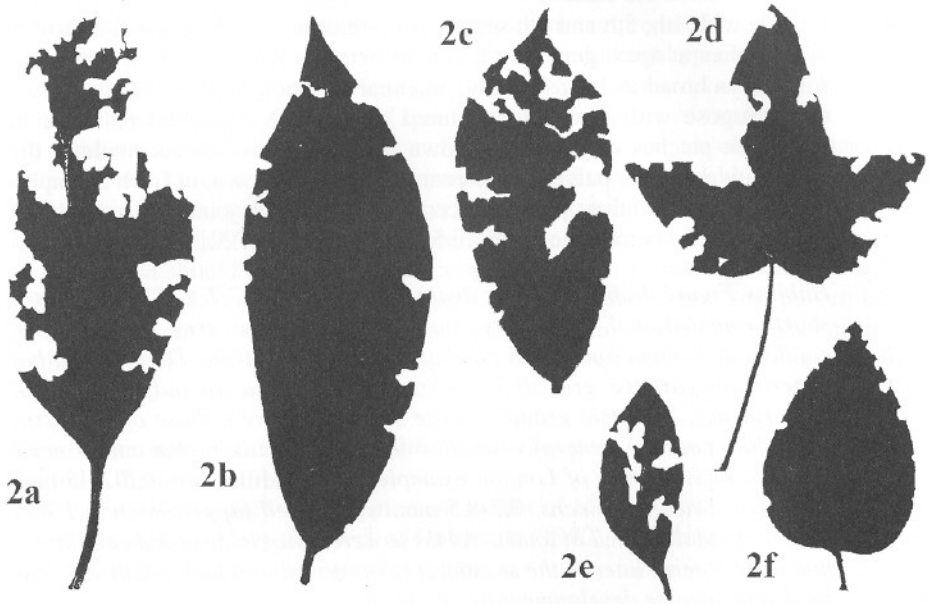


Figure 2 Characteristic damage by *Otiorhynchus* spp. to leaves; all damage by *O. armadillo* except 'c', which is by *O. salicicola*. (a) *Bergenia* sp. 'Bressingham White', Pimlico (b) *Viburnum davidii*, Chelsea Harbour, (c) *Prunus laurocerasus*, Chelsea Harbour, (d) *Hedera* sp., Fulham Road, (e) *Laurus nobilis*, Fulham Road, (f) *Viburnum tinus*, Royal Holloway College.

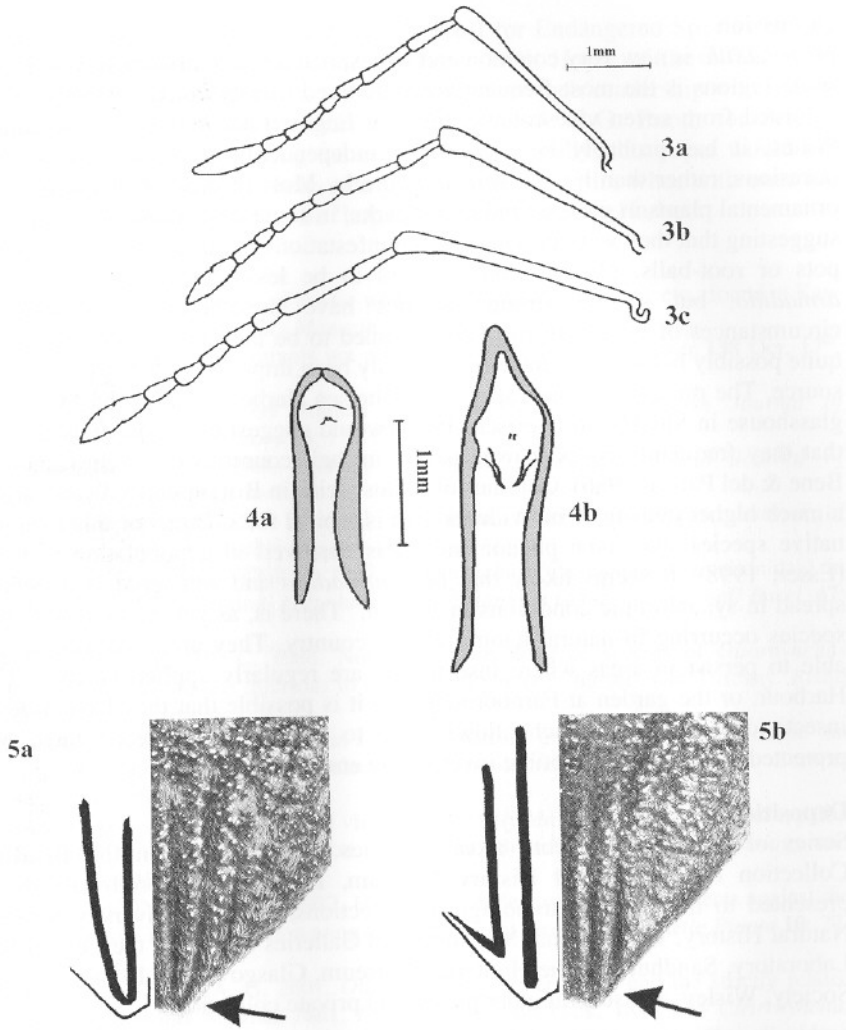


Figure 3 Antennae of *Otiorhynchus* spp. (a) *O. aurifer* Boh., (b) *O. armadillo* (Rossi), (c) *O. salicicola* Heyden.

Figure 4 Sclerotised apical part of aedeagus (median lobe) of *Otiorhynchus* spp. (adapted from Di Marco & Osella 2001) (a) *O. armadillo* (b) *O. salicicola*.

Figure 5 Apices of elytra showing form of first and second striae in *Otiorhynchus* spp.. Right, photographs, left, reflected line drawings of relevant structures (a) *O. armadillo* (b) *O. salicicola*. Photo Harry Taylor (NHM).

Discussion

O. armadillo is now very common and widespread in several parts of London, and in some regions is the most frequently encountered member of the genus. It has been recorded from seven vice-counties, five in England and one each in Scotland and Wales; it has probably been imported independently from abroad on multiple occasions, rather than having spread naturally. Most records of *armadillo* are from ornamental plants in gardens and urban parks; in some cases these are newly planted, suggesting that they were purchased with infestations of larvae already present in the pots or root-balls. *O. salicicola* appears to be less widespread in Britain than *armadillo*, but several strong colonies have nonetheless been located; the circumstances of its introduction are assumed to be the same as for *armadillo*, and quite possibly both species have occasionally been imported together from a common source. The presence of both species in Chelsea Harbour, and in the Mediterranean glasshouse in Stockholm (Borisch, 1997) would suggest this, especially considering that they frequently co-exist in nurseries in their countries of origin (Landi, 1991; Bene & del Parrini 1986). Colonies of both species in Britain may be very large, with a much higher density of individuals than is typical for *sulcatus* or other supposedly native species; the same phenomenon was observed in a population in Germany (Esser, 1998). It seems likely that both *armadillo* and *salicicola* will persist and spread in synanthropic conditions in Britain. There is, as yet, no evidence of either species occurring in natural habitat in this country. They are, however, apparently able to persist in areas where insecticides are regularly applied (such as Chelsea Harbour, or the garden at Farnborough), so it is possible that they have a degree of insecticide resistance, which allows them to thrive in managed habitat, perhaps protected from more susceptible invertebrate enemies.

Deposition of specimens

Series of both species from most localities are deposited in the British Isles Collection of the Natural History Museum, London. Material has also been presented to the Hope Entomological Collections, Oxford University Museum of Natural History, The National Museums and Galleries of Wales, the Central Science Laboratory, Sandhutton, The Hunterian Museum, Glasgow, The Royal Horticultural Society, Wisley, and several other public and private collections.

Acknowledgements

I would like to express particular thanks to the following people: to R.T. Thompson (BMNH) for freely sharing his expertise, and for confirmation of identifications; to S. Cole, B. Saville, A. Halstead and J. Maté for permission to use their records; to S. Cole for presenting the first British example of *O. salicicola* to the National Collection; to H. Taylor (NHM photo unit) for excellent photographs; to L. Magnano for confirming the identity of the first British specimen of *armadillo*; to Mr. & Mrs. R. Taverne for assistance & information; to M. Grant, A. Halstead and A. Salisbury (RHS, Wisley) for discussion and plant identification; to A. del Riva and F. Krell for translating Italian & German texts respectively; to S.V. Nikolaeva for her help with

figures, and constant support; to the People's Trust for Endangered Species and R. Angus for organising the Coleoptera Conference; to S. Hoyle of the NHM Press Office for her efforts, the journalists for their articles, & their readership who sent in specimens; to D.J. Mann, M.G. Morris, H. Mendel & R.G. Booth for helpful discussions, and for accompanying me on fieldwork. Finally, this paper would not have been possible without the help of my stepson Sasha Esin, who, with unerring instinct, first drew my attention to the 'large weevils' at Chelsea Harbour.

References

ALLEN, A.A. 2000. Three species of exotic weevils (Col., Curculionidae), etc., found at Kew Gardens. *Entomologist's Monthly Magazine* **136**: 148.

ANON., 2002. New weevil immigrants not a threat, says Certis. *The Grower* **138** Oct. 17th, p12.

BARCLAY, M.V.L. 2000. 1999 Annual Exhibition. Coleoptera. *British Journal of Entomology and Natural History* **13**: 172-173.

BARCLAY, M.V.L. 2001. 2000 Annual Exhibition. Coleoptera. *British Journal of Entomology and Natural History* **14**: 160-161.

BARCLAY, M.V.L. 2002. 2001 Annual Exhibition. Coleoptera. *British Journal of Entomology and Natural History* **15**: 174-175.

BASSANGOVA N. & GRUNDER J. 1997. *Otiorhynchus* (Coleoptera, Curculionidae) in various regions of Switzerland. *Mitteilungen der Entomologischen Gesellschaft Basel.* **47**: 22-28.

BENE, G. & del PARRINI, C. 1986. Notes on the biology of species of *Otiorhynchus* (Coleoptera Curculionidae) injurious to ornamental plants in nurseries in Tuscany. *Redia* **69**: 341-359.

BORISCH, D. 1997. Edvard Anderson's Mediterranean greenhouse in Stockholm: an immigration gate for weevils (Coleoptera: Curculionidae) from southern Europe. *Entomologisk Tidskrift* **118**: 133-134.

CHAPMAN, J. 2002. Invasion of the evil vine weevil. *Daily Mail, Tuesday October 8th*, p.25.

COLE, S. 2002. 2001 Annual Exhibition. Coleoptera. *British Journal of Entomology and Natural History* **15**: 176.

DESEÖ, K.V. & CONSTANZI, M. 1987. Use of nematodes pathogenic to insects against the larvae of weevils injurious to flowering and ornamental crops. *Difesa delle Piante* **10**: 27-132.

DI MARCO, C. & OSELLA, G. 2001. *Otiorhynchus* Germar, 1824 and the strictly related genera *Dodecastichus* Stierlin, 1861, *Limatogaster* Apfelbeck, 1898 and *Cirirrhynchus* Apfelbeck, 1899 from the Abruzzo-Molise Appennins (Coleoptera: Curculionidae). *Memorie de Museo Civico do Storia Naturale di Verona (II serie), Sezione Scienze della Vita*-N.15-2001. 1-117.

EIFLER, M. 1996. *Otiorhynchus armadillo* (Rossi, 1792) - neu fur unser Gebiet. *Bombus* **3**: 80.

ESSER, J. 1998. Interesting beetle finds from Germany (Col.). *Entomologische Nachrichten und Berichte.* **42**: 95-97.

GOLLKOWSKI, V. 1990. *Otiorhynchus armadillo* Rossi von der Insel Rugen (Coleoptera, Curculionidae). *Entomologische Nachrichten und Berichte* **34**: 142.

HOFFMANN, A. 1950. Coléoptères Curculionides (Premiere partie) *Faune de France* **52**: 1-486. Paris : Paul Lechevalier.
INGHAM, J. 2002. The evil weevils, *The Daily Express, 8th October 2002* (not in all printings).
LANDI, S. 1990. Possibility of biological control of *Otiorhynchus* spp. on ornamental plants in nurseries. *Redia* **73**: 261-273.
LANDI, S. 1991. Contribution to the knowledge of *Otiorhynchus salicicola* Heyd. (Coleoptera: Curculionidae). *Redia* **74**: 127-134.
LONA, C. 1937. Studi sugli *Otiorrhynchus*-II. *Bolletino societa entomologica italiana* **69**: 150.
MAGNANO, L. 1998. Notes on the *Otiorhynchus* Germar, 1824 complex (Coleoptera: Curculionidae). *In*: Colonnelli, E., Louw, S. & Osella, G., (*eds*). *Taxonomy, ecology and distribution of Curculionoidea (Coleoptera: Polyphaga).* Proceedings of a symposium (28 August, 1996, Florence, Italy). 20th International Congress of Entomology. Torino: 1-294.
MANN, D.J. 2002. Changes to the British Coleoptera list published in 2000 and 2001. *The Coleopterist* **11**: 52-63.
MEEK, J. 2002. Weevil pest warms to life in southwest London, *The Guardian, 8th October 2002*.
MORRIS, M.G. 1997. Broad-Nosed Weevils Coleoptera: Curculionidae (Entiminae). *Handbooks for the Identification of British Insects* **5**(17a): 1-106.
O'BRIAN, K. 2002. A touch of weevil, *The Daily Telegraph Gardening Supplement, 12th October 2002*.
PALM, E. 1996. *Nordeuropas snudebiller. 1. De kortsnudede arter (Coleoptera: Curculionidae)- med saerligt henblik pa den Danske fauna. Danmarks Dyreliv* **7**: 1-356.
REITTER, E. 1913. Bestimmungs-Tabelle der Europaischen Coleopteren. Curculionidae: 20 Teil: Die ungezahnzen Arten der gattung *Otiorhynchus*. *Weiner Entomologischen Zeitung* **32**: 25-118.
SUTTON, P. 2002. 2nd symposium and workshop on the Conservation of saproxylic beetles in ancient trees. *Bulletin of the Amateur Entomologists' Society* **61**: 153-161.
TREMATERRA, P. 1994. *Amphipyra pyramidea*, a new pest of actinidia. *Informatore Agrario* **50**: 75-77.

