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TWO LOCALITIES FOR *STICTOTARSUS MULTILINEATUS* (FALKENSTRÖM) IN ENGLAND, AND ITS OCCURRENCE WITH OTHER NOTEWORTHY SPECIES

by Andrew Foster

On 28 September 1984 three specimens of *Stictotarsus multilineatus* (Falkenström) were collected from Birkdale Tarn, (grid reference NY 8501) in the north-west Yorkshire (vice-county 65). This is the species known until recently either as *Potamonectes* or as *Nebrioporus griseostriatus* (DeGeer). Nilsson & Holmen (in press) have endorsed the separation of *multilineatus* from the true *griseostriatus*, which is largely confined to coastal rock pools in Norway, Sweden and Finland. During subsequent visits on 19 September 1992 and 25 May 1993 I found *S. multilineatus* to be common at this locality. More recently, on 13 July 1995, whilst conducting survey work on a property acquired by the National Trust, a single example was taken from Fountains Fell Tarn, (SD 868712), mid-west Yorkshire (v.-c. 64). Both water bodies are acidic upland tarns situated on the millstone grit cap overlying the Carboniferous limestone of the northern Pennine hills.

These represent the only recorded sites for *S. multilineatus* in Yorkshire and, almost certainly, for England. The early English records of *S. multilineatus* from Carlisle and London reported in Stephens (1839) were doubted by Balfour-Browne (1940) who believed that *Nebrioporus assimilis* (Paykull) was more probably the species involved, and G.N. Foster (*in litt.* 1984) suggested that the Carlisle record might even refer to *Oreodytes davisi* (Curtis). Fowler (1887) records that *S. multilineatus* is 'said to have occurred in northern England', though no other details are provided and this may refer to the earlier Carlisle record given in Stephens. Although widely distributed in Scotland, where in the far north it occurs at low altitudes, *S. multilineatus* is very local upland species elsewhere in the British Isles - apart from these first English records there are only a few recent records for upland lakes in both Wales and Ireland.

Birkdale Tarn at an altitude of 480 m is a large natural lake with stony, sandy and peaty substrata, though Fryer (1993) reports that it has been artificially enlarged through damming. The *S. griseostriatus* were associated with the stony areas of the tarn, with most individuals netted from a depth of 0.5m. or so, i.e. not along the very shallow margins. Also of note is the occurrence of *Hygrotus (Coelambus) novemlineatus* (Stephens). One example was recorded from the peaty shallows of the tarn on 28 September 1984 and it was not uncommon on 19 September 1992, though none was found during my visit on 25 May 1993. Birkdale appears to be only the third locality for this species in Yorkshire. The two previous records are: Easton Nab, August 1911, W.J. Fordham and G.B. Walsh, det. W.E. Sharp; and at Middleton in Teesdale, 1934 by G.B. Walsh. Other aquatic Coleoptera recorded from Birkdale include the boreal *Agabus arcticus* (Paykull), abundant in the tarn on each of my visits, and *A. guttatus* (Paykull), reported from the tarn by Brown (1937), who also recorded *Ochthebius exsculptus* Germar, *Limnius volckmari* (Panzer) and *Elmis aenea* (Müller) from a nearby stream during a field meeting held in 1937.

Fountains Fell Tarn, located some 30 km to the south of Birkdale and at the higher altitude of 640 m, has stony and sandy substrata. Other species recorded here with the single *S. multilineatus* on the 13 July 1995 were singletons of *N. assimilis*, *N. elegans* agg. (♀) and *Oreodytes sanmarkii* (Sahlberg) together with an abundance of *A. arcticus*. Despite working the Tarn for nearly an hour I was unable to obtain more examples of hydroporines, although only the shallows up to a depth of 0.3 m. or so were sampled. Some nearby boggy pools, within somewhat degraded blanket bog, yielded the locally distributed *Hydroporus morio* Aubé and *Agabus congener* (Thunberg) which are often recorded from upland situations.

Birks Tarn (SD 921759), at an altitude of 600 m, is another acidic, stony tarn in the Yorkshire Pennines that looks suitable for *S. multilineatus*, although I failed to find it when sampling the tarn on 22 July 1992. However, in common with Birkdale and Fountains Fell Tarns, the boreal *A. arcticus* was present in the tarn itself and, in addition, teneral adults were also common in their pupal chambers under stones around the shoreline. The only other water beetle noted here was *O. sanmarkii*.

My thanks to Garth Foster for providing details of previous records for *H. novemlineatus* and for gaining access to the relevant literature.

BALFOUR-BROWNE, F. 1940. *British Water Beetles* **1** London: Ray Society.

BROWN, J.M. 1937. Yorkshire Naturalist's Union at Keld, May 15th to 17th, 1937. *Naturalist* **62** 161-162.

FOWLER, W.W. 1887. *Coleoptera of the British Islands.* **1** London: Reeve.

FRYER, G. 1993. The freshwater Crustacea of Yorkshire. A faunistic and ecological survey. *Yorkshire Naturalist's Union & Leeds Philosophical and Literary Society.*

NILSSON, A.N. & HOLMEN, M. *The aquatic Adephaga (Coleoptera) of Fennoscandia and Denmark. II. Dytiscidae*. Leiden, E.J. Brill. (Fauna Entomologica Scandinavica, in press)

STEPHENS, J.F. 1839. *A manual of the British Coleoptera, or beetles.* London: Longman, Orme, Brown, Green, & Longmans.

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ADDRESSES OF AUTHORS The addresses of authors of articles, and of the contacts for reviewed works, are given at the end of this issue of *Latissimus*, together with a selection of e-mail numbers. The address for other correspondence is:- Dr G N Foster, 3 Eglinton Terrace, Ayr KA7 1JJ, Scotland, UK

BIBLIOGRAPHY OF SPANISH AUTHORS

⌘This book is useful but could have been so much more useful. It lists 9,891 references of 1,745 Spanish entomologists who were active between 1758 and 1990. It is thus not a bibliography of Spanish entomology, because there would be many papers produced in the same period by non-spaniards. Many of the references concern things other than insects in Spain. Amongst the amendments is the need to delete papers by J.A. Nuñez, who is not Spanish. One is left wondering whether every birth certificate was inspected.

MARTIN ALBALEDEJO, Carolina, 1994. *Bibliografía entomológica de autores españoles.* Documentos Fauna Ibérica **1**. Ramos, M.A. (ed.). Museo Nacional de Ciencias Naturales, Madrid. Available at 5,464 ptas from Consejo Superior de Investigaciones Cientificas, Servicio de Publicaciones, Vitruvio 8, 28006 Madrid.

AN UNUSUAL SPECIMEN OF *HYDROPORUS MEMNONIUS* NICOLAI

by Jonty Denton

I collected a number of *Hydroporus memnonius,* along with *H. melanarius* Sturm and *H. neglectus* Schaum, from a shaded, boggy carr site on Woolmer Forest, North Hampshire on 3 December 1994. Among a number of normal looking shining males and full form females was a single, atypical shiny specimen. The black elytral markings were very distinct, and the beetle appeared to be mature. I kept the insect alive for over a month in an aquarium, but the coloration remained unaltered. The specimen was then killed and found to be male. The shoulders of the elytra were transparent, so that the folded wings could be seen. However, the dark mark was opaque, and remained obvious on the carded specimen.

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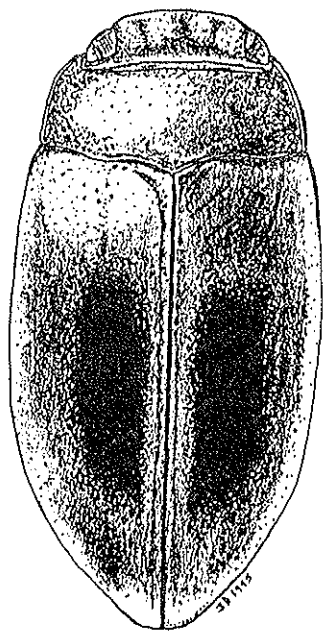


TROPHIC STRUCTURE IN NEW PONDS

Ten newly created ponds were subject to different environmental conditions in their first year of existence. The colonisation and successional stages were generally as expected, most communities being dominated by detritivores. The carnivores, with five named taxa of beetles out of 11, typically colonised the ponds after 4-5 months.

VELASCO, J. MILLAN, A. & RAMIREZ-DIAZ, L. 1993. Estructura trófica de las comunidades de insectos en nuevos medios acuáticos. *Anales de Biología* **19** 7-18.

VELASCO, J. MILLAN, A. & RAMIREZ-DIAZ, L. 1993. Colonización y sucesión de nuevos medios acuáticos I. Composición y estructura de las comunidades de insectos. *Limnetica* **9** 73-85.

WORLD BIBLIOGRAPHY OF DRYOPOIDEA

Professor William D Shepard has prepared a bibliography of Elmidae, Dryopidae, Psephenidae, Limnichidae, Lutrochidae and Eulichadidae. He thinks that the Palaearctic literature may be under-represented. The text may soon be networked, and Professor Shepard can be contacted using either the e-mail or the more orthodox address listed at the end of this issue.

PARANACAENA A VALID GENUS

In his review of hydrophiloid genera, Michael Hansen indicated that the relationships of Australian *Paranacaena* were not clear. Elio Gentili discusses the genus and claims that it is distinct on the basis of the long basal, spiniform process on the aedeagus and the 8-jointed antennae. Other characters vary more between the nine species. To the known species, all from Australia - *P. lindi* (Blackburn), *P. sublineata* (Blackburn), *P. eremita* (Blackburn), *P. horni* (Blackburn), *P. littoralis* (d'Orchymont) and *P. humilis* (d'Orchymont) - are added the newly described *balkei* (from New Guinea), *wattsi* (from New South Wales) and *nitens*, from Queensland.

GENTILI, E. 1993. *Paranacaena* Blackburn, 1889: a valid genus (Coleoptera, Hydrophilidae). *Giornale italiano di Entomologia* **6** 285-296.

TOWARDS A CRITICAL CHECKLIST OF IBERIAN WATER BEETLES - SOME OLD RECORDS RECONSIDERED

by I Ribera, P Aguilera, D T Bilton, H Fery, J Fresneda, C Hernando & G N Foster

In our opinion there is no reason to suspect that entomologists of old were more stupid than us, so old records of well known species should be trusted. It is not rare to find an old record ignored or discarded just because the species has not been found again more recently, without any other consideration.

In dealing with the fauna of the Iberian Peninsula this problem is exacerbated by a very incomplete knowledge of the distribution of many species, and ignorance of the fauna of some very interesting sites and habitats. Even if it could be admitted that a species is no longer present in an area, this does not mean that it was so in the past. Habitat degradation or loss is a common reason for the local extinction of some species, especially those which require large undisturbed water bodies. For instance, most of the Mediterranean coast (except isolated points occupied by cities) was wetland a hundred years ago, and just fifty years ago near to Barcelona there were very well preserved sites (e.g. the Delta del Llobregat and Casa Antúnez). Modern records from these areas only represent a minimal part of what could have lived there. The same applies to most of the coastal or inland wetlands, which have been drained or badly damaged in recent times.

These are some cases in which old records need to be confirmed with the study of the original material or through new captures:

a. *If a taxon has been split*

Haliplus andalusicus was described by Wehncke in 1874, previous records of this species were probably attributed to *H. variegatus* Sturm owing to their external similarity (van Vondel 1991). Records of *H. variegatus* before 1874 (Cádiz and Málaga - Rosenhauer 1856), or near to that date (Badajoz - Uhagon 1876), have to be confirmed, or the original material studied. Modern records of the species in the Iberian Peninsula are those of Régil (1985) from León (together with *H. andalusicus*), and Régil & Garrido (1993) from the Villafáfila lagoons (Zamora). Van Vondel (1991) examined four museum specimens from Spain. Although the localities were not given in the text, in the maps they were located in Mallorca and in the Cantabrian mountains. The record of Báguena (1935) from Valencia corresponds to the unique specimen found by Moroder (1924). Other isolated records are those of Palencia and Ciudad Real (Fuente 1921). The species has also been found in the Canadal fens (or Capmany fens, Girona - Ribera *et al.* 1994), although very scarce (only two specimens, a male and a female). It has also been found in La Pineda de Salou, in Tarragona (IR & PA).

