1999 ANNUAL EXHIBITION Imperial College, London SW7—27 November 1999

The following account of exhibits has been compiled by A. M. Jones (British butterflies), G. A. Collins (British Macrolepidoptera), H. E. Beaumont (British Microlepidoptera), N. M. Hall (Foreign Lepidoptera), P. J. Chandler (Diptera), P. J. Hodge (Coleoptera), A. J. A. Stewart (Hemiptera), A. J. Halstead (Hymenoptera and other orders), R. Dyke (Illustrations). The photographs for the two colour plates were taken by D. E. Wilson and the cost of printing these plates was met by a grant from the Hammond Memorial Fund.

BRITISH BUTTERFLIES

BAILEY, K. E. J.—Genetic and temperature experiments during 1999. Aglais urticae (L.): extreme examples of the polygenic ab. pseudoconnexa Cabeau from selective pairings. These enhanced the expression of the aberration whilst reducing the proportion of types. Cold shock experiments on the same stock tended to suppress the expression of the gene. An attempt at combining pseudoconnexa and specimens with small central forewing spots (possibly another polygenic form) is under way.

Argynnis adippe (D.&S.): the results of pairing stock of U.K. origin with pure f. cleodoxa Ochsenheimer from Bulgaria. The F_1 produced 85% cleodoxa indicating that it was dominant. Cold shock experiments produced one specimen with its dark markings tending to coalesce.

Eurodryas aurinia (Rott.) ab. *atratus* Bailey: further breeding of this new aberration including specimens bred in an F_2 from pairings between male ab. *virgata* Tutt and female *atratus* showing a tendency to combine in two forms. Also exhibited were specimens of *virgata* from selective breeding experiments showing some specimens to be genetic in origin. These were compared with phenocopies induced by cold shock, the difference being apparent in the underside markings which were type in the genetic stock but transitional to ab. *sebaldus* Schultz in the cold shocked specimens.

Other specimens resulting from cold shocks included an extreme female Argynnis paphia (L.) ab. nigricans Cosmovici (also subjected to late larval photoperiod change). Various Melitaea cinxia (L.) aberrations, an extreme ab. sebaldus of E. aurinia and a varied series of confluent and melanic Issoria lathonia (L.). Two Colias croceus (Geoffroy) approaching ab. pseudomas Cockerell including a f. helice Hübner, and a male ab. nigrofasciata Verity (shortened day length during the late larval stage and prolonged cold shock), a similarly treated helice with uneven distribution of the black pigment.

Interesting specimens that occurred spontaneously during breeding experiments included an *M. cinxia* with homoeosis on the right hindwing, an *E. aurinia* ab. *melanoleuca* Cabeau (Plate I, Fig. 9) with strongly aberrant forewings and near normal hindwings (the exhibitor believes that this was induced by the accidental overheating of a cage of pupating larvae, by a combination of sunlight and infrared lighting), an *I. lathonia* with extreme melanic forewings (Plate I, Fig. 10) (believed to have resulted from a pupating larva getting overheated in the greenhouse).

A wild-caught Vanessa atalanta (L.), showing a bilateral red pigment disorder to the hindwings, Thorverton, S. Devon, ix.1999.

BOOKER, R. J.—An unidentified yellow *Pieridae* taken near Goodwood, W. Sussex, 25.viii.1994.

BUTLER, A.—Wild-caught specimens, the highlight being a possibly unique "gynandrous" Lysandra bellargus (Rott.) with apparently male blue hindwings on an otherwise female insect, Swanage, Dorset, viii.1999. (Plate I, Fig. 3). A Polyommatus icarus (Rott.) ab. obsoleta Gillmer, Silverstone, Northants, viii.1995. Hipparchia semele (L.) ab. triocellata Ragusa, and ab. monocellata Lempke both Portland, Dorset vii.1999.

Captive-bred specimens included Lycaena phlaeas (L.) ab. oblitera Scudda, ab. bipunctata Tutt and ab. remota Tutt from S. Yorks larvae, iv.1999, and an ab. remota + ab. partimauroradiata Leeds (Plate I, Fig. 11), from E. Sussex larvae, iv.1998. P. icarus a selection of obsolete specimens bred viii.1999 from a female taken at Kettering, Northants.

Temperature shock experiments included from cold shock *L. phlaeas* ab. *cuneifera* Shultz, vii.1998, *Aglais urticae* (L.) ab. *conjuncta* Neuberg vi.1997. *Argynnis paphia* (L.) two ab. *confluens* Spuler one being f. *valesina* Esper iv.1999. From heat shock *A. urticae* ab. *semiichnusoides* Pronin, ab. *nigricaria* Lambillion, ab. *lucia* Derenne and ab. *nigra* Tutt, viii.1999.

BUTTER, P.—A pathological *Maniola jurtina* (L.) with white patches on the hindwings, captured at Halden Hill, Devon, 7.viii.1999.

CALLOW, M.—*Melitaea cinxia* (L.) two specimens with reduced markings on the forewings and the hindwing borders becoming dark suffused, bred F_4 generation, vi.1999. *Ladoga camilla* (L.) extreme ab. *obliterae* Robson & Gardner with much reduced white bands, captured vii.1999. *Maniola jurtina* (L.) a bilateral gynandromorph (Plate I, Fig. 4) captured on the same day as the *L. camilla. Lycaena phlaeas* (L.) a male with enlarged and suffused forewing discoidal spots, captured viii.1999. *Plebejus argus* (L.) a male with obsolete spotting to the underside, captured, Dorset, vii.1998.

FENSOME, B.—A selection *Maniola jurtina* (L.) captured vii.1999 and including an impressive albino female ab. *cinerea* Cosmovici from Paxton Pits, Hunts and an extreme female ab. *anticrassipuncta* Leeds (Plate I, Fig. 8), Waresley, Beds. *Lysandra coridon* (Poda.) various aberrations from the Chiltern Hills near Dunstable viii & ix.1999 including ab. *caeca* Courv., ab. *descreta* Tutt and *obsoleta* forms. *Lycaena phlaeas* (L.) an ab. *fuscae* Robson taken at Patton, Beds, ix.1999 and a bred ab. *remota* Tutt. *Inachis io* (L.) a specimen resulting from a cold shocked pupa with the right side aberrant and the left side more or less type.

Colias croceus (Geoffroy) a bred series from Corfu including a male lacking the usual black borders to the hindwings (Plate I, Fig. 2) and several ab. *pseudomas* Cockerell.

HARMER, A. S.—A selection of aberrations from the exhibitor's collection featured in his book *Variation in British Butterflies* either as photographs or paintings by A. D. A. Russwurm. These include many fine historic specimens including two extreme melanic *Boloria selene* (D. & S.), an *Argynnis adippe* (L.) ab. *bronzus* Frowhawk, and a *Lysandra coridon* (Poda.) ab. *alba-radiata* Bright & Leeds, specimens taken by the exhibitor (many a feature of past exhibitions) included a fine *Argynnis aglaja* (L.) ab. *viridiatra* Strand (Plate I, Fig. 1) captured Mendips, Somerset, 21.vii.1974.

JONES, A. M.—Wild-caught specimens included Ladoga camilla (L.) ab. nigrina Weymer underside, vii.1999, Maniola jurtina (L.) an extreme ab. antiparvipuncta Leeds with pin pricks for eye spots and an ab. subtus-albida Silbernagel both vii.1999. Lysandra coridon (Pada.) a male ab. albescens Tutt + ab. limbojuncta Courv. viii.1999. Two bred *Quercusia quercus* (L.) undersides, one ab. nov. with the ocelli reduced in size and blind and one with the forewings becoming obsolete and the hindwings ab. *latefasciata* Courv. (Plate I, Fig. 5), bred by the exhibitor's father R. Jones vi.1999.

KEMP, R.—A mixed gynandromorph of *Anthocharis cardamines* (L.) predominantly female but with male streaks on one side, taken in the exhibitor's garden at Ford Village, Bucks. at 9.00 am on 3.v.1999.

MARTIN, G.—A specimen of *Parthenus sylvia* (Cramer) taken 21.vii.1999 at Bromley by Bow, East London by P. Lipcombe.

MCCORMICK, R.—Specimens taken in Co. Clare, Ireland viii.1999, *Pieris napi* (L.) ssp. *britannica* Müller & Kautz a pair from the Burren, *Maniola jurtina* (L.) ssp. *iernes* Graves taken at Fanore sand dunes, *Hipparchia semele* (L.) ssp. *clarensis* de Lattin a pair from the Burren.

REVELS, R. C.-The results of breeding from a heavily marked female Pieris napi (L.). The original female was taken at Patton Wood, Beds, viii.1997. The F1 emerged iv/v.1998 and were all type, an F2 in vi.1998 only showed a slight tendency towards heavy markings, however two males appeared to be albinos, the dark markings replaced with ginger (see Br. J. Ent. Nat. Hist., 12: 1999 Plate I, Fig. 1). An F3 in viii.1998 (5 specimens from an albino male × type female pairing) produced some specimens with a tendency to dark markings but no albinos. Pairings from the albino stock and remaining specimens were obtained and these and diapausing pupae from the F1 & F2 formed the basis of the four 1999 generations. Each of these generations consisted of about 100 specimens (10-20% of all eggs were infertile and 50% of larvae died), these were mostly type with only a few slightly darker than normal, however, both summer broods (broods 2 & 3 1999) produced albinos. The late summer brood also gave 2 very heavily marked females and 2 with some markings absent. A pairing between an albino female and a type male from the same brood was obtained but no eggs were laid. Pupae from typical pairings of the stock are overwintering. Polyommatus icarus (Rott.): an extreme underside aberration (Plate I, Fig. 2), the only aberration to emerge when half a brood of 40 fresh pupae were subjected to cooling (+2°C). Aphantopus hyperantus (L.): an F₂ generation from pairings between an ab. arete Müller male and ab. lanceolata Shipp. female in July 1997. These gave specimens with slightly streaking pupils but lacking the outer rings.

Hipparchia semele (L.) an interesting exhibit showing the results of breeding the recessive ab. *holonops* Brouwer and ab. *monocellata* Lempke between 1975–1981.

STANDING, P. A.—*Melitaea cinxia* (L.) bred in 1999 from stock maintained for many years. These showed varying expression of the dark-marked underside ab. *wittei* Geest. Unfortunately the most extreme example failed to expand one wing.

STOKES, D.—An interesting series of *Argynnis paphia* (L.) the results of temperature experiments. These included a male ab. *nigricans* Cosmovici and several extreme *confluens/ocellata* forms of both sexes, some with very striking undersides (Plate I, Fig. 7). A specimen of *Coenonympha pamphilus* (L.) captured in Beds., in 1993 and a *Lycaena phlaeas* (L.) bred from Northants, stock 1998 both showing homoeosis.

TEBBUTT, P.—Various melanic nymphalid butterflies the results of temperature experiments on freshly formed pupae. *Aglais urticae* (L.) ab. *semiichnusoides* Pronin, ab. *nigrocaria* Lambillion, ab. *velata* Turati and two transitional to *nigrocaria*. *Polygonia c-album* (L.) ab. *obscura* Closs., and ab. *sagitta-album* Frohawk. *Boloria selene* (D. & S.), two with melanic hindwings. *Ladoga camilla* (L.) ab. *obliterae* Robson & Gardner.

Thecla betulae (L.), four underside aberrations (Plate I, Fig. 6) induced by long cold shock to the pupae and a pair of uppersides, a male ab. *spinosea* Gerhard and a female ab. *restricta* Tutt.

A short series of Lysandra coridon (Poda.) from various localities including obsoleta and caeca forms and a fine male ab. antidigitata B. & L.

A second-brood specimen of Erynnis tages (L.) from Northants.

YARNOLD, J.—Photographs of a male *Danaus plexippus* (L.) taken on 30.ix.1999 on three separate occasions on the same day at St. Dellan, in the parish of St. Buryan, Cornwall. The butterfly was first observed in the gardens just above the low sea cliff at 11 am but not photographed until midday as it rested on ivy, and again soon after on flowers and then at 3 pm on buddleia. Other sightings were made on the 1 & 2.x. Observations showed that the butterfly visited the garden for roughly half hour periods and would then fly off over the trees and up the hillside.

Melitaea cinxia, photographs taken at Hordle Cliff, Hampshire on the 1, 7 & 14.vi.1999.

A very interesting photograph of an extreme melanic male aberration of *Lasionmata megera* (L.) (appearing like an ab. *saturatior* Crumbrugge of *Pararge aegeria* (L.)) taken on the afternoon of 2.x.1999 as it patrolled a large area of flower beds in gardens at St. Dellan, Cornwall. It was observed again on the morning and afternoon of 3.x when it showed its underside to be normal. Unfortunately no further photographs were possible and the specimen was not retained.

BRITISH MACROLEPIDOPTERA

Although 1999 was probably an even poorer year than 1998, more exhibits were shown, but then more exhibitors relied on material from earlier years. Immigrant Lepidoptera were generally scarce, but several examples of *Macdunnoughia confusa* (Steph.) and *Earias insulana* (Boisd.) were shown as well as reared examples of *Eublemma ostrina* (Hb.) from the many larvae found on the coast of Devon and Dorset. Amongst the resident species *Heterogenea asella* (D. & S.) had a good year; being seen in numbers in Kent, in Hampshire, and in Devon for the first time in well over 90 years. Exhibits containing examples of Channel Islands Lepidoptera are included here, although not part of the British fauna, rather than in Foreign Lepidoptera.

BAILEY, K. E. J.—*Heliothis nubigera* (H.-S.), Thorverton, S. Devon, i.1999. *Hyles livornica* (Esp.), reared from a larva on antirrhinum at Farnham, Surrey, vi.1999. *Agrius convolvuli* (L.), found at rest, Thorverton, S. Devon ix.1997. *Euplagia quadripunctaria* (Poda), aberration, Exeter, S. Devon, viii.1991 (D. Stadling).

BAILEY, M.—An exhibit showing the comparative totals, flight times and wingspan of *Mesapamea secalis* (L.) and *M. didyma* (Esp.) at Timsbury, N. Soms. in 1998. From a sample of just over 800, *didyma* comprised 10% of the catch, appeared slightly later, and was marginally smaller.

BAKER, P. J.—An exhibit showing melanism in the British Geometridae, including examples of: *Idaea aversata* (L.), Thorpe, Surrey, 24.vii.1991; *Peribatodes rhomboidaria* (D. & S.), Gussetts Wood, Bucks., 16.vii.1974; *Odontopera bidentata* (Cl.), Pinner, Middx., 18.v.1964; and *Cabera exanthemata* (Scop.), Studland, Dorset, 6.viii.1976.

BROOKER, R. J. & MASTERS, I. D.—Migrant Lepidoptera from previous years: Cryphia algae (Fab.), Middleton-on-Sea, W. Sussex, 5.vii.1997 and 6.viii.1997; Drepana curvatula (Borkh.), Middleton-on-Sea, W. Sussex, 30.vii.1993.

BUTCHER, A. G. J.—*Cyclophora annulata* (Fab.), melanic forms appearing as a result of rearing several broods from a typical female from Sidney Wood, Surrey, 20.vi.1998. *Crocallis elinguaria* (L.) ab. *fusca* Reutti, Grain, W. Kent, 1.vii.1999; *Semiaspilates ochrearia* (Rossi), Grain, W. Kent, 5.ix.1999, heavily banded aberration; *Idaea aversata* (L.), bred from a very dark female, Gillingham, E. Kent, vii.1997. *Orthosia miniosa* (D. & S.), Dungeness, E. Kent, 3.iv.1999, presumed

migrant. *Miltochrista miniata* (Forst.) and *Perizoma bifaciata* (Haw.), Hamstreet, E. Kent, 8.x.1999, probable second broods.

BUTTER, P.—Seven species of moth recorded as second broods in Devon in 1999: Idaea dimidiata (Hufn.); Camptogramma bilineata (L.); Colostygia pectinataria (Knoch); Apeira syringaria (L.); Ourapteryx sambucaria (L.); Spilosoma luteum (Hufn.); and Mythimna impura (Hb.). Schrankia taenialis (Hb.) and Schrankia costaestrigalis (Steph), the latter from Devon. Cyclophora porata (L.), Ashclyst Forest, S. Devon, 7.viii.1999, two colour forms.

CLANCY, S.—Moths from E. Kent: *Thera cupressata* (Geyer), Dungeness, 25.x.1999, new to Kent; *Nola aerugula* (Hb.), New Romney, 4.vii.1999, and Lydd, 5.vii.1999; *Cerastis leucographa* (D. & S.), Lydd, 4.iv.1999, probable migrant, first Kent record since 1912; *Earis insulana* (Boid.), Dungeness, 11.ix.1999, new to Kent; *Trichoplusia ni* (Hb.), New Romney, 9.viii.1999; *Pechipogo plumigeralis* (Hb.), Greatstone, 20.vii.1999; *Ourapteryx sambucaria* (L.), Lydd, 29.ix.1997, second brood example with extensive dark suffusion [a similar specimen is figured *Proc. Trans B.E.N.H.S.* 18: plate 2]; *Tholera cespitis* (D. & S.), Dungeness, 10.ix.1999, aberration.

CLARKE, J.-Lepidoptera reared or taken in 1999: Sabra harpagula (Esp.), Tintern, Mon., 1.vii.1999; Heliophobus reticulata hibernica Cock., bred from a female from Portland, Dorset, 20.vi.1998; Conistra rubiginea (D. & S.), bred from a female from Lingfield, Surrey, 31.iii.1999; Schrankia taenialis (Hb.), Longrope Wood, E. Kent, 19.vi.1999, and Tintern, Mon., 1.vii.1999; Cossus cossus (L.), female found dead, Charmouth, Dorset, 18.vii.1999; Cosmia diffinis (L.), 31.vii.1999, Hunts.; Rheumaptera hastata nigrescens (Prout), near Spean Bridge, Westerness, June 1999, flying amongst birch; Hemaris tityus (L.), near Spean Bridge, Westerness, 9.vi.1999, at bluebell flowers; Heterogenea asella (D. & S.), Longrope Wood, E. Kent, 29.vi.1999 three seen, 7.vii.1999 20 seen; Chortodes morrisii morrisii (Dale), Charmouth, Dorset, vii.1999; Entephria flavicinctata ruficinctata (Guenée), reared from larvae, Ben Lawers, Mid Perth, vi.1999; Eupithecia egenaria (H.-S.), Tintern, Mon., 27.v.1999, seen abundantly; Zygaena lonicerae jocelynae Tremewan, reared from cocoons from Talisker Bay, Skye, N. Ebudes, vi.1999; Opisthograptis luteolata (L.), Rye, E. Sussex, 29.viii.1999, near ab. albescens Cock.; Melanthia procellata (D. & S.), Slindon, W. Sussex, 19.vi.1999, ab. extrema Schaw (Plate 2, Fig. 1); Lomaspilis marginata (L.), Glen Loy, Westerness, 7.vi.1999, near ab pollutaria Hüton. A series of Gnophos obscurata (D. & S.) showing local forms from different soils in southern England.

COOK, R. R.—*Cosmia affinis* (L.) and *C. diffinis* (L.), reared from larvae from Cambridgeshire, v.1998. *Hecatera dysodea* (D. & S.), reared from larvae from Swanscombe, Gravesend and Northfleet, W. Kent, on 26.vii.1998. *Entephria flavicinctata flavicinctata* (Hb.), reared from larvae from Grassington, Mid-west Yorks, 16.v.1999. *Eublemma ostrina* (Hb.), reared from heads of *Carlina vulgaris* carline thistle, Portland, Dorset, 19.viii.1999.

DOBSON, A. H.—Heterogenea asella (D. & S.) and Meganola strigula (D. & S.), Frame Wood, S. Hants, 3.vii.1999. Rhodometra sacraria (L.), Greywell, N. Hants, 22.x.1999. Aleucis distinctata (H.-S.), Hook, N. Hants, 24.iii.1977, new to VC12 (P. Boswell). Angerona prunaria (L.), Morgaston Wood, N. Hants, 11.vi.1999, aberration. Cerastis rubricosa (D. & S.), Bramley Frith Wood, N. Hants, 17.iii.1999, resembling Scottish form. Agrochola haematidea (Dup.), 8.x.1999, from a new site in the New Forest. Euphyia biangulata (Haw.), Starcross, S. Devon, 12.ix.1999, second brood.

ELLIOTT, B.—*Perizoma blandiata* (D. & S.), reared from larvae found on Yell, Zetland, viii.1997, probably referable to ssp. *perfasciata* (Prout) usually found on the Hebrides.

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HARMAN, T. W.—A specimen of *Schinia scutosa* (D. & S.), taken at Kingsgate, Thanet, E. Kent, 7.vii.1999 by Francis Solly.

HAYWARD, R.—Moths taken in 1999: *Hecatera dysodea* (D. & S.), Northfleet and Swanscombe, W. Kent, a pair reared from wild larvae found in 1998; Gravesend, W. Kent, 14.vii.1999, at actinic light, and reared from larvae found viii.1999; *Hypena obsitalis* (Hb.), Torquay, S. Devon, 7.ix.1999. New species from a Slough, Bucks., garden: *Eupithecia subumbrata* (D. & S.), 16.vi.1999; *Eupithecia indigata* (Hb.), 2.v.1999; *Ennomos quercinaria* (Hufn.), 1.viii.1999; *Lithophane hepatica* (Cl.), 30.iii.1999; *Apamea sublustris* (Esp.), 16.vi.1999; *Nonagria typhae* (Thunb.), 1.viii.1999.

HECKFORD, R. J.—Eublemma ostrina (Hb.), Strete Gate, Slapton, S. Devon, reared from larvae in Carlina vulgaris carline thistle, 2.vii.1999.

HENWOOD, B.—From Devon: A photograph of a larva of *Helicoverpa armigera* (Hb.), Berry Head (SX9456, VC3) vi.1999 found feeding on the seeds of *Rhinanthus minor* yellow rattle; *Triphosa dubitata* (L.), Berry Head, 31.vii.1999, presumed immigrant; *Heterogenea asella* (D. & S.), woodlands near Great Torrington (SS5217, VC4) 26.vi.1999 (W. Deakins); *Eublemma ostrina* (Hb.), Strete Gate Beach, Slapton (SX8345, VC3) 24.vii.1999, larvae in heads of *Carlina vulgaris* carline thistle from which the adults shown were reared.