Appendix 1: List of British Records of *O. armadillo* and *O. salicicola* up to and including November 2002.

***Otiorhynchus armadillo* (Rossi)**:
NORTH HAMPSHIRE (VC 12): Farnborough, Juniper Rd. (SU8456) 9/x/2002, 1♂, 3♀, attacking holly etc. (Mrs. E. Simmons).
SURREY (VC 17): Egham, Royal Holloway College (SU9970) 25/vi/2002, 1♀ on ornamental *Viburnum tinus* planted by pathway (MVLB); 26/vi/2002, several from potted *Viburnum tinus* on balcony, 9 p.m. (MVLB and others): Battersea, Condray Place (TQ2777) 20/x/2002, 1♂, (Mrs. V. Thomas): Camberley, The Maultway (SU9059) 8/x/2002, 1♂, anonymous letter. East Molesey, Hampton Court Crescent (TQ1468) 4/xi/2002 (R. Navarro), 1♀.

MIDDLESEX (VC 21): Chelsea, Kings Road (TQ2778) 28/viii/1998, 1♀ on outside window of department store (MVLB): Chelsea, Chelsea Harbour (TQ2676) 27/viii/2001; 2♀♀, 1♂, on wall of railway bridge (one pair *in cop.*) (Sasha Esin): 11/ix/2001, 1♀, 1♂, on wall of railway bridge (MVLB): 22/ix/2001, 1♂, as above: 4/x/2001, 2♂, as above: 11/x/2001, 1♂, as above: 5/vi/2002, 1♂, as above: 10/vi/2002, abundant on *Viburnum davidii*, 11 examples on *Prunus laurocerasus* in Harbour Complex, in company with *O. salicicola* (MVLB): 16/vi/2002, abundant on *Prunus* in Harbour Complex (MVLB): 17/vi/2002, as above: 18/vi/2002, as above, plus 2 examples on ornamental *Pyracantha* on railway embankment: Pimlico, Cambridge Road (TQ2878) 10/vi/2002, 1♀, 1♂, (Janice Taverne): 11/vi/2002, 69 individuals (and three *O. sulcatus*) taken from potted ornamental plants on roof garden at 9:30 p.m. by torchlight searching (MVLB): Fulham, Fulham Road (TQ2678), 9/vii/2002, several from planters with *Hedera helix* and *Laurus nobilis*. (Andrew Halstead): 15/vii/2002, as above (MVLB): 2/xi/2002, as above (MVLB): Fulham, New King's Road (TQ2576) 13/viii/2002, 2♂, 1♀ shaken from *Laurus nobilis* in garden, 11:30 p.m (MVLB): Whetstone, Russell Lane, (TQ29) 8/x/2002, 2♂ (Mr. R. Hull-McCracken): St. James's Place (TQ2980), 10/x/2002, 1♂, (Mr. A. Morgan): Grosvenor Place (TQ2879), x/2002, several on *Viburnum tinus* (A. Halstead): Hampton Court Garden & Nursery (TQ16), 22/xi/2002, on *Laurus nobilis* (enquiry from CSL).
BEDFORDSHIRE (VC 30): Biddenham, St. Mellion Drive (TL0149) 1♂, 10/x/2002, (Mr. & Mrs. Harrison).
STAFFORDSHIRE (VC 39): Stretton, Burton on Trent (SK2425), 10/x/2002, 1♀, anonymous letter.
GLAMORGAN (VC 41): Cardiff (ST 17) 12/ix/1999, 1♀, coll. A. Sanborn.
MIDLOTHIAN (VC 83): Edinburgh, Dalry (NT27) 22/vii/2000, 1♀, coll. B. Saville.

***Otiorhynchus salicicola* Heyden:**
SURREY (VC 17): Banstead, Croydon Lane (TQ26) 10/x/2002, 3♂ (anonymous letter).
MIDDLESEX (VC 21): Victoria, Victoria Street (TQ2979) xii/2000, 1 dead in office: i/2001 one example on office window: iv/2001, one on roof terrace outside office: v/2002, one on roof terrace (all Stuart Cole): Chelsea, Chelsea Harbour (TQ264767) 10/vi/2002, 5 examples on *Prunus* in Harbour Complex, in company with *O. armadillo*: 16/vi/2002, abundant on *Prunus* in Harbour Complex: 17/vi/2002, as above: 18/vi/2002, as above: 4/viii/2002, as above: 9/xi/2002, as above: (all MVLB): Fulham, Townmead Road, Imperial Wharf, (TQ262763), 10/x/2002, severe infestation on *Photinia* (MVLB): Bayswater, Lombardy Place (TQ2580), 26/xi/2002, 2♂ (S. Ross).

Appendix 2: Food plants noted for adults of *Otiorhynchus armadillo* and *O. salicicola* in Britain.

***Otiorhynchus armadillo* (Rossi):**
CAPRIFOLIACEAE: *Viburnum davidii* Franch. (Figure 2b) 4 large plants in stone planters heavily attacked (Chelsea Harbour): *Viburnum tinus* L., "laurustinus" (Figure 2f) (Royal Holloway, Grosvenor Place). ROSACEAE: *Sorbus hupehensis* C.Schneider, "Hupeh rowan"; considerable damage to these small trees (Pimlico): *Prunus laurocerasus* L., "cherry laurel"; (Figure 2c). Square cut ornamental hedges were utilised by *armadillo* as well as *salicicola* and *sulcatus* (Chelsea Harbour). *Cotoneaster* spp. considerable feeding damage on both large-leaved and small-leaved taxa (Chelsea Harbour). *Pyracantha coccinea* M. Roemer, "firethorn" occasional evidence of feeding (Chelsea Harbour). CELASTRACEAE: *Euonymus fortunei* (Turcs.) (Chelsea Harbour). SAXIFRAGACEAE: *Bergenia* sp. "Bressingham white or elephant's ears" (Figure 2a) heavily attacked, to the point of defoliation (Pimlico). POLYGONACEAE: *Muehlenbeckia* sp., "wireplant"; only limited damage (Pimlico). AQUIFOLIACEAE: *Ilex* sp. "holly" (Farnborough)
ARALIACEAE: *Hedera helix* L., "ivy" (Figure 2d). (Fulham Road/ Battersea).
LAURACEAE: *Laurus nobilis* L., "bay" (Figure 2e). (Fulham Road/ Hampton Court). LAMIACEAE: *Clinopodium* sp. "basil" (Battersea).

***Otiorhynchus salicicola* Heyden:**
ROSACEAE: *Prunus laurocerasus* L., "cherry laurel" (Figure 2c). (Chelsea Harbour). *Photinia* sp. "red robin" (Townmead Road).

Belated records of *Lebia cyanocephala* (Linnaeus) (Carabidae) in Hertfordshire

Jonty Denton
2 Sandown Close, Alton, Hants GU34 2TG, UK. Email: JontyDenton@AOL.COM

The Natural History Museum, London recently acquired the W.R.B. Hynd collections of Coleoptera and amongst this material were three specimens of *Lebia cyanocephala* (Linnaeus) from Hertfordshire.

Lees Wood nr Watford (TQ0798) 17.vii.1943 two specimens
'The Grove' nr Watford (TQ0898) 29.viii.1942 one specimen

Unfortunately, they had been remounted, and so the original collector is not known. These appear to be the first records of this rare beetle in Hertfordshire. The sites are close to an extensive complex of working gravel pits. St.John's wort *Hypericum* is locally abundant on bunds and disturbed ground around these works, and *Chrysolina hyperici* (Forster) (Chrysomelidae) a host of *L. cyanocephala* was present in 2002.

Scolytus pygmaeus (Fabricius, 1787) (Scolytidae) – a new arrival to Britain

N.F. Heal
44 Blenheim Avenue, Faversham, Kent ME13 8NW

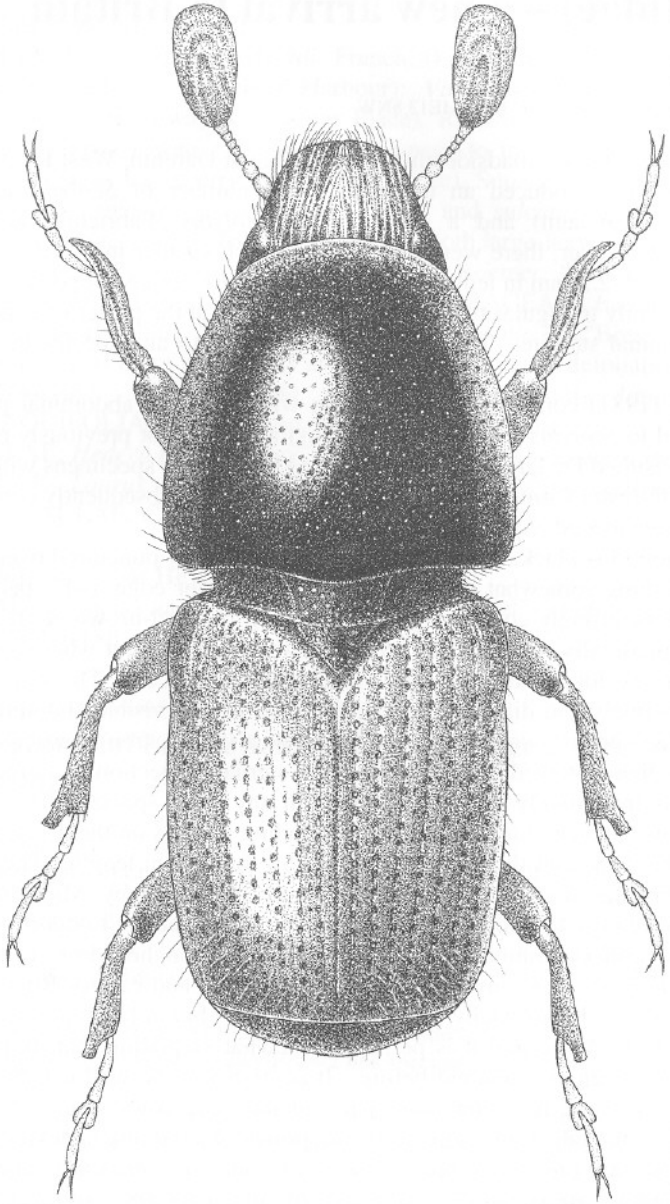
Beating an old regrowth roadside elm *Ulmus* hedge at Darenth, West Kent (TQ5870) on 27 June 2000 produced an unusually large number of *Scolytus* adults – *S. multistriatus* (Marsham) and a corpse of *S. scolytus* (Fabricius) were readily identifiable. However, there were a number of much smaller individuals ranging in size between 1.8–2.5 mm in length, some of which were noticed to possess a strongly projecting, bluntly triangular tubercle located centrally at the posterior edge of the 4th visible abdominal sternite. These did not readily key to any species in the British literature.

Nunberg (1981) contained an illustration with a similar abdominal profile, but which related to *Scolytus pygmaeus* (Fabricius) a species not previously recorded in Britain. I consulted Dr Tim Winter who offered to compare specimens with a foreign series in the Forestry Commission's collections, and who subsequently confirmed my specimens were indeed *S. pygmaeus*.

The pronotum is black, very shiny, finely and diffusely punctured over main part of disc, becoming somewhat denser towards the anterior edge and especially front angles. This is strongly contrasting with a shining rich red-brown elytra. The male frons is longitudinally rugose, flattened, and strongly pubescent whereas that of the female is convex, longitudinally rugose, and weakly pubescent. The metasternum of both sexes is finely and diffusely punctured. The second visible abdominal sternite of the female is broadly concave in the hind half giving a strong vertical separation from the median flattened sternal area. The sternal projection is only present in males, which are unlikely to be confused with any other species. The male of *S. laevis* Chapuis, also an elm feeder, has a protruding process on the 4th sternite, but it is of different shape and the adult measures 3.5 - 4.5 mm in length. The respective abdominal profiles are quite distinct and well illustrated by Michalski (1973). Specimens have been deposited at the Natural History Museum, London.

Apparently rather common and widely distributed throughout France, also central and eastern Europe- Germany, Austria, Poland, central and eastern Russia, also the Mediterranean – Italy and Sicily (Balachowsky, 1949) but only of rare occurrence in Sweden (Schedl, 1981), and it is perhaps somewhat surprising that its presence in Britain has not been encountered before. It continues to be well established at the Darenth site, seeming to prefer those parts of the hedgerows where the foliage is yellowing or withered. Elm seems to be the principal pabulum, attacking weakened and cut trees and preferring upper layers of thin bark on trunk and branches (Nikitsky, 1996). Reference is also made in Schedel (1981) to its being found exceptionally on hornbeam *Carpinus betulus* L. and beech *Fagus sylvaticus* L.; also

Prunus armeniaca L. and very occasionally on *Olea europaea* L., neither of which occurs naturally in Britain.



Scolytus pygmaeus (Fabricius) R.J.W. Read

Basset *et al.* (1992) conducted experiments in Italy to study the transmission of the fungus *Ophiostoma ulmi* (Schwarz) Nannfeldt, which causes Dutch elm disease. The conclusion was that *S. pygmaeus* was found to be equally capable of vectoring the fungus as *S. multistriatus*. The disease cycle has been known since the 1930s (Fransen, 1931). The new generation of adult beetles emerge from elm bark, they carry spores of the pathogen on their bodies, and before seeking out bark for fresh breeding material, often feed in tiny 'crotches' of healthy elms. Apparently, this is the most common way by which *O. ulmi* infects elms, the scolytid feeding grooves serving as the infection source for the pathogen. It is very noticeable that elm survives in bush form for several years until it becomes large enough to be affected by *S. multistriatus*. However, *S. pygmaeus* being so small means that that fungus can be transmitted to the elm bark at a much earlier stage of growth (Favaro, 1993), and if *S. pygmaeus* achieves widespread distribution, I fear the growth of our elm hedges may be severely affected.

