November 1987

EMPID AND DOLICHOPODID STUDY GROUP NEWSHEET NO 4

Editorial

Again it is gratifying to note the continuing interest being shown in these groups by seasoned dipterist and learner alike, as evidenced by the high standard of contributions and fresh requests for inclusion on the mailing list. Roy Crossley and I are greatly encouraged by the steady flow of material since we first broached the idea of an embryo recording scheme nearly two years ago. Like most embryos this has turned into a bustling infant making great and growing demands on its wilting parents, whose enthusiasm has thus far proved equal to the task; but we shall see .....

An immediate and useful outcome has been the publication of much descriptive and taxonomic information which would otherwise have taken a long time to reach many field workers. Valuable also are the notes on local finds and patterns of distribution, which over time add considerably to our knowledge of seasonal and geographical variations. No offering is so insignificant as to be valueless, and your Editors urge you to put forward notes, however brief, on what, when and where. The received wisdom is patchy and often unreliable and there is always a need for more.

Roy Crossley contributes a note on the status of the proposed field record card covering the Dolis and Empids, which the BRC have prepared. The hope is that contributors will begin to use the cards to accumulate data and provide feedback on layout, etc., before a formal Recording Scheme is launched. As Roy points out, the new cards may also stimulate further interest in the group. It is salutary to be reminded how new ideas on classification emerge, are tested and discussed, and can fairly rapidly become the new status quo until challenged in their turn by fresh ideas. Thus the site card will make extensive use of the ideas of Chvala on the familial and sub-familial status of several groups among the Empids, disturbing the novice just as he had begun to find his way around.

I have been unable to attend any of the field meetings this year, but I have been collecting at two new sites, the NCC National Nature Reserve at Old Winchester Hill and a new Reserve managed by the Hampshire Trust at Bartley Heath. Both seem potentially rich sites, although like others I have found this to be a poor year in general. However recent forays at OWH have revealed Leptopeza flavipes and Platypalpus luteus, while Bartley Heath has produced Oedalia flavipes, Aclonempis longipes, Phyllodromia melanocephala, Oropezella sphenoptera, Xanthempis trigramma and X. scutellata. Several Hilara spp. were flying earlier in the season, but I have found a distinct reduction in numbers compared with a year ago.

Please send any contributions for issue 5 of the Newsheet to me or to Roy Crossley, and we will hope to compile the next number in time for distribution with the next Diptera Bulletin in early Spring next year.

Anthony Bainbridge, 166 Farnborough Road, Farnborough, Hants, GU14 7JJ.

BRC SITE-VISIT CARDS

Site-visit cards for Dolis and Empids have been prepared by the Biological Records Centre, Monks Wood, and these were distributed at the Annual Dipterists' Meeting on 3 October. The cards have been made available by BRC in advance of the launch of formal recording schemes in order to allow future contributors to make a start on field recording and, hopefully, to stimulate further the already growing interest in these families.

There are two cards; one is for Dolichopodidae which has presented no problems with nomenclature, the list following Kloet and Hincks, (A Check List of British Insects, 2nd edition, Pt 5, 1976), except that sub-genera have been dispensed with. For example, Ectomus alpinus is incorporated within the list of Campsicnemus species.

The other card is for Empididae and the opportunity has been taken to follow the most recently published classification by Chvala, (The Empidoidea (Diptera) of Fennoscandia and Denmark II). In this the family Empididae is more restricted than in the Check-List, and other families are introduced, (Hybotidae, Atelestidae and Microphoridae). However, the genera follow the familiar order of the Check-List and, as with the Dolichopodidae card, all sub-genera have been incorporated within full genera. This results in there being three large genera only in the newly defined sub-family Empidinae, (Rhamphomyia, Empis and Hilara), and this may seem rather daunting at first, but it is hoped that recorders will soon become familiar with the list which should look very tidy and be simple to use.

I am obliged to many colleagues who have readily given me guidance and advice on the preparation of the cards, and especially to Brian Eversham of the Biological Records Centre who has been responsible for over-seeing their production.