JENKINS, A.—Herminia tarsicrinalis (Knoch), bred from a female from Thorpeness, E. Suff. *Thalpophila matura* (Hufn.) and *Luperina nickerlii knilli* Boursin, from the Dingle, N. Kerry. *Diaphora mendica* (Cl.) f. *rustica* Hb., a second generation bred from a female from the Burren, Clare. *Synanthedon myopaeformis* (Borkh.), reared from larvae from Sutton, Surrey.

KNILL-JONES, S. A .- Moths from the Isle of Wight. Freshwater: Dryobota labecula (Esp.), 22.xi.1999, second British record (Plate 2, Fig. 3); Colostygia multistrigaria (Haw.), 28.iii.1999; Idaea aversata (L.), 16.vii.1999, orange-banded variety; Eupithecia indigata (Hb.), 28.iv.1999; Agrius convolvuli (L.), 6.ix.1999; Schrankia costaestrigalis (Steph.), 15.ix.1999; Nycteola revayana (Scop.), 11.vii.1999; Leucochlaena oditis (Hb.), 11.ix.1999; Mythimna favicolor (Barr.), 7.ix.1999; Orthonama obstipata (Fab.), 24.ix and 2.xi.1999; Plusia festucae (L.), 10.ix.1999; Trigonophora flammea (Esp.), 26.x.1999; Agrotis exclamationis (L.), 20.vi.1999, melanic; Parastichtis ypsillon (D. & S.), 10.vii.1999; Apamea scolopacina (Esp.), 13.vii.1999; Craniophora ligustri (D. & S.), 16.vii.1999. From other sites: Eupithecia millefoliata (Rössler), St Helens and Cranmore, reared from 1998 larvae; Chloroclystis chloerata (Mab.), Knighton Down and Freshwater, reared from 1999 larvae; Eupithecia tripunctaria (H.-S.), Firestone Copse, reared from 1998 larvae; Nola strigula (D. & S.), Parkhurst Forest, 8-12.vii.1999; Atolmis rubricollis (L.), Parkhurst Forest, 8.vii.1999; Deileptenia ribeata (Cl.), Parkhurst Forest, 12.vii.1999. Odontopera bidentata (Cl.), extreme aberration reared from a 1954 Boston, Lincs., larva (Plate 2, Fig. 4)

MARSHALL, L.—Selidosema brunnearia scandinavaria (Stdgr.), Browndown Ranges, Gosport, S. Hants., 16.viii.1999; Trisateles emortualis (D. & S.), Grange Copse, Gosport, S. Hants., 8.vii.1999, new to VC11.

MARTIN, G.—A selection of Lepidoptera taken in urban habitats: *Hyles gallii* (Rott.), Broadstairs, E. Kent, 14.viii.1999; *Euplagia quadripunctaria* (Poda), Plymouth, S. Devon, 10.viii.1999; *Bena bicolorana* (Fuess.), Plaistow, S. Essex, 24.vii.1999; *Paradrina clavipalpis* (Scop.), Elephant & Castle, Surrey, ii.1999, a larva found spinning up on a cardigan inside a wardrobe, possibly originating from a nearby window box.

MCCORMICK, R. F.—Moths recorded in Devon. Examples shown were mostly substitute specimens, but vouchers exist for all species. *Heterogenea asella* (D. & S.),



PLATE 1 ANNUAL EXHIBITION 1999

1: Argynnis aglaja ab. viridiatra, Mendips, Somerset, 1974, A.S. Harmer. 2: Polyommatus icarus ab. bred, 1999, R.C. Revels. 3: Lysandra bellargus, Swanage, Dorset, 1999, A. Butler. 4: Maniola jurtina, bilateral gynandromorph, captured 1999, M. Callow. 5: Quercusia quercus ab. latefasciata bred ex Surrey, 1999. R. Jones. 6: Thecla betulae male ab. bred. temperature shock, 1999, P. Tebbutt. 7: Arygnnis paphia ab. confluens, temperature shock, 1999, D. Stokes. 8: Maniola jurtina ab. anticrassipuncta, Waresley, Beds, 1999, B. Fensome. 9: Eurodryas aurinia ab. melanoleuca, bred 1999, accidental heatshock, K.E.J. Bailey. 10: Issoria Iathonia, bred, 1999, K.E.J. Bailey. 11. Lycaena phlaeas ab. remota, bred ex E. Sussex, 1998, A. Butler. 12: Colias croceus, bred ex Corfu, B. Fensome.

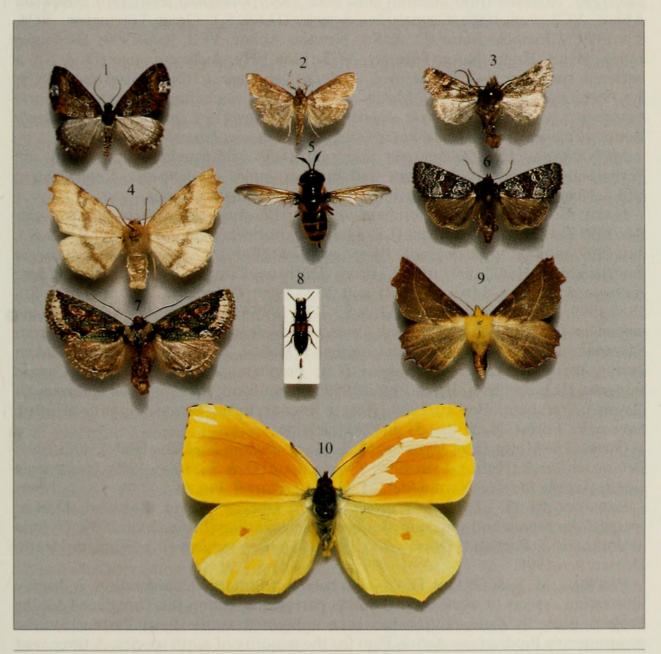


PLATE 2 ANNUAL EXHIBITION 1999

1: Melanthia procellata ab. extrema, Slindon, W. Sussex, 1999, J. Clarke. 2: Herpetogramma licarsisalis, Freshwater, Isle of Wight, November 1998, S. Knill-Jones. 3: Dryobota labecula, Freshwater, Isle of Wight, 1999, S. Knill-Jones. 4: Odontopera bidentata ab., Boston, Lincs, 1954, S. Knill-Jones. 5: Callicera spinolae, Royston, Herts, 1999, A.J. Halstead. 6: Mesapamea secalis ab. lilacina, Dymchurch, E. Kent, J. Owen. 7: Allophyes oxyacanthae ab. Densole, Kent, 1999, T. Rouse. 8: Philonthus spinipes, Guestling, Sussex, P.J. Hodge. 9: Ennomos alniaria, melanic, Leckford, Hants, 1999, T. Rouse. 10: Gonepteryx cleopatra, gynandromorph, ex Greece, 1998. N. South exhib. L. Winokur.

a second specimen from Great Torrington, VC4 [see Henwood]; Idaea degeneraria (Hb.), Slapton, VC3, 11.ix.1999, presumed migrant; Discoloxia blomeri (Curt.), Buckfastleigh, VC3, 16.vii.1999; Furcula bicuspis (Borkh.), Buckfastleigh, VC3, 22.v.1999, recorded from nineteen sites since 1980; Thumatha senex (Hb.), Newton Abbot, VC3, 9.vii.1999; Cerastis leucographa (D. & S.), Great Torrington, VC4, 8.iv.1999; Lacanobia suasa (D. & S.), Newton Abbot, VC3, 9.vii.1999; Eublemma ostrina (Hb.), Hopes Nose, Torquay, VC3, 12.vi.1999. Jodia croceago (D. & S.), a battered specimen was found in a spider's web near to Newton Abbot, VC3, 8.x.1999, but not retained. Moths from Ireland including: Aspitates gilvaria burrenensis Cock.; Aporophyla lueneburgensis (Freyer); Luperina nickerlii knilli Bours.; Calamia tridens occidentalis Cock.; and Celaena haworthii (Curt.).

MCNAMARA, D.—*Callimorpha dominula* (L.), wild-caught examples of ab. *flavomarginata* and ab. *lutescens*, and bred examples of *dominula*, f. *medionigra* and f. *bimacula*, together with a brief description of their genetics.

NASH, S.—Moths from Fernham, Berks.: *Rhodometra sacraria* (L.), 25.viii-6.ix.1999 (14); *Agrius convolvuli* (L.), 11 and 19.ix.1999; *Orthosia miniosa* (D. & S.), 3.iv.1999, thought to be migrant; *Polyploca ridens* (Fab.), 27.iv.1999; and *Colostygia multistrigaria* (Haw.), 30.iii.1999. From Durlston Country Park, Dorset: *Thera cupressata* (Geyer), 14.xii.1998 (2) and 18.vi.1999; *Catarhoe rubidata* (D. & S.), 18.vi.1999; *Mythimna albipuncta* (D. & S.), 27.v.1999 (2) and 3.ix.1999 (2); *Mythimna unipuncta* (Haw.), 14.xii.1998; and *Conistra rubiginea* (D. & S.), 4.iv.1999. From Savernake Forest, N. Wilts: *Eilema sororcula* (Hufn.), 27.v.1999. Aberrations taken during the year: *Hepialus lupulinus* (L.), Fernham, Berks., 27.v.1999; *Cosmia trapezina* (L.), Fernham, Berks., 4.viii.1999, a plain form; *Zanclognatha tarsipennalis* (Treits.), Fernham, Berks., 29.vi.1999, a fuscous form; *Biston strataria* (Hufn.), Savernake Forest, N. Wilts., 31.iii.1999, melanic.

OWEN, J.—Moths from Dymchurch, E. Kent: *Deltote bankiana* (Fab.), 4.vii.1999; *Pelosia muscerda* (Hufn.), 4.viii.1999; *Tyta luctuosa* (D. & S.), 10.vii.1999; *Mesapamea secalis* (L.) ab. *lilacina* Warren (det. M. Honey) (Plate 2, Fig. 6).

PARSONS, M. S.—*Eublemma ostrina* (Hb.), Cheyne Weare, Portland, Dorset, reared from larvae and pupae in *Carlina vulgaris* carline thistle, 3.viii.1999. *Hypena obsitalis* (Hb.), Portland, Dorset, 27.x.1999. *Chlorissa viridata* (L.), Winfrith Heath, Dorset, 9.vi.1999.

PARSONS, M. S. & GREEN, D. G.—On behalf of Butterfly Conservation. A display illustrating aspects of work carried out as part of the Action for Threatened Moths Project. Butterfly Conservation has been appointed as the Lead Partner for the government's Biodiversity Action Plan for the majority of moth species. A three year project was started in May 1999, funded by English Nature and Butterfly Conservation, to oversee the implementation of these Action Plans. Moths featured in the display included: *Catocala promissa* (D. & S.), *Catocala sponsa* (L.), *Dicycla oo* (L.), *Moma alpium* (Osbeck), *Hadena albimacula* (Borkh.), *Calophasia lunula* (Hufn.), *Shargacucullia lychnitis* (Ramb.), and *Hypena rostralis* (L.).

PEET, T. N. D.—A specimen of *Luperina dumerilii* (Dup.), Icart Point, Guernsey, 1.ix.1999, new to the island, and three examples of *L. testacea* (D. & S.) for comparison.

PHILLIPS, J. W.—From Scotland, iv.1999: Aviemore, Elgin, Orthosia incerta (Hufn.), Brachionycha nubeculosa (Esp.), Lycia hirtaria (Cl.); Struan, Mid Perth, Lycia lapponaria scotica (Harr.). From Ireland: Eupithecia venosata plumbea Huggins, Doolin Point, Clare, reared from larvae found on Silene maritima sea campion, 7.vi.1997. A short series of Trichopteryx polycommata (D. & S.) bred from a female from Findon, W. Sussex found in 1998. Migrants: Cryphia algae (Fabr.),

Northney, Hayling Island, S. Hants., 31.vii.1999; *Macdunnoughia confusa* (Steph.), Northney, Hayling Island, S. Hants., 25.ix.1999 (P. Dunnell).

PICKLES, A. J.—Hylaea fasciaria (L.) ab. grisearia Fuchs, Lymington, S. Hants., 5.vii.1999. Chilodes maritimus (Tauscher), Lymington Marshes, S. Hants., examples of ab. bipunctata Haw., ab. nigristriata Stdgr., and ab. bipunctata + nigricostata Stdgr.

RIVERS, C.—Laothoe populi (L.), a bilateral gynandromorph taken at Cumnor Hill, Oxon., 16.vii.1999, by the exhibitor's grandson.

ROUSE, T.—Allophyes oxyacanthae (L.), Densole, E. Kent, 27.x.1999, pale specimen (Plate 2, Fig. 7). Euproctis similis (Fuess.), Folkestone Warren, E. Kent, 29.x.1999, second brood. Aspitates gilvaria (D. & S.), Dover, E. Kent, 20.viii.1999, lacking dark forewing stripe. Ennomos alniaria (L.), Leckford, N. Hants., 25.vii.1999, melanic (Plate 2, Fig. 9). Migrants from E. Kent: Rhodometra sacraria (L.), Folkestone Warren; Agrius convolvuli (L.), examples bred from wild female, Densole, 17.ix.1999; Orthosia miniosa (D. & S.), Densole, 2.iv.1999.

SCANES, J. T. & MIDDLETON, H. G.—Moths from Scotland taken 7–14.viii.1999. From the Spey Valley, Easterness: Eugnorisma depuncta (L.); Enargia paleacea (Esp.); Protolampra sobrina (Dup.); Diarsia dahlii (Hb.); Stilbia anomala (Haw.); Carsia sororiata anglica Prout; Thera juniperata scotica (White); and Chloroclysta citrata citrata (L.). From Findhorn, Elgin: Euxoa cursoria (Hufn.).

SIMS, I.—*Macdunnoughia confusa* (Steph.), Staines, Middx., 9.x.1999, new to VC21 (J. Muggleton). *Autographa gamma* (L.), and a parasite, *Pimpla turionellae* (L.) (Hym.: Ichneumonidae), reared from a larva of this species, Poole, Dorset, 25.vii.1996. Aberrations including: *Alcis repandata* (L.), Homefield Wood, Medmenham, Bucks, 10.vi.1995; *Craniophora ligustri* (D. & S.), Homefield Wood, Medmenham, Bucks, 7.vii.1995; and *Lymantria monacha* (L.), Ashley Hill Forest, Berks..

SIMSON, E. C. L.—An exhibit showing pairs of fourteen species of Lepidoptera with wingless females.

STERLING, P. H.—Moths recorded by members of the Dorset Moth Recording Network: *Hadena luteago barrettii* (Doubl.), Grove, Portland, 26.vi.1999, new to VC9 (D. Walbridge); *Earis insulana* (Boisd.), Portland Bird Observatory, 25.viii.1999, new to VC9 (M. Cade); *Xestia c-nigrum* (L.), Puddletown, 13.viii.1999, an extreme aberration (H. Wood Homer).

TREMEWAN, W. G.—A dark suffused aberration of Lymantria monacha (L.), Playing Place, W. Corn., 10.viii.1999.

WARNE, B.—Moths from the Isle of Wight: *Hypena rostralis* (L.), reared from larvae beaten from *Humulus lupulus* hop; *Thera cupressata* (Geyer), Binstead, 18.x.1999, with ten more up to 13.xi.1999; *Hadena compta* (D. & S.), 16.v.1998, new to VC10; *Rhodometra sacraria* (L.), 12.viii.1999; *Cyclophora puppillaria* (Hb.), 19.ix.1999.

WEDD, D.—Moths from Henley-on-Thames, Oxon.: Cepphis advenaria (Hb.), a series bred from a female taken v.1998 and fed on birch; Ptilodon cucullina ([D. & S.]), second-brood example; Archanara sparganii (Esp.), 27.viii.1999; Scopula immutata (L.), 20.vii.1999; Catarhoe cuculata (Hufn.), 4.vii.1999. From Inch, N. Kerry, viii.1999: Mesoligia furuncula (D. & S.), an ochreous form; Celaena haworthii (Curt.), a large indistinctly-marked form; Luperina nickerlii knilli Bours., 24.viii.1999. From Anglesey: Luperina nickerlii gueneei Doubl., 27.viii.1999. From E. Norf.: Eilema pygmaeola pygmaeola (Doubl.) and Pelosia obtusa (H.-S.), Horsey Dunes, vii.1999, flying together in dune slack. From the Channel Islands, 1998–99: Hadena luteago barrettii (Doubl.), distinctive form; Mythimna putrescens (Hb.), Icart Bay, Guernsey; Idaea rusticata atrosignaria Lempke, one of the commonest moths;

Thera cupressata (Geyer), Achirondel, Jersey, v.1999; Crocallis dardoinaria (Donz.), Petit Bot, Guernsey, 3.viii.1999, third Channel Islands record; Agrotis crassa (Hb.), Guernsey, viii.1999; Polyphaenis sericata (Esp.), Guernsey, viii.1999; Hyles euphorbiae (L.), L'Eree, Guernsey, 6.viii.1999; and Scopula emutaria (Hb.) and Eupithecia lariciata (Freyer), Achirondel, Jersey, v.1999, both new to Jersey.

WOOLDRIDGE, D. B.—*Trigonophora flammea* (Esp.), Freshwater, Isle of Wight, 28.x.1999.

YOUNG, D.—Moths taken this year. From the Scottish Highlands, early April: Lycia lapponaria scotica (Harr.); Brachionycha nubeculosa (Esp.); Achlya flavicornis scotica (Tutt); Orthosia gothica (L.); Orthosia incerta (Hufn.); and Trichopteryx carpinata (Borkh.). From Tilshead, S. Wilts: Bembecia ichneumoniformis (D. & S.), swept by day. From Surrey: Pechipogo strigilata (L.), Sidney Wood.

BRITISH MICROLEPIDOPTERA

[NOMENCLATURE AND CLASSIFICATION FOLLOWS THE CHECKLIST OF BRADLEY 1998]

BEAUMONT, H. E.-Morophaga choragella (D. & S.), Anston Stones Wood, South Yorks. (VC63), 16.vii.1999, at light. (The first Yorkshire record). Coleophora caespititiella Zell., Skipwith Common, Selby, East Yorks. (VC61), 7.iv.1999, larval cases in seedheads of Eriophorum, emerged 10.v.1999. (The first VC61 record). Elachista subocellea (Steph.), Maltby Far Common, South Yorks. (VC63), 2.vii.1999, at light. (The first VC63 record). Sorhagenia lophyrella (Dougl.) Anston Stones Wood, South Yorks. (VC63), 16.vii.1999, at light. (The first Yorkshire record of a moth that does not appear to have been recorded north of East Anglia). Epiphyas postvittana (Walk.), specimens from several localities in the south of VC63 where this spreading species has become quite widespread. Apotomis lineana (D. & S.), Misson, Notts. (VC56), 17.vii.1999, at light. (The first Notts. record). Eudemis profundana (D. & S.), Bowden Housteads Wood, Sheffield, South Yorks. (VC63), 23.vii.1999, several at light. (The first VC63 record and the first from Yorkshire since the nineteenth century). Cydia fagiglandana (Zell.), specimens from several South Yorkshire woods (VC63), where it has been recorded quite commonly during 1999; the only previous confirmed Yorkshire record was from near Rotherham in 1996. Cydia amplana (Hübn.), Spurn, East Yorks. (VC61), 3.viii.1999, at light (leg. B. R. Spence). (The first Yorkshire record of a moth which has otherwise only been recorded from the south coast of England). Schreckensteinia festaliella (Hübn.), Askham Bog, York (VC64), 10.iv.1999. (The first VC64 record). Platytes alpinella (Hübn.), West Melton, South Yorks. (VC63), 1.viii.1999. An uncommon moth inland in Yorkshire. Endotricha flammealis (D. & S.), Misson, Notts. (VC56), 17.vii.1999, at light. (The first Notts. record). Pima boisduvaliella (Guen.), Spurn, East Yorks. (VC61), 31.vii.1999 (leg. B. R. Spence). (The first Yorkshire record).

BLAND, K. P.—*Stigmella aeneofasciella* (H.-S.), Fealar, Perths. (VC98), 23.ix.1998, linear/blotch mine on *Fragaria vesca*, emerged 30.v.1999. *Yponomeuta padella* (L.), South Melville, Midlothian (VC83), 17.vi.1999, larvae, emerged 30.vi.1999. Usually recorded only occasionally in Scotland but several localities had defoliated hedges in 1999, no parasites were reared from over fifty larvae. *Philedone gerningana* (D. & S.), Lunkard, Glen Doll, Angus (VC90), 27.vii.1999. (New to Angus). Interesting species from Isle of Arran (VC100): *Digitivalva pulicariae* (Klim.), Kildonan, Arran, 26.vi.1999, leafmines in *Pulicaria dysenterica*, emerged 12.vii.1999. (with J. R. Langmaid) (New to Scotland). *Coleophora adjunctella* Hodgk., saltmarsh near

Prospect Hill, Margnaheglish, Arran, 27.vi.1999, one male swept (New to Arran). *Ebulea crocealis* (Hübn.), Kildonan, Arran, 26.vi.1999, one of several seen. (New to Arran). *Cydia funebrana* (Treits.), Edinburgh, 17.ix.1998, reared from plums imported from Italy, emerged 7.vi.1999.

BROOKER, R. J. & MASTERS, I. D.—Sceliodes laisalis (Walk.), Haslemere, Surrey (VC17), at light, 21.viii.1975.

BUTTER, P.-Sclerocona acutellus (Eversm.), Devon (SX945895), 16.vi.1999.

CLANCY, S. P.—Pyralidae from the Dungeness area, Kent. *Haimbachia cicatrella* (Hübn.), Dungeness, Kent, 31.vii.1999, a small female example (The third British record). *Hellula undalis* (Fabr.), New Romney, Kent, 20.ix.1999. (The third Kent record). *Evergestis limbata* (L.), Lydd, Kent, 7.vii.1999. (The first Kent record). *Conobathra tumidana* (D. & S.), New Romney, Kent, 2.viii.1999, two specimens taken at separate trap sites. *Pempelia obductella* Zell., Dungeness, Kent, 31.vii.1999. *Vitula biviella* (Zell.), Lydd, Kent, 17 & 26.vii.1998, 5 & 17.vii.1999. The first record was at Lydd on 13.vii.1997, four were recorded there in 1998 and nine in 1999 with a further moth at Greatstone in 1999. Probably established in the Lydd area. (New to Britain). *Plodia interpunctella* (Hübn.), Greatstone, Kent, 10.vii.1999. *Ephestia kuehniella* Zell., New Romsey, Kent, 18.ix.1999. *Homoeosoma nebulella* (D. & S.), Greatstone, Kent, 26.viii.1999.