There is already accumulating evidence that the species may be capable of establishing itself successfully over a wide area, at least in southern Britain, as demonstrated by the following subsequent additional observations.

(1) I found the species to be present at Cuxton, West Kent (TQ7067) on 23 July 2000 some eight miles distant to the east in a very similar hedgerow situation.

(2) Colin Plant swept a male at Ten Acre Wood, near Hillingdon, Middlesex (TQ0983) on 5 June 2002 adjacent to an elm hedge.

(3) Richard Jones swept a female from roadside vegetation at Gardiner's Lane, Basildon, South Essex (TQ7290) on 25 June 2002, and beat a male off elm branches at Downham Woodland Walk, near Bromley, West Kent (TQ3871) on 2 July 2002, both in association with several *S. multistriatus*.

(4) David Hance beat a male off elm at Ivychurch, Romney Marsh, East Kent (TR0328) on 13 July 2002.

I will follow its progress in Britain with considerable interest and would be interested to learn of other records.

Acknowledgements

I am especially grateful to Dr. Tim Winter for confirming my original identification; to David Hance, Richard Jones and Colin Plant for willingly agreeing to my incorporating their records; to Maxwell Barclay, Natural History Museum, London for drawing my attention to various sources of reference and to Dr. Ed Jarzembowski of the Maidstone Museum and Art Gallery for obtaining various text translations from Thierry Deve at the National Museum of Natural History, Paris and Ewa Krzemińska at the Institute of Systematic and Evolution of Animals, Kraków.

References

BALACHOWSKY, A. 1949. Coléoptères Scolytides. Faune de France **50**. Paris: Librairie de la Faculté des Sciences.

BASSET, Y., FAVARO, A., SPRINGATE, N.D., BATTISTI, A. 1992. Observations on the relative effectiveness of *Scolytus multistriatus* (Marsham) and *Scolytus pygmaeus*

(Fabricius) (Coleoptera: Scolytidae) as vectors of the Dutch elm disease. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* **65**: 61-67.

FAVARO, A., BATTISTI, A. 1993. Observations on the Elm Bark Beetle *Scolytus pygmaeus* (Fabricius) as possible vector of the Fungus *Ophiostoma ulmi* (Schwarz) Nannfeldt. *Redia* **76** n.z. 459-466.

FRANSEN, J.J. 1931. Some data on the spread by the cambium beetles, *Scolytus scolytus* and *Scolytus multistriatus*, of the elm disease due to *G. ulmi* in connection with the control of the disease. *Tijdischr Plantenziekt* **37**: 49-62.

MICHALSKI, J. 1973. *Revision of the Palearctic Species of the Genus Scolytus Geoffroy*. Polska Akademia Nauk Zaklad Zoologii Systematycznej I Doświadczalnej.

NIKITSKY, N.B., OSIPOV, I.N., CHEMERIS, M.V., SEMENOV, V. B. & GUSAKOV, A.A. 1996. The Beetles of Prioksko – Terrasny Biosphere Reserve – Xylobiontes, Mycetobiontes and Scarabaeidae (with the review of the Moscow Region Fauna of these groups). *Arch. Zool. Mus. Moscow Univ.***36**: 1-197. [In Russian]

NUNBERG, M., 1981. Scolytidae Platypodidae *Klucze do Oznczania Owadów Polski* **19**: 1-115: No. 120. Entomologiczna Warszawa. Wroclaw.

SCHEDL, K.E. 1981. Scolytidae in Freude, H., Harde,.K.W. & Lohse, G.A. (Eds) *Die Käfer Mitteleuropas* **10** , Krefeld: Goecke & Evers.

Additional records of *Judolia sexmaculata* (Linnaeus) (Cerambycidae) from Scotland

Chris Sullivan
14 Main Road, Crombie, Dunfermline, Fife KY12 8JY Email: csullivan@clara.co.uk

While working at the National Museums of Scotland (NMS), a few beetles that were part of material collected by Iain MacGowan were passed to me by David Robertson (also a Professional Assistant at NMS) for identification. One of these beetles turned out to be *Judolia sexmaculata* (Linnaeus) a Notable A cerambycid (Hyman, 1992) under threat from the loss of native pine forests. The specimen was collected in Aviemore on 5 July 1979.

On looking into the Scottish Insects Records Index (SIRI) housed at the NMS I found there were over 50 records for this particular species, but I believed most of these to be citations. This consequently led to examination of the main museum collection and other major collections that are kept separate in NMS.

The main collection had ten specimens; seven of these collected by D.K. Kevan at Aviemore in 1949; one from the Linn of Dee by J.A. Owen in 1956 and one from Pitlochery, collected by Collin in 1920. Of the other separate collections Thomas Hudson Beare's (1859 – 1939) contained nine specimens all from Nethy Bridge and dated 1932, 1934 and '35. D.K. Kevan's (1895 – 1968) collection had twelve specimens all from Aviemore and dated 1944, 1945 and 1949. The Waterhouse collection, which has collections from the father George Robert (1810 – 1888) and his two sons Charles Owen (1843 – 1917) and Edward Alexander (1851 – 1916) and that of Frank Balfour Browne (1874 – 1967), contained no specimens of *Judolia sexmaculata*.

Subsequently, Iain MacGowan brought me another *Judolia sexmaculata* to verify his identification. It proved to be correct and was collected at Creag Vinean, Dunkeld on 24 June 2002.

Acknowledgements
Thank you to Iain MacGowan for allowing me to publish his findings.

References

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: Joint Nature Conservation Committee.

Further records of *Chrysolina americana* (Linnaeus) (Chrysomelidae) in Britain.

A. Salisbury.
The Royal Horticultural Society's Garden, Wisley, Woking, Surrey GU23 6QB

Since the discovery of the rosemary beetle *Chrysolina americana* (Linnaeus) out of doors at Wisley Garden, Surrey (TQ0658) in 1994 (Halstead, 1996), colonies and individual specimens of this Mediterranean beetle have been found in central and south west London. Several colonies and reports of individuals have been made from the 10km squares TQ26, TQ27 and TQ30 (Barclay and Mann 2002, Salisbury 2002, Menzies 1999). Colonies of the beetle have also been reported outside of London from the vice counties of Berkshire, Cambridgeshire, Surrey and East Norfolk (Smith 2001, Salisbury 2002). In addition, individuals have been reported from Leicestershire and South East Yorkshire (Salisbury 2002).

Several more records of the beetle were received by the Royal Horticultural Society's members' advisory service during 2002. Further reports were received from the TQ27 area of London, on 13 May 2002, 24 June 2002 and 8 January 2003, indicating that the beetle is continuing to spread in this area. Outside London, the beetle was reported on 14 October 2002 from rosemary plants in Sawbridgeworth, Hertfordshire (TL4814). The specimens found are likely to have been imported with the host plant from Italy. On 19 December 2002, specimens were found on rosemary imported from the Mediterranean region in Crickhowell, Breconshire (SO2112) and on 12 September 2002 from Hamptons, East Sussex (TQ6252) on rosemary, the origin of the host plants is unknown.

It is clear that *C. americana* has become an established pest in the south west of London, and is continuing to spread in this area. The records also indicate that the beetle is continuing to be imported with plant material from the Mediterranean. Thus, further records of the beetle can be expected, particularly as the Plant Health and Seed Inspectorate is no longer taking statutory action against this pest when outbreaks occur (Anon 2002), and it is therefore likely that the beetle will continue to be imported and spread through the nursery trade.

References

ANON. 2002. The rosemary beetle *Chrysolina americana*. Plant Health and Seed Inspectorate news release, DEFRA, London. 28 June 2002.

BARCLAY, M.V.L. & MANN, D.J. 2002. Some further records of *Chrysolina americana* (L.) (Chrysomelidae) in London. *British Journal of Entomology and Natural History* **15**: 136-137.

HALSTEAD, A.J. 1996. Possible breeding by the rosemary beetle, *Chrysolina americana* L. in Britain. *British Journal of Entomology and Natural History* **9**: 107-108.

MENZIES, I.S. 1999. [Exhibit at 1998 BENHS Annual Exhibition.] *British Journal of Entomology and Natural History*, **12**: 177.

SALISBURY, A. 2002. The rosemary beetle, *Chrysolina americana* (L.) (Col., Chrysomelidae) in Britain. *Entomologist's Monthly Magazine* **138**: 77-80.

SMITH, M.N. 2001. [Exhibit at 2000 BENHS Annual Exhibition.] *British Journal of Entomology and Natural History* **14**: 168.

Review

An annotated list of wetland ground beetles (Carabidae) and rove beetles (Staphylinidae) found in the British Isles including a literature review of their ecology by D.A. Lott English Nature Research Reports, no. 488. 83 pp of text and tables, no illustrations. Softbound. 2003 Unpublished, available free of charge from English Nature, Northminster House, Peterborough PE1 1UA or via their website.

There are 597 wetland species of carabids and staphylinids, but the diversity of non-aquatic wetland beetles (and invertebrates in general) is often overlooked in favour of the aquatic species. This research report helps to raise the profile of non-aquatic wetland beetles.

After a brief introduction, the publication is divided into three sections. A literature review of the ecology of wetland beetles includes sections on habitats and on site assessment for conservation. The section on 'resources for study' reviews sampling methods (particularly pitfall-trapping and hand-searching), gives a very useful guide to identification literature on wetland carabids and staphylinids, and pointers to other sources of information such as national recording schemes. The third section is an annotated list of wetland species, including for each species a measure of its fidelity to wetlands, its preferred wetland habitats and microhabitats, conservation status, and its frequency and abundance in the author's own very extensive sampling of wetland beetle assemblages.

The text is fluent, readable and authoritative (even where the literature on the subject is thin and scattered) and is drawn from a very long list of references from across Europe and North America. As stated in the introduction, this work is "primarily intended to be an information tool": that rather modestly stated intention has been admirably achieved. This will be a valuable work for all those with an interest in wetland beetles, their ecology and their conservation.

Mark G. Telfer

Prionychus melanarius (Germar) (Tenebrionidae) widespread in north Gloucestershire

Keith N.A. Alexander
59 Sweetbrier Lane, Heavitree, Exeter EX1 3AQ

John Owen and Ian Carter discovered *Prionychus melanarius* (Germar) in Gloucestershire in 1983 (Owen, 1987), little more than 20 years ago. At the time, it seemed extraordinary that this rare wood-decay species occurred in the county at all. However, since then it has increasingly been found locally, to the extent that it is now known from seven 10 km squares in the county alone. Atty (1983) never found it himself in the county and nor did any previous recorders. So, does this mean that the species has colonised recently or expanded from a formerly very localised population? The answer appears to be neither of these - the species has almost certainly been widespread in the county for a very long time but has been missed through its association with under-worked habitats.

The beetle is very much characteristic of old open-grown trees, where the central heartwood is in the process of being hollowed out by fungi, and the trunks are well-warmed by the sun. It occurs in three main types of habitat in Gloucestershire: old pastures with scattered ancient pollards along the Cotswold escarpment, ancient parklands or chases, and old orchards. None of these habitats had been investigated much by previous recorders. It does not occur in closed canopy woodlands.

The first record does not appear to fit any of these categories - but see below - although it was from an old open-grown tree: it was reared from larvae found in an elm *Ulmus* stump on the bank of an old lane between Lower Apperley (Carter, 1986) and Norton (Owen, 1987 & 1990). This area (SO82) is within a series of low hills within the Severn floodplain.

A fragment of a *Prionychus* sp. elytron was collected by myself from beneath bark on a dead horse chestnut *Aesculus hippocastanum* L. in Whitcliff Park, Berkeley (ST69), 21 October 1984, but not recognised as *P. melanarius* until long after. An adult was found at this same site by Ian Carter (pers. comm.) in 1986. Whitcliff Park is an ancient deer park on a hill along the Severn flood plain. The only similar site subsequently found to have the beetle is Forthampton Oaks (SO83), Tewkesbury, where I found an elytron beneath loose bark on a dead oak *Quercus* in August 1999. These oaks are relicts of the former medieval Malvern Chase.

Paul Whitehead then began to find the species in the old hollow ash *Fraxinus* pollards along the Cotswold escarpment, first on Bredon Hill in Worcestershire (Whitehead, 1996) and, I understand, subsequently on the main Cotswold escarpment in neighbouring areas of Gloucestershire. He then began to find it in hollow fruit trees in old orchards and this has also been my own experience since beginning a

study of the county's orchards for the People's Trust for Endangered Species, as part of their work on noble chafer *Gnorimus nobilis* (Linnaeus). It seems likely that the original site for the beetle at Apperley actually lies within an area of old orchards. My orchard records are as follows:

> Lord's Hill House, Ashleworth (SO82), fragments of beetles in wood mould in white-rotted hollow fruit tree, 6 October 2001, KNAA.
> Flaxley Abbey (SO61), Blaisdon parish, pupa (reared) from red-rot in old plum tree, 23 June 2002, KNAA.
> Chestnut Cottage Orchard, Popes Hill (SO61), Littledean parish, adult in white-rotted pear trunk, 7 July 2002, D. Gibbs.
> Oak Field Plum Orchard (SO71), Blaisdon, pupae (reared) free in wood mould within red-rotted hollow trunk, 4 June 2002.
> Hollybush Farm (SO71), Longhope, elytra frequent with larvae in fine red-rot debris in cavity in old plum tree, 18 August 2002.