H. andalusicus has been recorded from the Balearic Islands, several sites in Andalucía, and León (Rico *et al.* 1990). It also occurs in central Spain (Quero, Toledo - M Alonso 9.4.1979; Laguna de Pitillas, Navarra - IR, PA & A Millán 6.6.1995).

Rhantus exsoletus (Forster) was recorded by Traizet (1895) (determined by Régimbart) from Casa Antúnez, in Barcelona. This species is close to *R. hispanicus* Sharp, described in 1882. In Traizet's paper there is no indication about dates, but it seems likely that Régimbart did not considered the possibility of *hispanicus* when he identified the material for Traizet. Records previous to 1882 are clearly dubious (e.g. Sharp 1878 from Portugal, and all the later references to this record).

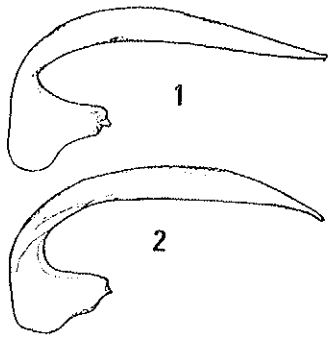
The same applies to records of *Hydroporus erythrocephalus* (L.) from the NW of the Iberian Peninsula previous to the description of *H. vespertinus* Fery & Hendrich, which according to these authors have to be attributed to their new species (Fery & Hendrich 1988, although *H. erythrocephalus* has been recorded recently from Extremadura by Garrido *et al.* 1994a); records of *Hydraena (Phothydraena) testacea* Curtis before the redescription of *H. atrata* Desbroches des Loges by Berthélemy (1965) and the description of *H. hernandoi* Fresneda & Lagar; records of *Chaetarthria seminulum* Herbst previous to the rediscovery of *C. similis* Wollaston in western Europe (Hebauer 1993), d'Orchymont (1940) having previously recorded it from the river Guadiato in Sierra Morena, Córdoba; records of *Limnoxenus niger* (Zschach) in the SW quadrant of the Iberian Peninsula prior to the description of *L. olmoi* Hernando & Fresneda; records of *Hygrotus (Coelambus)* spp. previous to the description of *H. lagari* (Fery) and *H. fresnedai* (Fery), records of *Graptodytes flavipes* (Olivier) prior to the description of *G. castilianus* Fery; records of *Colymbetes fuscus* (L.) prior to the description of *C. schildknechti* Dettner; all the records of the *Agabus chalconatus*-group prior to the descriptions of *A. dettneri* Fery, *A. hozgargantae* Burmeister and *A. albarracinensis* Fery, and similar cases (including some of the descriptions of the larvae of *Deronectes* and *Nebrioporus* by Bertrand before the discovery of most of the Iberian endemic species of these genera!)

b. *If the identification characters formerly used have proved to be of limited value*

Hydroporus vagepictus Fairmaire & Laboulbène is the only species of the *H. palustris*-group occurring in the NE of the Iberian Peninsula. The records of *H. incognitus* Sharp in Fresneda & Hernando (1988) and *H. palustris* (L.) in Ribera (1992) were from localities in Val d'Aran, on the north side of the Pyrenees. Other recent records of *H. palustris* in the French Oriental Pyrenees are from Les Bulloses (JF), Les

Angles, and Font Romeu (R Constantin). The *H. palustris* recorded from the south side of the Pyrenees in Fresneda & Hernando (1988, 1989) and Ribera *et al.* (1988) correspond to *H. vagepictus*, as well as all the material that we have seen from different sites in Catalunya, Aragón and the Iberian mountains. There are no modern records of *H. palustris* from this area in the literature except those of Bertrand (summarised in Rico *et al.* 1990), the only ones in the rest of the Iberian Peninsula being from western localities, León (Garrido & Régil 1994), Palencia (2 specimens - Valladares *et al.* 1994) and Extremadura (1 specimen - Garrido *et al.* 1994a). We have found only *H. vagepictus* in the Cantabrian mountains, Serra da Estrela and in central Spain. Old records have to be confirmed, because external characters habitually used for the identification of the two species (such as size and shape, colour patterns of the elytra, and male claws) have proved to be of limited use. So far as we know the best distinction between them is provided by the tip of the aedeagus, straight with a button at the apex or slightly upwards in *H. palustris* (Fig. 1), and curved downwards in *H. vagepictus* (Fig. 2).

Figs 1 & 2: Aedeagi (lateral view) of *H. palustris* (1) from Les Bulloses, Pyrénées Orientales and *H. vagepictus* (2) from Calatañazor, Soria.



The morphometric study of the aedeagus of *Agabus lapponicus* (Thompson) and *A. congener* (Thunberg) (Nilsson 1987) allowed the identification of some specimens of the former species from the Pyrenees, previously considered as *A. congener* by Ribera *et al.* (1988) and Fresneda & Hernando (1988) (see Ribera *et al.* 1993). In Nilsson (1987) this species was also first recorded from the French Pyrenees. Additional material has been identified from Ibón de Bramatuero, Ibón de Anglios, and Benasque in Huesca; Pleta de Mulleres and Estany Serrader in Lleida; and Les Bulloses in the Pyrénées Orientals (JF). Other Pyrenean records (see Rico *et al.* 1990) can probably be referred to *A. lapponicus*, which also occurs in Albarracín (Teruel - DTB, HF, JF & CH); Pineda de la Sierra (Burgos) and Sierra de Gredos (Ávila) (HF); and Serra da Estrela (DTB). The true *congener*, as checked by Anders Nilsson, occurs on Peñalara, in the Sierra de Guadarrama (GNF 20.4.1985).

The records of *Hygrotus versicolor* (Schaller) and *H. quinquelineatus* (Zetterstedt) from Barcelona (Cuní & Martorell 1876) most probably refer to colour variations of *H. inaequalis* (F.). This species is very common in areas with reeds and other macrophytes both in coastal lagoons and inland fens. The variability of the elytral pattern of *H. inaequalis* is well known (Brancucci 1977), and some of the forms have an almost identical appearance to other species. Brancucci (1977) describes a form very similar to *H. versicolor* ab. *semilineatus* Zimmermann; in the Canadal fens (Girona) specimens occur with an elytral pattern identical to that of typical *H. quinquelineatus* from the UK. Cuní and Martorell were not water beetle specialists, and it seems likely that they were confused by the sometimes spectacular colour variations of *H. inaequalis*. The same sort of confusion could explain the records of *Bidessus unistriatus* (Schrank) (see Rico *et al.* 1990), which probably have to be referred to colour and shape variations of *B. pumilus* (Aubé), a widespread species both in the coast and in inland lagoons.

The species pair *Deronectes hispanicus* (Rosenhauer)/*D. opatrinus* (Germar) has proved difficult to handle, mainly because of the variability of the characters usually used in the identification. The record of *D. hispanicus* from Lugo (González & Novoa 1988) correspond to *D. opatrinus* or *D. costipennis gignouxi* Fery & Brancucci (J González, *pers. comm.*), the record of *D. opatrinus* in Hernando & Fresneda (1986) correspond to *D. hispanicus*, and probably other records of the group should be revised.

The record of *Agabus dilatatus* (Brullé) in Ribera *et al.* (1988) (already corrected in Ribera 1992 and Ribera *et al.* 1993, although still included in Garrido *et al.* 1994b) correspond to *A. guttatus* (Paykull), which in the Pyrenees show a great deal of variation in size, shape, colour and elytral microreticulation (*A. guttatus* can be easily identified by the presence of a small subapical tooth on the aedeagus).

c. *If there is possible confusion in the names of the locality or the species*

The case of *Ludyella corticariiformis* Reitter, an elmid which was assigned to Spain because the material in the same box were all European specimens, is a good example (Montes & Soler 1986).

The record of *Hyphydrus ovatus* (L.) from "Galizien" (Biström 1982), from material deposited in the Museum für Naturkunde der Humboldt Universität (Berlin), could correspond to the "Galicia" area in the Carpathians, between Poland and Ukraine. The other records from Iberia are based on a couple of specimens labelled "Portugal", which could also be wrong (O Biström, *pers. comm.*). In Régimbart's collection in the MNHN (Paris), among material from different areas (including Spain), there are a few specimens of different species labelled "Galicia occ." or "Gallicie occ.", with localities from the Carpathians. In Bertrand's collection, also in the MNHN, there are two *H. ovatus* in one of the Pyrenean boxes (Ribera *et al.* 1993). Although the locality has not been found, it is possible that the species reaches the north side of the chain - and even some parts of northern Catalonia (Fuente 1921). Sharp's (1978) record from Portugal is dubious (see comments to *G. bilineatus* below).

Sanfilippo (1982) includes an old record of *Agabus striolatus* (Gyllenhal) from "Spagna (Galizia)", which could also be referred to the other Galicia in central Europe, as this is the locality ("Galizien") referred to by Zimmermann (1934). However, Guignot (1933) records this species from Aix les Thermes, in the Pyrenees, so there is still a possibility that this species could occur in Iberia.

Sharp's (1878) record of *Noterus crassicornis* from Portugal (attributed to *N. crassicornis* (Müller) in Rico *et al.* 1990) is in fact *N. crassicornis* Aubé, a synonym of *N. clavicornis* (DeGeer) (Sharp 1882). The records of *N. crassicornis* in Cuní (1888) and Traizet (1895), both from Casa Antúnez (Barcelona), refer to "Fab." (Fabricius). According to Holmen (1987), *N. crassicornis* (Müller) was erroneously attributed to Fabricius, but the chaotic nomenclature of *N. crassicornis* (Müller) and *N. clavicornis* (DeGeer) was such that it is most likely that this is another misnamed record. Moreover, both authors recorded only *N. laevis* Sturm and *N. crassicornis* (Fab.) from Barcelona, without any reference to *N. clavicornis*, which actually occurs in the area as well as in other coastal lagoons in Catalunya (Delta del Llobregat, Barcelona - Lagar 1951 and IR 22.11.85; La Pineda de Salou, Tarragona - IR & PA 28.5.1994; Delta del Ebro, Tarragona - GNF, IR & DTB 17.5.94; Tordera, Barcelona - F Sabater, mixed with the records of *N. laevis* in Sabater *et al.* 1986).

Graphoderus bilineatus (DeGeer) was recorded from Portugal by Sharp (1878), among specimens collected by van Volxem. Although the identification cannot be questioned, Sharp himself was dubious about the locality in a later work (Sharp 1882 p. 698). In the original paper there is no additional information or comment about the species listed, so it seems that Sharp just identified a series of specimens. However, this species is known to live in some areas were it was once considered doubtful (SW France - Bameul 1994), so it is always possible that the locality is correct, and Portugal (perhaps Spain also?) is just a new area to add to the list.

d. *And the trivial case, if the author does not usually work on the group and the records come from a generalist work*

Suphrodytes dorsalis (Fab.), which does not occur in the Iberian Peninsula, and *Copelatus atriceps* Sharp were recorded from Tordera by Sabater *et al.* (1986). The material was examined and confirmed to be *Hydroporus vagepictus* and *Copelatus haemorrhoidalis* (F.) respectively. However, in the same paper there also were very interesting records which *a priori* could have been considered doubtful, such as *Graphoderus cinereus* (L.), which were confirmed after the study of the material. It was not possible to check the specimens of *Hydrophilus piceus* (L.) and *Hydrochara caraboides* (L.), but they could be accurate because they were from the known area of distribution and in the right habitat (see below).