CLARKE, J.—*Amblyptilia punctidactyla* (Haw.), specimens reared from larva and pupae on *Stachys sylvatica*, Gravetye Forest, East Grinstead, West Sussex, 18.viii.1999, Canon Teign Falls, Hennock, Devon, 10.viii.1999, Jennycliffe, Plymouth, Devon, 13.viii.1999, Staddon Heights, Plymouth, Devon, 13.viii.1999, Stenoptilia zophodactylus (Dup.), Stonelees, Sandwich, Kent, 26.viii.1999, reared from flower/seed-heads of *Blackstonia perfoliata* and *Centaurium* sp.

COOK, R. R.—Pyralid moths including *Crambus uliginosellus* Zell., Studland, Dorset, 6.vii.1999. *Thisanotia chrysonuchella* (Scop.), Sandwich, Kent, 17.vi.1999. *Pediasia contaminella* (Hübn.), Parley Heath, Dorset, 29.vii.1999, at light. *Udea fulvalis* (Hübn.), Christchurch, Dorset, vi.1999, reared.

DAVIS, A.—A display of provisional maps from the Pyralid and Plume Recording Scheme. A request for information on microlepidoptera from Radnorshire (VC43) in order to produce a county list.

DOBSON, A. H.—*Epiphyas postvittana* (Walk), Basingstoke, Hampshire, First occurred in exhibitor's garden 8.x.1995 since when it has become a pest, larvae damaging shoots and buds of shrubs and rose cultivars, and 48 in m.v. trap on 31.ix.1999.

ELLIOTT, B.—Microlepidoptera taken during 1999, including Acleris species reared during 1999. Teleiodes wagae (Now.), Killinny and Glencolumbkille, Burren, Co. Clare, taken among hazel scrub. Dichrorampha sylvicolana Hein., Loch Inch, early.vii.1999, several disturbed from Achillea ptarmica. Eucosma metzneriana (Treit.), locality not stated, a strong but very localised breeding colony discovered in 1999 after several were taken in 1998. Agonopterix astrantiae (Hein.), Glencolumbkille, Burren, Co. Clare, reared ex larvae in rolled and withered leaves of Sanicula. Depressaria chaerophylli Zell., Braishfield, Hants., reared from Chaerophyllum temulentum growing in a hedge. Depressaria ultimella Staint., Droxford, Hants., reared from stems of Apium nodiflorum growing in a wet ditch.

GIBBS, D. J.—Bohemannia quadrimaculella (Boh.), Weston Moor, Somerset, 18.vii.1999, beaten from alder. (First Avon record). Nemophora minimella (D. & S), Max Bog, Somerset, vii.1999, locally common on saw-wort flowers. (Probably first Avon record). Monochroa palustrella (Dougl.), Weston Moor, Somerset, 7.vii.1999, at light. Syncopacma larseniella (Gozm.), Lower Woods, South Glos., 9.vii.1999.

(Probably first Avon record). Sorhagenia lophyrella (Dougl.), Weston Moor, Somerset, 18.vii.1999, beaten from alder buckthorn. (Second Avon record).

HART, C.-Hellula undalis (Fabr.) Cury, Mullion, Cornwall, 10.ix.1999.

HARVEY, M.—*Enicostoma lobella* (D. & S.), Holtspur Bottom Butterfly Conservation reserve, Beaconsfield, Bucks. (SU 916914), 29.v.1999, at light. Possibly the first Bucks. record for almost one hundred years.

HECKFORD, R. J.-Archinemapogon yildizae Koçak, Speybank, Easterness (VC96), larva in Fomes fomentarius, 10.ix.1998 (with M. R. Young), emerged 6.iv.1999. Coleophora clypeiferella Hofm., Berry Head, Brixham, Devon (VC3), 31.vii.1999, at light. New to Devon. Schiffermuelleria subaquilea (Staint.), Haytor, Devon (VC3), 30.i.1999, larva in spun dead leaves of Vaccinium myrtillus, emerged 24.iii.1999. Batia lambdella (Don.), roadside, Muir of Dinnet, South Aberdeen (VC92), 18.v.1999, larva in dead Ulex stem, emerged 4.vi.1999. New to VC92. Borkhausenia fuscescens (Haw.), Webbington, Somerset (VC6), 28.xi.1998, larva in dead leaves of Chamaecvparis sp., emerged 9.vi.1999; Bowhill, Exeter, Devon (VC3), 23.i.1999, larva in spun dead leaves, emerged 27.vi.1999. Larvae not previously described in the British Isles. Tachystola acroxantha (Meyr.), Plympton, Plymouth, Devon (VC3), 3.iv.1999, pupae in dead Juniperus sp. leaves, emerged 25.iv.1999. Monochroa tenebrella (Hübn.), Trowlesworthy Warren, Devon (VC3), 1 & 24.v.1999, larvae in stems of Rumex acetosella, emerged 20.v.1999 and 10.vi.1999. Bryotropha basaltinella (Zell.), Wytham, Oxford (VC22), 12.iv.1987, larvae in Tortula muralis, emerged 6-19.vi.1987. Exhibited for comparison with B. dryadella (Zell.) Bryotropha dryadella (Zell.), Berry Head, Devon (VC3), 16.vi.1984, 28.vi.1986 and 11.vi.1988; Upton Towans, Cornwall (VC1), 4.vi.1997. New to Great Britain; prior to determination of these specimens the only other British specimen was an undated one taken on Jersey, Channel Islands, in the Paris Museum. British specimens are virtually indistinguishable from B. basaltinella (Zell.) but the habitat may differ, since all known English specimens are coastal. Bryotropha terrella (D. & S.), Trowlesworthy Warren, Devon (VC3), 10.iv.1999, larva in tube amongst Agrostis sp. and Rhytidiadelphus squarrosus, emerged 15.v.1999 (together with cocoon). Larva possibly not previously seen in the British Isles. Caryocolum proximum (Haw.), Wanstead Flats, Essex (VC18), 24.iv.1999, larvae in spun shoots of Stellaria media, emerged 4 & 7.vi.1999. Acleris abietana (Hübn.), Bridge of Avon, Banff (VC94), 11.ix.1998, pupae on Abies procera, emerged 23.ix.1998. New to VC94. Celypha palustrana (L. & Z.), Crathie, South Aberdeen (VC92), 17.v.1999, larvae amongst Dicranum sp., emerged 20 & 24.vi.1999. Crambus pascuella (L.), Bicton Common, Devon (VC3), 4.iv.1999, larva in spun tube amongst Trichophorum cespitosum, emerged 5.vi.1999. Crambus uliginosellus Zell., Colaton Raleigh Common, Devon (VC3), 3.vi.1999, larvae feeding in spun tubes amongst Sphagnum capillifolium but feeding on Carex flacca and an unidentified grass, emerged 6.vii.1999. Not previously reared as foodplant and life history had been unknown.

HENWOOD, B.—Ischnoscia borreonella (Mill.), Berry Head, South Devon (VC3), 31.vii.1999, two specimens, one netted by the exhibitor and one by B. F. Skinner. A new site for this local moth, otherwise known in Britain only from Portland, Dorset and Torquay, South Devon. *Caloptilia falconipennella* (Hübn.), Kingsteignton, South Devon (VC3) 30.x.1999, cocoon on leaf of *Alnus glutinosa*, emerged 4.xi.1999. (First Devon record). *Phlyctaenia stachydalis* (Germ.), near Great Torrington, North Devon (VC4), 26.vi.1999, two specimens.

KNILL-JONES, S. A.—Microlepidoptera from Isle of Wight (VC10), including from Freshwater, *Niditinea fuscella* (L.), 18.i.1999, larva, reared (First VC10 record). *Blastobasis decolorella* (Woll.), 14.xi.1999. (The first VC10 record). *Evergestis limbata* (L.), 3 & 10.vii.1999. Uresiphita polygonalis (D. & S.), 31.x.1999. Herpetogramma licarsisalis (Walk.), 9.xi.1999 (New to Britain) (Plate 2, Fig. 2).

LANGMAID, J. L.—*Digitivalva pulicariae* (Klim.), Kildonan, Isle of Arran, 27.vi.1999, larva on *Pulicaria dysenterica*, emerged 11.vii.1999 (with K. P. Bland) (New to Scotland). *Coleophora alnifoliae* Barasch, Southwick Hants, 5.vi.1999, larvae on *Alnus glutinosa*, emerged 5.vii. 1999. (New to VC11). *Duponchelia fovealis* Zell., Southsea, Hants, 3.ix.1999, at light. (New to Hampshire and fourth British record).

MARTIN, G. & HONEY, M. R.—An exhibit illustrating the ongoing review of the British Lepidoptera collections at the Natural History Museum. A newly completed drawer of *Argyresthia* species including recently donated examples of *A. trifasciata* Staud. and *A. cupressella* Wals.

McCORMICK, R.—Devon records, the specimens exhibited being not necessarily those on which the record was based. *Calamotropha paludella* (Hübn.), Newton Abbot, 9.vii.1999 (The third Devon record). *Catoptria margaritella* (D. & S.), representing a record at Belstone, Okehampton, 2.viii.1999 by C. Penney. *Eudonea delunella* (Staint.), Great Torrington and Teignmouth, 1999, the species was seen at several locations in VC3 and VC4 during the year. *Parapoynx stratiotata* (L.), Slapton, 11.ix.1999, one of five seen. *Sitochroa palealis* (D. & S.), representing two seen at Hopes Nose, Torquay, 8.vii.1999. *Sclerocona acutellus* (Eversm.), Exeter, two taken during 1999. (The fourth and fifth British records) A further specimen was taken 5.vii.1999. *Diasemia reticularis* (L.), Bideford, 30.vii.1999, (leg. Dr. A. Henderson). (The first Devon record since before 1878). *Cryptoblabes gnidiella* (Mill.) and *Euzophera bigella* (Zell.), specimens reared from pomegranates purchased in Devon, 6.ix.1999, the latter providing the first Devon record.

NASH, S.—Fernham, Berks., Epiphyas postvittana (Walk.), 3.xi.1999. Calamotropha paludella (Hübn.), 1.viii.1999. Sitochroa palealis ((D. & S.), 13.vii.1999. Pempeliella dilutella (D. & S.), 2.vii.1999. Durlston Country Park, Swanage, Dorset, Epiphyas postvittana (Walk.), 14.xii.1998. Epischnia bankesiella Rich., 18.vi.1999.

O'KEEFFE, D.—The British species of the genus Bucculatrix (Zell.). Tischeria dodonaea Staint., Dartford Heath, Kent, ex mines on Quercus robur. (The first Kent record for over fifty years). Nemophora fasciella (Fabr.), Wilmington, Kent, 13.vi.1999. Dichomeris ustalella (Fabr.) Tintern, Mons. (VC35), 25.vi.1999, one of two at light. (The first county and vice-county record).

OWEN, J.-Hellula undalis (Fabr.), Dymchurch, Kent, 19.ix.1999.

PARSONS, M. S.—From Dorset, Coleophora ochrea (Haw.), Studland Cliffs, larvae 20.v.1999; Monochroa suffusella (Dougl.), East Lulworth, 25.viii.1999; Helcystogramma lutatella (H.-S.), larvae 10.vi.1999; Scythris empetrella Karsh. & Neils., larvae 23.iii.1999; Crambus uliginosellus Zell., Studland Cliffs, 15.vi.1999. From East Sussex, Metzneria neuropterella (Zell.), Whitbread Hollow, Eastbourne, 7.viii.1999, several to light; Hedya nubiferana (Haw.), Oggs Wood, nr. Eastbourne, 1.vii,1999. From Raynes Park, Surrey, Anarsia lineatella (Zell.) larva found in a peach, country of origin unknown, 6.1999; Scythris limbella (Fabr.), 18.vi.1999; Gypsonoma minutana (Hübn.), 23.vii.1999.

ROUSE, A.—Antigastra catalaunalis (Dup.), The Warren, Folkestone, Kent, 22.ix.1999 (The sixth Kent record).

SIMS, I.—Stigmella floslactella (Haw.), Medmenham, Bucks., adults and cocoon ex mines on Corylus avellana, 16.ix.1994, emerged 1.iv.1995 indoors. Stigmella carpinella (Hein.), Old Ponds Copse, Reading, Berks., adult and cocoon ex mine on Carpinus betulus, 29.ix.1998, emerged 8.iv.1999, indoors. Possibly new VC22 record. Stigmella suberivora (Staint.), University, Whiteknights, Reading, Berks., adults and cocoons ex mines on Quercus ilex, 6.iii.1999, emerged 16.iv.1999 indoors. Stigmella microtheriella (Staint.), Medmenham, Bucks., adults and cocoons ex mines on Corvlus avellana, 20.x.1991, emerged 16.iv.1992 indoors. Adela cuprella (D. & S.), River Loddon, Lower Earley, Berks., and Dinton Pastures Country Park, Reading, Berks., both 27.iii.1999. Second and third confirmed localities from VC22. Antispila treitschkiella (F. v R.), Medmenham, Bucks., adult and cocoon ex mine on Cornus sanguinea, 27.viii.1990, emerged 15.v.1991 indoors. Bankesia douglasii (Staint.), Fareham, Hampshire, 17.ii.1999, cases from D. O'Keeffe, all emerged (females) by 10.iii.1999. Epichnopterix plumella (D. & S.), Hainault Forest, Chigwell Row, Essex, 14.v.1998, males in flight over grass in hot, sunny weather. Leucoptera malifoliella (Costa), Syderstone, Norfolk, ex mines on Malus pumila, 9.viii.1998, emerged 7.iv.1999 indoors. Phyllonorycter lantanella (Schr.), Lower Earley, Reading, Berks., ex mines on Viburnum tinus in garden, 17.iii.1999, emerged 26.iii.1999. Phyllonorvcter strigulatella (Zell.) Baynes Wood, Greenham Common, Berkshire, adults and mines on Alnus incana, 16.xi.1997, emerged 1.ii.1998; Blacknest, Brimpton, Berks., ex Alnus glutinosa, 10.xi.1997, emerged 24.ii.1998. Elachista albifrontella (Hübn.), Hainault Forest, Chigwell Row, Essex, larvae swept from grasses 10.iv.1999, emerged 8.v.1999.

SOFTLY, R. A.—An exhibit with slides and information on the Crambinae of Hampstead Heath, Middlesex.

STERLING, P. H.—Microlepidoptera recorded by members of the Dorset Moth Recording Network. *Monochroa palustrella* (Dougl.); Portland Bird Observatory (VC9), 31.vii.1999, at light, leg. M. Cade (New to Dorset). *Mompha sturnipennella* (Treits.), Portland Bird Observatory (VC9), 9.viii.1999, at light, leg. M. Cade. (New to Dorset). *Archips oporana* (L.), Hurn, Dorset (VC11), 21.vi.1998, at light, leg. M.Jeffes. (The first vice-county record since 1888). *Acleris logiana* (Cl.), Hurn, Dorset (VC11), 12.ii.1999, at light, leg. M. Jeffes

TREMEWAN, W. G.—Euchromius ocellea (Haw.), Towanroath, Chapel Porth, Cornwall, 21.i.1999.

UFFEN, R. W. J.—*Syncopacma albipalpella* (H.-S.), reared by R. J. Heckford from larval spinning on *Genista anglica* collected by the exhibitor at Croxley Common Moor, Rickmansworth, Herts., 1.vi.1999. First Herts. record and the only known extant UK site.

WARNE, B.-Crocidosema plebejana (Zell.), Binstead, Isle of Wight, 1.xi.1999.

WEDD, D.—Species recorded at Henley-on-Thames, Oxon., *Evergestis extimalis* (Scop.), 20.vii.1999. *Galleria mellonella* (L.) showing size and colour variation from overlapping broods. *Pempeliella dilutella* (D. & S.) occurred commonly at light in 1999. *Anania verbascalis* (D. & S.) and *Pempelia genistella* (Dup.), both abundant on Jersey and Guernsey during 1999.

FOREIGN LEPIDOPTERA

3RD BENHS EXPEDITION TO BELIZE, 2–22 DECEMBER 1998

1) WARING, P. M. (Leader)—The BENHS has now mounted three expeditions to Belize to examine the Lepidoptera of several contrasting localities. It is a small but interesting former British dependency in Central America, about the same size as Wales. Photographs were shown of (i) the five members of the expedition: Paul Waring, Norman Hall, Roger Kemp, Ian Menzies & Steve Meredith, with the hire car, (ii) a mercury vapour lamp and sheet set-up, constructed by Barry Fox (a member of the 1997 expedition), which was used at the expedition's base at Pook's Hill. Apart from Pook's Hill, the itinerary included the Rio Bravo Special Conservation and Management Area in the north of Belize (La Milpa), the British Museum (BMNH) field station in the Chiquibul Forest in the centre of the country (Las Cuevas) and the Lubaantun area in the south (Fallen Stones). Considerable progress has been made with identifications, largely by referring to the National Collections in the Natural History Museum, for access to which we are most grateful. (R. Kemp remarked that Belize is poorly represented in lepidoptera collections in this country, which is surprising for a former British colony.)

2) HALL, N. M.-Moths from Belize. Four drawers of provisionally identified material, including representatives of all of the major families. On the expedition NMH collected moths exclusively, concentrating on 'smaller' macros and Pyralid moths. PMW concentrated on butterflies and 'larger' macros (Saturnids, Sphingids and larger Geometrids and Noctuids). The other expedition members helped with the mothing, but collected butterflies and other orders. All moths were killed and pinned in the field and brought back in postal or store boxes. This severely limits the number of specimens that can be transported, but ensures that they are in reasonable condition. The total number was of the order of 1500 moths. They were identified (with varying degrees of confidence) by comparison with the collections in the BMNH. A note was made of the BM drawer in which each species was located. This yields a two-part number, the first part of which (the drawer series number) identifies the family or subfamily, and the second part the number of the drawer within its series. By sorting the moths by the two-part numbers, they are automatically sorted into a systematic order, though this is Hampson's order, dating from near the beginning of the century, and does not conform to the most up-to-date taxonomic views. In the exhibit, the specimens had been sorted into the BM systematic order before being placed in the drawers, and the initial identifications and BM drawer numbers were written on the glass lids with a marker pen. All identifications will need checking before labels are attached to the specimens. Many of the identifications will remain uncertain, even if the specimens are dissected or compared with type specimens-especially if the genus needs revision.

3) KEMP, R. J.-Butterflies from Belize. Examples from differing habitats (selected from about 250 different species identified) and some interesting mimicry rings. (1) Deep forest species, all La Milpa 12.xii.98: Colobura dirce L., Nessaea aglaura Dbldy, Tigridia acesta L. (2) Forest ride & edge species: Hamadryas feronia farinulenta Fruhstorfer, Las Cuevas 8.xii.98, Euptychia libye L., Lubaantun 16.xii.98, Chlosyne gaudealis Bates, Pooks Hill 5.xii.98, Heliconius erato petiverana Dbldy, Lubaantun 18.xii.98, Melanis pixie Bsdv, Bladen Camp 19.xii.98, Heliconius doris eratonia Stdgr, Las Cuevas 8.xii.98, Aeria eurimedia pacifica Godman & Salvin (Ithomiinae), Lubaantun 17.xii.98, Heliconius charitonius L., La Milpa 14.xii.98, Macrosoma semiermis Prout (Hedylidae), Pooks Hill 6.xii.98, Arawacus mexicana D'Abrera, Las Cuevas 7.xii.98. (3) Open ground species: Phoebis argante F., La Milpa, 14.xii.98, Aphrissa boisduvalii Felder, Bladen Camp 18.xii.98, Siderone thebais Felder, Las Cuevas 7.xii.98, Libytheana carinenta Cr., Bladen Camp 18.xii.98, Eueides aliphera Godt, Pooks Hill 20.xii.98, Eurema boisduvaliana Feld., Las Cuevas 8.xii.98, Eurema daira Godt, La Milpa 12.xii.98. (4) Mimicry Complex I: Heliconius ismenius telchima Dbldy (Heliconiidae), Bladen Camp 19.xii.98, Lycorea cleobaea atergatis Dbldy (Danainae), Lubaantun 17.xii.98, Tithorea harmonia hippothous Godman & Salvin (Ithomiinae), Pooks Hill 5.xii.98, Mechanitis lysimnia doryssus Bates (Ithomiinae), Lubaantun 17.xii.98, Mechanitis polymnia isthmia Bates (Ithomiinae), Lubaantun 17.xii.98, Eueides isabella eva F. (Heliconiinae), Lubaantun 16.xii.98, Dismorphia amphiona praxinoe Dbldy (Pierinae), Las Cuevas 9.xii.98, Hypothyris lycaste dionaea Hewitson (Ithomiinae), Las Cuevas 8.xii.98. (5) Mimicry Complex II: Parides arcas mylotes Bates, Bladen Camp 19.xii.98, Parides sesostris zestos Gray, Bladen Camp 19.xii.98, Parides polyzelus Feld., Bladen Camp 19.xii.98, Archonias tereas approximata Butler (Pierinae), Lubaantun 17.xii.98. Mimicry Complex (3): Oleria paula Weymer, Las Cuevas 7.xii.98, Pteronymia cotytto Guerin, Las Cuevas 8.xii.98.

BAILEY, K. E. J.—European Butterflies, 1999. (1) Danaus chrysippus L. Examples taken in early ix.99 along the coast of N.W. Spain at L'Escala on the Bay of Rosas. According to a local lepidopterist it has been regularly appearing in the area during late summer over the last three years and there is evidence of local breeding. The exhibitor found it to be quite common in suitable areas close to the coast and saw one pair in cop. (2) A photograph of a live female Apatura ilia D. & S. f.clytie intersex. This was reared from hybrid stock originating from N. French and Spanish (Barcelona) parents. This female was handpaired to a sibling male successfully and many ova were laid but these all failed to develop and the specimen by then was beyond preservation. However the hybrid stock is being maintained. (3) Euphydryas aurinia Rott. beckeri. A bred aberration similar to E. aurinia aurinia ab. virgata, recently shown to be a polygenic form. The current breeding stock is believed to have originated in Cataluña and has been maintained for at least 5 years.