As already mentioned, the Severn Vale population of this beetle extends northwards into Worcestershire, and not just in the Cotswold ash pollards but also in old orchards. I found fragments in a red-rot cavity in an old cherry at Birchenhall Farm, Alfrick, Worcestershire (SO75), 21 July 2002.

This Severn population is clearly the most important in Britain for this Red Data Book (Vulnerable) species (Shirt, 1987). Elsewhere only small isolated populations are known in areas of ancient forest or medieval deer park. It was introduced as new to Britain by H. St J. Donisthorpe, from Sherwood Forest (Fowler & Donisthorpe, 1913), and has subsequently been discovered in the Arundel Park area of West Sussex (Bedwell, 1923; Alexander, Foster & Telfer, 1998), and at Staverton Park (Mendel, 1979) and neighbouring Rendlesham Forest (Nash, 1982) in East Suffolk.

An extraordinary feature of the British distribution of this species is its absence from other classic old forest areas – Windsor, the New Forest and Epping for instance would all appear to be within its British range and to have plenty of suitable habitat. It is not known from Moccas Park – the richest parkland in Britain for saproxylics – nor Burnham Beeches, Richmond Park, etc, etc. The Severn Vale area has however, an extremely rich concentration of saproxylic beetles, just as do those more famous sites.

Acknowledgements

I am grateful to the People's Trust for Endangered Species for encouraging me to start surveying old orchards for beetles, and to Ian Carter and Dave Gibbs for sharing their records.

References

ALEXANDER, K.N.A., FOSTER, A.P. & TELFER, M.G. 1998. A selection of the more interesting beetles found during the work of the National Trust's Biological Survey Team in 1997. *British Journal of Entomology and Natural History* **11**: 102.

ATTY, D.B. 1983. *Coleoptera of Gloucestershire*. Cheltenham: privately published.
BEDWELL, E.C. 1923. *Prionychus (Eryx) fairmairei* Reiche: a southern record. *Entomologist's Monthly Magazine* **59**: 236-237.
CARTER, I. 1986. Some rare and interesting beetles new to Gloucestershire. *Proceedings and Transactions of the British Entomology and Natural History Society*. **19**: 50.
FOWLER, W.W. & DONISTHORPE, H. St J. 1913. *The Coleoptera of the British Islands. Vol.* **6** *(Supplement)*. London: Reeve.
MENDEL, H. 1979. *Prionychus melanarius* (Germ.) (Col., Tenebrionidae) in Staverton Park, Suffolk, a third British locality. *Entomologist's Monthly Magazine* **114** (1978): 190.
NASH, D.R. 1982. *Prionychus ater* (Germ.) (Col., Tenebrionidae) in Suffolk – a further record. *Entomologist's Monthly Magazine* **118**: 144. [Later corrected to *P. melanarius*.]
OWEN, J.A. 1987. *Prionychus melanarius* (Germar) (Col., Tenebrionidae) in Gloucestershire. *Entomologist's Monthly Magazine* **123**: 145.
OWEN, J.A. 1990. Beetles bred from eggs or reared from larvae. *British Journal of Entomology and Natural History* **3**: 88.
WHITEHEAD, P.F. 1996. The notable arboreal Coleoptera of Bredon Hill, Worcestershire, England. *The Coleopterist* **5**: 45-53.

A new locality for *Meloe variegatus* Donovan (Meloidae) on the Isle of Wight in 1833

Alex J. Ramsay
Dryfemount, Dundas Street, Bo'ness West Lothian EH51 0DG

Meloe variegatus Donovan was last recorded in Britain at Margate in 1882 (Hyman, 1992) and was apparently a well known though extremely local species in southeast England, where it occurred on the coast from Margate to Dover in Kent, and could often be picked up from Victorian bathing machine ruts (Dawson, in Key, 1992). Fowler (1888) notes that all British specimens originate from this area, although both Buck (1954) and Hyman (1992) note an additional locality for 'Hampshire', but no further details are apparently available.

In the process of preparing a new illustrated key to British *Meloe*, I borrowed several *Meloe* specimens from the National Museums of Scotland, two of which were *M. variegatus*. The male specimen was without data, but the female specimen bore a handwritten label "Meloe variegatus. Taken on grass near the Salt pit. Nettlestone. IW. April 26.1833. W. Darwin Fox." This undoubtedly refers to Nettlestone on the Isle of Wight, in the east of the island (SZ69; VC 10), which may be the 'Hampshire' record to which Buck (1954) refers, although it is likely that any record from the Isle of Wight would be referred to as such. Its locality is somewhat odd for such a thermophilic species, since Nettlestone is located in an east/west orientated valley on the east side of the island, and there are apparently no suitable nesting areas available for host bees at the site (A. Wright, pers. comm.).

Enquiries to Andrew Whittington at the National Museum of Scotland about other specimens of *M. variegatus* held at the NMS revealed no further definite examples with locality data for the Isle of Wight. In the absence of further specimens, it is possible that the specimen could be a vagrant brought in by workers on the salt pits, but raises the intriguing possibility that it may have originated from a colony further south on the island. Here the warm south facing cliffs still maintain colonies of other thermophilic species such as the Glanville Fritillary *Melitaea cinxia* L. (Lepidoptera: Nymphalidae) (Emmet & Heath, 1990).

Acknowledgements
My thanks to Andrew Whittington at the National Museums of Scotland for loaning the specimens and checking the collection for further examples, and to Adam Wright for providing local information about the Nettlestone site.

References
BUCK, F.D. 1954. Coleoptera: Lagriidae to Meloidae. *Handbooks for the Identification of British Insects*, 5(9). London: Royal Entomological Society.
EMMET, A.M. & HEATH, J. 1990. *The Butterflies of Great Britain and Ireland*. Colchester: Harley Books.
FOWLER, W.W. 1888. *Coleoptera of the British Islands*. Vol. **5**. London: Reeve & Co.
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: Joint Nature Conservation Committee.
KEY, R.S. 1992. A little bit of beetling history - two letters about beetle collecting from J.F. Dawson (1802-1870) to J.T. Syme (1822-1888). *The Coleopterist* **1**(3): 6-10.

A new record of *Otiorhynchus desertus* (Rosenhauer) (Curculionidae) in Scotland

Chris Sullivan
14 Main Road, Crombie, Dunfermline, Fife KY12 8JY. csullivan@clara.co.uk

Dave Beaumont, an ecologist with the RSPB, asked me to identify pitfall trapped specimens collected from varied areas in Scotland. The majority of the trapped material was of the usual suspects but one that stood out was the attractive curculionid, *Otiorhynchus desertus* (Rosenhauer) a Notable B species (Hyman, 1992). The pitfall trap was laid in woodland at Insh Marshes, grid reference NH003781, with both suckering and mature aspen *Populus tremulus* L. between 21 July and 24 August 1999.

In the Scottish Insect Records Index (SIRI) housed at the National Museums of Scotland in Edinburgh, only five records were found and one of those was a citation. The four locations for the SIRI records were Culbin Forest, Gordonstoun, Inner Hebrides and the Isle of May.

Acknowledgements
Thanks to Dave Beaumont for allowing me to publish the record.

Reference
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: Joint Nature Conservation Committee.

A further note on the continued spread in Britain of the Lily Beetle *Lilioceris lilii* (Scopoli) (Chrysomelidae), with notes on its host plant range

Andrew Salisbury
The Royal Horticultural Society's Garden, Wisley, Woking, Surrey GU23 6QB

Introduction

The lily beetle *Lilioceris lilii* (Scopoli) became established in Britain in the early 1940s (Fox Wilson, 1942) and initially spread slowly across southeast England. By the late 1970s, the beetle was known to be established in five south eastern vice counties. During the 1980s and 1990s there was a massive extension in the range of this pest of lilies and fritillaries with scattered reports of the beetle as far north as the vice counties of Cheshire and South Lincolnshire. Cox (2001) reported on this extension of range in Britain and the beetle's known host range. The beetle's distribution and host range has been monitored at Royal Horticultural Society (RHS) Garden Wisley since the beetle's establishment in Surrey in 1940; this paper provides an update to Cox (2001).

Post 1970 distribution in Britain

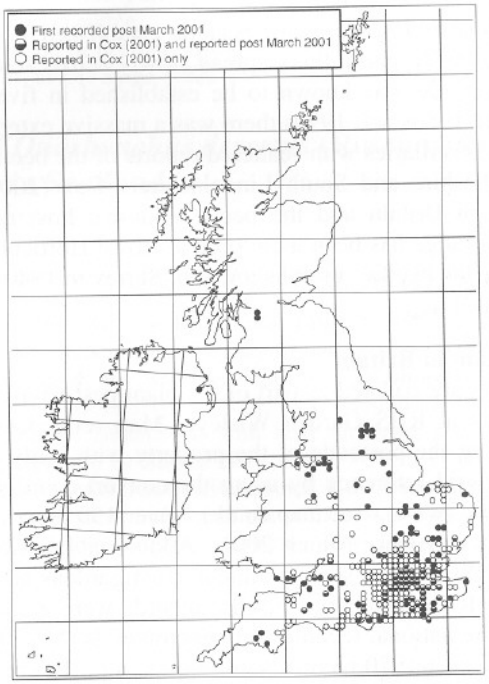
Lilioceris lilii records are collated as part of the plant pest advisory work carried out by the entomologists at RHS Garden Wisley. Map references are gained where possible by requesting the postcode of the property with a lily beetle problem and converting this to a grid reference by using the convert coordinates facility on the Streetmap internet site (www.streetmap.co.uk). Over 150 records of the beetle have been received in this way since March 2001. Additional records were obtained via postal surveys of RHS gardens, some National Trust gardens and other gardens that allow free access to RHS members. Further records were gained from requests to other coleopterists, the national recorder for chrysomelids (Mike Cox) and reviewing recent literature. All post-1970 records were plotted on a 10 km distribution map of the UK using the DMAP© software (Figure 1). A summary of records received from 10 km squares not reported in Cox (2001) is given in the appendix.

By March 2001 *L. lilii* had been recorded from 43 vice counties and 211 10 km grid squares in England and Wales (post 1970). Most post 1970 reports of the beetle outside the south-east of England were first received in the late 1980s or 1990s (Cox, 2001).

As of March 2003 the lily beetle has been recorded from 265 10 km squares and 46 vice-counties in England and Wales. The first record for the vice-county of Leicestershire (55) was received in 2001 (M. Cox pers. comm.) and first records for

the counties of South East Yorkshire (61) and South West Yorkshire (63) were received in summer 2002. Examination of the distribution map (Map 1) indicates that the records from some of these counties may have been natural spread from infestations in the York area (VC 64) where the beetle was first reported in 2000. This pattern can also be seen in other areas where the beetle was first reported during the 1990s, such as Cheshire where the beetle is becoming widespread and a frequent enquiry to the RHS Members' advisory service. The beetle has now been reported from almost all English vice-counties south of Mid Yorkshire. However, no reports of the beetle from North Devon (4) or Cornwall (1 & 2) have been received.

Figure 1Map of provisional post 1970 distribution of *Lilioceris lilii* in Britain.



In March 2001 the lily beetle had not been reported from Ireland or Scotland (Cox, 2001) but in 2002, *L. lilii* was reported from Scotland for the first time, from the Netherlee area of south Glasgow (GR: NS582599, VC 76 Renfrewshire) in May 2002 (Hancock, 2002). At least four adult *L. lilii* were seen, including a mating pair on 6 May. A further six records of the beetle were received by Geoff Hancock following an article in the *Glasgow Herald* (G. Hancock pers. comm.).
These records indicate that the lily beetle has been present in the Netherlee and Cathcart areas of south Glasgow since 2000. In addition to being reported for the first time from Scotland in 2002, the first report from Northern Ireland was published

(Anderson & Bell, 2002). Adult *L. lilii* were discovered on the Kings Road, south Belfast (H38 Co Down Irish grid J390734) in June 2002. Indications are that the beetle had been present at least since 2001.

The increase in the range of *L. lilii* since the early 1980s has been coupled with an increase in the proportion of enquiries made on this pest to the Entomology section of the RHS. In the 1970s and early 1980s the beetle made up less than one percent of pest enquiries; during the late 1980s and 1990s, this proportion has risen to between 2 and 3 percent of the total.

The records indicate that *L. lilii* is continuing to expand its range throughout the UK and may now be established in Glasgow and Belfast. It is impossible to determine the reasons for the lily beetle's rapid spread during the past decade, however, several factors are likely to have played a part. The 1990s was the warmest decade on record (Met Office data). Winter cold is unlikely to affect the beetle, as the winters in parts of the beetle's range in mainland Europe are colder (although often dryer) than the UK. However, warmer summers may enable the beetle to spread more rapidly by flight. This is possibly how the beetle's distribution is increased on a local basis such as the aggregation of records in the York and Cheshire areas. The increase in records of the beetle received by the RHS Members' advisory service may also be partially attributed to a rise in the popularity of lilies during the past decade; in 2000 lilies (*Lilium*) topped a poll of the UK's favourite flower for the first time (Anon, 2000). This, in combination with the distances that plants are sometimes transported, gives greater scope for lily beetle to be an unwelcome stowaway. This is almost certainly how the beetle is transported over greater distances and is likely to have happened in Glasgow and Belfast.

Host range

Field observations have been made on the host range of the lily beetle at RHS Garden Wisley during the growing seasons (April to October) of 2000, 2001 and 2002. Observations have concentrated on the plant genera *Lilium* and *Fritillaria* as a large number are grown at Wisley. Many other genera are sometimes fed upon by the adult beetles but the larvae can probably only develop on *Lilium* spp., *Fritillaria* spp. (Salisbury, 2001; Cox, 2001) and *Cardiocrinum* (giant lilies, these were considered part of the genus *Lilium* in the past). In addition to observations made at Wisley, postal surveys of other RHS gardens, some National Trust gardens and gardens that allow free access to RHS members provided some additional information. Table 1 summarises the results of the field observations. Lily species on which observations have been made were classified following the broadly accepted seven-part (numbered) classification devised by Comber (1949) and using the common names supplied by McRae (1998).