Old records confirmed

In recent years some old records have been confirmed, both because the original specimens were found (e.g. *Hydaticus transversalis* (Pontoppidan) in Barcelona - Hernando & Aguilera 1994), or because new specimens were collected (e.g. *Ilybius fenestratus* (Fab.), Fresneda *et al.* 1990).

Valladares & Ribera (1993) confirmed the presence in Spain of *Hydrophilus piceus* and *Hydrochara caraboides*, whereas authors such as Ienistea (1978) and Smetana (1980) had ignored or rejected old records. Old localities of *H. piceus* have been confirmed by new captures (Galacho de Justibol, Zaragoza - CH 7.1982 1 specimen; Delta del Llobregat, Barcelona - JF 22.9.1984 1 specimen, 17.4.1987 1 specimen), and its known distribution has been extended far to the south (the Ebro Delta - GNF, IR & DTB 17.5.1994 1 specimen). The record from Alicante (Fuente 1925) has yet to be confirmed.

Enochrus morenae was described in 1870 by Heyden, but some authors either considered it not to be a valid species (e.g. des Gozis 1919), or ignored it completely (e.g. Chiesa 1959) until its rediscovery and the designation of a lectotype (Angus 1988). It has been found in several places in the south and west of the Iberian Peninsula (see Angus 1988 and Valladares 1995 for a comprehensive review, plus Arroyo del Tiradero, Cádiz, 6.8.1995, Serradilla del Arroyo, Salamanca, 26.7.1995 - PA; Arroyo del Descansadero, Cádiz, 8.1985, Villanueva del Río, Sevilla, 8.1985, Río Hozgarganta in Jimena de la Frontera, Cádiz, 14.7.1987, Río Guadarranque, Cáceres, 3.8.1993 - CH & JF; Torrox, Málaga - GNF 8.1.1992; Espiel, Córdoba - M Baena 7.2.1985; Miranda de Douro, Bragança, 11.7.1986, Monchique, Faro, 26.6.1986 - S Bignal). There are some old records of *E. morenae* from the French Oriental Pyrenees (see e.g. des Gozis 1919, Fuente 1925, and other catalogues). A couple of specimens of *E. morenae* have recently been found in Sant Climent (Girona, near France), in a small stream with a shaded, rocky substratum, a rather typical habitat. In our opinion the French old records must be trusted, and *E. morenae* cannot be considered an Iberian endemic.

Ilybius quadriguttatus (Boisduval & Lacordaire) was recorded from La Coruña (López-Seoane 1866) and Andalucía (Rosenhauer 1856). The species has been identified by JF & CH among material in the Museu de Zoologia (Barcelona) collected by De Gregorio in light traps in Girona (Aiguamoll de Roses, 15.6.1985 1 specimen, Aiguamolls de la Gola de Ter, 10.6.1989 1 specimen), and has been recently found in the Canadal fens, also in Girona (2 specimens, IR & PA). This species is very scarce in the southern part of its distribution, so more records might be expected if suitable habitats were sampled exhaustively.

Possible good records

Traizet (1895) recorded some European species from Casa Antúnez, in Barcelona. In his paper he acknowledges Régimbart's identification, so the records of well known species such as *Acilius canaliculatus* (Nicolai) or *Ilybius fuliginosus* (F.) (in coexistence with *I. meridionalis* Aubé) must be trusted, in spite of the lack of modern records of both species in the Iberian Peninsula (the true *I. fuliginosus* occurs in the north side of the Pyrenees, in Val d'Aran, as recorded by Fresneda & Hernando 1988, but all the specimens we have seen from the Iberian Peninsula are *I. meridionalis*). The same could apply to the record of *Gyrinus minutus* F. from Barcelona (see Rico *et al.* 1990), discarded by Lagar (1967), but recently recorded from León and two sites in Aragón (Rico *et al.* 1990, Ribera 1992). An enigmatic record is *Ilybius ater* (De Geer) from Barcelona (Martorell 1879), a distinct species unlikely to be confused with anything else (recorded also from Madrid -see Rico *et al.* 1990-, although that could be probably included in **d** above). Considering the fact that most of the aquatic habitats of the area have been completely destroyed (including Casa Antúnez), and in the light of some of the recent findings in coastal areas or temporary fens in Catalunya (some of them reported here), it seems most likely that these records were accurate - and we must not reject the possibility of collecting new specimens of these or other northern species on the Mediterranean coast or in the Pyrenees (e.g. *Hydroporus scalesianus* Stephens, recorded in Fuente 1921 without locality or reference, and also under *H. gracilis* Wehncke in Winkler 1924).

And the last one, an old record that has remained unnoticed in recent times: *Hydroporus jurjurensis* Régimbart from the Iberian Peninsula (in Winkler 1924, we have not found the original source). The distribution of the species could seem crazy: some Algerian mountains and (?) Iberia ("*Hi.*", Hispania in Winkler's catalogue). But there are some close biogeographical affinities between the mountain systems in north Africa and in the north and centre of the Iberian Peninsula, a type of north-south disjoint distributions known for long in several groups of animals and plants, usually explained by the dry episode of the Mediterranean sea in the late Miocene (Brehm 1947). In water beetles, we have the paradigmatic examples of *Rhithrodytes bimaculatus* (Dufour) (Bameul 1989) and the complex *Graptodytes pietrii* Normand/ *G. castilianus* Fery (Fery 1995), and perhaps some less typical distributions such as that of *Acilius duvergeri* Gobert.

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WATER BEETLES IN NAVARRA

A survey of the Comunidad Foral de Navarra, in the Spanish Pyrenees, resulted in a large number of new records for the area, with 105 species identified, including 37 Adephaga and 68 Polyphaga. The area is most remarkable for the 14 species of elmid.

GARRIDO GONZALEZ, J., DIAZ PAZOS, J.A. & REGIL CUETO, J.A. 1994. Fauna acuática de la Comunidad Foral de Navarra (España) (Col., Adephaga y Polyphaga). *Bulletin de la Société entomologique de France* **99** 131-148.

A NEW CATALONIAN *HAENYDRA*

The new species, described from Lleida and Barcelona, is close to *H. bitruncata* d'Orchymont and it brings the total *Haenydra* count for Iberia to 16. The female elytra are drawn out into distinct teeth. Characters of the genitalia are described in detail, unfortunately with some figure numbers being transposed (Figures 1, 5 and 6 should be figures 2, 7 and 8, respectively, and *vice versa*).

FRESNEDA, J. AGUILERA, P. & HERNANDO, C. 1994. *Hydraena* (*Haenydra*) *catalonica* n.sp. (Coleoptera, Hydraenidae) de la Península Ibérica. *Zapateri Revta. aragon. ent.* **4** 81-86.

HAWAIIAN HYDROPHILIDS

Twenty one species are known, of which two are certainly endemic, one is certainly indigenous, three are possibly indigenous, four have been deliberately introduced and 11 are adventitious. The three North American adventitious species - *Enochrus sayi* Gundersen, *Tropisternus salsamentus* Fall and *T. lateralis humeralis* Motschulsky - are all aquatic but the rest are terrestrial as are the two species deliberately introduced, *Cercyon quisquilius* (L.) and *Sphaeridium scarabaeoides* (L.) to control fly pests breeding in dung.

HANSEN, M. 1995. A review of the Hawaiian Hydrophilidae (Coleoptera). *Pacific Science* **49**(3) 266-288.

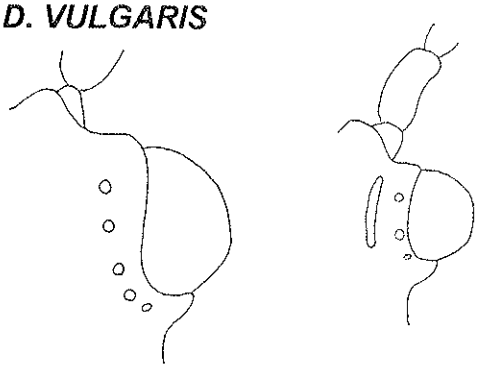
SYSTEMATIC REVIEW OF HYDROPHILOIDEA

Species-richness and general diversity is greatest in the tropics, particularly in south-east Asia and in South America, where the described species are only a small proportion of the true total. The Histeroidea and Hydraenoidea are regarded as sister groups of the Hydrophiloidea. The six distinctive families of the Hydrophiloidea divide into the Helophorid and the Hydrophilid lineages. Amongst the difficult problems are generic limits within the Anacaenini and the Sphaeridiinae. This is one of the papers in the *Festschrift* intended to celebrate Roy Crowson's 80th birthday.

HANSEN, M. 1995. Evolution and classification of the Hydrophiloidea - a systematic review. 321-353. In: J. Pakaluk & S.A. Slipinski (eds) *Biology, Phylogeny, and Classification of Coleoptera*. Muzeum i Instytut Zoologii PAN, Warsaw.

AN ADDITIONAL CHARACTER FOR DISTINGUISHING *DONACIA SIMPLEX* FROM *D. VULGARIS*

by John Bratton



Figs 1-2: Dorsal views of right sides of head of *Donacia simplex* (1) and *D. vulgaris* (2), both specimens collected from Thompson Common, Norfolk on 17 June 1995.

Usually these two species are easy to distinguish as the elytra of *Donacia simplex* are unicolorous and those of *D. vulgaris* typically have broad purple patches forming a stripe down the mid-line. Occasionally *D. vulgaris* is unicolorous and then identification can be more difficult, particularly if the food plant is unknown.

There is a consistent, albeit microscopic, difference in the impressions around the eye sockets. *D. simplex* has a row of deep circular impressions, whilst *D. vulgaris* has shallower, less obvious, circular impressions and a deep shiny groove parallel to the socket.

Received September 1995

HELP REQUIRED ON NEOTROPICAL DRYOPOIDS, SOUTHERN EUROPEAN ELMIDS AND MITES LIVING ON BEETLES

Reinhard Gerecke is seeking help with determination of Dryopoid water beetles, mostly collected during two journeys to Ecuador. The first part of his collection, from 1992, is in the Smithsonian Institution but Dr Gerecke has not been able to contact Paul Spangler. Consequently he does not know where to send the second batch, taken in 1994/95 along transects from the Pacific coast to Amazonia, between 20 and 3500 metres above sea level.

Another interest of Dr Gerecke is based on southern European elmids, mainly derived from mountain streams and springs, and coming from poorly studied areas in Greece and in what are now highly inaccessible parts of the former Yugoslavia. He would be very glad to find a specialist who would check his determinations. Material could be lodged with an appropriate natural history museum if required.

Finally, Dr Gerecke has drawn attention to his continuing interest in the mites associated with aquatic insects, where the boot might be on the other foot, i.e. with Dr Gerecke prepared to identify mites submitted by members or to arrange contacts with those who can.

XX International Congress of Entomology, Florence/Firenze, 25-31 August 1996

The Scientific Programme of Congress has as Section 11 Special Environments, the first Subsection of which is concerned with aquatic insects. Within that we have 11G-2 "Hydroadephaga", the contacts being Vincenzo Volpe and Giorgio Pontuale. The early registration fee (by 31 January 1996) is Lir. 520,000. The organising Secretariat is O.I.C. srl, Via A. La Mormora, 24, I-50121 Firenze, Italy.