CORLEY, M. F. V.—Detritophagous gelechioid moths: In areas such as Southern Europe, North Africa and the Middle East with long hot dry seasons, many species of Lepidoptera have larvae which feed on dead or dying leaves or detritus on the ground. Among these groups are several families of Gelechioidea. Portuguese members of the families Symmocidae, Holcopogonidae and Lecithoceridae were exhibited. Very little is known of the early stages of Symmocidae and Lecithoceridae, but they are believed to be detritophagous. The larvae of *Holcopogon bubulcellus* Stdgr feed in dry cow dung.

16 of the 18 Portuguese Symmocidae were exhibited. Some species require dissection for certain identification—the problem is familiar to British lepidopterists in relation to the genus *Oegoconia* Stainton—but also occurs with species of *Symmocoides* Amsel and *Dysspastus* Gozmany. There are three endemic Portuguese species: *Symmoca revoluta* Gozmany (exhibited) occurs in an area so close to the Spanish border that it must eventually be found over the border; *S. serrata* Gozmany is known from three specimens collected in North Portugal in the early part of this century and one from Tunis in 1926; *Symmocoides gozmanyi* Amsel is only known from a single specimen collected in North Portugal in 1954.

Both Portuguese Holcopogonidae and three of the four Lecithoceridae were exhibited. The latter family is notable among Gelechioidea for the length of the antennae. The species *Euradachtha pallicornella* Stdgr is sexually dimorphic.

Species exhibited: Symmocidae: Oegoconia quadripuncta Haw., O. caradjai Popescu-Gorj & Capuse, O. deauratella H.-S., Apatema mediopallidum Wals., Catasphalma kautziella Rbl, Symmoca nigromaculella Rag., S. revoluta Goz, (Gozmany), S. tofosella Rbl, S. torrida Goz., S. uniformella Rbl, S. signatella H.-S., S. alhambrella Wals., Symmocoides don Goz., S. oxybiellus Millière, Dysspastus fallax Goz., Stibaromacha ratella H.-S., Holcopogonidae: Holcopogon bubulcellus Stdgr, Aragonia punctivittella Zerny, Lecithoceridae: Homaloxestis briantiella Trti, Eurodachtha pallicornella Stdgr, E. canigella Caradja.

EDWARDS, P. J.—Two small collections of moths: 1) from France, near Saumur, Maine-et-Loire, including *Arctornis l-nigrum* Müller and *Minucia lunaris* D. & S. 2) from Spain, La Escala, Gerona province, ix.99, including *Bena prasinana* auctt., which is rare in Gerona. PJE has now seen *Danaus chrysippus* L. there in good numbers for two successive years. This is much further north than it is usually found. Despite patient searching and watching he could not discover the foodplant. *Asclepias*, the usual foodplant, does not grow in the area.

EZARD, A. S.—Lepidoptera from France 1999: (1) From Roussergues, Tarn, 6-10.vi.99: Marumba quercus D. & S., Zygaena fausta L., Odonestis pruni L., Meganola togatulalis Hb., Rhodostrophia calabra Petagna, Amephana anarrhini Dup., Omphaelophana antirrhinii Hb., Lamprosticta culta D. & S., Dysgonia algira L., Hyles euphorbiae L., Lygephila craccae D. & S., Spiris striata L., Catephia alchymista D. & S., Athetis hospes Frey., Coscinia cribraria L., Epimecia ustula Frey., Cyclophora puppillaria Hb., Acontia lucida Hufn., Synthymia fixa F., Pyrois effusa Bsdv. (2) From Avrilly, Allier, 11–17.vi.99: Pungeleria capreolaria D. & S., Callimorpha dominula L., Stegania trimaculata Vill., Aplasta ononaria Fuess.

FENSOME, B.—Aberrations of *Colias croceus* Fourcroy, bred ix.99 from an egglaying female taken from Roda, Northern Corfu: (i) a curious male lacking normal black borders on the hindwing and (ii) several females (ab *pseudomas*) with the yellow spotting on the forewing black borders very much reduced.

HALL, N. M.-Lepidoptera collected in Spain (with permissions obtained separately from five of the autonomous regions and from the Parque Natural Cabo de Gata-Nijar in Almeria). The main collecting sites were: Pais Vascos: Parque Garaio in Alava. Castille & Leon: Embalse de Uzquiza in Burgos. Aragon: Biel & Los Monegros in Zaragoza. Cataluña: Sierra de la Creu & El Torn, L'Hospitalet del Infant in Tarragona. Andalucia: El Pozo del Esparto, Vera Playa, Mini Hollywood, Cala Bordonares, Cerro Colorado and Playa de Los Genoveses, all in Almeria. Noctuidae: (1) Cryphia muralis Forster, Creu, 3,4&5.viii.99. Unusual forms said to be similar to those found in Cambridge. Though muralis is reasonably common in Spain, NMH has not found anything other than the 'normal' form at other localities. (2) Chortodes dulcis Oberthür, Garaio, 27.vii.99 & Biel, 28.vii.99. The small black dots on the wing make it easy to identify. It is a highly local species. (3) Emmelia trabealis Scop., bred from a gravid female from Monegros, 29.vii.99. The larvae were fed on Convolvulus, and examples were passed to Jim Porter for photography. A second female also laid many eggs, but they were infertile. (3) Phyllophila obliterata Rmbr, Creu, 3.viii.99. According to Calle (Noctuidos Españoles), it is rare and occurs only along the NE littoral. (4) Conistra erythrocephala D. & S. Bred from gravid females from Uzquiza, 4.v.99. (5) Eublemma jucunda Hb., El Torn, 30.vii.99. Three black females illustrating the normal considerable size range. NMH has also seen black females in Valencia province but has never seen any reference to them, and has never seen black males. (6) Zethes insularis Rmbr, la Creu 5.viii.99 (a rather late date: Calle quotes a range of 20.v to 10.vii). This feeds on Pistacia. Geometridae: (1) Idaea vulpinaria H.-S., bred from a gravid female, El Torn, 2.viii.99, of the form described as rusticata D. & S., which some taxonomists consider a separate species. In rusticata the central bar has a characteristic 'teardrop' appearance, and there is a different number of spurs on the hind tibiae. The larvae were fed on Erica arborea. (2) *I. elongaria* Rmbr, bred from gravid female, El Torn, 2.viii.99. (3) *I. attenuaria* Rmbr, bred from gravid female from Cerro Colorado, 24.iv.99. The larvae were fed on *Tamarix*. *I. attenuaria* is one of the species that sits like a pug, with the wings not touching the abdomen. (4) *I. deitanaria* Reisser & Weisert (5) *I. subrufaria* Stdgr, both Cabo de Gata 4.99. deitanaria and subrufaria are both fairly common in Almeria in April & May, but NMH has not seen them at any other time of year. (5) I. saleri Dominguez & Baixeras, El Pozo 1&2.v.99, El Torn, 30.vii.99 2.viii.99. NMH believes that he is the only person who has found this species outside Valencia Province, which contains the type locality (El Saler). Discovering it in Almeria on 1st May, extends the known range south from Valencia. He has tried to breed the moth from gravid females and has discovered that early instar larvae will only eat flowers, whereas later instars will eat the leaves of Erica arborea. Though he has managed to get several through to final instar, none has yet pupated successfully. (6) Scopula decolor Stdgr, Vera 15&16.iv.99. These are much more strongly marked than decolor obtained from other localities. They bear a strong resemblance to the illustration of S. flaccata Stdgr given by Culot. decolor and flaccata are presumably extremely closely related. (7) Crocallis auberti Oberthür, la Creu 3,4&5.viii.99. This is widespread in Spain but not common and easily overloooked among other Crocallis spp. (8) ?Chemerina caliginearia Rmbr, Uzquiza 4.v.99. This large Geometrid moth is said to have a very distinctive shape, and the specimen has been confidently identified for me as caliginearia. However, according to Culot caliginearia flies in February-March on the Mediterranean littoral, whereas this specimen was found at an altitude approaching 1000 metres in May. Pyralidae: (1) Hypotia sp. nov., la Creu, 3.viii.99. A known, but apparently undescribed, species that has been found previously in Menorca, Morocco and Portugal (M. Honey & M. F. V. Corley, pers. comm.) (2) Staudingeria yerburii Butler, Mini Hollywood, 25.vi.97 & El Pozo 1&2.v.99. This phycitid moth is described from North Africa and is not listed by Karsholt & Razowski. Hence it is possibly new to Spain and to Europe. (3) Eurhodope rosella Scop. Garaio 7.viii.99 (4) E. cruentella Dup. Cabo de Gata 20&22.iv.99. The pink coloration of rosella and cruentella is unusual for Phycitines. (4) ?Euzopherodes vapidella Mann, Bordonares 16.x.98 and Genoveses 25.iv.99. (5) ?Bazaria spp. (At least two species, several localities). Karsholt & Razowski list only one Bazaria for Spain B. ruscinonella Rag.

HONEY, M. R.-Moths from the Balearic Islands: (i) S'Albufera, Mallorca (ii) S'Albufera des Grau, Menorca (iii) S'Albufereta, Mallorca. The specimens displayed were some of the moths resulting from a two-week trip to Mallorca and Menorca in x.99. Light-trapping was undertaken every night during the visit as part of a current project to monitor the moth diversity of the Balearic Islands. Three areas with slightly different types of habitat were selected. The first two are designated Natural Parks and are sites well known to resident and visiting bird watchers, the third is an area currently under negotiation to be designated as such. All three sites are basically coastal wetland sites that have escaped the threat of development by the tourist industry. The moth fauna of the Balearic Islands is not well documented (only one provisional check list published in 1981) so all the species recorded to date, including those recorded by other visiting lepidopterists, have been added to an updated distributional check list for the islands. In contrast to the butterfly fauna, the moth fauna of the islands seems to be quite diverse and extensive. Some species are easily recognized as they are also resident species in Britain (Peribatodes rhomboidaria D. & S., Menophra abruptaria Thunb., Xanthorhoe fluctuata L., Scopula ornata Scop., Spilosoma urticae Esp., Pyrausta despicata Scop., Bactra lancealana Hb., etc.); others are now scarce in Britain (e.g. Trichophaga tapetzella L.); others occur in Britain mainly as occasional migrants (Luperina dumerilii Dup., Mythimna loreyi Dup., Eublemma parva Hb., Antigastra catalaunalis Dup., Ancylosis oblitella Z., Hellula undalis F., etc.). The remainder includes species that are widespread in continental Europe and others that are exclusively Mediterranean. Many of the specimens represent new records for Mallorca or Menorca; others are new to the Balearics as a whole (e.g. Phthorimaea operculella Z., Apodia bifractella Dup., Ptocheuusa paupella Z., Palumbina guerinii Stt., etc.) and some are new to Spain (e.g. Elachista contaminatella Z.). One species of emerald moth (Kuchleria insignata Hausmann), that was described as new to science from Spain as recently as 1994, was found on Menorca by one of the project team and additional specimens

were trapped there in October 1999 during this project. Nothing is known of the biology of this species but a closely related species feeds as a larva on *Ephedra* (joint pine). A search of the area in which the moth was found revealed numerous stands of an *Ephedra* species. As the adult moth was already on the wing the local member of the project will conduct a search for larvae next year (2000) during the summer months. A number of specimens remain unidentified, particularly among the smaller microlepidoptera.

MARTIN, G.-Lepidoptera taken in a hamlet 4 km NW of Guilliers, Morbihan, France, over four nights in early vii.99, from an overgrown garden consisting mainly of bracken with mature oaks and elms surrounded by cornfields. Over one hundred and seventy species of Pyralidae and Macrolepidoptera were recorded. The specimens shown were those which are either scarce, extinct or absent from the U.K. Oecophoridae: Harpella forficella Scop., Limacodidae: Apoda limacodes Hufn., Cossidae: Cossus cossus L., Pyralidae: Synaphe punctalis F., Elegia similella (Zinck), Sitochroa palealis D. & S., Anania verbascalis D. & S., Dolicarthria punctalis D. & S. Nymphalidae: Nymphalis polychloros L. (large tortoiseshell). Lasiocampidae: Odonestis pruni L. Geometridae: Tephronia sepiaria Hufn., Pseudoterpna coronillaria Hb., Scopula nigropunctata Hufn., Idaea ochrata Scop., Eupithecia breviculata Donzel, Notodontidae: Thaumetopoea pityocampa D. & S., Tritophia tritophus D. & S., Drymonia querna D. & S. Noctuidae: Macrochilo cribumalis Hb. Pechipogo plumigeralis Hb., Parascotia fuliginaria L., Polyphaenis sericata Esp., Trachea atriplicis L., Lacanobia splendens Hb., Mythimna vitellina Hb., Hadena luteago D. & S. Lymantriidae: Arctornis l-nigrum Müller, Nolidae: Meganola albula D. & S.

MIDDLETON, A. P.—Butterflies of Cuba: A sample of 37 species collected in Cuba in vii.99. (A) Atabey, Havana (Suburban): *Phoebis sennae* L. (yellow, white and intermediate forms and f. sennalba F. M. Brown), Eurema messalina F., E. nicippe Cr., E. lisa Bsdv. & Leconte, Ascia monuste L., Nathalis iole Bsdv., H. andraemon Hb., Agraulis vanillae L. (including an aberrant form lacking dark pigment), Euptoieta hegesia Cr., Anartia jatrophae L., Phyciodes phaon W. H. Edwards, Calisto herophile Hb., Polites baracoa Lucas, Hylephila phyleus Dry, Pyrgus oileus L., Asbolis capucinus Lucas, Urbanus dorantes Stoll, U. proteus L. (B) Near Vinales at the western end of the island (agricultural / tobacco region + limestone hills): Heraclides androgeus Cr., Dryas iulia F. (C) Las Terrazas (near to a small area of surviving rainforest between Vinales and Havana): Siproeta stelenes L., Junonia genoveva Cr., Electrostrymon angelia Hewitson, Panoquina sylvicola H.-S. (D) Jibacoa (North coast east of Havana—light woodland): Eurema larae H.-S., Heliconius charitonius L., Marpesia eleuchea Hb., Lucinia sida Hb., Anthanassa frisia Poey. (E) Near Santiago de Cuba (South-east corner of the island, light woodland close to the beach) P. agarithe Bsdv., Eurema daira Godt., Anteos clorinde Godt., Battus polydamus L., Hamadryas amphichloe Bsdv., Phocides pigmalion Cr.

PARKER, R.—(1) Butterflies from New Zealand xi.98. New Zealand has only 23 species of butterfly, and November is too early in the season for many of them. The definitive work on the subject is *New Zealand Butterflies* by George V Gibbs 1980. Gibbs splits the species as follows:

Endemic to New Zealand 11 speci	es
Common to Australia and New Zealand in pre-European times 2 speci	es
From Australia and elsewhere, but only since European settlement 3 speci	les
Regular visitors from Australia 2 speci	es
Rare visitors from Australia 5 speci	les
Total 23 speci	les

10 of these were seen: (i) Pieris rapae L. Since the Large and Green-veined Whites have not reached New Zealand, the Small White is known simply as "the White butterfly". It is now widespread and common, following an accidental introduction in 1929. (ii) Danaus plexippus L. Not uncommon along the cliffs to the south of Christchurch. plexippus reached New Zealand in the 1870s: since then it has established a migration and overwintering pattern internal to New Zealand which echoes its behaviour in North America. (iii) Bassaris gonerilla F. This relative of our own Red Admiral occurs only in New Zealand and, as a sub-species, 620 kms to the south east on Chatham Island. The larval foodplant, stinging nettle, is not common, and the butterfly is rather local, though widespread. (iv) Bassaris itea F., (v) Lycaena salustius F. five females were displayed, showing the variability in the purple submarginal band, and the two different forms of the undersides. The coppers of New Zealand are a complex group, possibly comprising more than the four species listed by Gibbs. They live in colonies on the Muehlenbeckia vines which grow on wasteland. Three localities were found. They are becoming scarcer, perhaps because landowners are encouraged to eliminate the larval foodplant, which is considered a weed. (vi) L. feredayi Hudson. This is more heavily marked in black than L. salustius, but does not show sexual dimorphism. (vii) L. boldenarum White 'Boulder Copper'. Quite distinct from the preceding coppers, boldenarum is more likely to be mistaken for a blue, and flies with the Common Blue (Zizina), Its English name suits its habitat, rocky places, so it is amusing that its Latin specific name was given for Helen Bolden, an entomologist's wife. (viii) Zizina otis F. ssp. labradus Godart & ssp. oxleyi Felder Common Blue/Southern Blue. The two subspecies have north/south distributions, with an overlap zone on the east coast of South Island, where hybrids occur. Whilst labradus is found in Australia, the morphologically distinct oxleyi is a New Zealand endemic. (ix) Danaus chrysippus L. & (x) Cynthia kershawi McCoy were seen but not taken.

(2) Butterflies in Turkey x.99: 28 species were found around Alanya, on the south coast, between 10.x.99 & 24.x.99: (i) Danaus chrysippus L. Plain tiger. (ii) Pontia edusa F. (iii) Lycaena thersamon Esp. (iv) Lycaena sp., possibly ottomana Lefebvre or asabina H.-S. The specimen had underside hindwing markings very like the Grecian Copper. (v) Leptotes pirithous L. (vi) Zizeeria knysna Trimen ssp. karsandra Moore (vii) Maniola megala ob. L. (viii) Ypthima asterope Klug. Colonies frequented hot hillsides with a particular type of long grass amongst large rocks, on which they perch and 'disappear', so good is their underside camouflage. (ix) Gegenes pumilio Hoffmannseg, also found in the same dry rocky habitat. (x) Parnara thrax Hb. (xi) Carcharodus alceae Esp. Common on rough ground where mallow grows as a weed. (xii) Carcharodes stauderi Reverdin. (xiii) ?Muschampia proto Ochs., sage Skipper.

The following were seen, but not exhibited: Papilio machaon L., Pieris brassicae L., Pieris rapae L., Colias crocea Fourcroy, Charaxes jasius L., Vanessa atalanta L., Cynthia cardui L., Lycaena phlaeas L., Lampides boeticus L., Polyommatus icarus Rott., Aricia agestis D. & S., Freyeria trochylus Frey, (the smallest of European butterflies), Lasiommata megaera L., Lasiommata maera L., Pararge aegeria L.

WEDD, D. J. D.—*Heliconius charitonius* L., ex female, Cobo, Guernsey, August 1999. A female *charitonius*, which had escaped from a butterfly house at le Friquet in the centre of Guernsey where hundreds of Heliconids fly loose, was noticed ovipositing on *passiflora*. These were taken home and the butterfly was bred from them. It is a South American species, unlikely to survive even the mildest of Channel Islands winters.

WINOKUR, L.—A gynandromorph of *Gonepteryx cleopatra* L. purchased at the 1999 Amateur Entomologists' Society annual exhibition from Nigel South of Misterton, Somerset, who took it at Párga, Greece (39' 18'N, 20' 23'E) in v.98. The

specimen is predominantly male with areas of pale green/white female coloration on all the wing surfaces. (Plate 2, Fig. 10). The data and dull yellow underside patches identify it as *G. c. cleopatra f italica* Gerhard [= *f. massilensis* Foulquier] (Tolman & Lewington, 1997). Photomicrographs were shown showing selected upperside details.

DIPTERA

There was a decrease in the number of exhibitors this year, but more exhibits in common with the annual meeting of Dipterists Forum, which was held two weeks earlier. Several species recently recognised as new to the British fauna were included. Progress in the Society's Heathland Flies Biodiversity Project was the subject of an exhibit by the President.

ALEXANDER, K. N. A.—*Oxycera morrisii* Curtis (Stratiomyidae), Hedgley Bottom, East Glos, swept from limestone spring, 17.vii.1999, a new record for the modern county.

BLAND, K. P.—A *Botanophila* species (Anthomyiidae) reared from seed pods of *Gentianella amarella* and *G. campestris*, Fealar Estate, Perthshire (NO 0075 and 0077, V.C. 89); larvae were collected 21.ix.1998, adults emerged 20.vi–2.vii.1999, with some parasitism by a *Trybliographa* species; an empty puparium was found in a dehisced seed pod of *G. campestris* at Over Bohespic, Perthshire (NN7361, V.C. 88), 22.x.1999; this species was thought to be *B. gentianae* (Pand., 1900) as previously suggested based on finds in 1997 of vacated seed pods (Bland, 1998, *Dipterists Digest* (Second Series) **5**: 10–11), but examination of adults by Michael Ackland has now indicated that they belong to *B. tuxeni* (Ringdahl, 1953).

COLLINS, G. A.—Notable Diptera from Surrey in 1999: *Rhagio annulatus* (De Geer) (Rhagionidae), St John's Wood, Dormansland (TQ410415), 8.vi; *R. strigosus* (Meig.) (Rhagionidae), Headley Warren, Leatherhead (TQ191538), 5.vi, close to the known localities around Box Hill; *Acinia corniculata* (Zett.) (Tephritidae), Happy Valley, Coulsdon (TQ309566), 1.ix; *Sciomyza dryomyzina* Zett. (Sciomyzidae), River Wey, Shalford (SU998472), 1.vi, previously known in Surrey from further up the Wey in 1968; *Gymnosoma nitens* (Tachinidae), Howell Hill, Epsom (TQ239619), 28.vii, first recorded in Britain from Box Hill, Surrey in 1956 but recorded from several sites in Kent and Essex in recent years (also see R. A. Jones, 1999, *British Journal of Entomology and Natural History* 12: 140–141); *Graphogaster brunnescens* Villeneuve (Tachinidae), Arbrook Common, Esher (TQ141627), 4.viii, recorded from three sites in Surrey in 1999.