Observations on the presence of *L. lilii* have been made on 29 species, five cultivars, one sub-species and 50 hybrid lilies at Wisley Garden. In conjunction with the literature (Cox, 2001), the total number of lilies on which observations of lily beetle occurrence have been made is now 30 species and 51 hybrid lilies. In

addition, the lily beetle has been observed on four species of *Fritillaria*. Adults eggs and larvae of *L. lilii* have been observed on lilies from all the groups devised by Comber (1949) with the exception of group 7 (Dauricum Section in table), on which only adult beetles were seen. However, observations have only been made on one lily species in this group and only over one season. No stage of the beetle has been recorded on one species of lily (*L. kelleyanum*) and on 14 of the hybrid lilies. *L. lilii* grubs have not been observed on three additional lily species *L. davidii*, *L. duchartrei* and *L. sulphureum*. Using the same indicator of a true host (presence of larvae) for the hybrid lilies, no grubs have been observed on 23 of the hybrids.

These field observations can only give an indication of which lilies or fritillaries are attacked by the beetle, it does not give an indication of those that are resistant to the beetle. Absence of the beetle in the field could be due to many unknown factors, for example, the plant observed might have been in a position that made it unattractive to ovipositing beetles.

By February 2003 only 30 of the approximately 100 known species and only 51 of the thousands of hybrid lilies have had any observations made on the presence of *L. lilii*. However, results from field surveys at Wisley indicate that few if any *Lilium* are likely to be resistant to attack from the lily beetle.

Acknowledgements

It is a pleasure to thank Andrew Halstead for his help and advice through all aspects of the work and critical review of early manuscripts; Ian Waghorn for his help with the surveys; Lin Ewart and all the staff at the National Trust, staff at RHS gardens and gardens providing free access to RHS members involved in the surveys; Mike Grant for his advice on the taxonomy of *Lilium* and Mike Cox and other entomologists for providing additional distribution information.

References

ANDERSON, R. & BELL, A.C. 2002. A first record of the Lily Beetle *Lilioceris lilii* (Scopoli) in Ireland (Chrysomelidae: Criocerinae). *The Coleopterist* **11**: 90.

ANON. 2000. Lilies head the popularity stakes. *Horticulture Week*. November 16, 2000: 10.

COMBES, H.F. 1949. A new classification of the genus *Lilium*. *The RHS Lily Year Book* **13**: 86-105.

COX, M.L. 2001. The status of the Lily Beetle *Lilioceris lilii* (Scopoli, 1763) in Britain (Chrysomelidae: Criocerinae). *The Coleopterist* **10**: 5-20.

FOX WILSON, G. 1942. The Lily beetle, *Crioceris lilii*. *Journal of the Royal Horticultural Society*. **67**: 165-168.

HANCOCK, G. 2002. Lily beetle First Words. *The Plantsman New Series* **1** (4): 190.

McRAE, E. A. 1998. *Lilies. A guide for growers and collectors*. Oregon: Timber Press.

SALISBURY, A. 2001. Further investigations with the lily beetle (*Lilioceris lilii* (Scop.) Col: Chrysomelidae): the search for parasitoids. Unpublished report, RHS Garden, Wisley, Surrey.

Table 1: Summary of observations made on the presence of lily beetle on cultivars of *Lilium* and *Fritillaria*. ✔ = stage present on at least one occasion at RHS Garden Wisley or in postal surveys carried out in 2000, 2001 or 2002. C = recorded by other authors (summarised in Cox, 2001, no note of egg presence in that report).

*Lily Sections: (Comber 1949, McRae 1998): 1. Martagon Section; 2. American Section; 3. Candidum Section; 4. Oriental Section; 5. Asiatic Section; 6.Trumpet Section ; 7. Dauricum Section.

Lilium	Section*	Year (s) observed	Adults	Eggs	Larvae
L. hansonii	1	2000, 2001, 2002	✔	✔	✔
L. martagon	1	2000, 2001, 2002	✔C	✔	✔C
L. tsingtauense	1	2002		✔	✔
L. kelleyanum	2	2002			
L. occidentale	2	2002	✔	✔	✔
L. pardalinum	2	2000,2002	✔C	✔	✔C
L. superbum	2	2000, 2001, 2002	✔	✔	✔
L. bulbiferum	3		C		C
L. candidum	3	2001	C		✔C
L. monadelphum (=szovotsianum)	3	2000, 2001	✔C	✔	✔
L. pomponium	3	2002	✔	✔	✔
L. pyrenaicum	3	2000	✔		
L. pyrenacium subsp. *carniolicum*	3	2000	✔C		C
L. alexandrae	4	2002			
L. auratum	4	2000	✔C		C
L. rubellum	4	2001			✔
L. speciosum	4	2000, 2001, 2002	✔C	✔	✔C
L. speciosum 'Albo-novum'	4	2002	✔		✔
L. speciosum var. rubrum	4	2002	✔		✔
L. speciosum 'Punctatum'	4	2002			
L. speciosum 'Uchida'	4	2002	✔		
L. davidii	5	2000, 2002	✔C	✔	
L. duchartrei	5	2000	✔	✔	✔
L. lancifolium	5	2000, 2001, 2002	✔C	✔	✔C
L. lancifolium 'Splendens'	5	2002	✔	✔	✔
L. nepalense	5	2000, 2002	✔	✔	✔

Lilium	Section*	Year (s) observed	Adults	Eggs	Larvae
L. poilanei	5	2001	✔		✔
L. pumilum	5	2002	C		C
L. formosanum	6	2000, 2001, 2002	✔C	✔	✔
L. leucanthum	6	2001, 2002	✔	✔	✔
L. longiflorum	6	2000	✔C	✔	✔
L. regale	6	2000	✔C	✔	✔C
L. sargentiae	6	2001			✔
L. sulphureum	6	2002	✔		
L. dauricum	7	2000	✔		
L. 'Acapulco'	Hybrid	2002			
L. 'Afterglow'	Hybrid	2001, 2001	✔	✔	✔
L. 'Amber Gold'	Hybrid	2002	✔	✔	✔
L. 'Arthur Grove'	Hybrid	2002	✔	✔	✔
L. Bellingham Group	Hybrid	2002	✔	✔	✔
L. 'Black Beauty'	Hybrid	2002			
L. 'Brocade'	Hybrid	2001, 2002	✔	✔	✔
L. 'Bright Star'	Hybrid	2002	✔	✔	
L. x *burbankii*	Hybrid	2000, 2001, 2002	✔	✔	✔
L. 'Butter Pixie'	Hybrid	2002	✔		✔
L. x *centigale*	Hybrid	2002	✔		
L. x *dalhansonii* 'Marhan'	Hybrid	2002		✔	✔
L. Del Norte Group	Hybrid	2002			
L. 'Enchantment'	Hybrid	2002	✔C	✔	✔
L. Everest Group	Hybrid	2001, 2002			✔
L. 'George Soper'	Hybrid	2002			
L. Golden Splendor Group	Hybrid	2001, 2002	✔	✔	✔
L. 'Green Magic'	Hybrid	2002	✔	✔	✔
L. x *hollandicum*	Hybrid	2001			
L. 'Joanna'	Hybrid	2002			
L. 'Karen North'	Hybrid	2002		✔	✔
L. 'Karmen'	Hybrid	2002			
L. 'King Pete'	Hybrid	2002	✔		
L. 'Limelight'	Hybrid	2002			
L. 'Marie North'	Hybrid	2002	✔		
L. 'Matchless'	Hybrid	2002			
L. 'Moonlight'	Hybrid	2002	✔		
L. 'Mrs R.O. Backhouse'	Hybrid	2001, 2002	✔	✔	✔
L. 'Nutmegger'	Hybrid	2002			

Lilium	Section*	Year (s) observed	Adults	Eggs	Larvae
L. 'Orange Pixie'	Hybrid	2002		✔	✔
L. 'Pandora'	Hybrid	2002		✔	✔
L. 'Peach Pixie'	Hybrid	2002			
L. 'Pegasus'	Hybrid	2002			
L. 'Peggy North'	Hybrid	2002	✔	✔	✔
L. Pink Perfection Group	Hybrid	2001, 2002	✔	✔	✔
L. 'Pink Tiger'	Hybrid	2001, 2002	✔	✔	✔
L. 'Prins Constatijn'	Hybrid	2002		✔	✔
L. 'Red Lion'	Hybrid	2002	✔		
L. 'Rosemary North'	Hybrid	2002	✔	✔	✔
L. San Gabrial Group	Hybrid	2002	✔	✔	✔
L. 'Santorin'	Hybrid	2002	✔		✔
L. 'Showbiz'	Hybrid	2002	✔		
L. 'Smoky Mountain'	Hybrid	2002	✔	✔	✔
L. 'Star Gazer'	Hybrid		C		C
L. 'Thunderbolt'	Hybrid	2002			✔
L. 'Vanguard'	Hybrid	2002	✔	✔	✔
L. 'Vico Queen'	Hybrid	2002			
L. Yellow Blaze Group	Hybrid	2002	✔	✔	✔
L. 'Yellow Butterfly'	Hybrid	2002			
L. 'Zalta'	Hybrid	2002			
Fritillaria					
F. imperialis		2000, 2001	✔C	✔	✔C
F. imperialis 'Argenteovariegata'		2002	✔		✔
F. imperialis 'Lutea'		2002	✔		
F. imperialis 'Prolifera'		2002			
F. imperialis 'The Premier'		2002			
F. imperialis 'Rubra'		2002			
F. meleagris		2001	✔C		✔C
F. pontica			C		
F. pyrenaica 'Lutea'		2001	✔	✔	✔
F. thunbergii		2001			

Appendix 1. Additional 10 km squares from which the Lily beetle *L. lilii* has been reported since Cox (2001).

VC	VC Name	10 km	Month	Data source
H38	County Down	J37	June 2002	Anderson and Bell (2002)
3	South Devon	SX46	May 2002	B. Salt via M. Cox (pers. comm.)
3	South Devon	SX57	June 2001	RHS Members Advice Service (MAS)
3	South Devon	SX65	April 2001	RHS MAS
6	North Somerset	ST36	May 2002	RHS MAS
6	North Somerset	ST45	July 2002	RHS MAS
6	North Somerset	ST42	May 2002	RHS MAS
6	North Somerset	ST85	June 2001	RHS MAS
8	South Wiltshire	SU06	May 2001	RHS MAS
11	South Hampshire	SU32	June 2002	Survey 2002
11	South Hampshire	SZ39	May 2002	RHS MAS
11	South Hampshire	SZ79	2002	M. Cox (pers. comm.)
13	West Sussex	TQ22	June 2001	Survey 2001
14	East Sussex	TQ51	1999-2001	M. Cox (pers. comm.)
14	East Sussex	TQ50	May 2002	RHS MAS
14	East Sussex	TQ62	June 2001	Survey 2001
15	East Kent	TL15	September 2002	RHS MAS
15	East Kent	TR03	2001	M. Cox (pers. comm.)
15	East Kent	TR25	June 2002	RHS MAS
15	East Kent	TR36	August 2001	RHS MAS
16	West Kent	TQ72	May 2001	RHS MAS
18	South Essex	TL60	2002	M. Cox (pers. comm.)
18	South Essex	TQ79	June 2001	Survey 2001
18	South Essex	TQ78	May 2002	RHS MAS
19	North Essex	TL81	August 2001	Paul Parmenter (pers. comm)
19	North Essex	TL84	2002	M. Cox (pers. comm.)
20	Hertfordshire	TL41	January 2002	RHS MAS
24	Buckinghamshire	SP71	July 2001	Survey 2001
26	West Suffolk	TL74	November 2002	RHS MAS
26	West Suffolk	TL86	April 2002	RHS MAS

VC	VC Name	10 km	Month	Data source
26	West Suffolk	TL96	July 2001	RHS MAS
27	East Norfolk	TG32	June 2002	Survey 2002
28	West Norfolk	TF63	May 2001	RHS MAS
29	Cambridgeshire	TF40	2002	M. Cox (pers. comm.)
29	Cambridgeshire	TL29	May 2002	RHS MAS
29	Cambridgeshire	TL35	June 2001	Survey 2001
29	Cambridgeshire	TL36	2000	M. Cox (pers. comm.)
29	Cambridgeshire	TL48	August 2002	Paul Millard (pers. comm.)
30	Bedfordshire	TL04	May 2002	RHS MAS
34	West Gloucester	ST67	2001	M. Cox (pers. comm.)
40	Shropshire	SJ52	August 2002	RHS MAS
41	Glamorgan	SS87	August 2001	RHS MAS
41	Glamorgan	ST07	2002	M. Cox (pers. comm.)
53	South Lincoln	SK96	October 2001	RHS MAS
53	South Lincoln	TF21	June 2001	R.S. Key and K. Mitchell (pers. comm.)
53	South Lincoln	TF20	June 2001	R.S. Key (pers. comm.)
55	Leicestershire	SK50	2001	M. Cox (pers. comm.)
57	Derbyshire	SK34	2002	RHS MAS
58	Cheshire	SJ77	July 2002	RHS MAS
58	Cheshire	SJ78	2001	M. Cox (pers. comm.)
58	Cheshire	SJ87	2002	RHS MAS
59	South Lancaster	SD20	July 2002	Survey 2002
59	South Lancaster	SJ79	September 2001	RHS MAS
61	South-east York	SE64	2002	RHS MAS
63	Mid-west York	SE40	August 2002	RHS MAS
64	Mid-west York	SE06	June 2002	Survey 2002
64	Mid-west York	SE44	June 2002	RHS MAS
64	Mid-west York	SE45	June 2001	RHS MAS
64	Mid-west York	SE54	August 2001	RHS MAS
64	Mid-west York	SE55	July 2002	RHS MAS
76	Renfrewshire	NS56	June 2002	Hancock (2002), Hancock (pers. comm.)
76	Renfrewshire	NS55	May 2002	Hancock (2002), Hancock (pers. comm.)