HYDROJAECHUS VIENNENSIS, A NEW GENUS AND SPECIES OF WATERMAN FROM CENTRAL EUROPE

by David S. Boukal

My interest in water beetles, especially in members of the superfamily Dryopoidea, is as deep or maybe even deeper than the Kallar River in southern India (Kerala State) in which I almost drowned in 1993 when trying to collect some spectacular xylophagous elmids. Inevitably, such a high degree of devotion soon led me to the Natural History Museum in Vienna. Apart from an extremely rich collection of these tiny but undoubtedly interesting animals that I could be and certainly was overwhelmed by, I met a number of outstanding experts. In fact, the museum was the place where, for the first time in my life, I met a superb collection of European water beetle buffs. I am most grateful to Manfred Jäch and to Heinrich Schönmann for their generous support and proverbial hospitality which I enjoyed during my research visits in August 1993, July 1994, February and April 1995. In this way I was able to meet such fascinating personalities as Juan Angel Diaz Pazos working busily on *Hydraena* females, Michael Balke reviewing the rich dytiscid material collected by him in Irian Jaya, and now deposited in the Vienna Natural History Museum, as well as Professor Lanzhu Ji, studying elusive hydrophilid material from "The China Water Beetle Survey". Last but not least, I should not forget to mention the omnipresent Stefan Schödl and Jan Kodada, though at first I mistook them for part of the museum inventory as they never seemed to leave their laboratories.

Plate 1. *Hydrojaechus* gen n. *viennensis* sp. nov., its friendly face half hidden in a lush cover of *Myriophyllum*-like setae.

Most of the time I spent in the museum was filled with work on a revision of New Guinea *Austrolimnius*, which is now coming to its close. It is based on rich material (too rich, in truth, if one has to look at every individual specimen) collected by David Dudgeon in the Sepik-Ramu Basin in 1988 and some specimens taken by Messrs Bacchus and Ullrich in Papua New Guinea and by Michael Balke in Irian Jaya. One species was also discovered by Manfred Jäch in the Moluccas. Altogether the material in VNHM comprises 17 new species, thus increasing the number of *Austrolimnius* known from the area to 25. This also suggests that the elmids of New Guinea are not as poor either in number of species or in sheer quantities as was thought previously. The discovery of *Austrolimnius* in the Moluccas pushes the known distribution of the genus further westwards but there are signs that the real distribution of Austrolimnius is much wider. It seems also possible that *Austrolimnius* is a junior synonym of the African *Helminthocharis*, a problem that has yet to be solved.

However, my coleopterological impressions of Vienna are not the only extraordinary experience I can report. The story I tell here is just the strangest among a series of unusual ones.

Though accepted as a common phenomenon by ordinary people for centuries, watermen are virtually unknown in the scientific community. One of the rare masters to dedicate his life to the exploration of the mysterious existence of these subaquatic, human-like creatures is Michael Balke from Berlin (Plates 2 and 3).

Last summer I met Mr Balke in Vienna where he was carrying out some field research in the swampy areas surrounding this quiet old regional township. I was already fed up with admiring the ancient architecture of the city, this silent remainder of the past glory of the faded colonial super power of which Vienna used to be the capital. Moreover, a deep interest in watermen has been buried in my subconscious since childhood, when I was told ominous fairy tales by my Transsylvanian grandmother. This casual meeting with such a famous explorer newly awoke this sentiment in my soul with overwhelming strength. These two reasons made me ask Mr Balke to be allowed to join him during his field studies. He promptly and kindly agreed to my request. Thus I was able to witness with my camera one of the greatest discoveries in modern science since DNA was decoded.

In the beginning, however, nothing indicated that we might be successful in any detail of Mr Balke's carefully prepared plans. We spent whole evenings and nights gazing into the dark, quiet backwater pools scattered along the edge of the mighty flowing Danube. We left them regularly in a a kind of

pools scattered along the edge of the mighty flowing Danube. We left them regularly in a a kind of depressed, contemplative mood at an early morning hour, as our achievements were usually restricted to an infinite number of bites from the mosquitoes that plagued us every night.

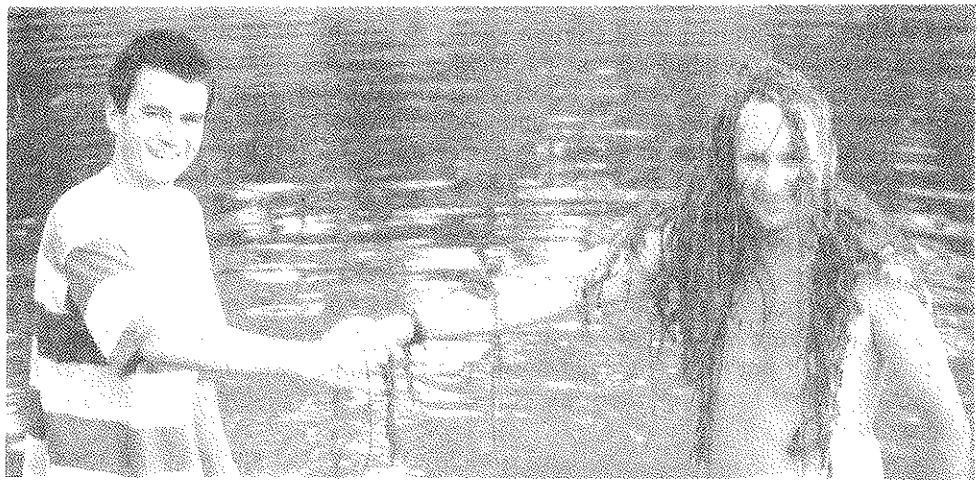


Plate 2. The happy scientist, M.D. Balke, with his most surprising discovery, a rare specimen of waterman.

Even at this price, paid in blood, Mr Balke didn't give up the programme and stubbornly insisted that we should try it again and again. In fact, I trusted him completely. His computations predicted that the area we were investigating was the heart of waterman distribution, and chances of the discovery of these endangered, highly vulnerable creatures were relatively high. After two fruitless weeks or so, this assumption proved to be absolutely correct.

That particular evening the sun was quietly westering and long shadows began to creep over the silent waters of an exceedingly large pool on the bank of which we sat down with little enthusiasm remaining. Suddenly, we sensed suspicious waves on the surface. Only seconds later, the eagerly expected creature emerged from the abyss. It would be a waste of paper if I tried to describe here what I felt in the first minutes of this unique encounter. Fortunately, the creature regarded us silently and calmly for almost an hour, so that we able to make a proper examination of its upper body and take some notes after the first moments of unbearable, indescribable excitement.

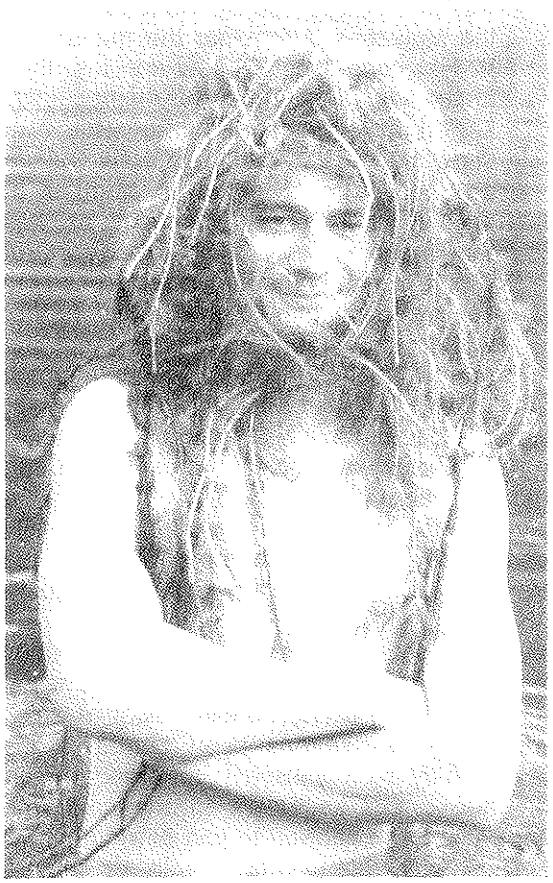


Plate 3. Mr Balke in waterman-like camouflage, trying to attract watergirls.

The creature was of very virile appearance and apparently naked. It was similar to a human being except for the following characters:

1 The two lateral cranial appendages, colloquially known as ears, are in fact spiracular gills already known from some subaquatic insects. each of the gills is connected with one lung by a long tube and their function is to bring fresh water (!) to the lungs. Therefore, we denote the tubes as "aqueducts". As was explained to us later by the creature itself, it has to dive to take fresh water into its lungs every 73 minutes in order to prevent severe dehydration. In Plate 1, it can be seen looking at its watch (a highly waterproof brand of Swiss manufacture) to decide whether it is time to dive again.

2 The extensive hydrofugic pubescence (Plants 1 and 2) covering most of his head, neck and shoulders, and consisting of the usual hairs and *Myriophyllum*-like setae in an approximate ratio of 23:47. We could not find out whether this was a plastron analogue, used for respiration, or if it is a kind of camouflage or perhaps an unusual type of symbiosis. We could only judge from the creature's face that it is extremely proud of it.

The creature, to which we give the name *Hydrojaechus* gen n. *viennensis* sp. nov., refused to have its abdomen and anatomy examined further. It also refused to be moved to the VMNH, where logically it should be deposited, since it represents the holotype. We might remark here that it was even offered a large comfortable aquarium and a number of other privileges, including that of being the only living holotype in an otherwise irreversibly mute collection. On the other hand, it promised to stay in the same area for the next thirty years, thus providing handy study material for the

ensuing influx of the world zoological community. This agreement was sealed with a handshake (Plate 2).

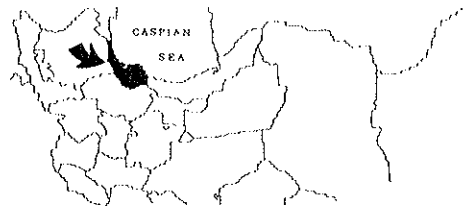
After a short but sincere farewell the creature finally dived, and we were left alone in consternation on the gravelly shores of those mysterious waters. the night sky, filled with millions of stars, was already becoming paler as we walked home full of an impression that this single event has unimaginably widened the horizons of biology.

Received May 1995

ON THE AQUATIC COLEOPTERA OF GILĀN, A PROVINCE IN THE NORTH OF IRAN

by S.O. Hosseinie

The province of Gilān is situated in the north of Iran, on the south side of the Caspian Sea (Fig. 1). The province is part of the Caspian watershed basin and the Kurdestan-Iranian Highland. The climate is Mediterranean. The surface area is about 15,000 km²; there are no prominent lakes, but other kinds of lotic water bodies occur as well as lentic habitats. The Anzali Marshes (also known as Pahlavi Marshes is some older references) are of special interest, being a reserve area, home to many interesting birds and water beetles.



Collections in this province were made in 1976 (13 sites), 1977 (10 sites) and 1993. The first two surveys were made *en route* to other areas of Iran but the 1993 Expedition was planned specifically for Gilān. It took about three weeks, and 71 sites were surveyed for beetles.

Dytiscidae, Hydrophilidae, Noteridae and Haliplidae were found in ponds, streams, rivers and marshlands, whereas Hydraenidae and Dryopidae did not occur in marshland, and Gyrinidae were found only in running water. A total of seven families and 30 genera have been collected. The generic identifications are summarised in the table. Identification of material to specific level is in progress.

This study was supported by a grant from the Shiraz University Research Council.