GODFREY, A.—Some miscellaneous Diptera recorded in 1998 (unless otherwise stated): *Dicranomyia goritiensis* (Mik) (Limoniidae), Axmouth Undercliff, Dorset (SY28), 2.vii, at seepages on coastal cliffs; *Chrysops sepulcralis* (F.) (Tabanidae), Hartland Moor, Dorset (SZ946856), 1.vii; *Oxycera terminata* Meig. (Stratiomyidae), Brackets Coppice, Dorset (ST5106), 30.vi; *Thyridanthrax fenestratus* (Fall.) (Bombyliidae), Studland Heath, Dorset (SZ0284), 3.vii; *Parochthiphila spectabilis* (Loew) (Chamaemyiidae), Little Sea (Studland Heath), Dorset (SZ0284), 3.vii, swept from *Phragmites*, the first record outside Cambs; *Stenomicra delicata* (Collin) (Stenomicridae), Morden Bog, Dorset (SY9190), 3.vii, in *Carex* tussocks; *Platycephala umbraculata* (Fabricius) (Chloropidae), Eype Cliffs, Dorset (SY4491), 2.vii, associated with *Phragmites* on coastal landslips; *Scatella ciliata* Collin (Muscidae), Hartland Moor, Dorset (SZ946856), 1.vii and Studland Heath, Dorset (SZ02847), 1.vii, found at several sites on the Dorset heathlands; *Cephenemyia*

auribarbis (Meig.) (Oestridae), Cheanna Mhur, Loch Arkaig, Scotland (NN097917), 31.v.1999.

HALSTEAD, A. J.-Some local and scarce Diptera recorded in 1999: Solva marginata (Meig.) (Xylomyidae), RHS Garden, Wisley, Surrey, 24.vi, swept from riverbank vegetation; Choerades marginatus (L.) (Asilidae), Wisley Common SSSI, Surrey, 28.vii, on an oak (Quercus) leaf; Eutolmus rufibarbis (Meig.) (Asilidae), Greyspot Hill (Brentmoor Heath), near West End, Surrey, 31.vii, swept in boggy area; Dolichopus linearis Meig. (Dolichopodidae), RHS Garden, Wisley, Surrey, 7.vii, swept from riverbank vegetation; Agathomyia falleni (Zett.) (Platypezidae), RHS Garden, Wisley, Surrey, 17.viii, swept from riverbank vegetation; Callicera spinolae Rond. (Syrphidae) (Plate 2, Fig. 5), Royston, Herts. (V.C. Cambs), 20.ix, on ivy (Hedera helix) flowers in an overgrown hedge between gardens, a significant western extension of the range of this species previously recorded in Britain only in East Anglia and Cambs; Pelecocera tricincta Meig. (Syrphidae), Chobham Common, north of Gracious Pond Farm, Surrey, 6.vi, on Heracleum flower; Volucella zonaria (Poda), Knaphill, Surrey, 3.viii, on a leek (Allium porrum) flower in the exhibitor's garden-it was noted that this species has become common in the Woking district in the last few years; Conops strigatus Wied. in Meig. (Conopidae), Greyspot Hill (Brentmoor Heath), near West End, Surrey, 31.vii; Melieria cana (Loew) (Ulidiidae), Plumpton Hall, Morecambe Bay SSSI, Cumbria, 20.vi, swept from saltmarsh; Dioxyna bidentis (Rob.-Des.) (Tephritidae), RHS Garden, Wisley, Surrey, 7.vii, swept from riverbank; Trypeta artemisiae (F.), RHS Garden, Wisley, Surrey, 19.viii, swept from riverbank; Liriomyza huidobrensis Blanchard (Agromyzidae), RHS Garden, Wisley, Surrey, emerged 4-5.viii, reared from leaf mines in Penstemon, this fly is an imported notifiable leaf miner;

HODGE, P. J.—Diptera recorded from southern England in 1999: Leptarthrus vitripennis (Meig.) (Asilidae), Happy Valley, Coulsdon, Surrey (TQ302571), 10.vi, two females swept; Dolichopus signifer Hal. (Dolichopodidae), Rye Harbour Nature Reserve (TQ942180), 4.ix, male swept; Urophora spoliata (Hal.) (Tephritidae), Haxton Down, Wilts (SU1950), 14.vii, male swept off saw-wort (Serratula tinctoria); Acinia corniculata (Zett.) (Tephritidae), Farthing Down, Surrey (TQ2958), 9.vii, female beaten off hawthorn (Crataegus); Cistogaster globosa (F.) (Tachinidae), Stinchcombe Hill, Glos. (ST7498), 17.vi, two females swept off steep south-facing calcareous grassland.

MILES, S. R.—The three species which are the subject of the Society's Heathland Flies Biodiversity Project were exhibited and details given of the progress made in this project in 1999:

(1) *Thyridanthrax fenestratus* (Fall.) (Bombyliidae). A number of observations of this species were made at Thursley Common NNR, Surrey. These included sucking dust up by the fly using the end of its abdomen and oviposition (egg flicking) into a hole from which a specimen of the solitary wasp *Ammophila pubescens* was seen to fly out. A standard walk was set up on the Common using marked compartments to try to correlate spatial activity of the fly with its surroundings. These observations will be used to determine the most suitable areas in which to excavate nest sites of the possible hosts, *Ammophila* species, to look for fly pupae. A few nests have been marked for excavation in 2000. Provisional results indicate that the fly is more active in those rides not used by horse-riders.

(2) *Bombylius minor* L. (Bombyliidae). This species was seen by several observers in Dorset, including two new sites, Upton and Gore Heaths. Several flower-visiting records were made. Oviposition and dust gathering was also observed by the exhibitor on a 5 foot high vertical eroded sandy cliff on Upton Heath. Steve Crellin

saw several specimens on the Isle of Man. No further progress was made in determining possible hosts.

(3) Chrysotoxum octomaculatum Curtis (Syrphidae). A few individuals were seen by the exhibitor in Surrey. These were visiting both broom (Cytisus scoparius) and buttercup (Ranunculus species) flowers. They occurred in a small area of heathland near and within an area in which the lesser pond sedge (Carex acutiformis) was growing. Females of Chrysotoxum cautum (Harris) (also exhibited) were seen to oviposit onto the leaves of the Carex, as well as on Yorkshire fog (Holcus lanatus) and the dorsal surface of Rubus leaves. The probably empty egg cases could still be located, affixed to these plants, three months later. A hoverfly larva was found and photographed between a leaf sheath and the main stem of the Carex in June.

PARKER, M.-Rare and local species of Diptera recorded in 1999 from Dorset, Hants, Somerset and the Lake District in England; from Morayshire, the Isles of Skye and the Outer Hebrides in Scotland, including a number of common species from the remote island of St Kilda. The grid references of two species of Syrphidae from the vicinity of Grantown-on-Spey are withheld in view of the possible vulnerability of their populations: Haematopota pluvialis (L.) (Tabanidae), Hirta, St Kilda, Western Isles (NF100991), 20.vii, male swept from a grassy slope; Stratiomys potamida Meig. (Stratiomyidae), Binnegar Farm, Dorset (SY884879), 31.vii, female nectaring on Pastinaca sativa; Dialineura anilis (L.) (Therevidae), Sandscale Haws, Cumbria (SD1975), 15.vi, one male and one female swept from a grassy sand-dune slope; Pamponerus germanicus (L.) (Asilidae), Sandscale Haws, Cumbria (SD1975), 15.vi, 18.vii, female swept from a grassy sand-dune slope; Anasimyia lunulata Meig. (Syrphidae), Pollachar Marsh, South Uist, Western Isles (NF746147), 18.vii, female swept from marshland; Blera fallax (L.) (Syrphidae), Grantownon-Spey, Morayshire, 22.vi, male flying around *Rubus idaeus*; *Chalcosyrphus nemorum* (F.) (Syrphidae), Tokavaig, South Skye (NG6011), 23.vi, a male swept from *Ranunculus* species; *Cheilosia soror* (Zett.) (Syrphidae), Crawthorne Farm, Dorset (SY7796), 26.viii, female nectaring on *Heracleum sphondylium*; *Episyrphus* balteatus (De Geer) (Syrphidae), Hirta, St Kilda, Western Isles (NF100991), 20.vii, female swept from a grassy slope; *Eupeodes corollae* (F.) (Syrphidae), Hirta, St Kilda, Western Isles (NF100991), 20.vii, male swept from a grassy slope; *Hammerschmidtia* ferruginea (Fall.) (Syrphidae), Grantown-on-Spey, Morayshire, 26.vi, male nectaring on Heracleum sphondylium; Lejops vittatus (Meig.) (Syrphidae), Wall Common, Somerset (ST259453), 10.vii, several females swept from Scirpus maritimus growing in a dyke; Meligramma euchromum (Kowarz) (Syrphidae), Mark Ash, New Forest (SU2407), 9.v, male nectaring on Euphorbia amygdaloides; M. trianguliferum (Zett.) (Syrphidae), Scrubbity Burrows, Dorset (ST9717), 15.v, female and Delcombe Wood, Dorset (ST7805), 16.v, both on Euphorbia amygdaloides; Orthonevra brevicornis (Loew) (Syrphidae), Ashley Chase, Dorset (SY564878), 25.v, female swept; Paragus tibialis (Fall.) (Syrphidae), Stoke Heath, Dorset (SY856893), 7.viii, male hovering over bare sand; Pipiza lugubris (F.) (Syrphidae), Crawthorne Farm, Dorset (SY7796), 26.viii, female nectaring on Heracleum sphondylium; Platycheirus clypeatus (Meig.) (Syrphidae), Hirta, St Kilda, Western Isles (NF100991), 20.vii, female swept from a grassy slope; *P. manicatus* (Meig.) (Syrphidae), Hirta, St Kilda, Western Isles (NF100991), 20.vii, several females swept from a grassy slope; *P. splendidus* Rotheray (Syrphidae), Allt Volgair, South Uist, Western Isles (NF7928), 24.vii, one female swept from a flowery slope in relict woodland; Sphaerophoria interrupta (F.) (Syrphidae), Pollachar Marsh, South Uist, Western Isles (NF746147), 18.vii, several males swept from marshland; *Conops strigatus* Wied. (Conopidae), Stoke Heath, Dorset (SY884879), 7.viii, female nectaring on

Senecio jacobaea; C. vesicularis L. (Conopidae), Mark Ash, New Forest, Hants (SU2407), 9.v, female on Euphorbia amygdaloides; Myopa fasciata Meig. (Conopidae), Stoke Heath, Dorset (SY856893), male nectaring on Senecio jacobaea.

PERRY, I.-Uncommon Diptera found in 1999: Chrysopilus laetus Zett. (Rhagionidae), Lode, Cambs, reared from the rotting trunk of a fallen poplar, adults emerging in late May; Haematopota bigoti Gobert (Tabanidae), Whiteford Burrows, Glam., 15.vii, males swept from transitional marsh; Hybomitra expollicata (Pand.) (Tabanidae), Farlington Marshes, Hants, 23.vii, a female resting on emergent vegetation in a brackish ditch; Thereva fulva (Meig.), (Therevidae), Whiteford Burrows, Glam., 15.vii, swept from sallows and Oxwich, Glam., 11.vii, swept from dunes; Chersodromia cursitans (Walk.) (Hybotidae), Sandscale Haws, Cumbria, 18.vi, running around on damp sand where seepages occurred at the top of the beach; Empis impennis Strobl (Empididae), Farley Mount Country Park, Hants, 21.vii, swept from calcareous grassland; Myopites inulaedyssentericae Blot (Tephritidae), Wicken Fen, Cambs, 3.vii, swept from its food plant fleabane (Pulicaria dysenterica), new vice-county record; Chaetorellia loricata (Rond.) (Tephritidae), Martin Down, Hants, 22.vii, swept from its food plant greater knapweed (Centaurea scabiosa); Orellia falcata (Scop.) (Tephritidae), Oxwich, Glam., 11.vii, swept from dune slack; Salticella fasciata (Meig.) (Sciomyzidae), Holme Dunes, Norf., 8.v and 5.vi, swept from dunes; Elachiptera rufifrons Duda (Chloropidae), Farlington Marshes, Hants, 23.vii, swept from brackish ditches; Delina nigrita (Fall.) (Scathophagidae), Holme Dunes, Norf., 8.v, swept from dune slack.

PLANT, C. W.—Syrphus? rectus Osten Sacken (Syrphidae), ? new to Great Britain. A single female, reared from a larva on *Prunus spinosus* at Bishop's Stortford, Herts, during vi.1987. This hoverfly was recently added to the Irish fauna by Martin Speight (1999. *Dipterists Digest* (Second Series) 6: 85–91). Females have areas of the wing membrane without microtrichia (unlike *S. ribesii* (L.) and *S. torvus* Osten Sacken), but the hind femora are yellow (unlike *S. vitripennis* Meig.). Males cannot be separated from *S. vitripennis* on present knowledge.

Syrphus rectus is a north American species. In adding it to the European list in 1996, Pierre Goeldlin (Bulletin de la Société entomologique Suisse 69: 157–171), found a number of differences between European and American examples and so placed the European ones in a new subspecies bretolensis. There is, however, some debate over whether this is a valid species in Europe or whether it is a form of Syrphus vitripennis. The specimen exhibited had the hind femora entirely yellow, whereas typical S. rectus bretolensis (described from only three specimens), has the base of the hind femora narrowly black (for a distance that is less than the width of the femur), Another problem is that all of the hairs on the hind femora of this specimen are yellow as in S. vitripennis, whereas in S. rectus bretolensis they are black. The shape of the probasisternum (a plate on the front of the thorax behind the head), which serves fairly well to separate the three previously known British species of Syrphus, is more or less identical to that of S. vitripennis.

STUBBS, A. E.—Craneflies (Tipulidae and Limoniidae) and hoverflies (Syrphidae) from six mainly woodland sites in East Kent, early v.1999:

(a) Denge Wood (TR1052 etc.), 6 and 7.v, a Woodland Trust reserve on the dip slope of the chalk, with grassland, coppice and coppiced glades with a good flora, including plenty of wood spurge (*Euphorbia amygdaloides*): *Tipula pabulina* Meig. (Tipulidae), male, a local species of calcareous soils in v, easily overlooked; *Tipula hortorum* L. (Tipulidae), male and female, a male was found feeding at wood spurge flowers, others were common on a dull morning flying over a valley bottom area coppiced about two years previously; *Dicranomyia mitis* (Meig.) (Limoniidae), a species complex, the exhibit being of the true *mitis*, the only specimen seen in East Kent in two weeks whereas it had been expected to be relatively frequent on calcareous soils, the conclusion being drawn that droughts of previous years have held down its population; *Epistrophe melanostoma* (Zett.) (Syrphidae), male and female at wood spurge flowers, others being seen, a recent colonist to Britain with most records being from Surrey; *Eupeodes* species indet. (Syrphidae), male and female at wood spurge flowers, close to *E. nielseni* (Dušek and Láska) and *E. nitens* (Zett.) but does not fit either; *Meligramma euchromum* (Kowarz) (Syrphidae), several seen at wood spurge flowers, an elusive spring species; *Rhingia rostrata* (L.) (Syrphidae), two females at hawthorn (*Crataegus*) flowers, others seen; the suggestion was made that it develops in badger setts in woodland (a sett was seen), but the fly is difficult to find with East Kent being particularly well represented in records; it was also noted that *R. campestris* Meig. was common at this site but only visiting herbaceous flowers.

(b) Child's Forstal, Blean Woods (TR176644), 7.v, a small wood with coppice, purchased by Eric Bradford, the Society's former Curator, in order to safeguard this part of the Blean Woods complex, and passed to the Kent Wildlife Trust at his death: *Tipula pseudovariipennis* Czizek (Tipulidae), male and female, a rare and poorly known species, the first time that the exhibitor had found it in numbers yet only one (interpreted as a possible wind-blown stray) was seen in the adjacent Clowes Wood, which is much bigger; *Tipula varipennis* Meig. (Tipulidae), male and female, a common woodland species in the spring exhibited for comparison; the females of both species are black bodied but the wings of *varipennis* are short and the front femora extensively dark and thickened. The males are less easy to separate but the abdomen is very much blacker than in *pseudovariipennis*.

(c) Wye, 10.v: *Epistrophe melanostoma* (Zett.) (Syrphidae), female, just east of Coldharbour Farm, where a roadside path runs through a strip of woodland (TR068465); *Cheilosia nigripes* (Meig.) (Syrphidae), female, swept under extremely windy conditions from a tiny piece of woodland in an exposed position on top of the downs and assumed to be a wind-blown stray from lower on the downs (approximately TR074470).

(d) Sandwich, at north end of dunes, 11.v (TR346616), alluvial levels with brackish ditches which lie behind the dunes and adjoining the estuarine River Stour, the finds being in a short section of ditch with sea club-rush (*Bolboschoenus maritimus*), just within National Trust land forming part of a complex Nature Reserve: *Erioptera* (*Mesocyphona*) bivittata (Loew) (Limoniidae), two males, mainly known from the north Kent marshes and to a lesser extent the East Anglian coast, part of the specialist brackish ditch fauna that is now highly localised because most habitat has been drained or over-managed; *Molophilus pleuralis* de Meijere (Limoniidae), male, a more widespread brackish species since it prefers very mildly saline conditions.

(e) Church Wood, 15.v (TR15), an RSPB Reserve and part of the Blean Woods complex; an extensive programme to restore coppice management and to diversify woodland structure was well advanced; there were remnants of heathland and some of the more open rides had tormentil (*Potentilla erecta*); locally there were good stands of wood spurge in flower and woodland streams added to the diversity: *Meligramma euchromum* (Kowarz) (Syrphidae), male, several seen at wood spurge flowers; *Sphaerophoria fatarum* Goeldlin de Tiefenau (Syrphidae), male, locally frequent visiting tormentil flowers along woodland rides and a few seen more generally in open areas, perhaps typically a wet heath species, certainly in the north; it was also noted that short-bodied *Sphaerophoria* species have become very localised

in woodland since only in some of the larger woods has there been continuity of woodland rides.

(f) Thornden Wood, 7.v (TR155634), a large wood of the Blean Woods complex, with extensive coppice remaining, now better managed with some fine habitat amidst less interesting areas: *Dicranomyia affinis* (Schumm.), one of the splits from the *mitis* (Meig.) complex (not yet formally published), male and female, swept from sallow (*Salix*) regrowth along wet ditches in a ride with some tormentil, normally a heathland species and very scarce in the south so its occurrence here and at Church Wood is of note.

STUBBS, J.—A selection of photographs taken at the Dipterists Forum autumn 1999 field meeting based at Oxford; these showed participants determining and discussing finds at the Hill End Study Centre, adjacent to Wytham Wood, where the evening sorting took place and also a few scenes of celebration taken after most of those present had finished sorting their catches.

COLEOPTERA

ALEXANDER, K. N. A.—A selection of the more interesting beetles encountered during 1999. Species prefixed with an asterisk (*) are new vice-county records. *Ampedus elongantulus (F.) (Elateridae), Gulf Scrubs, Colesbourne, E. Glos., on grass blade, trackside, 16.v.1999; *Silis ruficollis (F.) (Cantharidae), Lydney Marsh, W. Glos., in reedbed, 26.vi.1999; Pyropterus nigroruber (Deg.) (Lycidae), Staindale Wood, N.-E. Yorks., on bracken in oak wood, 19.vii.1999, second record for N. York Moors National Park; Hallomenus binotatus (Quensel) (Melandryidae), Bridestones Reserve, N.-E. Yorks., beaten from heather close to Laetiporus sulphureus bracket, 21.vii.1999; Tetratoma desmaresti Latr. (Tetratomidae), Bransdale, N.-E. Yorks., knocked off dead lower branches of old oaks, 15.ix.1999; Polydrusus mollis (Ström) (Curculionidae), Bigsweir Wood, Wye Gorge, W. Glos., 24.iv.1999, very rare in county; Anthonomus pomorum (L.) (Curculionidae), Woolaston Lime Coppice, W. Glos., knocked off Clematis liana, 26.vi.1999, very rare in county; Curculio betulae (Stephens) (Curculionidae), Low Wood, Bransdale, N.-E. Yorks., off birch, 23.vii.1999.

BARCLAY, M. V. L.—(1) Some notable Coleoptera collected during the past five years. *Platyderus ruficollis* (Carabidae), Natural History Museum garden, Middx, 26.xi.1999; *Agonum sexpunctatum* (L.) and *Pterostichus angustatus* (Dufts.) (Carabidae) and *Acritus homoeopathicus* Wollast. (Histeridae), Ockham Common (near Bolder Mere), Surrey, in a bonfire heap, 26.iv.1998; *Trox scaber* (L.) (Trogidae), Tynemouth Street, Fulham, Middx, common in bones, fish skeletons and faeces buried by cats in garden; *Saprosites mendax* Blackburn (Scarabaeidae), Wimbledon, Surrey, under bark of dead oak in frass of *Cylindrinotus laevioctostriatus* (Goeze) (Tenebrionidae), 20.iii.1996; *Uleiota planata* (L.) (Cucujidae), Wisley Common, Surrey, under pine bark, 1.v.1999; *Tetratoma desmaresti* Latr. (Tetratomidae), Bookham Common, Surrey, sieved from under fungus-killed oak, 14.iii.1999; *Molorchus umbellatarum* (von Schr.), White Downs, Surrey, on dogwood blossom, 17.vi.1998; *Gracilia minuta* (F.) (Cerambycidae), Gwent Levels, Mon., in pan trap, vii.1999; *Scolytus rugulosus* Müll. (Scolytidae), Wimbledon, on fruit-wood pile (*Prunus* sp.), 5.vii.1995.

(2) A weevil new to Britain: *Otiorhynchus armadillo* (Rossi) (Curculionidae), Chelsea, Middx, one specimen found outside Marks and Spencer, 28.viii.1998, lives in central European mountain ranges.

(3) Notable beetles collected in a flight interception trap between 17.vi.1998 and 8.vii.1998 at Silwood Park, Berks. One species (prefixed *) is new to Berks. *Plegaderus dissectus* Er. (Histeridae), *Stenichnus godarti* (Latr.) (Scydmaenidae), *Euplectus nanus* (Reichenb.) (Pselaphidae), *Ampedus rufipennis* (Steph.) and *Panspoeus guttatus* Sharp (Elateridae), *Aulonothroscus brevicollis* (de Bonvoul.) and **Hylis olexai* (Palm) (Eucnemidae), *Hadrobregmus denticollis* (Creutz in Panz.) (Anobiidae), *Tritoma bipustulata* F. (Erotylidae), *Aderus oculatus* (Payk.) (Aderidae).

(4) Synchita humeralis (F.) (Colydiidae), Wisley Common, 1.v.1999 and S. separanda (Reitt.) (Colydiidae), Richmond Park, Surrey, under sycamore bark, 6.x.1996, to show the difference in elytral shape between the two species.