Field Meeting Report: Norfolk (5–7 July 2002)

Martin J. Collier
Hillside Cottage, Syleham, Eye, Suffolk IP21 4LL Email: collierm.beetles@virgin.net

Holt Hall Field Study Centre was the venue for this meeting in north Norfolk and a splendid, if rather expensive, venue it was too – being an early Victorian mansion set in over 80 acres of woodland and gardens (which themselves produced a list of almost 100 species). After a formal welcome and introductions from the Warden (George Carrick) and meeting organizers (Mark Telfer and the author), events got off to a fairly convivial start; helped no doubt by the provision of wine with the evening meal, (a popular feature - future field meeting organizers please take note).

A total of 32 people attended the meeting, with many new faces among the more regular attendees of these events and with people travelling from as far afield as Scotland, Ireland and Wales. Several people commented that it was a very long time since they had seen so many coleopterists gathered together for a residential field meeting and all agreed that it was a wonderful opportunity to renew old acquaintances, make new friends and generally catch up with beetle news. Of course, Norfolk has long been a favourite county for itinerant coleopterists, because of the many rare species associated with the special habitats of the Breck, Broads and coast, but a similar meeting at Wells-next-the-Sea in 2000 attracted less than half this number of people. The interest and enthusiasm generated by the 2002 meeting was therefore something of a surprise to the organizers – albeit a very pleasant one.

The meeting followed the traditional format of offering attendees a detailed list of sites for which access had been arranged. This list had been carefully compiled by the organizers to give a balance of well-known localities, for people to find the rarities, and relatively unknown sites for which records were required. Then, just as traditionally, people went off and visited several sites that were not on the list and for which permission had not been arranged: such is the pioneering spirit of entomologists and long may it continue. Most of the well-known coastal localities were covered e.g. Holkham, Cromer and Salthouse, but several old woodland sites were included in an attempt to improve the relatively poor saproxylic species content of the Norfolk county list. A few Suffolk sites were added for good measure, largely to provide useful stopping off points for travellers from the south and west of England. A total of 38 sites were visited (34 in Norfolk and 4 in Suffolk).

The final total for the meeting was a very respectable 733 species, including 20 of Red Data Book and 89 of Nationally Notable status. The size of this list was due in no small part to the fact that we had the specialist expertise of people like Colin Welch (Staphylinidae) and Garth Foster, David Bilton and Geoff Nobes (water beetles) to boost the species totals in families often somewhat overlooked in field meetings like this.

Some ten species were added to the Norfolk list (one as a result of taxonomic revision), as follows: *Longitarsus absynthii* Kutschera (West Runton by Colin Welch), *Phaedon concinnus* Stephens (Holkham & Salthouse by Michael Salmon), *Nephus quadrimaculatus* (Herbst) (Cranwich Camp by Mark Pavett), *Otiorhynchus atroapterus* (Degeer) (Holkham by Colin Welch), *Sitona ambiguus* Gyllenhal (Holkham by Michael Salmon), *Trichosirocalus barnevillei* (Grenier) (Cranwich Camp by Mark Pavett), *Tychius junceus* (Reich) (Cranwich Camp by Brian Levey), *Athous campyloides* Newman (Overstrand cliffs by Mark Telfer & Trevor James), *Elodes elongata* Tournier (=*kolleri* Klausnitzer) (Holt Hall by Brian Levey) and *Bruchela rufipes* (Olivier) (East Harling Heath by author).

With the exception of *Pogonus luridipennis* (Germar), all of the usual Norfolk coast specials were recorded, though perhaps not as frequently as on other occasions, as can be seen in the following list where the number of recorders finding each species is indicated: *Bembidion ephippium* (Marsham) (5), *Harpalus pumilus* Sturm (=*vernalis*) (2), *Masoreus wetterhalli* (Gyllenhal) (1), *Tachys scutellaris* Stephens (2), *Hypocaccus metallicus* (Herbst) (3), *Melanophthalma curticollis* (Mannerheim) (1), *Limnichus pygmaeus* (Sturm) (3), *Malachius barnevillei* Puton (7), *Bledius diota* Schiödte (1) and *Bledius filipes* Sharp (1).

It was good to see that people were not just collecting the rarities and ignoring the less exciting species. This is clearly demonstrated by the records received for the following common species: *Rhagonycha fulva* (Scopoli) (22 records, 15 sites), *Notiophilus biguttatus* (Fabricius) (24 records, 11 sites), *Coccinella septempunctata* Linnaeus (23 records, 15 sites) and *Meligethes aeneus* (Fabricius) (22 records, 14 sites). Giving equal recording effort to all species in this way helps considerably in establishing which species really are the most common and widespread in the county. Otherwise, it is all too easy to end up with such extreme bias that the national rarities are recorded more frequently than the common species because visiting coleopterists are concentrating on finding their desiderata. This is particularly noticeable at the site level of recording but can also feed through to the county level.

The size of the species list makes it unsuitable for publication but an MS Excel file (136KB), showing full details on who found what where, is available from the author by email (preferred option) or by post on receipt of three 1st class stamps. This information is in the form of a species-based list showing the site(s) at which each species was found and the recorder's initials for each site. Full details (grid references) for sites and keys to recorder initials etc. are provided, along with a few summary statistics showing the numbers of species per site, recorders per site and species per recorder. All records have been entered on the author's copy of the Norfolk beetle database (Recorder 3.3) and will be submitted to the Norfolk Biological Records Centre in due course.

Lycoperdina bovistae (Fabricius) (Endomychidae) in South Devon

C.R. Turner
79 Bowers Park Drive, Woolwell, Plymouth, Devon PL6 7SH

Recent records (i.e. post 1970) for *Lycoperdina bovistae* Fabricius are known only from South Hampshire (VC 11), East Sussex (VC 14), West Norfolk (VC 28) (Hyman, 1992), East Kent (VC 15) (Barclay 2001), Warwickshire (VC 38) (Lane *et al.*, 2002) and now South Devon (VC 03). In September 1996, a specimen of *L. bovistae* was captured, in a pitfall trap on Roborough Common, Plymouth, South Devon (SX5064). A subsequent brief search in the area failed to reveal any puffballs *Lycoperdon* spp. at the time of capture but a number of fruiting bodies were successfully located in the vicinity later that year. Previously *L. bovistae* has been recorded from a number of woodland sites but was also thought to occur in more open situations (Hyman, 1992). The area of capture on Roborough Common consisted of open

heathland, regularly grazed and infrequently burnt. The pitfall trap was located in an area dominated by dense maturing heather *Erica* and bracken *Pteridium aquilinum* (L.). Hyman (1992) does refer to pre-1970 records from South Devon and examination of the collections held at Plymouth Museum revealed two previous Devon records, both from J.H. Keys and recorded in his notebook. The first consisted of several teneral specimens 'bred from larvae in a puffball' from Newnham Park, June 1887 (SX55), and a further capture referred to 'two specimens in a puffball' from Buckfast, September 1905 (SX76). A visit to the collections held at Exeter Royal Albert Memorial Museum revealed two more potentially local specimens of *L. bovistae*. One, dated 1913, originated from the De la Garde collection, the other came from the Reading collection and was dated 1904. Unfortunately, both specimens had no further data. Although both collectors were known to be active in Devon, neither record can be positively attributed to the county.

Acknowledgements

I am indebted to Max V.L. Barclay of the Natural History Museum, London and Darren J. Mann of the Oxford University Museum of Natural History (Hope Entomological Collections) for their generous assistance, knowledge and experience with *L.bovistae*. I am also grateful to David Bolton of the Royal Albert Memorial Museum, Exeter and Helen Burchmore of Plymouth City Museum for their interest and access to collections.

References

BARCLAY, M.V.L. 2001. 2000 Annual Exhibition. Coleoptera. *British Journal of Entomology and Natural History* **14**: 160-161.

LANE, S.A., WRIGHT, R.J. & FORSYTHE, T.G. 2002. *An Atlas of Warwickshire Beetles*. Warwickshire Biological Records Centre. 217pp.

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: Joint Nature Conservation Committee.

KEYS, J.H. *ca.* 1880- *ca.* 1930. *Collection Notebook*. Held in Plymouth City Museum and Art Gallery.

Triotemnus coryli (Perris) (Scolytidae) rediscovered

N.F. Heal

44 Blenheim Avenue, Faversham, Kent ME13 8NW

It never ceases to amaze me how often the most unlikely-looking piece of habitat yields something of interest if examined thoroughly and methodically. This was again my experience when beating hazel coppice in a small damp wood at Charing, East Kent (TQ9549) on 29 August 2001. Amongst other interesting beetles, I retained a small scolytid for later examination.

Identification of *Triotemnus coryli* (Perris) is difficult and it is often confused with *Taphrorychus bicolor* (Herbst) and female *Xylocleptes bispinus* (Duftschmid). The latter should provide no great difficulty, measuring 2.5–3.5 mm, and associated with *Clematis vitalba* L. In addition, the elytral declivity has suture and raised edges projecting and finely tuberculate.

T. bicolor ranges in size between 1.5–2.6 mm and small specimens are very similar to *T. coryli* but the species has a five segmented antennal funicle and a distinctly articulated club (Duffy, 1953). These can be somewhat difficult characters to determine with certainty except under high-power and the following additional observations may help to resolve an identification.

The thorax of *T. bicolor* is strongly granulate in front, very slightly longer than broad the sides of which are more or less evenly arched from base. It is usually associated with *Quercus* and *Fagus*. *T. coryli* is a smaller, narrow species (1.6–2.0 mm), the thorax of which is considerably longer than broad and almost parallel sided. The antennal funicle is 4 segmented and the club indistinctly articulate. It is most often associated with *Corylus*.

An additional comparative difference lies in the puncturation of the elytral intestices which in *T. bicolor* are about as strongly punctured as the striae, whereas in *T. coryli* they are distinctly less strong and more diffuse.

I provisionally identified the specimen as *Lymantor* (now *Triotemnus*) *coryli* and referred it to Maxwell Barclay at the Natural History Museum, London who after comparison with specimens in the British collection agreed my identification was correct. There are 10 British examples here; six originating from Kent and four from Surrey all collected by Donisthorpe, Power or Champion in the late 19th century.

Not apparently having been recorded in Britain for such a long time, it was thought that the beetle could be another 'extinct' species and I tried to establish what the status of the species might be. The results of my enquiries are summarised hereunder, although I have not personally verified the identification of any of the deposited specimens.

(1) Fowler (1891) refers to the species (then included in the genus *Dryocoetes* (Eichhoff) as rare occurring in dead branches/twigs of *Corylus* and *Carpinus* citing

Champion (Darenth and Ashtead); Sharp & Rye (Darenth); Power (Darenth, Birch Wood and Weybridge); Blatch (Kidderminster).
(2) Fowler (1908) summarises the distribution as Darenth & Birch Woods, Chattenden, and near Cuxton – very rare.
J.J. Walker (1897) refers to the capture of a single specimen whilst walking from Halling Station across the chalk downs to the south side of Cobham Park on 12 June 1897, and this is very likely to be the VCH reference to 'near Cuxton'.
(3) Fowler & Donisthorpe (1913) adds Donisthorpe (Coombe Wood); Walker (Chattenden); Elliman (Cromer, Norfolk). Donisthorpe (1892) gives a capture date of 25 July 1891.

A species account was not given in Shirt (1987) as detailed accounts were only provided for RDB1 and 2 categories, and at that time it was scheduled as RDB3. The 1992 JNCC Review upgraded the species to RDB1 – Endangered, seemingly fully justifiable based on published records. The Review does contain a reference to a pre-1970 record from South Hampshire. Unfortunately, it has not proven possible to discover the source of this record. It probably originated in preview correspondence and I would be delighted if anyone reading this note can throw any light upon this reference.

A.A. Allen informs me that he has an undated specimen in his collection taken by P. Harwood at Takely, Essex "sweeping under trees along roadside". Harwood's material is held at the Hope Collections in Oxford University Museum and interestingly Darren Mann informs me that there are three specimens therein labelled Takely -06.1910. It is therefore likely that Allen's specimen originates from around 1910. There is also a specimen labelled Huntingfield dated 1907 collected by A.J. Chitty and 10 undated examples ex Huntingfield, Faversham, (coll J.J. Walker).

A.J. Chitty (1904) reported that two years earlier he had found a hedge near his home at Huntingfield, Faversham which was composed entirely of dead wood which had been repaired with upright stakes of chiefly birch and with long horizontal boughs of hazel entwined; in this he had found a number of interesting beetles. He later reported that the hedge unfortunately was finished for collecting purposes, having totally collapsed and a long portion disappeared probably to light the fires of local cottagers. J.J. Walker was a friend of Chitty and the likelihood is of all his specimens originating from the same hedge or nearby. Interestingly Huntingfield is only located some 3-4 miles to the north of the Charing site.

I have also enquired of several Natural History Museums thereby obtaining the following additional information.
(1) Cambridge University Museum of Zoology
Dr. William Foster consulted the O.E. Janson and E.A. Newbury collections where there are 13 specimens, the most recent of which is labelled Wiveldsfield, Surrey (? East Sussex) dated 12.7.26 ex.coll. G.W. Nicholson. Seven specimens are without data ex. col. G.R. Crotch. Two specimens in the Janson collection labelled Weybridge collected by Power 1860 and finally two others also ex. coll. O.E. Janson and labelled "*Tomicus lichtensteini* and ratz Darenth".