Table. Occurrence of genera of aquatic Coleoptera in the Province of Gilān, Iran

*occurrences in the Anzali Marshes

	1976	1977	1993		1976	1977	1993
Dytiscidae	+	+	+	Haliplidae			
*Guignotus**	+	+	+	*Peltodytes**	+	+	+
Laccophilus	+	+	+	*Haliplus*	-	+	+
Hypophorus	+	+	+	Hydrophilidae			
Agabus	+	-	+	*Laccobius**	+	+	+
Nebrioporus	-	+	+	*Enochrus**	+	+	+
Rhantus	-	+	+	*Berosus*	+	+	+
Hydroporus	-	-	+	*Spercheus**	+	-	+
Eretes	-	-	+	*Helophorus*	-	+	+
*Cybister**	-	+	+	*Paracymus*	+	+	+
Coelambus	-	-	+	*Helochares**	+	-	+
Hydaticus	-	-	+	*Hydrophilus*	-	-	+
Methles	+	-	+	*Limnoxenus*	-	-	+
Hydrovatus	-	-	+	Hydraenidae			
Platambus	-	-	+	*Ochthebius*	+	-	+
Noteridae				*Limnebius*	-	-	+
*Noterus**	+	+	+	Dryopidae			
Gyrinidae				*Dryops*	+	-	+
Aulonogyrus	-	-	+				

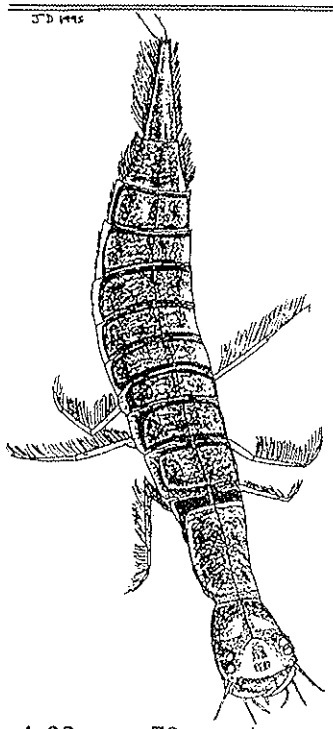
Received July 1995

ORIENTAL ELMIDS

Ancyronyx are remarkable *Stenelmis*/*Macronychus*-like elmids with yellow and dark patterns. The 1994 paper is a formal treatment of the group, and it includes a colour plate. The paper should be read in conjunction with the earlier popular article.

JÄCH, M.A. 1993. *Ancyronyx* (Coleoptera: Elmidae) - the spider riffle beetle of the Malaysian forest rivers. *Nature Malaysiana* **18** (3) 86- 89.

JÄCH, M.A. 1994. A taxonomic review of the Oriental species of the genus *Ancyronyx* Erichson, 1847 (Coleoptera, Elmidae). *Revue suisse de Zoologie* **101** 601-622.



THE DISTRIBUTION AND ECOLOGY OF *GRAPHODERUS ZONATUS* HOPPE IN BRITAIN

by Jonty Denton

Introduction

Graphoderus zonatus is known from only one locality in Britain, Woolmer Forest, Hampshire. In 1992 it became the first beetle to benefit from the English Nature Species Recovery Programme, which funded a survey and research scheme. Intensive monitoring during 1992/3 yielded very few adults, and this was related to the low water table, which led to early desiccation of the core breeding sites. However, the wet winters of 1994 and 1995 led to a recovery of the water table, which coincided with a dramatic (albeit localised) increase in numbers. Mark-recapture estimates made in Woolmer Pond indicated that several hundred adults were present. the upswing in the beetle's fortunes made it a good time to make a concerted effort to find the larvae, which had not been studied in Britain.

Methods

All of the ponds in Woolmer Forest were netted in April 1995, and any larger dytiscid larvae were identified to genus, and, where possible, to species. This initial survey yielded *zonatus* larvae in Woolmer Pond, and the distribution around this large water body was investigated in detail by sampling the entire shoreline at 10 metre intervals, netting for 1 minute 1m, 5m and 10m from the bank.

A 30 cm x 70 cm glass aquarium was filled to a depth of 20 cm with Woolmer Pond water. About 40% of the filled volume was occupied by plant material, mainly *Juncus bulbosus* and floating *Sphagnum.* A range of small invertebrates was added including cladocerans (>2 per cm^3) and ostracods.

Results

Distribution of larvae The highest densities of *Graphoderus* larvae were recorded at the stations which had yielded adults in September 1994. However, the spread from these core areas had been rapid, with larvae occurring virtually all around the pond. The pH of Woolmer Pond showed little variation, being in the range 4.5-5.0. Larvae were found in water 30-150 cm deep, and usually occurred in sparsely vegetated areas. Larvae were occasionally found in weed-free open water over 20m from the nearest shore. The open areas of the lake were often subject to considerable wave action. Larvae of all instars were present from April-July, and a few 3rd instar larvae were found in August. The first adults (2 ♂♂) were found on 30 June; they had pupated at the base of *Juncus* tussocks. The presence of recently hatched larvae in July indicated a protracted breeding season.

Observations on larvae in the aquarium The larvae spent long periods hanging from the surface film in a characteristic near-vertical posture. They swam around the edges of the weed masses but rarely strayed into the weed, significantly (χ^2 26.3, 1 d.f., $P<0.01$) preferring open water. Larvae of *G. zonatus* and *Acilius sulcatus* (L.) showed no obvious differences in habitat preference or prey selection, cladocerans being the main choice.

Within 8 days the larvae had removed most of the cladoceran population, and they then spent more time on or near the bottom of the tank, seeking out prey items in the silt layer. Once the aquarium was replenished with Cladocera, the larvae resumed their open water feeding mode. During the final instar the larvae spent more time near to the bottom and in the weed masses. The larger larvae preyed on *Notonecta* nymphs.

Two larvae pupated in late June and one *Graphoderus* and one *Acilius* (both ♂♂) emerged on 4 July.

Discussion

The field observations reflected those in the aquarium, with the larvae showing an obvious preference for open water. *Dytiscus, Colymbetes* and *Rhantus* larvae replaced *Graphoderus* and *Acilius* in vegetated areas. The other larger dytiscid larvae appear to select larger prey items, including other beetle larvae, than *G. zonatus* and *A. sulcatus*, and therefore the absence of the latter from weedy areas may relate to predator rather than competitor avoidance. Predator trials indicated that *Dytiscus* larvae and larger odonate nymphs (*Anax* and *Aeshna*) can certainly catch *Acilius* larvae. Clearly a preference for open water is also likely to make *G. zonatus* highly vulnerable to fish predation.

The similarity of niche selection indicates that *Acilius* is likely to be the major larval competitor with *Graphoderus*, but the differences during this phase remain enigmatic. *Graphoderus* larvae greatly outnumbered (>15:1) *Acilius* in the open water of Woolmer Pond. However, the reverse was true in the smaller open water areas connected to Woolmer Pond. It is not known whether this was as a result of habitat selection or differences in dispersal rates.

The food preferences of *G. zonatus* larvae are similar to those reported by Galewski (1974), and the preference for open water is similar to that of *G. cinereus* (L.) (G N Foster, pers. comm.). *Graphoderus*

and *Acilius* are probably mostly sight predators, as they have two pairs of well developed, forward-facing eyes.

These observations may offer a clue as to why *G. zonatus* is so restricted in Britain. Large, sandy bottomed lakes without fish are rare. Regular desiccation or low pH are clearly important to prevent the establishment of fish populations.

The similarities in larval niche selection were not mirrored by the adults, which selected different habitats. Adult *Acilius sulcatus* were rarely taken in the flooded *Sphagnum* areas favoured by adult *Graphoderus*.

Recognition of the larvae of *Graphoderus zonatus*

The general shape and posture of the *G. zonatus* third instar larva is shown in Fig. 1 (page 12). It is very similar to the larva of *Acilius sulcatus*, and has similar habits, moving rapidly in open water and regularly adopting a near vertical posture in the water column. The larvae are able to adjust their buoyancy rapidly and can move backwards and forwards freely. Both *Acilius* and *Graphoderus* larvae show the characteristic 'snapping' feeding action. At Woolmer both types of larvae occur together and are usually black dorsally and pale underneath. Galewski (1974) and Nilsson (1982) provide keys. The main character is the single labial appendage of *G. zonatus* versus the forked appendage of *A. sulcatus*, visible in all instars using a x15 lens, though it is difficult to avoid damage to first instars. The only obvious difference in body form is the length of the first thoracic segment, which, with practice, enables the separation of the two species in the net without the aid of a lens. In *A. sulcatus*, the first thoracic segment is nearly twice the length of the head (Fig. 2), and in lateral view more or less parallel-sided. *G. zonatus* has a much shorter first thoracic segment, which is saddle-shaped in lateral view.

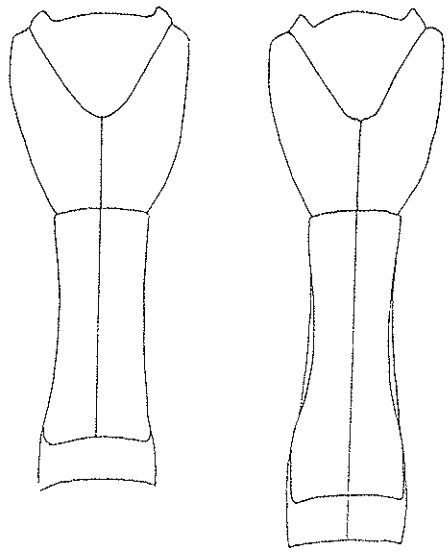


Figure 2. Comparison of larvae of *Graphoderus zonatus* (left) and *Acilius sulcatus* (right)

The head pattern of the two species is also a useful; guide but not without variation. Most 2nd and 3rd instar *G. zonatus* have an '88'-shaped mark between the eyes (Fig. 3). This area is usually either pale or all dark on *A. sulcatus*.

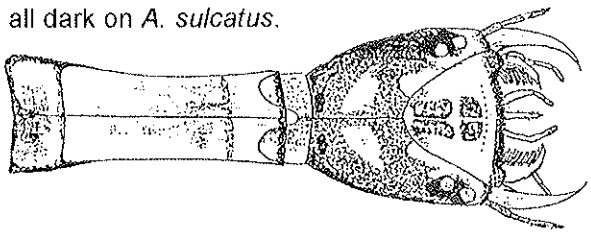


Figure 3. Typical head and thorax pattern of *Graphoderus zonatus* 2nd/3rd instars

Acknowledgements

I wish to thank English Nature, specially Dr Martin Drake, for supporting the research, and the Ministry of Defence for allowing access at Woolmer.

GALEWSKI, K. 1974. Diagnostic characters of larvae of European species of *Graphoderus*, with an identification key and some notes on their biology. *Annales Zoologici* **22** 485-494.

NILSSON, A.N. 1982. A key to the larvae of the Fennoscandian Dytiscidae (Coleoptera). *Fauna Norrlandica* **2** 1-45.

Received August 1995

NET VERSUS TRAP

Fernando Pederzani was called in to examine the beetles caught in unauthorised fish traps taken from the Punte Albarete reserve by WWF wardens in March 1995. No fish had been caught, but one trap contained 420 large beetles, about 80% *Cybister lateralimarginalis* and 20% *Hydrophilus piceus*. The smaller species could presumably escape through the meshes of the trap net. In several hours' use of the hand net, it was possible to find only 5-10 specimens of each of these species.

Received June 1995

COMMUNITIES OF THE ETTENBACH RIVER, BADEN-WÜRTTEMBERG

Ninety six species were recorded at 19 sampling sites in 1991 and 1992. The communities are analysed in relation to site characteristics, and the zonation of the most important species is described. Among some detailed studies is a comparison of the phenologies of *Anacaena lutescens* and *A. limbata*. The former appeared to have a bimodal cycle, peaking in May and August, whereas *A. limbata* was found only from July to November with a peak in September.

BRAUN, A.R. 1994. Die Wasserkäfergesellschaften des Ettenbachs im Mittleren Schwarzwald (Coleoptera: Hydradephaga, Palpicornia, Dryopoidea, Scirtidae). *Lauterbornia* **19** 1-41.