Roy Crossley, 46 St David's Road, Otley, West Yorkshire, LS21 2AW.

BANGOR FIELD MEETING, JULY 1987

Dolis and empids were not as prolific, either in variety of species or in abundance of individuals, as on the South Wales field meeting in 1986. This comparative scarcity was probably nothing more than a reflection of conditions over much of the country in what has been a generally poor season for these flies. Nevertheless, a number of rarities were found and everyone seemed to have collected some new species.

Coastal localities were attractive, as always, and Peter Dyte was able to continue his work on populations of Hydrophorus oceanus, measuring sex ratios by water trapping and sweeping; and also studying courtship behaviour of Dolichopus diadema and D. nubilus. A freshwater seepage on to clean sand above the high tide level at Traeth Dulas, Anglesey, yielded Hercostomus (sg Muscidideicus) praetextatus to Ivan Perry who also took Crossopalpus curvipes on the nearby salt marsh, where Platypalpus albocapillatus also occurred. Crossopalpus curvipes was also taken at Newborough Warren and amongst short turf at Aberffraw.

Ivan Perry found Clinocera nigra at cliff seepages at Great Ormes Head and Campsicnemus pusillus in base rich flushes at Cors Erddreiniog, Anglesey. At this locality Stuart Ball took Dolichopus longitarsis, and additional species of this genus reported by Stuart include D. phaeopus at Malltraeth Marsh and D. notatus from slacks and dune meadows at Aberffraw, both localities being on Anglesey. D. notatus was found in large numbers by several members of the party on dune slacks at Newborough Warren where Hydrophorus balticus also occurred, and the tiny doli Schoenophilus versutus. Near to the shore at Newborough, beyond the sand hills, Peter Dyte took Syntormon filiger which was the only specimen recorded during the week.

The floating bog at Llyn Hafodol, Anglesey, proved to be productive, the outstanding species being Dolichopus phaeopus (Roy Crossley), and Hercostomus chalybeus

(Stuart Ball). However, the most species-rich site reported by Roy Crossley was the woodland at Afon Rhaedr Fawr near Llanfairfechan. Here mainly in shady, wet places along the stream side 31 species of dolis and empids were recorded, most of which are common and widespread, but the list includes Hilara media, H. morata and H. lurida. Hilara media was also taken in the nearby wooded valley at Nant y pandy (which in truth we only visited in order to get this delightful name onto our data labels!). Ivan Perry found H. media by shaded stream and river at Gorswen and Afon Roe in the Conwy Valley, and he also took Platypalpus albifacies in limestone woodland on Great Ormes Head.

Roy Crossley, 46 St David's Road, Otley, West Yorkshire, LS21 2AW.

NEW EMPIDS AT HAWTHORN BLOSSOM IN WINDSOR FOREST

The need to look closely at small empids visiting tree blossom in early summer was made apparent by my experience this year in Windsor Forest.

I mentioned in my notes on empids additional to Collin's monograph that I had taken a female Euthyneura some years ago at Windsor, which I had not certainly identified. It had some of the characters described for E. albipennis in Chvala's Scandinavian key, but I was then unsure whether it corresponded to the new species being added to the British list by Jonathan Cole. When Jon's paper on E. inermis appeared it seemed more likely that my Windsor specimen was indeed albipennis.

Accordingly I visited the Forest on 30th May when I spent the day mainly sweeping around rotting stumps and logs in the shadier areas near Badger's Brook as decaying wood is the larval habitat of the genus Euthyneura. While it was a successful day with 53 species of fungus gnat and 3 species of Platypezidae to interest me, it was less productive in numbers at least for empids associated with dead wood. Oedalea apicalis as well as O. stigmatella and O. holmgreni were found and one female of Euthyneura gyllenhali, easily recognised by the brown smudge on the wing, was found on low beech foliage overhanging a fallen trunk. A female Euthyneura swept over low vegetation around logs, however, had clear greyish wings - not the whitish wings of the species I was seeking and despite its partly dark legs could only be E. inermis of the species found in Britain.