(2) Liverpool Museum
This houses the collections of B.S. Williams and McKechnie-Jarvis. Steve Judd informs me that there is but one specimen in the latters collection labelled 'Foreign – no data'.
(3) Manchester Museum
Colin Johnson advises me that there are six specimens collected by R.W. Lloyd ex Tretire and Treago (Herefordshire) between the dates19.9.43 and 20.7.1944.
(4) British Entomological and Natural History Society
Peter Chandler has examined the Society's collection wherein there are 2 old German specimens in the N.H. Joy collection; but not represented in the Massey collection.

It seems therefore that the 1943/44 Herefordshire records are the most recent occurrences of this insect prior to 2001.

It is reported to be associated with dead dry branches of various broad-leaved trees, reducing the internal wood to a powder; indeed Balachowsky (1949) refers to its being polyphagous. However, there seems to be a general concensus that *Corylus* is the principal pabulum attacked in this country.

Obviously 'agricultural improvement' will have accounted for the removal of most of the old derelict hedgerows, but further local research may yet reveal it to be less rare than it at first appears. I was able to find a further two specimens during May 2002, but I hasten to add this was the sum total of about 14 hours of concentrated beating of *Corylus* coppice spread over three visits during the season - fieldwork not for the weak or faint hearted.

Acknowledgements
I am extremely grateful in particular to Maxwell Barclay for confirming my original identification and also to the various aforementioned professionals who willingly gave of their valuable time in checking collections.

References

BALACHOWSKY, A. 1949. Coléoptères Scolytides. *Faune de France* **50**. Paris: Librairie de la Faculté des Sciences.
CHITTY, A.J. 1904. Collecting (chiefly Coleoptera) in old hedges near Faversham, Kent. *Entomologist's Monthly Magazine* **40**: 100-103.
DONISTHORPE, H. St J, 1892. *Stilicus fragilis* at Shirley . *Entomologist's Monthly Magazine* **28**: 160-161.
DUFFY, E.A.J. 1953. Coleoptera: Scolytidae and Platypodidae. *Handbooks for the Identification of British Insects* **5**: part 15.
FOWLER, W.W. 1891. *The Coleoptera of the British Islands* Vol. 5. London: L. Reeve & Co.
FOWLER, W.W. 1908. Coleoptera in *The Victoria History of the Counties of England A History of Kent* Vol.1 William Page (Ed). pp 122-178, London: Archibald Constable & Co. Ltd.
FOWLER, W.W. & DONISTHORPE, H. ST. J.K. 1913. *The Coleoptera of the British Isles* vol. 6. London: L. Reeve & Co.

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: Joint Nature Conservation Committee.

SHIRT, D.B. 1987. *British Red Data Books: 2. Insects*. Peterborough: Nature Conservancy Council.

WALKER, J.J. 1897. An afternoon among the Coleoptera in the Chatham District. *Entomologist's Monthly Magazine* **33**: 160-161.

Rare and Notable Coleoptera in England, 2002

Jonty Denton

2 Sandown Close, Alton, Hants GU34 2TG, UK. Email: JontyDenton@AOL.COM

Introduction

This note summarizes some of the regionally significant records of beetles made in 2002. I would also like to take this opportunity to correct a record from Denton (2000). The record for *Cicones undatus* Guerin-Meneville from Chappett's Copse, South Hampshire (SU6522) on 12 October 2000 is incorrect, the specimen being *C. variegatus* (Hellwig).

DORSET (VC 9)

Seatown (SY430913), 5 June. Psephenidae: *Eubria palustris* Germar, three females submerged in tiny moss fringed pool less than 10 cm in diameter. Eype's Mouth (SY4590), 16 July. Carabidae: *Drypta dentata* (Rossi) one in reed *Phragmites* bed in damp trickle; Georissidae: *Georissus crenulatus* (Rossi) several amongst stones in erosion gully near stream.

ISLE OF WIGHT (VC 10). All records made on 14 June 2002.

Swanpond Copse (SZ597902). Staphylinidae: *Myllaena elongata* (Matthews) with *Gabrius nigritulus* (Gravenhorst), *Aloconota sulcifrons* (Stephens), and *Gnypeta ripicola* (Kiesenwetter) on a small silt and shingle bar in a small wooded stream.

Eagleshead & Bloodstone Copses (SZ582877). Biphyllidae: *Biphyllus lunatus* (Fabricius) in *Daldinia* on ash *Fraxinus*; Melandryidae: *Orchesia minor* Walker, one beaten from hazel *Corylus*; Salpingidae: *Lissodema quadripustulata* (Marsham) abundant on dead blackthorn *Prunus spinosa* L. and other trees; Mycetophagidae: *Mycetophagus atomarius* (Fabricius) in rotting bracket fungi. *Lissodema quadripustulata* and *Biphyllus lunatus* were also frequent at Swanpond Copse and St. Lawrence Undercliff (SZ528764).

Borthwood Copse (SZ5684). Scirtidae: *Prionocyphon serricornis* (Mueller) in root plate pools in large beech *Fagus*, first record for the island?

SOUTH HAMPSHIRE (VC 11)

Emer Bog (SU3921). Dytiscidae: *Graptodytes granularis* (Linnaeus), very abundant in shallow mesotrophic fen, on 29 March but not seen on 13 August when *Hygrotus decoratus* (Gyllenhal) was frequent in same habitat. *Agabus congener* Thunberg, 2 males in acid ditch 29 March, only second modern site outside the New Forest in Southern England; Cerambycidae: *Aromia moschata* (Linnaeus) one swept from *Carex* in fen, 13 August.

Browndown (SZ5799). Carabidae: *Trechus fulvus* Dejean, one male in small saltmarsh pool in shingle, 22 July. This is the first modern record for Hampshire. Luff (1998) maps only one old record for VC 11.

Gilkicker Point (SZ6097) mostly from suction sampling on fixed shingle. Staphylinidae: *Philonthus nitidicollis* (Boisduval & Lacordaire) 17 June; Curculionidae: *Cathormiocerus socius* Boheman, 16 June, *C. myrmecophilus* (Seidlitz) locally abundant, May to August; Coccinellidae: *Platynaspis luteorubra* (Goeze), 17 May and 16 June.

Southampton University Botanical Gardens (SU4215). Carabidae: *Platyderus ruficollis* (Marsham), 25 July; Chrysomelidae: *Chrysolina oricalcia* (Müller) one female under an old shed, 2 September; Melyridae: *Sphinginus lobatus* (Olivier) one beaten from birch *Betula*, 5 August. Also beaten from oak *Quercus* near original locality at Titchfield Common (SU5206) on 10 July, with *Abdera biflexuosa* (Curtis) (Melandryidae) and *Lissodema quadripustulata* (Marsham) (Salpingidae).

Hayling Island, South Seafront (SZ7098), 8 June. Coccinellidae: *Platynaspis luteorubra* (Goeze) four with *Lasius niger* sensu stricto (Hymenoptera: Formicidae) in suction samples from low vegetated dunes; Apionidae: *Apion dissimile* Germar, abundant on hares-foot clover *Trifolium arvense* L.; Curculionidae: *Strophosoma faber* (Herbst) several in suction samples from open ground with plantains *Plantago* spp.

Great Salterns (SU669021) 25 June. Hydrophilidae: *Cercyon sternalis* Sharp, and *C. ustulatus* (Preyssler) in shallow pool, choked with emergent vegetation.

Milton Locks (SZ676997) 25 June. Curculionidae: *Sibinia arenariae* Stephens, two at edge of a small saltmarsh area on lesser sea-spurrey *Spergularia marina* (L.).

NORTH HAMPSHIRE (VC 12)

Woolmer Forest (SU7831). Carabidae: *Chlaenius nigricornis* (Fabricius) one under stone with a mating pair of *Agonum sexpuctatum* (Linnaeus), 21 April; Curculionidae: *Cionus nigritarsis* Reitter on dark mullein *Verbascum nigrum* L. growing on edge of railway ballast on otherwise acid heathland, July - August.

WEST SUSSEX (VC 13)

Beeding Hill (TQ2009) 27 June. Buprestidae: *Agrilus sinuatus* (Olivier) abundant emergence holes and larval working in old hawthorns *Crataegus*; Scarabaeidae: *Omaloplia ruricola* (Fabricius), dozens flying over short downland turf; Chrysomelidae: *Cryptocephalus aureolus* Suffrian, one swept off herb rich chalk grassland.

Bolnore Village (TQ3222). Carabidae: *Agonum sexpunctatum* (Linnaeus), in small acidic seepages with *Sphagnum*, 22 April; Pyrochroidae: *Pyrochroa coccinea* (Linnaeus) abundant on open clearfell, May to June; Mordellidae: *Tomoxia bucephala* Costa, 14 July, two swept from Bracken and 11 drowned in a white bucket.

EAST SUSSEX (VC 14)

Swansyard Farm, Ditchling (TQ3316). Buprestidae: *Agrilus sinuatus* (Olivier) two adults beaten from old hawthorn *Crataegus* hedge, 22 May.

SURREY (VC 17)

Royal Common (SU9242). Ptilidae *Ptenidium gressneri* Erichson (x4); Pselaphidae: *Euplectus kirbyi* Denny (one male); Lycidae: *Platycis minuta* (Fabricius) all in frass from large dead, but standing hollow beech *Fagus* tree occupied by *Lasius brunneus* (Hymenoptera: Formicidae), July and August.

Thursley Common (SU9041) 8 March. Staphylinidae: *Acidota crenata* (Fabricius) (taken by R.M. Fry, determined JD), first modern record for VC 17?

West End Common, Esher (TQ1263) 24 March. Staphylinidae: *Oxypoda recondita* Kraatz several in old bird's nests and dried up red-rot in hollow oaks, with long dead remains of several *Procraerus tibialis* (Boisduval and Lacoirdaire) (Elateridae) and *Opilo mollis* (Linnaeus)(Cleridae).

West Heath, Pirbright (SU9356) 21 March. Cucujidae: *Uleiota planata* (Linnaeus), three under Scot's pine *Pinus sylvestris* L. bark.
Cobbet Hill Signal Station (SU9453). Coccinellidae: *Platynaspis luteorubra* (Goeze) one swept from herbage in neutral grassland, after heavy downpour on 10 June. The same site yielded *Scymnus frontalis* (Fabricius) also new for this 10 km square.
Beddington Water Works (TQ2966). Carabidae: *Bembidion minimum* (Fabricius) and *B. quadripustulatum* Serville on bare draw-down zone round recently created lake, 24 July. Roger Booth also recorded *B. minimum* at this site in March 2002. These are the first county records for this primarily coastal carabid, *Microlestes minutulus* (Goeze), two on disturbed gravel also on 24 July may also be the first records for Surrey.
MIDDLESEX (VC 21)
Glebelands Local Nature Reserve, Finchley (TQ2691), 19 May. Dytiscidae: *Graptodytes granularis* (Linnaeus); Hydrophilidae: *Berosus affinis* (Brullé), *B. signaticollis* (Charpentier); Staphylinidae: *Stenus fornicatus* Stephens, in shallow marshy seasonal pond.

Acknowledgements
Thanks to Rob McGibbon and the Surrey Heathland Project for supporting more surveys on Surrey heaths; Hampshire Wildlife Trust (especially to Martin Harvey and Debbie Wicks) for surveys on various Trust reserves; Mike Edwards and Adam Wright for organising surveys; HWT and English Nature for supporting the Gilkicker weevil *Pachytychius melanocephalus* (Gyllenhal) Project.

Reference
DENTON, J. 2000. Rare and uncommon Coleoptera in England and Wales, 2000. *Coleopterist* **10**: 53-4.
LUFF, M.L. 1998. *Provisional atlas of the ground beetles (Coleoptera, Carabidae) of Britain* Huntingdon: Biological Records Centre.

An early record of *Cyphon konsbergensis* Munster (Scirtidae)

R.W.J. Read
43 Holly Terrace, Hensingham, Whitehaven, Cumbria CA28 8RF

Cyphon konsbergensis Munster was first added to the British List by Skidmore (1985) who discovered several specimens near Arisaig, Inverness-shire on 30 July 1981.

Recently I have been going through the scirtids in the collections of coleoptera held in the Tullie House Museum at Carlisle and extracting the data for the Scirtidae recording scheme currently being co-ordinated by Jonty Denton. Amongst a series of *Cyphon ochraceus* Stephens I discovered one specimen of *C. kongsbergensis*. It was collected by F.H. Day and bears the following data - Glen Moriston, Inverness 25.7.1937. The specimen was dissected and turned out to be a male. Identification was later confirmed by reference to the keys and illustrations provided by Skidmore (1985) and Lohse (1979). One other interesting beetle has also recently been discovered in the F.H. Day collection. This was a male specimen of *Stenus fossulatus* Erichson, which was collected by Day on the River Irthing, Cumbria in 1899 (Read 2002).

Acknowledgement
I wish to thank Stephen Hewitt (Keeper of Natural Sciences) at the Tullie House Museum for permission to publish this record of *C. kongbergensis*, and for granting me access to the coleoptera collections.

References
LOHSE, G.A. 1979. In FREUDE, H., HARDE, K.W. & LOHSE, G.A. *Die Käfer Mitteleuropas* **6**. Krefeld: Goecke & Evers.
READ, J. 2002. A further record of the rove beetle *Stenus fossulatus* Erichson from Cumbria. *Carlisle Naturalist* **9** (2): 29-30.
SKIDMORE, P. 1985 *Cyphon konsbergensis* Munster (Col., Scirtidae) in Scotland. *Entomologist's Monthly Magazine* **121**: 249-252.

The identification of Hyperinae (Curculionidae)

M.G. Morris
Orchard House, 7 Clarence Road, Dorchester, Dorset DT1 2HF

It has been pointed out to me that although the genera and species of Hyperinae are keyed in my recent handbook on 'True Weevils' (Morris, 2002), the group is omitted from the key to subfamilies in that publication. This error, and consequent confusion caused to users of the handbook, is greatly regretted, the more so since it also occurs in an earlier work (Morris, 1991); in this latter case the error was not detected, or at least not drawn to my attention.