CALABRIAN & SICILIAN BEETLES

The chapter in the book about on the Nebrodi Mountains referring to Noah's Ark includes references to water beetles such as *Hydroporus dobrogeanus* Ienistea, *H. memnonius* Nicolai and *Deronectes delarouzei* (Du Val). *H. memnonius* is mapped for Sicily and the full distributions of *H. dobrogeanus*, *H. jurjurensis* Régimbart and *H. regularis* Sharp are compared. The *Lauterbornia* paper concerns Dryopidae and Elmidae, four species being reported for the first time from Sicily:- *Elmis rioloides* Kuwert, *Esolus angustatus* (Müller), *E. berthelemyi* Olmi and *Oulimnius rivularis* (Rosenhauer).

GERECKE, R. 1990. Ein Beitrag zur Kenntnis der Dryopidae und Elmidae (Coleoptera: Dryopoidea) in Fließgewässern und Quellen Süditaliens. *Lauterbornia* **5** 27-41.

GERECKE, R. 1995. Gli ambienti acquatici "L'arca di Noè" della limnofauna siciliana. 149-159. In: Regrone Siciliano, Ass. Ferriferro Ambiente (ed.) Il Parco dei Nebrodi. Palermo.

NEW DATA ON THE DISTRIBUTION OF *LIMNEBIUS CORDOBANUS* D'ORCHYMONT IN THE IBERIAN PENINSULA

by Pedro Aguilera and Raoul Gerend

This Iberian endemic was described by d'Orchymont (1938), relying on material collected in the province of Cáceres, in the south-west corner of Spain. Valladares & Montes (1991) cited records from Córdoba (d'Orchymont 1938; Ienistea 1978), Granada and Málaga (Balfour-Browne 1978), as well as from Albacete and Jaen (Delgado leg.), all in the south of Spain. In Jäch's (1993) revision of the genus *Limnebius,* the species was considered to be distributed throughout southern Spain.

In recent surveys in the north-east of Spain this species was found in two localities in the Iberian mountains, in the provinces of Teruel, Guadalajara and Tarragona; and also in another locality near the Pyrenees, in the province of Girona, in the north-east extreme of the Iberian Peninsula. These new localities extend the distribution of the species to a wider area of Mediterranean influence, reaching the pre-Pyrenees in the north. Although there are no records from the north side of the Pyrenees, it would not be surprising to discover that *L. cordobanus* has a similar distribution pattern to, e.g. *Hydraena quilisi* Lagar, Fresneda & Hernando or *H. carbonaria* Kiesenwetter, both species reaching their northern limit in southern France.

Material studied: *Girona*, Palmerola, Marles river: 23.5.1993, 4 specimens (Aguilera leg.). *Guadalajara*, Poveda de la Sierra: 8.4.1993, 3 specimens (Gerend leg.). *Tarragona*, Tortosa, Calders river at Prat del Compte: 16.4.1995, 3 specimens (Gerend leg.). *Teruel*, Gudar: 22.05.1994, 12 specimens (Aguilera leg.).

BALFOUR-BROWNE, J. 1978. Studies on the Hydraenidae (Coleoptera) of the Iberian Peninsula. *Ciènc. Biol.* **4** 53-107.

IENISTEA, M.A. 1978. In ILLIES, *Limnofauna Europea*. Fisher Verlag, Berlin. pp. 303-314.

JÄCH, M.A. 1993. Taxonomic revision of the Palearctic species of the genus *Limnebius* Leach, 1815. *Koleopterologische Rundschau* **63** 99-187.

D'ORCHYMONT, A. 1938. Notes sur quelques *Limnebius* (Coleoptera, Palpicornia). *Bull. Ann. Soc. Ent. Belg.* **78** 275-291.

VALLADARES, L.F. & MONTES, C. 1991. *Lista faunística y bibliográfica de los Hydraenidae (Coleóptera) de la Península Ibérica e Islas Baleares*. Listas de la Flora y Fauna de las aguas continentales de la Península Ibérica No. 10, Asociación Española de Limnología.

Received June 1995

JAPANESE *LIMNEBIUS*

Only three species of *Limnebius* are known from Japan, *L. kweichowensis* Pu (of which *L. japonicus* Nakane is a synonym), *L. taiwanensis*, described by Jäch earlier, and the newly described *nakanei* and its subspecies *okinawensis*. All three are around 1 mm long and clearly fall into the *L. atomus* group, with the simplifed, paramere-less aedeagophore.

JÄCH, M.A. & MATSUI, E. 1994. The Japanese species of the genus *Limnebius* (Coleoptera, Hydraenidae). *Japanese Journal of Entomology* **62** 267-274.

ELMIDAE IS OFFICIAL AND *ELMIS* IS FEMALE

Opinion 1812 of the International Commission of Zoological Nomenclature rules in favour of Manfred Jäch's request, accepting that *Elmis* should be female, and ruling that the family name shall henceforward be Elmidae. Hopefully this puts to rest the arguments associated with Elminthidae, Elmididae, Helmidae and so on. The vote was 25 for and none against.

ICZN 1995. Elmidae Curtis, 1830 (Insecta, Coleoptera): conserved as the correct original spelling, and the gender of *Elmis* Latreille, 1802 ruled to be feminine. *Bulletin of Zoological Nomenclature* **52**(2) 217-218.

ICZN 1995. Opinion 1812. Elmidae Curtis, 1830 (Insecta, Coleoptera): conserved as the correct original spelling, and the gender of *Elmis* Latreille, 1802 ruled to be feminine. *Bulletin of Zoological Nomenclature* **52**(2) 217-218.

WEEVIL SYSTEMATICS

This review describes the basis for restructuring the weevil/bark beetle super family. Aquatic and wetland weevils are found mainly in the Brentidae (Nanophyinae), Erirhinidae (Stenopelminae, Erirhininae, Tanysphyrinae) and the Curculionidae s.s. (Cleoninae/Lixini, Bagoinae, Ceutorhynchinae/Phytobiini and Gymnetrinae).

MORRIS, M.G. 1995. Recent advances in the higher systematics of Curculionoidea, as they affect the British fauna. *The Coleopterist* **4** 21-30.

A PHYLOGENETIC ANALYSIS BASED ON THE GYRINID HEAD

Knowledge of the "living fossil" *Spanglerogyrus* is considered essential to understand the groundplan of the family Gyrinidae. This family is the sister-group of all other Adephaga, and, despite their "advanced" appearance, whirligigs are an early aquatic offshoot of the adephagan line. The larval studies in the 1994 paper indicate that the genera *Dineutus*, *Andogyrus* and *Macrogyrus* are monophyletic, which contradicts the findings of the 1990 paper, otherwise confirmed in the more recent study.

BEUTEL, R.G. & ROUGHLEY, R.E. 1994. Phylogenetic analysis of Gyrinidae based on characters of the larval head (Coleoptera: Adephaga). *Entomologica scandinavica* **24** 459-468.

IN THE FOOTSTEPS OF THE DINOSAURS - TEXAN HYDRAENIDAE

Hydraena dynosaurophila is described (alive) from near the fossilized footprints of Acrocanthosaurus. Another new species is *H. indiana*. This paper includes a comment on marked differences in morphology between two populations of *H. leechi* Perkins, found in two springs differing in altitude. The hydraenid fauna of Texas runs to 17 species.

JÄCH, M.A. 1994. Descriptions of new species of Hydraenidae (Coleoptera) from Texas, Indiana and Oklahoma, with faunistic and taxonomic notes on the family in Texas. *The Coleopterists Bulletin* **48** 301-308.

CHANGES AND ADDITIONS IN PALAEARCTIC *HYDRAENA*

Five new species of *Hydraena* s.s. are described, with a nett gain of three species because of new synonymies. *Hydraena subdepressa* Rey is synonymised with *H. angulosa* Mulsant, now seen to be a widespread European species, recorded from Spain, France, Belgium, Germany, Switzerland and Italy. *H. angulosa* is not yet known from Portugal, as material identified as *subdepressa* by Berthélemy and Whytton Da Terra was later corrected by Berthélemy to *stussineri* Kuwert. The loss of *subdepressa* is made up for *H. claryi*, a closely related species described from north-western Italy and found in Spain and France. The Turkish *H. pseudoriparia* d'Orchymont is split into two species, the nominate species, and *H. ilica* (*H. pseudoriparia* sensu Jäch 1992) from Anatolia. *H. nuratauensis* is described from Uzbekistan as a species related to *H. wraslei* Jäch from Tadzhikistan. Another new Uzbek species is *H. ukbekistanica,* and *H. puetzi* is described from eastern Russia. *H. carducha* Janssens is reduced to a synonym of *H. gressa* d'Orchymont. The paper concerning the Peloponnese describes two new species, *H. achaica* and *H. pelops*, plus recognition of *Ochthebius montenegrinus* Ganglbauer as Greek.

JÄCH, M.A. 1994. New and little known Palearctic species of the genus *Hydraena* (s.l.) Kugelann II (Coleoptera: Hydraenidae). *Entomol. Probl.* **25** 37-46.

JÄCH, M.A. 1995. New Hydraenidae from the Peloponnese (Greece) (Coleoptera: Hydraenidae). *Entomol. Probl.* **26** 39-42.

PALAEARCTIC *OCHTHEBIUS*

Five new species are described from Turkey (*fischeri*, *hanshebaueri*, *hofratvukovitsi*, *kirschenhoferi* and *punctatoides*), a further addition to the Turkish fauna being based on recognition of the specific status of *metallicus* d'Orchymont, originally described as a subspecies of *metallescens*. *Ochthebius angusi* is described from East Russia and China. Finally, *O. delgadoi* is described in the *lobicollis*-group from Spain. It is known from the provinces of Alicante, Albacete, Murcia and Jäen. *O. quadrifossulatus* Waltl, from which the new species is split, is more widely distributed. The lectotype is a female from Andalucia, another Spanish record being for Seville, but the species ranges through Morocco, Algeria, Tunisia and Sicily.

JÄCH, M.A. 1994. Revision der paläarktischen Arten der Gattung *Ochthebius* Leach. XIII. Beschreibung neuer Arten aus Spanien, der Türkei, Rußland un China. *Ann. Naturhist. Mus. Wien* **96**B 199-208.

PRIX SPÉCIAL POUR FRANCK BAMEUL

Congratulations to Franck Bameul for the award of the *Prix spécial Paul Pesson* from the Société entomologique de France, for his contributions to entomology. What is must be to peak so early in youth!

SOUTH AMERICAN *BEROSUS* AND *HEMIOSUS*

The neotropical genera *Derallus, Hemiosus* and *Berosus* are keyed, and the genus *Hemiosus* is fully reviewed, including descriptions of nine new species. *Berosus tartagalensis* is described form Argentina. Syntypes of *B. arcanus* Knisch have been found in d'Orchymont's collection, having originated in the collection of Lizer y Trelles.

OLIVA, A. 1994. A revision of the genus *Hemiosus* Sharp, 1882 in South America (Coleoptera: Hydrophilidae). *Bull. Annls Soc. r. belge. Ent.* **130** 267-303.

OLIVA, A. 1995. A new species of *Berosus* Leach from northwestern Argentina (Coleoptera: Hydrophilidae). *Bull. Annls Soc. r. belge. Ent.* **131** 57-60.

OLIVA, A. 1995. Sur quelques Berosini (Coleoptera: Hydrophilidae) de la collection Lizer y Trelles. *Bull. Annls Soc. r. belge. Ent.* **131** 75-77.

EVIDENCE FOR pH INSENSITIVITY

Over 100 tonnes of lime was applied to a watershed mire in southern Scotland in order to generate high pH water supplying a small loch, in which was recreated a trout fishery. The lake's fauna had previously been demonstrated to change in response to a combination of liming and the reintroduction of fish. An unnaturally large population of *Hydroporus palustris* was reduced and numbers of *Nebrioporus elegans* increased. Species such as *Agabus arcticus* and *Stictotarsus griseostriatus* have disappeared from the lake, suggesting a response to the change in pH. However, up above the lake, *A. arcticus* continued to be common in peat pools white with lime and with a pH as high as 8! This paper concerns a belated comparison of peat pools with and without lime. Basically - or acidically - nothing happened. It proved impossible to demonstrate any statistically significant differences between any of the 54 taxa identified, including 39 species of water beetle. What the study did confirm was the fundamental split between two types of peat pool community, that of shallow pools and flushes, dominated by *Hydroporus* species, and that of steeper-sided pools, dominated by bugs and dragonfly nymphs. This difference has previously been demonstrated in far more detail by Larson and House (1990).