While examining my catch I was nevertheless greatly surprised to find a small dark female empid resembling Euthyneura but with a short proboscis and some differences in the wing venation. It also lacked an antennal style (arista), the third antennal segment being smoothly rounded apically. The last is a character of Euthyneura myricae, still known only from Haliday's female type which is now lost (I failed to trace it during a recent visit to the National Museum, Dublin). E. myricae is, however, an otherwise typical Euthyneura species according to the description and figure of the wing given by Collin, who was evidently able to examine it before it disappeared.

On turning to Chvala's key I found that my specimen ran readily to the genus Anthalia, recorded as often being abundant at tree blossom such as rowan in Scandinavia. Other Anthalia species occur at a variety of flowers, including herbaceous plants, in North America.

This interesting discovery led me to return to Windsor Forest several times over the next two weeks, to look particularly at tree blossom. Unfortunately the hawthorn was already going over at this time and the rowan had finished flowering at Windsor some time earlier; bird cherry was, however, just coming out and provided an alternative for flies to visit. Sweeping of available blossom showed that this was the best lure for the genus Euthyneura as well as for Anthalia.

An evening visit on 31st May produced my only male so far of Anthalia together with two females, as well as females of E. inermis, E. myrtilli and one female of the white winged species; these were swept from hawthorn along with females of Dryodromia testacea. But I had still not taken the confirmatory male of the white winged species, so I returned again on 7th June, a dull drizzling evening after the BENHS Field Meeting in the New Forest. Although the hawthorn was now going over the remaining flowers were far more productive than the bird cherry which was now fully out. It was most pleasing to find on this occasion not only two more females but one male of the desired species. The male has even more strongly milky wings than the female and the abdomen distinctly silver dusted from some aspects, not apparent in the female. It can thus be affirmed that Euthyneura albipennis is a British species.

Also on the last occasion I found females of inermis, both sexes of myrtilli but the females predominating, a female of O. apicalis at hawthorn blossom, and two females of Anthalia, one of them at bird cherry with many myrtilli. On the following weekend an afternoon visit on 13th June produced more females of Anthalia and E. albipennis on the few remaining hawthorn flowers, Euthyneura were now abundant at bird cherry but almost all myrtilli, the sexes on this occasion in about equal numbers suggesting that males may finish feeding earlier in the day; one female of gyllenhali was at bird cherry and Dryodromia was again found at hawthorn.

A final visit on the evening of 14th June produced both sexes of inermis and myrtilli at bird cherry while the last remaining hawthorn produced two males of albipennis and a female of the same.

The significance of the last visit was that it followed a trip to Leckford, Hants., to particularly look for E. halidayi, of which females have been found twice in the carr woodland but despite much sweeping about decaying wood and the available tree blossoms, this locality produced not a single example of the genus.

Incidentally the visit to Eyeworth Wood in the New Forest on 6th June produced several of both sexes of inermis and myrtilli around decaying logs, but only myrtilli cound be found at hawthorn there.

To readily find these small empids, it is necessary to sweep the tree blossom, but this can produce large numbers under favourable conditions, as well as many other small empids. It will be interesting to see if this technique used in other localities or in other parts of the country will show that the species found at Windsor are more widely distributed than present information shows.

I will in the mean time be interested to hear of any records of the genus Euthyneura, with habitat data, and to examine any specimens of the genus. As reported above, four species of Euthyneura occur at Windsor, and we now have all the known European species in the British Isles. Indeed the other two species, halidayi and myricae are apparently known only from these islands, and are the only species so far found in Ireland. I have found halidayi in a good number of localities, mainly carr woodlands, but also at Knole Park, Kent where the habitat is not dissimilar to Windsor so it might turn up there yet. All my halidayi are, however, females so if anyone has males I would be interested to see them.

A note on Anthalia

The single male found differs from the females in having a short blunt antennal style as figured for the genus by Chvala, who did not indicate such a sexual difference. Both sexes differ from his description of schoenherri in having vein M2 less abbreviated and

the legs largely yellow (femur 3 and tibiae 1 and 3 dark on apical half or more). Further examination is necessary to confirm the identity of the species.