(5) A comparison between two extremely similar leaf beetles: Cryptocephalus biguttatus (Scop.) and C. bipunctatus (L.) var. thomsoni Weise. (Chrysomelidae). Specimens exhibited were: C. biguttatus, Moscow district, Russia, 27.vii.1997; C. bipunctatus (typical form) White Downs, Surrey, 11.vi.1995 and C. bipunctatus var. thomsoni, Wisley Common, Surrey, 8.vi.1999 and 11.vi.1999.

(6) Comparison between two superficially similar *Cryptocephalus* species (one non-British). *C. bilineatus* (L.) (Chrysomelidae), White Downs, Surrey, 11.vi.1995 and *C. vittatus* Suff. Les Mielles, Jersey, extremely common on broom, 9.vii.1988.

BOOTH, R. G.—(1) A species of ladybird native to eastern Australia, possibly originating from a nearby garden centre: *Rhyzobius lophanthae* (Blaisdell) (Coccinellidae), Morden Park, Surrey, TQ244672, 1.iv.1999, a single specimen found crawling up the trunk of an ash tree by D. A. Coleman.

(2) A selection of rare or notable species. Dromius vectensis Rye (Carabidae), Trerathick Point, W. Corn., SW846686, a male by grubbing at the base of Plantago on a poorly vegetated cliff-top, 31.vii.1998 (apparently the first record for the north Cornish coast); Lionychus quadrillum (Dufts.) (Carabidae), Seaton, E. Corn., SX296542, several under stones and gravel at base of cliff, 22.viii.1999 (first post-1970 record for vice-county); Helophorus longitarsis Wollast. (Hydrophilidae), Beddington sewage farm, Surrey, TQ2967, male in actinic light trap by D. A. Coleman, 17.viii.1998; Ptomaphagus varicornis (Rosenh.) (Leiodidae), Bradenham, Bucks., SU828974, female in pitfall trap on an experimental set-aside plot at edge of cereal field, v.1998, first Buckinghamshire record; Acylophorus glaberrimus (Herbst) (Staphylinidae), Burley Street, New Forest, S. Hants, SU2004, 3 in boggy area, 23.ix.1998, possibly the first British record since 1970s; Philonthus lepidus (Grav.) and Tachyporus scitulus Er. (Staphylinidae), Merthyr Mawr Warren, Glam., SS8676, 3 and 2 specimens respectively by sieving moss and grass on the dunes, 7.iv.1999, (P. lepidus not recorded from Wales according to Hyman & Parsons, 1994); Ocyusa nitidiventris Fagel (Staphylinidae), Isle of Grain, W. Kent, TQ892755, female by sieving strand-line debris on sea shore, 11.iv.1999; Psammodius (Brindalus) porcicollis (Ill.) (Scarabaeidae), Whitsand Bay, E. Corn., SX35, 1 on 25.viii.1999 and 2 on 25.viii.1999, in sand around roots of Ononis and grass at base of cliff (the first 20th century British record); Bruchidius varius (Ol.) (Chrysomelidae), Ashtead Common, Surrey, TQ1759, male swept from roadside ditch, 12.ix.1998; Glocianus moelleri (Thoms.) (Curculionidae), Gallows Hill, S. Wilts., ST949242, male collected in a Vortis suction sampler from downland by S. Mortimer and colleagues, 18.vi.1998.

(3) A selection of species from a flight interception trap at Silwood Park, Berks. between July 1998 and May 1999. *Leiodes lucens* (Fairm.) and *Agathidium confusum* Bris. (Leiodidae), *Stenichnus godarti* (Latr.) (Scydmaenidae), *Quedius aetolicus* Kr., *Aleuonota rufotestacea* (Kr.) and *Atheta inquinula* (Grav.) (Staphylinidae), *Clambus pallidulus* Reitter and *C. simsoni* Blackburn (Clambidae),

Cryptophagus falcozi Roubal, C. confusus Bruce, C. labilis Er. and C. micaceus Rey (Cryptophagidae).

(4) A selection of rare or notable species from surveys in the New Forest, S. Hants in May and Sept. 1999. Medon apicalis (Kr.), Gyrophaena munsteri Strand, Atheta glabricula Thoms. and A. parens (Muls. & Rey) (Staphylinidae); Rhizophagus nitidulus (F.) (Rhizophagidae), Colydium elongatum (F.) (Colydiidae), Ernoporus fagi (F.) and Trypodendron signatum (F.), Bramshaw, SU2515, 20-23.v.1999; Baeocrara variolosa (Muls. & Rey) and Acrotrichis dispar (Matth.) (Ptiliidae), Gyrophaena pulchella Heer (Staphylinidae), Bramshaw, SU2515, 19.ix.1999; Dendroxena quadrimaculata (Scop.) (Silphidae), Atomaria turgida Er. (Cryptophagidae), Pinnick Wood, SU2706, 22.v.1999; Anoplodera sexguttata (F.) (Cerambycidae), Brinken Wood, SU2706, 21.v.1999; Ampedus cinnabarinus (Esch.) (Elateridae), Warwick Slade, SU 2706, 21.v.1999, larva reared from rotten beech log and emerged ix.1999; Ptenidium brenskei Flach (Ptiliidae), Atheta hygrobia (Thoms.) (Staphylinidae), Warwick Slade, SU2706, 19.ix.1999; Euplectus fauveli Guillebeau (Pselaphidae), Sloden Wood, SU2112, 23.v.1999; Ptenidium turgidum Thoms. (Ptiliidae), Denny Wood, SU3305, 17.ix.1999; Stenus kiesenwetteri Rosenh., Paederus caligatus Er. and Acylophorus glaberrimus (Herbst) (Staphylinidae), Longitarsus nigerrimus (Gyll.) (Chrysomelidae), Black Down, SU3407, 18.ix.1999.

GIBBS, D. J.—Haliplus mucronatus Steph. (Haliplidae), Weston Moor, N. Som., ST4473, well established in grazing marsh ditches, 29.vii.1999; *H. variegatus* Sturm (Haliplidae), Weston Moor, N. Som., ST4473, in two ditches on grazing marshes, 16.viii.1999, first record for Avon; *Hydaticus transversalis* (Pontoppidan) (Dytiscidae), Weston Moor, N. Som., ST4473, fairly frequent in grazing marsh ditches, 11.viii.1999; *Omaloplia ruricola* (F.) (Scarabaeidae), Browns Folly, N. Som., ST7966, in calcareous grassland, 10.vii.1999, first Somerset record; *Cantharis fusca* L. (Cantharidae), Uphill, N. Som., ST3158, 23.v.1999 and Weston Moor, N. Som., ST4473, 8.vi.1999; *Aromia moschata* (L.) (Cerambycidae), Weston Moor, N. Som., ST4473, on hogweed, 4.viii.1999, probably the second record for Avon.

HACKETT, D.-Some notable Coleoptera collected in 1999. Bembidion saxatile Gyll. (Carabidae), Dunwich cliff, E. Suff., TM480707, at roots of Plantago in slipping sand, 6.ix.1999; Onthophagus joannae Goljan (Scarabaeidae), Watlington Hill, Oxon., SU705935, in rabbit midden, 4.vii.1999; Omaloplia ruricola (F.) (Scarabaeidae), Watlington Hill, Berks., SU705935, 4.vii.1999; Hemicoelus fulvicornis (Sturm) (Anobiidae), Highgate Wood, Middx, TQ283887, beaten off oak twigs, 5.viii.1998; H. nitidus (Herbst) (Anobiidae), Highgate Wood, Middx, TQ283887, in flight interception trap, 5.viii.1998; Uleiota planata (L.) (Cucujidae), Larks Wood, S. Essex, TQ382928, under bark of cut beech log, 2.vii.1999; Triplax aenea (Schaller) (Erotylidae), Larks Wood, S. Essex, TQ382928, in Pleurotus on beech, 2.vii.1999; Pycnomerus fuliginosus Er. (Colydiidae), White House Wood, S. Essex, TQ397916, 9.vii.1999; Mycetochara humeralis (F.) (Tenebrionidae), Larks Wood, S. Essex, TQ382928, under bark of damaged oak, 2.vii.1999; Lissodema quadripustulatum (Marsh.) (Salpingidae), Larks Wood, S. Essex, TQ382928, on beech trunk, 2.vii.1999; Ischnomera cyanea (F.) (Oedemeridae), Hampstead Heath, Middx, TQ2787, crawling up heart-rotten sycamore near Viaduct Pond, 21.v.1999; Bruchidius varius (Ol.) (Chrysomelidae), Highgate depot, Middx, TQ270887, swept 31.viii.1999, a new county record; Kalcapion semivittatum (Brentidae), Leyton churchyard, S. Essex, TQ376868, off Mercurialis annua, 22.vi.1999; Coeliodes erythroleucos (Curculionidae), Larks Wood, S. Essex, TQ382928, beaten off oak, 2.vii.1999.

HALSTEAD, A. J.-Some scarce or local Coleoptera taken in 1999. Pterostichus lepidus Leske (Carabidae), Whitmoor Common, Surrey, pitfall trap on dry heath, 18.vii.1999; Cantharis obscura (L.) (Cantharidae), Greatcalf Haw, near Ulpha, Cumbria, swept in deciduous woodland, 16.vi.1999; Platycis minuta (F.) (Lycidae), White Downs near Westcott, Surrey, swept from hawthorn scrub, 8.viii.1999; Lymexylon navale (L.) (Lymexylidae), RHS Garden, Wisley, Surrey, ovipositing on felled oak trunk, 23.vii.1999; Colydium elongatum (F.) (Colydiidae), Newlands Corner, Surrey, swept near dead beech, 23.v.1999; Osphyia bipunctata (L.) (Melandryidae), Therfield Heath (Church Hill), near Royston, Herts., female swept off hawthorn, 4.v.1999; Donacia clavipes (F.) (Chrysomelidae), Leighton Moss RSPB Reserve, near Silverdale, W. Lancs., swept off reeds, 14.vi.1999; Cryptocephalus bilineatus (L.) (Chrysomelidae), Newlands Corner, Surrey, swept off chalk grassland, 1.viii.1999; C. punctiger (Payk.) (Chrysomelidae), Whitbarrow Scar NNR, near Kendal, Cumbria, swept off birch, 13.vi.1999; Longitarsus ballotae (Marsh.) (Chrysomelidae), Royston, Herts., on Ballota nigra, 5.iv.1999; Rhynchites cavifrons Gyll. (Attelabidae), Thursley Common NNR, Surrey, swept off birch, 22.v.1999; R. cupreus (L.) (Attelabidae), Orobitis cyaneus (L.) (Curculionidae), Sandscale Haw, near Dalton-in-Furness, Cumbria, 15.vi.1999; Newlands Corner, Surrey, swept off rowan flowers, 25.iv.1999

HARVEY, M.—*Harpalus dimidiatus* (Rossi) (Carabidae). Streatley, Berks., SU592799, 2.v.1997, a male found at The Hollies (a National Trust property) near an area of downland that had been scraped back to bare chalk two years previously. Before this the area had a history of disturbance, being used, among other activities, for motorbike scrambling.

HOARE, D. I. B.-A selection of scarce beetles collected during 1998 and 1999, including two unusual varieties. Notiophilus aesthuans (Mots.) (Carabidae), Findhorn, Elgin, in open on dunes, 31.v.1999; Bembidion litorale (Ol.) (Carabidae), Glenfeshie, Easterness, dark form on sandy area on river shingle, 30.v.1999; Agabus arcticus (Payk.) (Dytiscidae), Dytiscus lapponicus Gyll. (Dytiscidae) and Gyrinus opacus Sahlb. (Gyrinidae), Lecht Pass, Banff., in pool, 2.vi.1999; Platydracus latebricola (Grav.) (Staphylinidae), Glenmore, Easterness, near nest of Formica exsecta Nylander (Hymenoptera: Formicidae), collected by G. Jones, 29.vi.1999; Ampedus elongantulus (F.) and A. quercicola du Buyss (Elateridae), Gritnam Wood, New Forest, S. Hants, off Crataegus blossom, 22.v.1999; A. sanguinolentus (Schrank) (Elateridae), Gritnam Wood, New Forest, S. Hants, off Pinus, 22.v.1999; Aplotarsus incanus (Gyll.) var. ochropterus Steph. (Elateridae), near Loch Morlich, Easterness, swept, 26.v.1999; Paraphotistus nigricornis (Panz.) (Elateridae), Gritnam Wood, New Forest, S. Hants, swept, 22.v.1999; Tillus elongatus (L.) (Cleridae), Bishop's Dyke, New Forest, S. Hants, on beech log, 19.v.1998; Coccinella quinquepunctata L. (Coccinellidae), Carron, Elgin, shingle on R. Spey, 29.v.1999; Orthocerus clavicornis (L.) (Colydiidae), Findhorn, Elgin, under stone on dunes, 31.v.1999; Leptura sexguttata F. (Cerambycidae), Whitley Wood, New Forest, S. Hants, off umbel, 22.v.1999; Donacia clavipes F. (Chrysomelidae), Wicken Fen, Cambs., off Phragmites, 20.vi.1999; Plateumaris braccata (Scop.) (Chrysomelidae), Chippenham Fen, Cambs., off Phragmites, 19.vi.1999; Cryptocephalus sexpunctatus (L.) (Chrysomelidae), Carron, Elgin, female off Betula, 29.v.1999 (this specimen was kept alive and 300 eggs were laid in early to mid-June).

HODGE, P. J.—25 species of Coleoptera from various locations in southern Britain. New vice county records are marked with an asterisk (*). *Harpalus melleti Heer (Carabidae), Rye Harbour, E. Sussex, TQ934180, in moss growing on shingle beach, 5.v.1999; *Badister meridionalis Puel (Carabidae), West Dean Brooks, E. Sussex, TQ514004, female in edge of pond, 27.ix.1999; Nebrioporus canaliculatus (Lacordaire) (Dytiscidae), Dungeness, E. Kent, TR065198 in new pond, 12.viii.1999; *Aeletes atomarius (Aubé) (Histeridae), Stansted Forest near Rowland's Castle, W. Sussex, SU747105, in fallen beech trunk, 1.viii.1999; *Saprinus virescens (Paykull) (Histeridae), near Wicken Fen, Cambs., TL5470, swept off mayweed in field gateway with Gastrophysa polygoni (L.) (Chrysomelidae), 22.viii.1999; *Ptenidium turgidum Thomson (Ptiliidae), Stansted Forest near Rowland's Castle, W. Sussex, SU747105, in fallen beech trunk, 1.viii.1999; Rugilus similis (Erichson) (Staphylinidae), Cowdray Park, W. Sussex, SU901222, male swept in lime avenue, 14.v.1999; *Philonthus nitidicollis (Boisduval & Lacordaire) (Staphylinidae), near the Pells swimming pool, Lewes, E. Sussex, TQ413107, male swept at edge of derelict marshy meadow, 1.iv.1999; *Philonthus spinipes Sharp (Plate 2, Fig. 8) and Gabronthus thermarum (Aube) (Staphylinidae), Eighteen Pounder Farm, Guestling, E. Sussex, TQ830146, in pile of stable manure, 2.iv.1999; Cypha nitidus (Palm) (Staphylinidae), Stansted Forest near Rowland's Castle, W. Sussex, SU747105, male in fallen beech trunk, 1.viii.1999; *Athous subfuscus (Muller) (Elateridae), Black Down near Haslemere, W. Sussex, SU9130, female swept off grass/young birch, 22.vi.1999; *Ptinus dubius Sturm (Ptinidae), The Crumbles near Eastbourne, E. Sussex, TQ647026, male and female beaten off pine Pinus sp. growing on shingle beach, 26.x.1999; Aplocnemus nigricornis (F.) (Melyridae), Old Lodge Nature Reserve, Ashdown Forest, E. Sussex, TQ462304, one swept, 11.v.1999; Malachius aeneus (L.) (Melyridae), Stickling Green, N. Essex, TL473327, several swept off grassland vegetation, 9.vi.1999; *Cryptophagus confusus Bruce (Cryptophagidae), Stansted Forest near Rowland's Castle, W. Sussex, SU747105, male in fallen beech trunk, 26.vii.1999; *Atomaria umbrina (Gyllenhal), (Cryptophagidae), Stansted Forest near Rowland's Castle, W. Sussex, SU738106, male at base of large beech stump, 1.viii.1999; * Rhyzobius chrysomeloides (Herbst) (Coccinellidae) and Melanophthalma transversalis (Gyllenhal) (Latridiidae), The Crumbles near Eastbourne, E. Sussex, TQ639024, 26.x.1999, several beaten off pine Pinus sp. growing on shingle beach; Diaperis boleti (L.) (Tenebrionidae), Peasmarsh, E. Sussex, TQ909224, one in Laetiporus sulphureus fungus fallen off a white willow Salix alba trunk, 10.ix.1999; Tetratoma desmaresti Latreille (Tetratomidae), Knole Park, W. Kent, TQ548538, beaten off dead oak bough 10.x.1999 and St. Dunstan's Farm, Heathfield, E. Sussex, TQ606193, beaten off the fungus Stereum (hirsutum?) on dead oak bough 31.x.1999; Gracilia minuta (F.) (Cerambycidae), Red Cliff near Sandown, Isle of Wight, SZ619853, swept near patch of brambles Rubus sp. on cliff-top, 31.v.1999; *Bruchidius varius (Olivier) (Chrysomelidae), Red Cliff near Sandown, Isle of Wight, SZ619853, female swept off red clover Trifolium growing on cliff-top, 31.v.1999 and Lullingstone Park, W. Kent, TQ5164, female swept off red clover, 16.vi.1999; Ceutorhynchus parvulus Brisout (Curculionidae), Bolbery Down, S. Devon, SX6838, male swept off clifftop grassland, 26.v,1999; *Ceutorhynchus unguicularis Thomson (Curculionidae), North Hill, Priddy, N. Som., ST5450, three swept in area of rough grassland 12.vi.1999.

KIRBY, P.—Recent captures of uncommon weevils (Curculionidae). Otiorhynchus raucus (F.), Cobham Woods, W. Kent, TQ699686, 1.vi.1998; Caenopsis fissirostris (Walton), Ashenbank Wood, W. Kent, TQ675693, 16.vi.1998 and East Ruston Common, E. Norf., TG342276, 5.vii.1998; Trachyphloeus alternans Gyll., Portland Bill, Dorset, SY677712, 15.ix.1998; T. asperatus Boh., Andrews Quarry, Northants, TL060982, 11.v.1999; Portland Bill, Dorset, SY677712, 15.ix.1998; T. aristatus (Gyll.), Wansford, A47 road verge, Northants, TF075008, 15.v.1999; Cathormiocerus maritimus Rye, Kennack Sands, W. Corn., SW735165, 24.ix.1992; Omiamima mollina (Boh.), Sharlston, S.-W.

Yorks., SE374194, 26.v.1995; Brachysomus echinatus (Bons.), Devil's Dyke, Cambs., 10.iv.1997; Cobham Woods, W. Kent, TQ699686, 1.vi.1998 and Wansford, A47 road verge, Northants, TF075008, 15.v.1999; Cneorhinus plumbeus (Marsh.), East Ruston Common, E. Norf., TG340280, 5.vi.1994; Hypera diversipunctata (Schrank), Bubwith Ings, S.-E. Yorks., SE202368, 22.vi.1995 and North Duffield Carrs, S.-E. Yorks., SE695375, 28.vi.1995; H. meles (F.), Dibden, S. Hants, SU405092, 19.vi.1999; Liparus coronatus (Goeze), Ashenbank Wood, W. Kent, TQ675693, 16.vi.1998; Leiosoma oblongulum Boh., Coed y Cerrig NNR, Mon., SO293212, 18-24.x.1997; Plinthus caliginosus (F.), Ashenbank Wood, W. Kent, TQ675693, 16.vi.1998 and Cobham Woods, W. Kent, TQ699686, 1.vi.1998; Gronops lunatus (F.), Leziate, W. Norf., TF673192, 13.vi.1999; Portland Bill, Dorset, SY677712, 15.ix.1998; East Ruston Common, E. Norf., TG340280, 19.vii.1998 and Andrews Quarry, Northants, TL060982, 11.v.1999; Magdalis barbicornis (Latr.), Chedglow Manor Farm, Wilts., ST937930, 23.vi.1999; M. carbonaria (L.), Merthyr Tydfil, Glam., SO0404, 5.vi.1997; M. cerasi (L.), East Ruston Common, E. Norf., TG340280, 5.vi.1994; Trachodes hispidus (L.), Cobham Woods, W. Kent, TQ699686, 1.vi.1998; Cryptorhynchus lapathi (L.), East Ruston Common, E. Norf., TG342276, 21.vi.1996 and Ferry Meadows Country Park, Northants, TL154972, 31.v.1999; Acalles ptinoides (Marsh.), Blaegwrach, Glam., SN843073, 18.ix.1996; Skipwith Common, S.-E. Yorks., SE658373, 24.vi.1997; Cobham Woods, W. Kent, TQ699686, 17.ix.1998; Ashenbank Wood, W. Kent, TQ675693, 16.vi.1998 and Ploughman Wood, Notts., SK640468, 24.ix.1998; A. roboris Curtis, Kilminorth Woods, E. Corn., SX243539, 12.viii.1999; Abagous lutulentus (Gyll.), Merthyr Tydfil, Glam., SO0404, 5.vi.1997; Bagous subcarinatus Gyll., Stoke Marshes, W. Kent, TQ853760, 22.vii.1995; Notaris aethiops (F.), Kielder Forest pond, Northumber., NY685896, 24.vi.1992; N. bimaculatus (F.), Richborough, E. Kent, TR329620, 16.ix.1996; South Thorganby Ings, S.-E. Yorks., SE693405, 18.vi.1996 and Ellerton Ings, S.-E. Yorks., SE697403, 29.vi.1995; N. scirpi (F.), Buckden Marina, Hunts., TL213685, 20.v.1999 and Glanstony, Carm., SN40, 16-21.ix.1994; Grypus equiseti (F.), Sutton Heath and Bog, Northants, TF089000, 20.iv.1996; East Ruston Common, E. Norf., TG340280, in pitfall trap, vi.1994; Glanstony, Carm., SN40, 16-21.ix.1994 and Havant, S. Hants, SU713050, 14.vi.1994; Mononychus punctumalbum (Herbst), Warbarrow, Dorset, SY870796, 13.ix.1998; Eubrychius velutus (Beck), Landbeach Marina, Cambs., TL480683, 24.v.1997; Phytobius leucogaster (Marsh.), Acle Straight, E. Norf., TG407103-500089, 19-28.v.1995; Pelenomus olssoni Israelson, Merthyr Tydfil, Glam., SO0404, 19.vii.1997 Drupenatus nasturtii (Germ.), River Colne near Harefield, Herts., TQ043929, 24.iii.1996; Thamiocolus viduatus (Gyll.), Buckden Marina, Hunts., TL213685, 31.viii.1999; Datonychus angulosus (Boh.), East Cottingwith Ings, S.-E. Yorks., SE697413, 12.vi.1996; Hadroplontus trimaculatus (F.), Rookery Farm, Eyke, E. Suff., TM330514, 28.v.1999 and St Oswald's Bay, Dorset, SY888793, 19.ix.1998; Glocianus punctiger (Gyll.), Gobions Wood, Herts., TL250035, 6.v.1999; Ceutorhynchus querceti (Gyll.), East Ruston Common, E. Norf., TG342276, 7.vi.1996; C. resedae (Marsh.), Andrews Quarry, Northants, TL060982, 16.v.1999; Kingsbury Brickpits, Warwick, SP218986, 18.viii.1998; Southorpe Roughs, Northants, TF073032, 23.vii.1997 and Landbeach Marina, Cambs., TL480683, 24.v.1997; Trichosirocalus barnevillei (Grenier), Dibden, S. Hants, SU405092, 19.vi.1999 and Greenham Common, Berks., SU5164, 17.vi.1998; T. dawsoni (Bris.), Portland Bill, Dorset, SY677712, 15.ix.1998; T. horridus (Panz.), Ketton, Leics., SK965055, 19.v.1999; T. rufulus (Dufour), Farlington Marsh, S, Hants, SU6804, 21.ix.1998 and Cobham Woods, W. Kent, TQ699686, 7.ix.1998; Stenocarus ruficornis (Steph.), Wansford, A47 road verge,