Species of Hyperinae will (or should) run to Erirhininae-Erirhinini (couplet 31'b') in Morris (2002) and to Erirhininae (couplet 42'b') in Morris (1991). It is fortunate that, in both cases, the relevant couplet is the final one of the key. This means that the subfamily key (in Morris, 2002) and key to 'main groups' (in Morris, 1991) can be modified to accommodate Hyperinae without disrupting the text of the keys unduly.

The following modification should be made to Morris (2002) to distinguish Hyperinae from Erirhininae-Erirhinini:

31 Pronotum strongly transverse, as broad as elytra at shoulders (fig. 38); 10th elytral stria evanescent [very rare species, southern England only, on *Lotus*]. **Storeinae**

Pronotum less strongly transverse, narrower than elytra at shoulders; 10th elytral stria entire [including common and widely-distributed spp.]. **32**

32 Rostrum longer, at least 4X as long as broad at base, and more strongly curved (e.g. figs 67, 68); antennal scape finer, less conspicuously clubbed at apex, and longer, longer than head is wide and often subequal in length to flagellum (e.g. fig. 69); pronotum more coarsely and deeply punctured; dorsum without scales or erect to suberect setae, or if with scales these isodiametric to elongate but never bifurcate or cleft at apex [mainly on monocotyledonous plants, larvae endophagous].

Erirhininae-Erirhinini

Rostrum shorter, not more than 3.5X as long as broad at base, and less strongly curved (almost straight in some species) (e.g. fig. 145); antennal scape thicker, more conspicuously clubbed at apex, shorter, or scarcely longer, than head is wide (e.g. fig. 129); pronotum more finely and shallowly punctured (but puncturation usually obscured by scales); dorsum with scales and erect to suberect setae, scales often bifurcate or cleft at apex (e.g. figs 123-126) [mainly on Caryophyllaceae, Apiaceae and Fabaceae, larvae ectophagous].

Hyperinae

Although Curculionidae-Hyperinae are gonatocerous and Erirhinidae are orthocerous the characters distinguishing the two groups are not ones which it is practical to use in a work which has purely the identification of species as its objective, as is explained in Morris (2002).

Other works in common use for identification of weevils, including Hyperinae, include Joy (1932), Fowler (1891), Kippenberg (1981, 1983) and Hoffmann (1950, 1954), while Fowles (1994) has keyed the species of *Hypera*.

Joy (1932) includes *Hypera* (=*Phytonomus*) and *Limobius* (the two genera of British Hyperinae) in Erirrhininae, interpreted in an older sense and including gonatocerous as well as orthocerous elements. The key to genera works fairly well considering its brevity and use of comparative characters (but see Fowles (1994)), although the reference to Erirrhininae in the key to subfamilies of Curculionidae (p. 244) is wrong; it is actually p. 224. Joy distinguishes Hyperinae from *Thryogenes* on the character of the tibiae (strongly bent at apex in *Thryogenes*), but his qualifying statement for Hyperinae 'straight, or nearly so' betrays the uncertain nature of this character, particularly as it is variable between the sexes in some cases.

Fowler (1891) treats Hyperinae as a tribe of Curculioninae, using the termination -ina (now used for subtribal names) rather than -ini. Although the characters used in the key are satisfactory, it suffers from the 'bbb*/aaaat†' style of notation and the fact that it is not invariably dichotomous.

Species of Hyperinae are accommodated in Hylobiinae in Kippenberg (1981, 1983). It is doubtful whether British coleopterists will find the key to subfamilies

(Kippenberg, 1981) particularly helpful, although only a few non-British groups are included. The inclusion of Hyperinae in Hylobiinae (roughly equivalent to Molytinae of other authors, but here markedly polyphyletic) is idiosyncratic and also unhelpful. The central European representatives in this group of disparate genera are treated in Kippenberg (1983).

Hoffmann (1950) recognises relatively few subfamilies in his treatment of Curculionidae, but a large number of groups are included in Calandrinae, an arrangement not followed by many other authors. Moreover, the subfamily Curculioninae of Hoffmann (1954) is based on an interpretation of *Curculio* as equivalent to *Hylobius* of other authors. Consequently, Hoffmann's treatment has more in common with Kippenberg's than would appear at first sight. In fact, Hoffmann's Calandrinae include *Balaninus* (=*Curculio*), making for confusion all round. As with Kippenberg's works, those of Hoffmann are unlikely to be of great utility to British workers seeking to place a hyperine in the correct subfamily.

Fowles's paper on species of *Hypera* (1994) includes useful comments on previous publications, as well as a key to the species themselves. However, the identification of a weevil as a specimen of *Hypera* is not addressed, and our two species of *Limobius* are not considered, no doubt because they are easily determined as such and as easily distinguished from each other.

Acknowledgements

I thank Bob Marsh for drawing attention to my unfortunate omission, and am aware that it was also spotted by Dr Andrew Duff.

References

FOWLER, W.W. 1891. *The Coleoptera of the British Islands.* **5.** London: L. Reeve & Co.

FOWLES, A.P. 1994. A provisional key to the weevils of the genus *Hypera* (Germar) (Curculionidae). *The Coleopterist* **3**: 15-20.

HOFFMANN, A. 1950. Coléoptères Curculionides (Première Partie). *Faune de France* **52**: 1-486. Paris: Paul Lechevalier.

HOFFMANN, A. 1954. Coléoptères Curculionides (Deuxième Partie). *Faune de France* **59**: 487-1208. Paris: Librarie de la Faculté des Sciences.

JOY, N.H. 1932. *A Practical Handbook of British Beetles (2 vols).* London: H.F. & G. Witherby

KIPPENBERG, H. 1981. Familie Curculionidae (Rüsselkäfer) [Introduction, key to subfamilies], pp. 102-111 in FREUDE, H., HARDE, K.W. & LOHSE, G.A. *Die Käfer Mitteleuropas* 10. Krefeld: Goecke & Evers.

KIPPENBERG, H. 1983. Unterfamilie Hylobiinae, pp. 121-154 in FREUDE, H., HARDE, K.W. & LOHSE, G.A. *Die Käfer Mitteleuropas* **11**. Krefeld: Goecke & Evers.

MORRIS, M.G. 1991. *Weevils (Naturalist's Handbooks* **16***)* Slough: Richmond Publishing Co.

MORRIS, M.G. 2002. True Weevils (Part 1). *Handbooks for the Identification of British Insects* **5** (17b): 1-149.

Literature Notices compiled by James Hogan

ALLEN, A.A. 2003. On the doubtful Moray record of *Lepyrus capucinus* (Schaller) (Col.: Curculionidae). *Entomologist's Record and Journal of Variation* **115** (3): 126.

ALLEN, A.A. 2003. *Dryophthorus corticalis* (Payk.) (Col: Curculionidae) found continuously at Windsor. *Entomologist's Record and Journal of Variation* **115** (3): 149.

ALLEN, A.A. 2003. The generic names of the British Hydradephaga explained. *Entomologist's Record and Journal of Variation* **115** (3): 149.

ATTY, D.B. 2002. A few beetles from Claife Heights. *Carlisle Naturalist* **10** (2): 30-31.

GUSAROV, V.I & HERMAN, L.H. 2002. *Leptusa* Kraatz, 1856 (Coleoptera, Staphylinidae, Aleocharinae): designation of the type species. *Entomologische Blätter* **98**: 115-119.

HEWITT, S.M. 2003. The bark beetle *Scolytus ratzeburgi* Janson new to Cumberland (VC70), with additional records from Westmorland (VC69). *Carlisle Naturalist* **11** (1): 12-13.

IMAI, T., MAEKAWA, M. & TSUCHIYA, S. 2002. Attractiveness of *p*-anisaldehyde to the varied carpet beetle, *Anthrenus verbasci* (L.) (Coleoptera: Dermestidae). *Applied Entomology and Zoology* **37** (4): 505-508.

JONSSON, M. 2003. Colonisation ability of the threatened tenebrionid beetle *Oplocephala haemorrhoidalis* and its common relative *Bolitophagus reticulates*. *Ecological Entomology* **28** (2): 159-167.

LABRIE, G., PRINCE, C. & BERGERON, J.M. 2003. Abundance and Developmental Stability of *Pterostichus melanarius* (Coleoptera: Carabidae) in Organic and Integrated Pest Management Orchards of Quebec, Canada. *Environmental Entomology* **32** (1): 123-132.

MANN, D.J. & TURNER, C.R. 2003. *Atrichopogon (Meloehelea) winnertzi* Goetghebuer (Diptera: Ceratopogonidae) feeding on *Meloe violaceus* Marsham (Coleoptera: Meloidae). *British Journal of Entomology and Natural History* **16** (1): 7.

O'CONNOR, J.P. 2003. *Reesa vespulae* (Milliron) (Col., Dermestidae) new to Ireland. *Entomologist's Monthly Magazine* **139**: 12.

OMKAR, SRIVASTAVA, S. 2002. The reproductive behaviour of an aphidophagous ladybeetle, *Coccinella septempunctata* (Coleoptera: Coccinellidae). *European Journal of Entomology* **99** (4): 465-470.

OWEN, J.A. 2003. Field Studies on *Cryptocephalus coryli* (Linnaeus) (Coleoptera: Chrysomelidae). *Entomologist's Gazette* **54** (1): 39.

READ, R.W.J. 2003. The beetle *Telematophilus typhae* Fallen in Cumbria. *Carlisle Naturalist* **11** (1): 10-11.

SUTTON, P.G. 2003. British Oil Beetles (Meloidae): Current progress. *Bulletin of the Amateur Entomologist's Society* **62** (447): 79.

VAN WIELINK, P., SPIJKERS, H. & FELIX, R. 2002. Observations of beetles on trees at night during the winter. *Entomologische Berichten-Nederlandsche Entomologische Vereenigung* **62** (6): 156-163.

WALTERS, J. 2003. Rugged Oil Beetle *Meloe rugosus* (Marsham, 1802) (Coleoptera: Meloidae) new to Dorset. *Bulletin of the Amateur Entomologist's Society* **62** (447): 48.

WHITEHEAD, P.F. 2003. *Pyrrhalta viburni* (Paykull) (Col.: Chrysomelidae) breeding on *Viburnum tinus*. *Entomologist's Record and Journal of Variation* **115** (3): 117-118.

YAMAN, M. 2002. *Gregarina phyllotretae* Hoshide 1953, a protozoan parasite of the flea beetles *Phyllotreta undulata* and *P.atra* (Coleoptera: Chrysomelidae) in Turkey. *Applied Entomology and Zoology* **37** (4): 649-653.

Subscribers' Notices

This section is for subscribers to advertise requests for information, specimens wanted for loan, or entomological items wanted or for sale. Notices will be repeated with each issue while space is available (or until withdrawn), newer ones appearing first, and may be edited for brevity.

Lily beetle larvae wanted: I am carrying out research into the distribution of larval parasitoids of the lily beetle in the UK (See Salisbury 2003 Two parasitoids of the lily beetle, *Lilioceris lilii* (Scopoli) (Coleoptera: Chrysomelidae), in Britain, including the first record of *Lemophagus errabundus* Gravenhorst (Hymenoptera: Ichneumonidae) *Br J Ent Nat Hist*. In press). I would like to receive live lily beetle larvae collected between May and September. Please send a maximum of five from any site per month to Andrew Salisbury, Entomology section, Royal Horticultural Society's Garden, **FREEPOST,** Wisley, Woking, Surrey, GU23 6BR. Please include a grid reference (minimum four figures), date of collection and host species/cultivar (if known).

From Keith Lewis During the 2002 AES Exhibition I acquired about 2000 beetles, collected in 1920-1930 plus logbooks of J. Colley. I would be most grateful for any information about this collector who I think died in 1966. kc.lewis@btopenworld.com

For sale: Coleopterist's Bulletin, vol. 31 (1977) to vol. 55 (2001) inclusive: £160 the set, postage extra. Trevor G. Forsythe, 5 Knob Hill, Stretton on Dunsmore, Warwickshire. CV23 9NN Tel. 02476 542688

Help wanted: I have about 20 beetles that I cannot identify; could anyone please help? If so contact Stephen Dawson, 55 Ashbourne Crescent, Sale, Cheshire M33 3LQ Tel 0161 232 7597.

Wanted: ***A monograph of the beetles associated with stored products*** by Hinton 1945. Please contact Andreas Herrmann, Bremervoerder Strasse 123, D – 21682 Stade, Germany. Fax: ++49 (0) 4146 / 930083, Email: herrmann@coleopterologie.de

Wanted: Coleoptera of the British Islands by Fowler (small paper), Practical Handbook of British Beetles by Joy, Beetles of the British Isles by Linssen. Please reply to Stuart Campbell, 4 The Laurels, Moreton, Wirral, Merseyside CH46 3SU. Tel 0151 6777047 (home), 0151 4736151 (office).

Montgomeryshire beetle records wanted: I am setting out as new recorder for this vice-county and would be grateful for any records, past and present. Any information on museum or private collections containing Montgomeryshire species would also be gratefully received. *Dr W. Schaefer,* Cwm-Weeg, Dolfor Newtown POWYS SY164AT.
E-mail: wolfgang@dial 1.co.uk.

***New* British Beetles (revised edition) by Peter Hodge & Richard Jones**: Work on a new and improved version of this book is progressing well, but it would enhance its usefulness still further if the sections entitled 'Errors in Joy' were more comprehensively covered. Therefore, if you know of any previously unrecorded errors in Joy, or can supply other useful information that would make his keys work more effectively, the authors would be pleased to receive details. Reply to *Peter J. Hodge* 8 Harvard Road, Ringmer, Lewes, East Sussex BN8 SHJ. Tel.: 01273 812047.

New *Stenus* recording scheme: Please send all records of *Stenus* (Staphylinidae) species to *Jonty Denton,* 2 Sandown Close, Alton, Hampshire GU34 2TG.
E-mail: jontydenton@aol.com.