Peter Chandler, Weston Research Laboratories Ltd., Vanwall Road, Maidenhead, Berks, SL6 4UF.

LOOKING FOR MEDETERA

When looking for Medetera pay particular attention to dead trees or branches, especially those where the bark is missing. As Medetera are very alert, approach these situations with caution and make a capture using a glass tube. Some people prefer to use a pooter but I have not had much success with this method and have found that specimens often go very greasy if left in ethyl acetate fumes for too long.

Many species are restricted to certain types of trees, such as Medetera nitida which is only to be found on Elms where the larvae develop in the galleries of the beetle Scolylus scolytus. Pines are host to a number of species, M. infumata was quite numerous near Loch Garten in June 1982 and 1984. Don't neglect the piles of felled conifers to be seen in southern plantations, by examining the cut ends of these I have found M. obscura and M. impigra in Carmarthen and M. ambigua and M. dendrobaena in the Norfolk Breckland. Poplars are another favourite tree for Medetera, M. oscillans has almost always been found on Lombardy Poplars, along with M. inspisata which I have also reared from Black and Grey Poplar. During 1986 I reared a species of Medetera new to Britain from Grey Poplar and found M. jugalis on the same tree.

Don't neglect old wooden fence posts or even concrete posts and brick walls, M. flavipes, M. diadema and M. muralis are most often found in this sort of situation. Finally a few species occur on coastal dunes far removed from any trees, M. micacea is one such species which I have also found inland on Limestone grassland.

Finding the various species of Medetera often requires patient observation, but knowing what their habitat preferences are considerably enhances your chances of finding them.

Ivan Perry, 27 Mill Road, Lode, Cambridge, CB5 9EN.

A FOURTH BRITISH LOCALITY FOR CHERSODROMIA CURSITANS (ZETT.)

Chersodromia cursitans was not included in Collin (1961) although both C. alata Walker (C. difficilis Lund. of Collin) and C. arenaria Haliday are compared to it in his species descriptions. C. cursitans was added to the British list by Smith (1964) from two specimens collected by Col. Yerbury at Studland, Dorset in 1904. Further records, collected by S.J. Falk for the 'National Review of Diptera', are from Loch Leven (J.H. Cole and A.E. Stubbs - 3. vii. 1977), and Caerlaverock (J.M. Nelson between 1970 and 1972).

During the recent (very wet) Coleopterist's weekend in Cumbria, I found C. cursitans in abundance just downstream of Whitrigg Bridge on the River Wampoole (NY2257, VC70, 27. vi. 1987). The river is tidal at this point, although well above the saltmarshes, and probably not very saline. The river bank forms a sandy cliff about 1m in height with a flat shelf of sparsely vegetated, firm silty-sand at its base. The flies were running rapidly between clumps of grass on this flat area and were caught by direct pooting (a sport that would make a good betting game). The situation sounds similar to that at Loch Leven where they were found running about on a sandy loch shore.

Stuart Ball, Nature Conservancy Council, Northminster House, Peterborough PE1 1UA.

Collin, J.E. (1961). Empididae. British Flies VI. 782p. Cambridge University Press.

Smith, K.G.V. (1964). Chersodromia cursitans Zetterstedt (Dipt., Empididae) reinstated as a British species. Ent. mon. Mag. 99: 127-128.

CUMBRIAN DOLIS

Having left Cumbria last spring, it seemed appropriate to collate the results of four year's collecting. My home in Kendal was conveniently situated between limestone pavement country and the acid uplands and this accounts for the stress I've placed on these two rock types in this article.