FOSTER, G.N. 1995. Evidence for pH insensitivity in some insects inhabiting peat pools in the Loch Fleet catchment. *Chemistry & Ecology* **9** 207-215.

LARSON, D.J. & HOUSE, N.L. 1990. Insect communities of Newfoundland bog pools with emphasis on the Odonata. *Canadian Entomologist* 122 469-501.

SOME UNUSUAL ENCOUNTERS WITH *ELMIS AENEA* (MÜLLER)

by Jonty Denton

I netted the famous Balmer Lawn pond in the New Forest on 21 July 1994. By this time all that remained was a large churned-up puddle less than 20 cm deep. Several cows were drinking and defaecating around me as I worked. However, from this unpromising mess I took several sticklebacks, young of great crested newts, as well as 23 species of beetle, including *Graptodytes flavipes* and, to my surprise, one *Elmis aenea*. I find it difficult to imagine more unsuitable conditions for a species normally found in well oxygenated streams.

The previous week I had noticed two dead *E. aenea*, with many *Helophorus* on the roof of my car at Amberley Wild Brooks in Sussex. The drought-like conditions in the southern counties probably forced riffle specialists to look for alternative sites in the same way as pond species.

The distribution of *Elmis* in a small chalk stream near Selborne in Hampshire was also somewhat perplexing. Dozens of individuals were present under stones and bricks in an area of shaded, sluggishly flowing water ca 5-10 cm deep, but none could be found where these conditions were replaced by a series of small white water riffles, which support some *Fontinalis*. This pattern has persisted for at least three years (1993-1995).

Received April 1995

BEHAVIOUR OF *DINEUTUS INDICUS*

The aggregation behaviour of this large whirligig has been studied in a stream in eastern Nepal, a monsoonal area. During stable flow, group size varied from 1-100, with sexes being equally distributed between groups. The beetles fed as unspecialised omnivores. The fullness of guts was unrelated to group size, indicating that group members did not either gain or lose foraging opportunities from aggregations. It was concluded that aggregations form for some reason not connected with feeding tactics or breeding, anti-predatory behaviour providing the most likely explanation. Beetles became much rarer during the monsoon.

WILKINSON, S.M., RUNDLE, S.D., BREWIN, P.A. & ORMEROD, S.J. 1995. A study of the whirligig beetles *Dineutus indicus* (Aubé) (Gyrinidae) in a Nepalese hillstream. *The Entomologist* **114** 131-137.

TWO HYDRADEPHAGAN STRATEGIES ASSOCIATED WITH TEMPORARY PONDS

This paper is a formal version of work described in ***Latissimus* 2.** The ponds at Capmany in Girona fill with rain water on an irregular basis. The 49 species of Hydradephaga that occupy the site have two strategies for coping with the uncertainty. One is to survive droughts as adults in the fens, quickly breeding when water reappears. The other, opportunistic, approach is to colonise new pools, peaking as adults when the ponds start to dry out, thence dispersing and surviving in small numbers wherever they can.

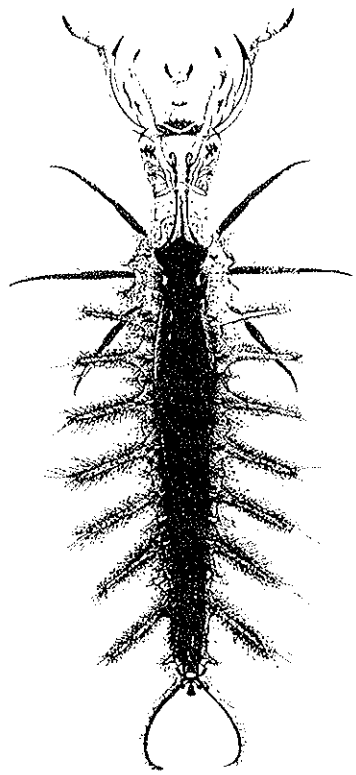
RIBERA, I., ISART, J. & RÉGIL, J.A. 1994. Coleópteros acuáticos de los estanys de Capmany (Girona): Hydradephaga. *Scientia gerundensis* **20** 17-34.

TENERIFE BEETLES

Of the 171 freshwater invertebrate taxa discussed in this paper, 37 are beetles, 11 being confined to the Canaries, one, the magnificent *Meladema imbricata* (Wollaston) being confined to Tenerife and the neighbouring La Gomera alone. In Tenerife, *M. imbricata* is restricted to the upper pine forests on the south slope of the island, whereas the permanent streams in laurel forest are occupied by the common southern European species, *M. coriacea* Laporte. Five other species of beetle are discussed in the context of vulnerability, one of them, *Chaetarthria similis* Wollaston, having recently well and truly escaped from this category, being recognised from much of the Western Mediterranean area. Six stream sites were selected for their conservation interest in Tenerife, the selection process being largely dictated by the rarity statuses of the species recorded rather than the species-richness of the sites.

MALMQUIST, B., NILSSON, A.N. & BAEZ, M. 1995. Tenerife's freshwater invertebrates: status and threats (Canary Islands, Spain). *Aquatic Conservation: Marine and Freshwater Ecosystems* **5** 1-24.

BROWSING SECTION - WATER DEVILS



Continuing our series on the correct use of language from the past, this is an extract from some extremely detailed observations on *Hydrochara caraboides* (L.). The plate was originally hand-coloured, being an engraving by John Cleghorn from a drawing by Dr Goring; a photocopy cannot do it justice.

"In examining the peculiarities of the structure and habits of this larva, what most strikingly attracts our attention is its ferocious and savage disposition, and the fitness of its organs for the exercise of its ravenous propensities. It may be safely asserted that no species of larva is known to be provided with weapons of destruction so powerful, so numerous, and so well adapted to their end, as those which this creature possesses. It is on this account that it has been popularly called the WATER DEVIL."

Quite the most depressing feature of the article, 157 years on, is the following:

"It is much to be regretted that modern entomologists attend so little to the aquatic larvae of insects; for surely it will not be pretended that a description of the creature in its perfect state constitutes its history. I have often made inquiries of the first entomologists of the day as to what insect a particular larva would become, and have as often been unable to obtain the slightest information."

GORING, C.R. 1838. On the larva of a species of British *Hydrophilus*. *The natural history of several new popular and diverting living objects of the Microscope, London, Pritchard, 2nd Edition* pp. 70-78, 1 coloured plate.

LEICESTERSHIRE RED DATA BOOK

This county list has been compiled from about 52,000 records held by the Leicestershire Museums Service. Of the 1,628 species reliably recorded from the country since 1970, 342 species attract some category of vulnerability or rarity. The equivalent statistics for water beetles alone are 7,000 records, 149 species in total and 57 requiring comment. The habitat, ecology and status of each species is discussed with attemtpts to identify threats and conservation measures. Derek has not put a price tag on the document but copies can be obtained from him (Leicestershire Museums Service, The Rowans, College Street, Leicester LE2 OJJ, England) at a special price of £5.

Lott, D.A. 1995. *Leicestershire Red Data Books. Beetles*. Leicestershire County Council Museums Arts & Records Service and Leicestershire & Rutland Wildlife Trust.

ABOUT THE ORIENTAL *HALIPLUS AGARWALI*

by Bernhard J. van Vondel

During the revision of the Oriental *Liaphlus*-species (Vondel, 1993) I did not have access to Vazirani's type material and his publication on the species of India (Vazirani, 1984). The *Zoological Record* did not take his publication into account, so I was not aware of the fact that it contained the description of a new species: *Haliplus agarwali*. Nakane (pers. comm.) drew my attention to this omission in my revision. Now that I have seen Vazirani's treatment of the Haliplidae of India, it is possible to judge better about his new and earlier species, although the types are not available.

I consider *H. agarwali* Vazirani to be a junior synonym of *H. indicus* Régimbart (1899), although there seems to be a difference (different interpretation?) in the serration of the elytral margin. *H. pulchellus indicus* sensu Vazirani (1984) is in fact *H. pulchellus* Clark (1863).

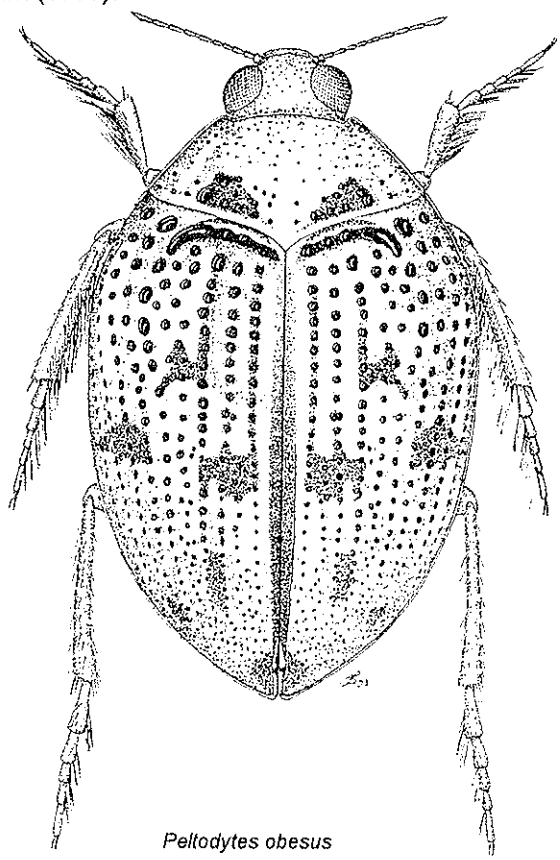
CLARK, H. 1863. Descriptions of new East-Asiatic species of Haliplidae and Hydroporidae. *Transactions of the Entomological Society of London* **3** 417-428.

RÉGIMBART, M. 1899. Révision des Dytiscidae de la région Indo-Sino-Malaise. *Annales de la Société Entomologique de France* **68** 186-367.

VAZIRANI, T.G. 1984. *Coleoptera. Family Gyrinidae and Family Haliplidae*. The Fauna of India. 140 pp., 57 figs., 3 plates. Calcutta.

VONDEL, B.J. VAN, 1993. Revision of the *Liaphlus* species of the Oriental region excluding China (Coleoptera: Haliplidae). *Tijdschrift voor Entomologie* **136** 289-316.

Received April 1995



Peltodytes obesus

PELTODYTES OBESUS FINDS A HOME

P. obesus was described by Peschet on the basis of a single unlabelled specimen in the Duchaine collection in Paris. Bernhard van Vondel has re-examined (and illustrated) the specimen, proving that Zimmermann was right in assuming it to be a junior synonym for *P. tortulosus* Roberts, a large nearctic species. The risks associated with the curation of unlabelled material are discussed, the basic point being that unusual material should be conserved.

VAN VONDEL, B.J. 1994. On the identity of *Peltodytes obesus* Peschet, 1923 (Coleoptera: Haliplidae). *Deinsea* **1** 53-55.

RECONSIDERING *HALIPLUS KULLERI* AND ITS RELATIVES

by Bernhard J. van Vondel

Since the revision of the Palaearctic species of *Haliplus* subgenus *Liaphlus* (van Vondel 1991) I have seen additional material belonging to the *Haliplus kulleri/jaechi/ortali*-group. *H. jaechi* Vondel (1991) and *H. ortali* Vondel (1991) were separated from *H. kulleri* Vondel (1988), mainly because of the differently shaped digitus on the left male paramere.