Northants, TF075008, 15.v.1999 and Cobham Woods, W. Kent, TQ699686, 7.ix.1998; Baris lepidii Germ., Erewash Meadows, Derbys, SK446500, in pitfall trap, v.1998; B. picicornis (Marsh.), Beeby's Pit, Hunts., TL192928, 9.v.1998; Curculio betulae (Stephens), Bretton, Peterborough, Northants, TF164100, 3.viii.1994 and Blaenclairch, Glam., SN973050, 17.vii.1997; C. rubidus (Gyll.), Sandy Heath, Beds., TL204492, 15.ix.1996 and Skipwith Common, S.-E. Yorks., SE658373, 24.vi.1997; C. villosus F., Hainault Forest, S. Essex, TQ480940, 28.iv.1999; Tychius pusillus Germ., Dibden, S. Hants, SU405092, 19.vi.1999; Sibinia arenariae Steph., Dibden, S. Hants, SU405092, 13.v.1999; Lantic Bay, E. Corn., SX147508, 11.viii.1999; Farlington Marsh, S. Hants, SU6804, 21.ix.1998 and Stoke Marshes, W. Kent, TQ853760, 22.vii.1995; S. primitus (Herbs), Dibden, S. Hants, SU405092, 1.ix.1999 and Leziate, W. Norf., TF673192, 13.vi.1999; Mecinus circulatus (Marsh.), Dibden, S. Hants, SU405092, 19.vi.1999; M. janthinus Germ., Cobham Woods, W. Kent, TQ699686, 1.vi.1998 and Wansford, A47 road verge, Northants, TF075008, 15.v.1999; Gymnetron beccabungae (L.), Merthyr Tydfil, Glam., SO0404, 5.vi.1997; G. veronicae (Germ.), Andrews Quarry, Northants, TL060982, 11.v.1999; Gobions Wood, Herts., TL250035, 6.v.1999; Kenfig Hill, Glam., SN843842, 4.vi.1997; South Thorganby Ings, S.-E. Yorks., SE693405, 18.vi.1996 and Manor Park Gravel Pits, Staffs., SK110170, 2.vi.1997.

KNILL-JONES, S. A.—A specimen of *Amphimallon solstitialis* (L.) (Scarabaeidae), Freshwater, Isle of Wight., mv light, 4.vii.1999.

LEWIS, K. C.—Some *Carabus* (Carabidae) collected in 1997 from Bosnia-Herzegovina, Slovakia and Moravia. *Carabus* (*Eucarabus*) obsoletus (Sturm), Lubocha, Slovakia, 1 specimen, 1.v–11.vi.1997 and Bukovske vrchy, Slovakia, 3 specimens at 500m, 1.v.–11.vi.1997; *Carabus* (*Eucarabus*) ullrichi (Germ.), Travniv, Moravia, 4 specimens, 6.v.–11.vi.1997; *Carabus* (*Moropocarabus*) scheidleri (Panz.) helleri Gangl., Pouzdfany, Moravia, 2 specimens, 20.vi.–11.vii.1997 and Strani, Moravia, 2 specimens, 20.vi.–11.vii.1997; *Carabus* (*Orinocarabus*) linnei (Panz.), Bukovske vrchy, Slovakia, 6 specimens at 500m, 1.v.–11.vi.1997; *Carabus* (*Pachystus*) hungaricus (F.) viennensis (Kr.), Pouzdfany, Moravia, 3 specimens, 6.viii.–27.viii.1997; *Carabus* (*Platycarabus*) irregularis (F.) montanandoni Buysson, Mala, Fatra, Slovakia, 2 specimens at 1000m, 31.vii.–1.viii.1997.

LOTT, D. A.-(1) Terrestrial beetles collected in 1999 from 36 wetland sites in the New Forest, S. Hants. Pterostichus anthracinus (Panz.) (Carabidae), Little Wooton Ponds, 12.vii.1999; Stenolophus skrimshiranus Steph. (Carabidae), pond at Brown Loaf, 12.vii.1999; Acupalpus exiguus Dejean (Carabidae), Beaulieu River, 20.v.1999; Badister dilatatus Chaud. (Carabidae), Little Wooton Ponds, 12.vii.1999; Demetrias monostigma Samouelle (Carabidae), Avon Water, 24.iv.1999; Stenus longitarsis Thoms. (Staphylinidae), Ocknell Plain, 25.iv.1999 and Warwick Slade, 22.v.1999; S. argus Grav. (Staphylinidae), Beaulieu River, 20.v.1999; S. europaeus Puthz (Staphylinidae), Denny Lodge, 13.vii.1999; S. kiesenwetteri (Rosenh.) (Staphylinidae), from 5 sites; Paederus caligatus Er. (Staphylinidae), from 11 sites; P. fuscipes Curtis (Staphylinidae), from 7 sites; Gabrius keysianus Sharp (Staphylinidae), pond at Brown Loaf, 12.vii.1999; G. velox Sharp (Staphylinidae), from 2 sites; Quedius plancus Er. (Staphylinidae), from 2 sites; Acylophorus glaberrimus (Herbs) (Staphylinidae), from 4 sites; Myllaena kraatzi Sharp (Staphylinidae), from 11 sites; Calodera riparia Er. (Staphylinidae), Bramble Hill, 22.v.1999; Bibloplectus ambiguus Redtenb. (Pselaphidae), Cadnam Bog, 26.iv.1999; Longitarsus nigerrimus (Gyll.) (Chrysomelidae), Withycombe Slade, 22.ix.1999; Chaetocnema subcaerulea Kuts. (Chrysomelidae).

(2) Other beetles collected from the New Forest, S. Hants in 1999. *Epierus comptus* (Er.) (Histeridae), Mark Ash Wood, 17.ix.1999; *Ptenidium brenskei* Flach (Ptiliidae),

Highland Water, 22.v.1999; *P. turgidum* Thoms. (Ptiliidae), Denny Wood, 18.ix.1999; *Meotica exillima* Sharp (Staphylinidae), Highland Water, 22.v.1999; *Acalles ptinoides* (Marsh.) (Curculionidae), Cadnum Bog, 26.iv.1999 and Mark Ash Wood, 17.ix.1999.

(3) Beetles collected in August 1999 from the French Alps. *Nebria jockischi* Sturm (Carabidae), Htes Alpes, La Grave, R Romanche, 1456m, 25.viii.1999; *N. picicornis* (F.) and *Bembidion varicolor* (F.) (Carabidae), Htes Alpes, La Grave, R Romanche, 1450m, 26.viii.1999; *B. complanatum* Heer (Carabidae), Htes Alpes, Villar d'Arene, R Romanche, 1990m, 22.viii.1999; *Omalium xambeui* Fauvel (Staphylinidae), Savoie, Pres du Galibier, marmot burrow 2300m; *Thinobius crinifer* Smetana (Staphylinidae), Htes Alpes, La Grave, Le Maurian Torrent, 1440m, 25.viii.1999; *Philonthus coracion* Peyer. (Staphylinidae), Savoie, Col du Galibier, 2460m, 20.viii.1999 and Isere Besse. Le Rif Tort, 2200m, 24.viii.1999.

MANN, D. J.—(1) Winter breeding *Aphodius* (Scarabaeidae) including a species not previously recognised in Britain. There are eight *Aphodius* species that are active throughout the winter months; of these, 50% have status in the review of scarce and threatened Coleoptera (Hyman, P. S. (Revised Parsons, M. S.) 1992 UK Nature Conservation No. 3: A review of the scarce and threatened Coleoptera of Great Britain part 1: JNCC, Peterborough). However, it is possible that these species are more widespread than the literature suggest and are merely under-recorded due to lack of interest in dung beetle work during the winter months by coleopterists. Species exhibited were: *Aphodius contaminatus* (Herbst), *Aphodius obliteratus* Panzer, *Aphodius consputus* Creutz, *Aphodius prodromus* (Brahm), *Aphodius sphacelatus* (Panzer), *Aphodius conspurcatus* (L.), *Aphodius distinctus* (O. F. Müller), and *Aphodius punctatosulcatus* Sturm. Specimens of this hitherto unknown British species were found in the Collections of Liverpool Museum Hope Entomological Collections, Oxford and the National Museum and Galleries of Wales, Cardiff (a paper on this species in Britain is currently in preparation).

(2) A recent capture of *Psammodius* (*Brindalus*) porcicollis (III.) (Scarabaeidae: Aphodiinae). *P. porcicollis* has been not been recorded in the entomological literature since 1897, although a dubious record exists for 1989. This year a total of six specimens have been taken at Whitsand Bay, E. Corn. (SX35) by Roger Booth and Darren Mann (Mann & Booth in press).

This rare species of scarab is restricted to small areas of banked sand at the base of cliffs, and less than eighty specimens have ever been taken since its addition to the British list in 1865, all from the same locality. This species requires further study to ascertain the threats to its future conservation status.

MENZIES, I. S.—(1) Some notable Coleoptera from Surrey. *Philonthus spinipes* Sharp (Staphylinidae), Bookham Common, Surrey, TQ122562, 5 specimens extracted from horse dung, 27.x.1999; *Clitostethus arcuatus* (Rossi) (Coccinellidae), Bookham Common, Surrey, by beating honeysuckle growing around a shaded birch trunk, 21.ix.1999 and 18.x.1999; *Aromia moschata* (L.) (Cerambycidae), Teddington Lock, Middx, TQ167717, in sun on leaves of osiers on north side of Teddington Lock, 21.viii.1947 (at this time the osiers growing along the margins of gravel pits at Ham were heavily infested with larvae of *A. moschata* and *Cossus cossus* (L.) (Lepidoptera: Cossidae)) and Bolder Mere, Surrey, TQ079584, flying in sun, 11.vii.1999; *Arhopalus tristis* (F.) (Cerambycidae): Ferring-by-Sea, W. Sussex, TQ095016, flying in sun in garden around stack of pine stakes, 4.viii.1947; Surbiton, Surrey, TQ185677, one found resting on wall of Villiers Lodge, 3.ix.1999; *Arhopalus rusticus* (L.) (Cerambycidae), Oxshott Common, Surrey, from pine stumps, 25.vii.1986 (exhibited for comparison with *A. tristis*); *Platystomos albinus* (L.) (Anthribidae), Wisley Common, Surrey, TQ069590, male beaten off birch sapling, 1.viii.1993 and TQ068587, on pile of fungus-infected sweet chestnut logs, 1.v.1999.

(2) Coleoptera collected in Belize in Dec. 1998. Cerambycidae (determined by R. G. Booth): Stenodontes molarius (Bates), Pook's Hill, Belmopan, at light, 20.xii.1998; Steirastoma senex White, Pook's Hill, Belmopan, at light, 17.xii.1998 and Fallen Stones, at light, 19.xii.1998; Oncideres sp., Pook's Hill, at light; Chrysomelidae (determined by M. L. Cox): Leptinotarsa undecimlineata (Stal.), Fallen Stones, on Solanum sp., 17.xii.1998; Zygogramma bigenera Stal., Pook's Hill, on flowering shrub, 19.xii.1998; Lema plumbea Chev., Pook's Hill, on vegetation, 6.xii.1998; Lema ?dilaticollis Jac., Las Cuevas, at light, 8.xii.1998; Colaspis hypochlora Lafei, Pook's Hill, at light, 20.xii.1998; C. compta Lafei, Pook's Hill, at light, 6.xii.1998; Colaspis sp., Rio Brava, at light, 13.xii.1998; Nodonota, 2 sp., Pook's Hill, at light, 6.xii.1998; Diabrotica balteata Le C., Las Cuevas, at light, 8.xii.1998; Diabrotica, 3 sp., Pook's Hill, at light, 19.xii.1998; Homophaeta aequinoctialis (L.), Fallen Stones, on vegetation, 17.xii.1998; Asphaera abbreviata (F.), Las Cuevas, at light, 8.xii.1998; Oedionychus sp., and Exora encaustica (Germ.), Pook's Hill, at light, 6.xii.1998; Ophraella dilatipennis (Jac.), Belmopan, on wall of admin block, 21.xii.1998; Disonycha brunneofasciata Jac., Fallen Stones, on vegetation, 17.xii.1998; Lysathia sp. and ?Megasus sp., Las Cuevas, at light, 8.xii.1998; ?Syphraea sp., ?Pseudogona sp. and Mesomphalia punicae Boh., Pook's Hill, at light, 6.xii.1998; Silphidae (determined by R. G. Booth): Oxelvtrum discicolle (Brullé), Pook's Hill, at light, 6.xii.1998; Lampyridae: 4 unidentified species; Lycidae: 4 unidentified species; Clavicornia (determined by R. G. Booth): Aegithus rufipennis Cher., Fallen Stones, in forest clearing, 17.xii.1998; Cycloneda sanguinea (L.), Pook's Hill, at light, 19.xii.1998; Epilachna discincta Weise (Coccinellidae), Fallen Stones, on vegetation, 17.xii.1998; Rynchophora (determined by M. L. Cox and R. T. Thompson): Rhynchophorus palmarum (L.), Pook's Hill, on fruit bait, 6.xii.1998; Ptychoderes rugicollis Jordan, Pook's Hill, at light, 6.xii.1998; Heilus bioculatus (Boh.), Fallen Stones, in forest clearing, 17.xii.1998; Macromerus numenius Er., Pook's Hill, at light, 19.xii.1998; Ambates solani Champion, Pook's Hill, at light, 6.xii.1998; Tenebrionidae (determined by R. G. Booth): Zophobas tridentatus Kr., Pook's Hill, at light, 19.xii.1998.

OWEN, J. A.—*Cryptocephalus coryli* (L.) (Chrysomelidae), together with photographs illustrating its early stages.

SALISBURY, A .- The Royal Horticultural Society's members advisory service. (1) Garden pests: the garden and Welsh chafers Phyllopertha horticola (L.) and Hoplia philanthus (Fuess.) (Scarabaeidae) cause damage to turf root systems; the May bug and summer chafer Melolontha melolontha (L.) and Amphimallon solstitialis (L.) (Scarabaeidae), larvae cause damage to plant roots; a pollen beetle Meligethes aeneus (F.) (Nitidulidae) found in gardens in large numbers, not a pest as such, but when introduced indoors with cut flowers it can be a nuisance; the raspberry beetle Byturus tomentosus (Deg.) (Byturidae), larvae can seriously reduce the quality of raspberry and other cane fruits; the asparagus beetle Crioceris asparagi (L.) (Chrysomelidae), both adults and larvae feed on young shoots and foliage; the lily beetle Lilioceris lilii (Scop.) (Chrysomelidae), Chobham, Surrey, 1940 (G. F. Wilson), attacks and defoliates lilies and fritillaries; The Colorado beetle Leptinotarsa decemlineata Say (Chrysomelidae), France, 1999 (collected by an RHS member), a rare pest of potatoes; the rosemary beetle Chrysolina americana (L.) (Chrysomelidae), Oatlands Park, Weybridge, Surrey, 1999, a recent colonist in Britain which attacks the foliage of lavender and rosemary; the mint beetle Chrysolina menthastri (Suff.) (Chrysomelidae), occasionally reported causing damage to mint in gardens; the Lythrum beetle Galerucella calmariensis (L.)

(Chrysomelidae), both adults and larvae feed on the foliage of purple loosestrife *Lythrum salicaria*; the water lily beetle *G. nymphaeae* (L.) (Chrysomelidae), causes damage to water lily leaves; the viburnum beetle *Pyrrhalta viburni* (Payk.) (Chrysomelidae), causes defoliation of both native and introduced *Viburnum* species; *Lavatera* flea beetle *Podagrica fuscicornis* (L.) (Chrysomelidae), Langley Vale, Surrey, vii.1999, occasionally reported causing damage to shrubby *Lavatera* in gardens; the vine weevil *Otiorhynchus sulcatus* (F.) (Curculionidae), larvae consume the roots of potted plants and the adults notch leaves; figwort weevils *Cionus scrophulariae* (L.) and *Cleopus pulchellus* (Herbs) (Curculionidae), both adults and larvae cause damage to flowers and shoot tips of *Scrophularia, Buddleja, Phygelius* and *Verbascum* species.

(2) Indoor pests: a powder post beetle *Lyctus brunneus* (Steph.) (Lyctidae), Middlewich, Ches., v.1999, potentially a serious pest of seasoned hardwood timber; the larder beetle *Dermestes lardarius* L. (Dermestidae), often found in bags of organic manure derived from deep litter poultry houses, which usually contains some carcass material; the biscuit beetle *Stegobium paniceum* (L.) (Anobiidae), a common species, found in almost any dried vegetable matter, including dog biscuits and slug pellets; Australian spider beetle *Ptinus tectus* Boield. (Ptinidae), Harlech, Merion., in RHS member's house, a pest of stored food products; the rice weevil *Sitophilus oryzae* (L.) (Curculionidae), Lyne, Surrey, x.1998, found infrequently in rice.

(3) Enquiries about species that are not pests: a common ground beetle *Pterostichus madidus* (F.) (Carabidae) and the devil's coach horse *Ocypus olens* (Müll.) (Staphylinidae), frequently found both in the garden and indoors. The stag beetle *Lucanus cervus* (L.) (Lucanidae), Southcote, Reading, Berks., specimen received dead, vi.1999. Recent publicity by the People's Trust for Endangered Species has increased interest in this dead-wood species; the rose chafer *Cetonia aurata* (L.) (Scarabaeidae), Sunningdale, Berks., a specimen, thought to be a vine weevil, was found in a garden, iv.1999. Larvae often occur in garden compost heaps. A woodworm beetle *Ptinomorphus imperialis* (L.) (Anobiidae), Lyndhurst, S. Hants, viii.1999, found by a RHS member in its pupal case in a dead wisteria branch. The wasp beetle *Clytus arietis* (L.) (Cerambycidae), often found inside dead wisteria branches. A longhorn beetle *Phymatodes testaceus* (L.) (Cerambycidae), often feurges from firewood in the house.

(4) Live adults and larvae of *Chrysolina americana* L. (Chrysomelidae), the rosemary beetle. Adult beetles were brought to a bug identification day at the RHS Garden, Wisley, on 27.vi.1999, from a garden in Oatlands Park, Weybridge, Surrey, as a pest on rosemary *Rosmarinus officinalis*. This is the first record of this beetle as a pest in a private garden seen by RHS advisors.

TELFER, M. G.—(1) Some beetles collected by MGT and H. R. Arnold at Monks Wood, Hunts., 26.v.1999, by sweeping grassy ride-edges at lunchtimes: *Badister unipustulatus* Bonelli (Carabidae), first record for Monks Wood; *Tillus elongatus* (L.) (Cleridae); *Agrilus pannonicus* (Pill. & Mitt.) (Buprestidae); *Malthodes frontalis* (Marsh.) (Cantharidae); *Lissodema quadripustulata* (Marsh.) (Salpingidae), an extraordinarily deformed specimen with a process on the right hand side of its prosternum; *Conopalpus testaceus* (Ol.) (Melandryidae); *Acalles roboris* Curtis (Curculionidae); *Coeliodes ruber* (Marsh.) (Curculionidae).

(2) Beetles collected by MGT and B. C. Eversham on Ouse Washes, 12.iv.1998: *Bradycellus csikii* Laczó (Carabidae), three specimens found together sheltering under a dock leaf after the Easter 1998 floods.

(3) Beetles collected by MGT and B.C. Eversham on Deal sandhills, E. Kent, 12.vi.1999: Amara spreta Dejean, Harpalus serripes (Quens.), Ophonus puncticeps

(Steph.) (Carabidae), a very small male; *Melanotus punctolineatus* (Pelerin) (Elateridae), one of four males flying around horse-radish in the rough of the golf course and *Platynaspis luteorubra* (Goeze) (Coccinellidae).

(4) Beetles collected by MGT and B. C. Eversham on Walland Marsh, E. Kent, 11.vi.1999: Amara strenua Zimm., Stenolophus skrimshiranus Steph., Badister collaris Mots., B. unipustulatus Bonelli and Odacantha melanura (L.) (Carabidae).

(5) Beetles collected by MGT and B.C. Eversham on Shetland, 9–18.vii.1999: *Pelophila borealis* (Payk.) (Carabidae); *Notiophilus aestuans* (Mots.) (Carabidae), the Keen of Hamar NNR, Unst; *Trechus fulvus* Dejean, (Carabidae), Quarff, mainland, two found together under a large rock near high water mark on a gravel beach; *Pterostichus rhaeticus* Heer (Carabidae), first Shetland record; *Calathus melanoce-phalus* (L.) (Carabidae), first Shetland record.