From 120 site visits to a wide range of habitats, mostly in VC 69, I recorded 79 species whose identity I am sure about and another 11 species with uncertain names. The most frequently found species were Sympycnus desoutteri (at 50% of sites), Campsicnemus curvipes (40%), C. loripes (33%), and Dolichopus plumipes (33%), all of which occurred in most habitats visited, and Hercostomus aerosus (25%) which was present at any wet but sheltered site. Other common species of unexposed sites included Hypophyllus obscurellus, Chrysotus gramineus and D. ungulatus. In shady, damp places, D. trivialis was common, whereas Sciapus platypterus was particularly abundant in drier woods. Some species which I ought to have encountered but which eluded me were D. claviger, D. festivus, Poecilobothrus nobilitatus, Rhaphium commune, Chrysotus neglectus and Sciapus wiedemanni, none of which live in habitats that I didn't investigate and therefore these species may be genuinely scarce or absent from SE Cumbria. Most of the remaining species that NCC does not rate as nationally notable and which I didn't find are, apparently, scarce or absent in northern England (Handbook; Peter Skidmore, communication with NCC).

Some species appeared to have fairly clearly defined habitats, although, to give you some idea how flimsy the evidence is for my generalisations, I give the number of sites where a species was found in parentheses. The moorland landscape of acid, peaty seepages with Juncus that many people associate with the Lake District was characterised, in its more extreme and exposed form, by Sympyncnus cirripes (10), D. atratus (14) and D. vitripennis (7), which were present up to 500m but also in more sheltered Carex marshes and by lowland rivers. Others frequently found in acid peaty seepages, either in or out of woods, or in acid marshes by tarns, were D. atratus (9), D. lepidus (5) and Syntormon tarsatus (5), and where seepages were in woods, D. discifer (12) and Hercostomus cupreus (7) were present. On open acid peat, Rhaphium longicorne (7) was sometimes common. These species were scarcely every found on limestone sites which were characterised instead by Hercostomus nigripennis (9) in abundance, either in woods or grassland, and Sympycnus spiculatus (5), mostly in dry woods. I was surprised at not being able to recognise a suite of species that are confined to either running or still water margins, apart from Rhaphium crassipes (6) and Liancalus virens by shaded rivers or streams. In fact, most species of wet places tended to be found anywhere wet, but of course this does not help to define the preferred habitat of wetland dolis.

Among the goodies were two RDB species and 21 nationally notable species, not including a number of dubiously named specimens. Hercostomus fulvicaudis (RDB 2) turned up on a CTNC reserve on the Kent estuary beside a limestone spring a few metres from salt marsh. Peter Chandler recorded it from the Eden estuary in northern Cumbria (Handbook). At the other altitudinal extreme, Campsicnemus compeditus

(RDB 3) was found at peat pools on bleak, boggy moorland at 500m. Campsicnemus marginatus occurred on the banks of two large stony rivers (Eden and Eamont) with shingle beaches and tall bankside vegetation. The species has a longer flight time than indicated in the handbook, and I have records from 5 April on the Monnow (Hereford) to 17 October on the Eden. Hercostomus chetifer (3) was present at woodland streams flowing over or derived from limestone. All five sites where Sympycnus spiculatus was recorded were also on limestone and only one of these could be described as wet. The dry sites were woods or scrub on pavement. Syntormon pumilus (5) was found at a variety of wet places from shaded riverside seepages to bleak Carex marsh at 280m. Three lowland limestone sites where S. spicatus was present were a marshy field, seepages over a rocky river bank and a dry deciduous wood. The opposite to this species in habitat was S. tarsatus (5) with all records from upland sites with seepages or streams, usually shaded, between 200-300m. The records for Bathycranium bicolorellum (3) represent a considerable extension of the range given in the Handbook. The sites were mixed wet woodland, Carex marsh with sallow carr and long grass by a large river without trees. Another very northern record was Teuchophorus simplex which was sitting on wet stones in the R. Kent.

The remaining notable species were scarce or did not lend themselves to generalisations; Argyra elongata (1), D. longitarsis (2), D. nitidus (1), D. planitarsis (1), D. rupestris (3), Hypophyllus discipes (1), Rhaphium albomaculatum (1), R. fasciatum (1) Syntormon filiger (1), S. monilis (1), S. sulcipes (2), Teuchophorus calcaratus (1), and T. spinigerellus (1).

Martin Drake, Nature Conservancy Council, Northminster House, Peterborough PE1 1UA.