(6) Beetles collected by MGT and B.C. Eversham at Dungeness, E. Kent, 4.v.1998: *Tachys bistriatus* (Duft.) (Carabidae), det. P. M. Hammond, 2000, a single specimen from cracked hard clay beside a gravel pit [exhibited as *T. micros* (Fischer von Waldheim)]; *Bembidion decorum* (Zenk. in Panz.), common on gravel pit margins, the first Kent record, initially found and identified by BCE.

HEMIPTERA

ALEXANDER, K. N. A.—A selection of the more interesting bugs encountered during 1999: *Geotomus punctulatus* (Costa) (Cydnidae), RDB1, and *Emblethis griseus* (Wolff) (Lygaeidae) RDB3, both from Tredra Cliff, Whitesand Bay, W. Cornwall, in loose sand, 5.v.1999; *Pterotmetus staphyliniformis* (Schilling) (Lygaeidae), RDB3, Boscregan Cliff, W. Cornwall, under heather mat on outcrop, 5.v.1999; *Pilophorus perplexus* (Douglas & Scott) (Miridae), Forthampton Oaks, W. Glos., on oak foliage with *Lasius brunneus* ants, 14.viii. 1999, new county record.

BADMIN, J. S.—*Cixius remotus* Edwards (Cixiidae): an exhibit of a survey of this species at Dungeness NNR, Kent.

BOWDREY, J.—*Spathocera dahlmanni* (Schilling) (Coreidae), Notable A, Middlewick Ranges, Colchester, Essex, TM0022, 24.viii.1999, taken in vacuum samples on bare sandy ground with *Rumex acetosella*, a sizeable colony, only one previous Essex record.

GIBBS, D. J.—*Macroplax preyssleri* (Fieber) (Lygaeidae), RDB3, Goblin Combe, Somerset, ST4765, 9.vi.1999, new site for this species, which is confined to Glos., Somerset and Glamorgan. *Rhyparochromus pini* (L.) (Lygaeidae), Notable B, Goblin Combe, Somerset, ST4765, 9.vi.1999 and Dolebury Warren, Somerset, ST4558, 19.viii.1999, local status unknown.

HODGE, P. J.—Drymus pumilio Puton (Lygaeidae), Notable B, Happy Valley, Coulsdon, Surrey, TQ302571, 2.ix.1999, one swept.

HODGE, P. J., SALMON, M. A. & STEWART, A. J. A.—An exhibit of various specimens of an unusual variant of *Issus coleoptratus* (Geoffroy) (Issidae) displaying single broad black longitudinal bands on each elytron; Roydon Wood, New Forest, Hants, SU316012, 1.viii.1998, col. M. A. Salmon; Pound Common, Woolbeding, W. Sussex, SU867246, 7.ix.1997, two specimens beaten from ivy-covered oak, coll P. J. Hodge; a specimen of the typical form, Alice Holt Forest, Hants, SU806405, viii.1997, taken in Malaise trap, Forestry Commission survey, det. A. J. A. Stewart.

KNILL-JONES, S.—Ledra aurita (l.) (Cicadellidae). Freshwater, Isle of Wight, 25.viii.1999, at mv light.

NAU, B.—An exhibit of draft keys to British water bugs, Saldidae, and plant bugs, Miridae; including photographs of some shield bugs which can be confused, and draft distribution maps of shield bugs and allies.

HYMENOPTERA

ARCHER, M.—(a) Some British aculeate bees and wasps taken in 1998 and 1999. Tiphiidae: *Tiphia minuta* Vander Linden, vi.98, Leicester—a new county record for Leics. Pompilidae: *Evagetes dubius* (Vander Linden), 28.viii.98, Roydon Common, Norf. Eumenidae: *Eumenes papillarius* (Christ), 30.vii.99, a vagrant species found at York Cemetery, Yorks. Vespidae: *Dolichovespula saxonica* (F.), 15 & 16.viii.99, Beningbrough Hall, Yorks—new to the county. Sphecidae: *Crossocerus distinguendus* (Morawitz), vii.98, Leicester—new to the county; *C. binotatus* Lepeletier & Brullé, 25.vii.98, Stutton, Yorks; *Cerceris quinquefasciata* (Rossius), 28.viii.98, Roydon Common, Norf.; *Philanthus triangulum* (F.), 6.viii.98, Gentleshaw Common, Staffs. Apidae: *Colletes hederae* Schmidt & Westrich, 7 & 9.ix.98, Guernsey; *Hylaeus signatus* (Panz.), 2.vii.98, York Cemetery, Yorks; *Andrena tibialis* (Kirby), 27.iv.98, Sandall Beat Wood, S. Yorks; *A. bimaculata* (Kirby), 7.viii.98, Highgate Common, Staffs and 28.iii.98, Ampthill, Beds; *Lasioglossum pauxillum* (Schr.), 10.v.98, Shedfield Common, Hants; *Hoplitis spinulosa* (Kirby), 18.viii.98, Burdale, E. Yorks—new to the county; *Nomada pleurosticta* H.-S., 4.vii.98, Brayton Barff, S. Yorks.

(b) Some aculeate bees and wasps from Italy, France and Crete. Scoliidae: *Megascolia flavifrons* (F.), 8.vi.99, Lucca, Tuscany, Italy; *Scolia hirta* (Schr.), 20.viii.79, le Corisie, Loire-Atlantique, France and 18.vi.99, Montecatini Alto, Florence, Tuscany, Italy. Apidae: *Chalicodoma sicula* Rossi, 2.iv.88, Makryalos, Crete and 31.iii.88, near Anatoli, Crete; *Anthidium interruptum* (F.), 19.viii.87, Dirac, Angoulême, Charente, France; *A. septemspinosum* Lepeletier, 2.viii.90, Pissos, Landes, France; *A. florentium* (F.), 22.viii.73, Avignon, Vaucluse, France; *A. oblongatum* (III.), 18.vii.95, Lac du Bouche, Haute-Loire, France; *A. punctatum* Lat., 15 & 21.vii.95, Pont d'Alleyras, Haute-Loire, France; *A. strigatum* (Panz.), 5.viii.90, near Luxey, Landes, France; *A. manicatum* (L.), 26.vii.90, Forêt de Fougères, Ille-et-Vilane, France and 14.viii.93, St Cernin de l'Herm, Dordogne, France; *A. lituratum* (Panz.), 8.viii.93, near Soulaures, Dordogne, France; *A. loti* Perris, 2.viii.90, Pissos, Landes, France; *Sphecodes albilabris* (F.), 16.viii.98, Vorey, Haute-Loire, France and 2.viii.75, Contouville, Manche, France; *S. alternatus* Smith, 13.iv.96, Songia, Crete; *S. marginatus* von Hagens, 15.v.98, Pontempeyrat, Haute-Loire, France.

BALDOCK, D. W. & COLLINS, G. A.—An exhibit based on the recording of aculeate hymenoptera in Surrey (VC 17) for a forthcoming publication in the "Surrey Atlas" series. Despite the amount of historical recording, several species new to Surrey have been found and many species thought to be uncommon have been found to occur quite widely. The species exhibited were arranged in three categories: those that are nationally rare; those that have RDB status but are quite widespread in Surrey; and those that are recently established in the county and spreading. The rare species shown were Pompilidae: *Ceropales variegata* (F.), col. J. P. Brock, 16.vii–9.viii.99, Thursley Common—this rare spider wasp had been unrecorded in Britain since 1955 and 1902 in Surrey. It was found in reasonable numbers by Malaise trapping but not found by direct observation. Eumenidae: *Symmorphus crassicornis* (Panz.), col. D.W.B., 11.vii.99, Bagmoor Common and col. G.A.C., 9.vii.99, Arbrook Common; *S. connexus* (Curt.), col. D.W.B., 15.vii.99, Bagmoor Common and 12.vii.99, Mare Hill Common. Both *Symmorphus* spp. were flying round the foliage of aspen on which the chrysomelid beetle *Chrysomela populi* L. was feeding.

Chrysididae: Chrysis fulgida L., col. D.W.B., 15.vi.99, Mare Hill Common. This RDB1 cuckoo wasp may be a cleptoparasite of Symmorphus crassicornis. Sphecidae: Crossocerus vagabundus (Panz.), col. D.W.B., 13.vii.99, Bagmoor Common. A RDB1 species that was formerly widespread but thought to have gone from Britain in the 1950s. It has recently been rediscovered in Hants and now in Surrey. Apidae: Hylaeus pectoralis Först., col. G.A.C., 1995, Esher Common. Nationally, this is a local bee that nests in the galls of the chloropid fly, Lipara lucens Mg. on common reed and occurs widely in East Anglia and Hants. There are now two sites in Surrey. Andrena proxima (Kirby), col. D.W.B., 9.vi.99, The Sheepleas, near West Horsley. A rare mining bee that seems to have declined recently, at least inland. There are several recent records from central Surrey. Nomada lathburiana (Kirby), col. G.A.C., 8.iv.99, Richmond. A rare bee parasitic on the nests of Andrena cineraria (L.), which itself is very local in Surrey. Extremely large numbers (10,000 +) of the host bee were seen with numerous examples of N. lathburiana. Distribution maps were shown of four "not so rare" species which have RDB status but are fairly widespread in Surrey. These are the bees Andrena florea F., Sphecodes niger Sichel, Nomada fulvicornis F. and Ceratina cyanea (Kirby). "New" species known from Surrey only in the 20th century and which are probably spreading are the sphecid wasps Passaloecus eremita Kohl and Ectemnius borealis (Zett.), and the bee Stelis breviuscula (Nylander) and its host bee Heriades truncorum (L.). Anyone with records of Surrey aculeate hymenoptera should contact David Baldock, Nightingales, Haslemere Road, Milford, Surrey, GU8 5DA.

COLLINS, G. A.—A specimen of *Pamphilius latifrons* (Fall.) (Hym: Pamphiliidae), taken 8.vi.99 at Foyle Riding, Limpsfield, Surrey. This appears to be only the second post-1970 record of a pamphiliid sawfly that has larvae that feed within rolled aspen leaves.

GIBBS, D.—Some solitary bees recorded in 1999 from Somerset. Apidae: Andrena proxima (Kirby), 25.v.99, from an old railway cutting at Radstock Sidings, Som.; A. marginata F., 21.viii.99, on devils-bit scabious, Tucking Mill, Som.; Stelis ornatula (Klug), 25.v.99, Radstock Sidings and 11.vi.99, Dolebury Warren, Som.—taken from warm sheltered spots in dry grassland, probably the first records for Avon; *Eucera longicornis* (L.), 2.vi.99, on red clover flowers, Blake's Pools, Som.; Ceratina cyanea (Kirby), 25.v.99, Radstock Sidings, Som.—there are several good colonies along the old railway line, these are the only Avon records for about 100 years; Nomada conjungens H.-S., 16.v.99, Radstock Sidings and 3.vii.99, Tucking Mill, Som.—both specimens of this RDB2 bee were from old railway cuttings and are the only Avon records; N. hirtipes Perez, 3.v.99, from calcareous grassland at Dolebury Warren and 16.v.99, Goblin Combe, Som.; N. lathburiana (Kirby), 6.iv.99, Troopers Hill, Bristol.

HALSTEAD, A. J.—Some scarce or local sawflies and sphecid wasps taken in 1999. Tenthredinidae: female *Protoemphytus perla* (Klug), 5.viii.99 and female *Caliroa cinxia* (Klug), 23.vii.99, both swept from a wooded river bank at RHS Garden, Wisley, Surrey; female *Periclista albida* (Klug), 25.iv.99, swept from oak, Newlands Corner, Surrey; *Metallus pumilus* (Klug), male 1.v.99, female 10.v.99, bred from larvae in leaf mines on raspberry, Brookwood, Surrey; female *Amauronematus puniceus* (Christ), 16.v.99, on aspen shoot, Chobham Common, Surrey. Sphecidae: male *Astata pinguis* (Dahlbom), 15.vi.99, netted in sand dunes, Sandscale Haws, near Dalton in Furness, Cumbria; male *Crossocerus palmipes* (L.), 11.vii.99, swept from dry heathland, Greyspot Hill, Brentmoor Heath, near West End, Surrey; female *C. styrius* (Kohl), 25.ix.99, swept in a deciduous wood, Moor Copse, near Tidmarsh, Berks.

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HARVEY, M.—Two local solitary bees from VC Berkshire. Apidae: female *Melitta tricincta* (Kirby), 30.vii.99, at flowers of red bartsia, *Odontites vernus* (the bee is believed to be dependent on the pollen of this flower), at Mowbray Fields, a proposed local nature reserve south of Didcot in the modern county of Oxfordshire. This record slightly extends to the north west the range of this bee and seems to be the first record for modern Oxfordshire; there are previous records for VC Berkshire. *Andrena labiata* F., 6.vi.99, from the exhibitor's garden, Upper Basildon, Berks.

HAWKINS, R. D.—Some aculeate hymenoptera and a wood wasp taken in recent years in Surrey. Siricidae: female *Urocerus gigas* (L.), 26.vi.99, killed by a woodworker's boot while investigating a van-load of logs at Farthing Down, Coulsdon. Formicidae: *Ponera coarctata* (Lat.), 28.ix.99, sieved from moss on chalk spoil and *Myrmecina graminicola* (Lat.), 30.ix.99, a winged female from chalk grassland on the lip of a quarry, both at Betchworth Quarry. Eumenidae: *Symmorphus connexus* (Curt.), 4.vii.98 at root plate of fallen pine, Bagmoor Common. Apidae: male *Lasioglossum xanthopus* (Kirby), 11.x.99 on *Knautia arvensis* flower, Happy Valley, Coulsdon; female *Andrena ferox* Smith, F., 11.v.98 flying over short turf at Reigate Heath; female *A. marginata* F., 19.viii.99, on *Scabiosa columbaria* flower, Farthing Down, Coulsdon; female *A. cineraria* (L.), 3.v.97, at nest holes in sandy ground, Ham Common; *Nomada lathburiana* (Kirby), a nest parasite found in company with the preceding species.

HODGE, P. J.—Two solitary bees and a spider wasp from Surrey. Apidae: female Andrena hattorfiana (F.), 9.vii.99, swept from flowers of field scabious, Knautia arvensis, Happy Valley, Coulsdon; female A. marginata F., 4.viii.99, flying over scabious flowers, Farthing Down, Coulsdon. Pompilidae: female Priocnemis agilis (Shuck.), 9.vii.99, on hogweed umbel, Happy Valley, Coulsdon.

MCNAMARA, D. S. K.—Several specimens of a large and as yet unidentified wasp of the Scoliidae family collected in Banos, Ecuador in 1996.

PARFITT, R. W.—A male wasp, *Polistes* sp. (Vespidae) found in a greengrocer's shop at Saltash, Cornwall on 19.xi.99.

UFFEN, R. W. J.-Some new and locally rare solitary bees and wasps recorded in 1999 in Hertfordshire (VC 20), including a sphecid wasp new to Britain. Apidae: Colletes succinctus (L.), 21.viii.99 at Nomansland Common, Wheathampstead and Gustard Wood Common, 29.viii.99 at Colney Heath Common. Andrena fuscipes (Kirby) has been recorded from three permanent Calluna sites for five-ten years while C. succinctus appeared to be absent. In 1999 it appeared at two of these fuscipes sites and both species were found at another, remote site at Colney Heath where heather has regenerated after ploughing in the 1940s. Female Andrena coitana (Kirby), 26.vi.99, swept from bramble flowers, Northchurch Common, N.W. Herts. Male Lasioglossum quadrinotatum (Kirby), 14.viii.99, swept from a chalk downland path, Therfield Heath, Royston. Two male Megachile leachella Curt., 19.vii.99, at 7pm and probably looking for roosting sites, exploring shattered root ends of an oak stump, Colney Heath. This species is generally thought of as a classic coastal dune and Breck species, with only occasional inland records. Sphecidae: New to Britain, a female Crossocerus congener Dahlbom, 1.vi.99, exploring woodworm holes in ash trees, Croxley Common Moor, Rickmansworth. It is distinguished from the similar C. podagricus (Vander Linden) by the male mid tibia not being foreshortened, and in both sexes by the lack of crenate boundaries on the dorsum of the propodeum. Crossocerus walkeri (Shuck.), 25.vi.99, several males and a female on bramble leaves by the River Mimram at Tewinbury SSSI, but no mayfly prey seen; Psen equestris (F.), 23.vii.99, Tyttenhanger sandpit, Colney Heath; Nysson trimaculatus (Rossius), 23.vii.99, both sexes numerous among a strong colony of Crossocerus quadrimaculatus (F.) at Tyttenhanger sandpit. Eumenidae: female Microdynerus exilis (H.-S.), 18.vii.99, Tyttenhanger sandpit, Colney Heath. Vespidae: *Dolichovespula saxonica* (F.), 2.viii.99, not new to Hertfordshire but infrequently seen, Frithsden Beeches, Ashridge.

DERMAPTERA

GIBBS, D.—The earwig, *Forficula lesnei* Finot, 21.viii.99, Tucking Mill, Som. Probably not infrequent but there are few Avon records.

ORTHOPTERA

GIBBS, D.—The grasshopper, *Omocestus rufipes* (Zett.), 19.viii.99, Dolebury Warren, Som. This is one of two colonies now confirmed in the Bristol area.

NEUROPTERA

KEMP, R. J.—*Nemoptera sinuata* Ol., 20.vi.98, flying in daylight in open scrub habitat at Osminaye on the Nimara Peninsular, S.W. Turkey. Its slow, floppy flight facilitated its capture. This member of the Nemopteridae is closely related to the insect depicted in the BENHS logo.

ILLUSTRATIONS

HARLEY, B. H.—Illustrations of all species described in Volume 4 of *The Moths* and Butterflies of Great Britain and Ireland (Oeciphoridae to Scythrididae, including Gelechiidae) on 12 colour plates by Richard Lewington, showing finished size. This will be published as early as possible in 2000, the text and illustrations being very nearly completed.

LEWIS, K. C.-Two watercolour paintings by Colin Ashford, a member of the Marine and Aviation Watercolour Society, showing two old entomological establishments. Painting number (1) showed the Butterfly Farm that was started by the late Mr. L. W. Newman in Salisbury Road, Old Bexley, Kent. After his death his son, the late Mr. L. H. Newman, continued the farm. The two houses shown in the painting formed the farm and were knocked into one to form one building part farm and part showroom. There was also a glass extension that ran the length of the building at the back; this was used for breeding butterflies and moths, as was the glazed building on the right. Sadly all the buildings were demolished during the 1970s. It's interesting to note as the millennium year approaches that Mr. L. H. Newman bred thousands of butterflies for release at the South Bank Festival of Britain in London. Painting number (2) showed Watkins and Doncaster the Naturalists after its move from the Strand in London. This building was situated at 110 Park View Road, Welling, Kent. The company was then owned by the late Mr. R. L. E. Ford and passed to his son Mr. R. J. Ford and is now located at Hawkhurst. The showroom/house was demolished during the 1970s and a large block of flats now occupies the space. Mr. Lewis carried out a lot of work for the Butterfly Farm and the Naturalists mostly setting butterflies and exotic beetles. Many members at the exhibition would remember visiting both the establishments in their younger days. Both watercolours were painted from 35mm slides taken by Mr. T. J. Lavender.

REVELS, R.—A selection of plants, butterflies and ladybirds from his extensive library of photographs.

ERRATA FROM 1998 EXHIBITION REPORT

12:3 p. 182. P.J. Hodge. The chrysid wasps *Chrysogona gracillima* (Foerster) and *Cleptes semiauratus* (L.) were taken at Turkey Brook, Forty Hall, Middlesex and not Surrey as stated.

12:3 p. 186. M.E.A. Shardlow. The starlet sea anemone (Nematostella vectensis) is a saline lagoon species. The record should be amended to read "in lagoons on Havergate Island..."

BENHS INDOOR MEETINGS

13 July 1999

Mr E. PHILP showed a large specimen of a male stag beetle, *Lucanus cervus* (L.) and a distribution map for this species in Kent.

Mr A. J. HALSTEAD showed a live specimen of the bug, Reduvius personatus (L.) (Hemiptera: Reduviidae) that was found on a garden fence at his house at Knaphill, Surrey on 8.vii.99. This species is usually found in houses or outbuildings where the adults and nymphs prey on household insects. Although said to be widespread in southern England this 14 mm bug is infrequently seen and presumably requires more specific conditions than simply living in buildings. Mr Halstead also showed some examples of an unidentified exotic ant the size of a worker wood ant. These were taken at the RHS Hampton Court Palace Flower Show on 8.vii.99. One of the exhibitors at the Show, The Palm Centre of Ham, Surrey, was showing some caranday palms, Trithrinax campestris. This palm grows in a restricted area of Argentina and is being destroyed as its habitat is converted into agricultural use. Some of these palms, which are frost tolerant, are being imported into the UK for garden use. The trunks are covered with interlocking spines and the remains of old leaf stalks, providing excellent hiding places for invertebrate animals. In addition to the large black ant, a single smaller elongate red ant was seen, plus numerous spider webs of a funnel type, all of which are likely to be exotic species imported with the palm.

It was announced that the Devon Moth Group has been approved as a corporate member by Council.

Dr J. MUGGLETON made a request for anyone who regularly runs a light trap for moths to contact him. The large yellow underwing moth, *Noctua pronuba* L. commonly comes to light in considerable numbers. It occurs in several colour forms and, unusually amongst moths, the ratio of colour forms seem to be constant throughout Britain. There is, however, some evidence to suggest this ratio may be changing and he would like to hear from people who are willing to record the colour forms in their area.

Mr A. J. HALSTEAD reported another established colony of the rosemary leaf beetle, *Chrysolina americana* L. Three specimens of this south European species were found in 1994 at RHS Garden, Wisley, Surrey in circumstances that suggested that it might have bred there; a single specimen was found at Dinton Pastures Country Park on 21.ii.98 and in late summer 1998 adults and larvae were found on lavender at the Shell Building, near Waterloo, London. The latest colony is on rosemary in a private garden at Oatlands Park, Weybridge, Surrey where many adults were found by the owners on 27.vi.99.



Jones, A M et al. 2000. "1999 Annual Exhibition. Imperial College, London SW7 - 27 November 1999." *British journal of entomology and natural history* 13, 146–187.

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