Examination of additional specimens from different countries (Cyprus, Iran, Iraq) shows, however, that all kinds of intermediate forms of this digitus are possible. Minor distinguishing characters as the density of the basal pronotal puncture-row and the weakly or well developed elytral maculation also vary in a way that it is hard to maintain the three species.

I now consider *H. jaechi* and *H. ortali* to be junior synonyms of *H. kulleri*.

VONDEL, B.J. VAN, 1988. Description of *Haliplus kulleri* n. sp. from Israel (Coleoptera: Haliplidae). *Entomologische Berichten, Amsterdam* **48** 97-98.

VONDEL, B.J. VAN, 1991. Revision of the Palaearctic species of *Haliplus* subgenus *Liaphlus* Guignot (Coleoptera: Haliplidae). *Tijdschrift voor Entomologie* **134** 75-144.

Received April 1995

OOPS A record for *Hydrophilus piceus* from the Isle of Wight turns out to be based on *Dytiscus marginalis*.

KNILL-JONES, S.A. 1995. *Hydrophilus piceus* (L.) (Coleoptera: Hydrophilidae) on the Isle of Wight - a correction. *Entomologist's Gazette* **46** 2.

SPANISH DYTISCID RECORDS

New records include *Methles cribratellus* (Fairmaire) from Tarragona, *Hydroglyphus signatellus* (Klug) from Tarragona, Toledo and Huesca, *Herophydrus musicus* (Klug) from Tarragona, *Rhithrodytes bimaculatus* (Dufour) from Huesca, *Coelambus fresnedai* Fery from Soria, and *Hydaticus transversalis* (Pontoppidan) from Barcelona.

HERNANDO, C. & AGUILERA, P. 1994. Nuevos datos sobre Dytiscidae (Coleoptera) para la Península Ibérica. *Zapateri, Revista aragonesa de Entomología* **4** 45-48.

***AGABUS SOLIERI* IN SPAIN**

A. solieri Aubé is identified from the Pyrenees in Huesca and Lérida but material from the Sierra Nevada are considered to be *A. bipustulatus* (L.).

SÁINZ-CANTERO, C.E., ALBA-TERCEDOR, J. & FRESNEDA, X. 1994. Sobre la distribución de *Agabus (Gaurodytes) solieri* Aubé, 1836, en la Península Ibérica (Coleoptera: Dytiscidae). *Boln. Asoc. esp. Ent.* **18** 95-96.

THE MATEJICEK AFFAIR

The theft of much carabid type material from the Natural History Museum, Vienna is recounted, including a prison-style set of photographs of the (alleged) thief. Although the (alleged) thief is named several times despite his release from police custody, the main thieves are those who purchase such stolen material. Manfred Jäch lists the missing material and notes that no action will be taken if it is returned voluntarily.

JÄCH, M.A. 1994. Jan Matejicek und das taxonomische *Carabus*-Desaster (Coleoptera: Carabidae). *Koleopterologische Rundschau* **64** 27-36.

ENTOMO PRAXIS - DMHF & GENITASE

Even if you are not Catalan, you may wish to know that entomological supplies are available from *Entomo praxis* (Tomà Yélamos, Apartat 37061, 08080 Barcelona - telephone and fax 93 323 08 77). Chemical products include several preparations for genitalia such as DMHF (10 ml for 300 ptas) and a proteolytic enzyme, Genitase, which can be used to remove non-chitinous material (1 gram at 950 ptas).

COELAMBUS NIGROLINEATUS STEVEN, A SPECIES NEW TO FRANCE (Coleoptera, Dytiscidae)

by Pierre Queney

In 1994 the study of the entomofauna of the Nature Reserve of Saint-Quentin-en-Yvelines, near Paris, allowed me, to explore this interesting place where there extends a large pond built under Louis XIV in order to supply Versailles.

This pond is surrounded with some smaller pools, which are generally much more attractive for water beetles, and in which I observed good species uncommon in the Paris area such as *Haliplus immaculatus* Gerhardt, *Ilybius subaeneus* Erichson, *Dytiscus circumflexus* Fab., and *Limnius opacus* Müller. But my best capture was certainly *Coelambus nigrolineatus* Steven, a dytiscid new to France. I took 25 specimens of it on 25 September and 8 October 1994 in company with two *C. confluens* Fab.

Information provided by Carr (1984), when he discovered it in England in April 1983 seem to be quite in accordance with my observations. The beetle must be a pioneer species. I caught it on a recently scraped gravel beach without vegetation.

However, it is rather surprising that the first mention of France concerns the environs of Paris, rather far from the usual habitat of Coleoptera and near to an industrial estate.

Carr, R. 1984. A *Coelambus* species new to Britain (Coleoptera: Dytiscidae). *Entomologist's Gazette* **35** 181-184)

Received March 1995

SCOTTISH RECORDS, 1993

A few notable species are recorded from south-west of Scotland by GNF. This paper will live on in ignominy for the occurrence of a *butterfly* record by GNF and Magnus Sinclair.

HANCOCK, E.G. 1995. Insect records from the west of Scotland in 1993. *Glasgow Naturalist* **22** 501-504.

***HYDROPORUS* IN THE CORDILLERA CANTABRICA**

This paper brings together a large number of new records of 17 species of *Hydroporus* for Cantabria, León, Lugo and Palencia, including *Hydroporus brancoi* Rocchi new for Spain, the latter having been described from Portugal.

GARRIDO GONZALEZ, J. & REGIL CUETO, J.A. 1994. Fauna acuatica de la Cordillera Cantabrica. I. El gen. *Hydroporus* Clairville, 1806 en la provincia fitogeografica Orocantabrica (Coleoptera Dytiscidae). *Boll. Soc. ent. ital., Genova* **126** 9-30.

GRANULEUBRIA, A NEW GENUS OF PSEPHENIDAE

This new genus is created for two new species, one from Turkey and one from Pakistan, and by transfer of two Indian species from *Drupeus*. *Falsodrupeus* Pic is transferred to the Psephenidae.

The male antennae have a superb antler-like appearance, but possibly the most remarkable feature lies in the microsculpture of the scutellum of *G. atriceps* (Pic), which might form the basis of a neo-Morris wallpaper.

JÄCH, M.A. & LEE, C.-F. 1994. Description of *Granuleubria*, a new genus of Eubriinae from west and south Asia. *Koleopterologische Rundschau* **64** 223-232.

ALTITUDINAL DISTRIBUTION OF CANTABRIAN BEETLES

Distributions are analysed on an altitudinal basis, using lists from 299 sites in the Cordillera Cantabrica. Lowland species include *Orectochilus villosus* Müller, *Bidessus minutissimus* (Germar), *Stictonectes epipleuricus* (Seidlitz) and *Stictotarsus duodecim-pustulatus* (Fab.). Intermediate altitude species are associated with land from 325 to 1,250 metres above sea level, within which the greatest species richness occurs. They include *Scarodytes halensis* (Fab.) and *Agabus didymus* (Olivier). The highland species include *Haliplus heydeni* Wehncke, *Hydroporus vespertinus* (Fery & Hendrich), *Agabus nebulosus* (Forster), *A. chalconatus* (Panzer), *A. albarracinensis* Fery and *Acilius sulcatus* (L.).

GARRIDO GONZALEZ, J., FERNÁNDEZ ALAEZ, M. & RÉGIL CUETO, J.A. 1994. Geographical distribution of Adephaga and Polyphaga (Coleoptera) in the Cantabrian Mountains (Spain): specific richness and analysis of the altitude factor. *Arch. Hydrobiol.* **131** 353-380.

EXTREMADURAN BEETLES

The fauna of the Extremadura in south-west Spain is reviewed in two papers. The lists include 71 Adephaga and 76 Polyphaga. *Stictonectes occidentalis* Fresneda & Fery and *Oulimnius cyneticus* Berthélemy & Whytton da Terra are recorded from Spain for the first time.

GARRIDO-GONZÁLEZ, J., DÍAZ-PAZOS, J.A. & RÉGIL-CUETO, J.A. 1994. Coleópteros acuáticos de Extremadura I (Haliplidae, Hygrobiidae, Gyrinidae, Noteridae y Dytiscidae). *Boletin de la Asociacion española de Entomologia* **18** 79-98.

GARRIDO-GONZÁLEZ, J., DÍAZ-PAZOS, J.A. & RÉGIL-CUETO, J.A. 1994. Coleópteros acuáticos de Extremadura II (Hydraenidae, Hydrochidae, Helophoridae, Hydrophilidae, Dryopidae y Elmidae). *Boletin de la Asociacion española de Entomologia* **18** 113-133.

A NEAR ASIAN GENUS NEAR *HYPHYDRUS*, *HYPHOVATUS*

Hyphydrus dismorphus Biström, from Thailand, is redescribed as the type species of a new genus *Hyphovatus*. *H. manfredi*, from Thailand, and *H. prapatensis*, from Sumatra are described as new species, all three species being keyed and illustrated.

WEWALKA, G. & BISTRÖM, O. 1994. *Hyphovatus* gen. n. from southeast Asia, with description of two new species (Coleoptera: Dytiscidae). *Koleopterologische Rundschau* **64** 37-43.

NEW INDIAN AND MALAGASSIC HYDRAENID GENERA

The pits and furrows that one associates with the *Ochthebius* pronotum have in *Davidraena* taken on the appearance of *Helophorus*. *Davidraena* is based on two species so far and *Gondraena* on three, all of which are fully illustrated and keyed.

JÄCH, M.A. 1994. Description of *Gondraena* gen.n. from South India and Madagascar and gen.n. from South India (Coleoptera: Hydraenidae). *Koleopterologische Rundschau* **64** 85-102.

NEW *MIRCOGIOTON* *Mircogioton grandis* is described from Sikkim and *M. spinosus* from Malaysia.

BAMEUL, F. 1994. Two new Oriental *Mircogioton* d'Orchymont, 1937 Coleoptera: Hydrophilidae: Sphaeridiinae). *Elytron* **7** (1993) 133-145.

THE *GRAPTODYTES AEQUALIS* GROUP

The group is revised, including the description of two new species, resulting in the following checklist with newly established synonymies. The key is a welcome addition to the usual high quality figures.

Graptodytes aequalis (Zimmermann) *flavipes* var. *octolineatus* Schaufuß	Morocco, Portugal, Spain
G. pietrii Normand	Tunisia, Algeria
G. castilianus Fery	Spain (Palencia, Avila, León, Soria)
G. siculus Fery *pietrii* sensu Fery	Italy (Sicily)
G. veterator (Zimmermann) *flavipes* var. *montenegrinus* Schaufuß	Croatia, Montenegro, Macedonia, Italy, Greece, Turkey
G. atlantis (Théry)	Morocco
G. flavipes Olivier *concinnus* Stephens *flavipes* var. *portalegrensis* Schaufuß	and France to Siberia and Mongolia

FERY, H. 1995. Notizen zur a[e]*qualis*-Gruppe und weiteren Arten der Gattung *Graptodytes* Seidlitz 1887 (Coleoptera: Dytiscidae). *Entomol. Z.* **105** 33-56.

PELTHYDRUS

The 21 species of the subgenus *Globipelthydrus* are described and keyed. These look like the hydrophilid equivalent of *Omophrum*. They are confined to the Orient.

SCHÖNMANN, H. 1994. Revision der Gattung *Pelthydrus* Orchymont. 1. Teil: *Globipelthydrus* subgen.n. (Coleoptera: Hydrophilidae). *Koleopterologische Rundschau* **64** 189-222.

CANTHYDRUS

By designating a lectotype for the Noterid, *Canthydrus flavus* (Motschulsky), the position is clarified for *C. ritsemae* (Régimbart), an Asian species of which *C. pseudoflavus* Rocchi is a new synonym. *C. rocchii* is newly described from Burma and *C. birmanicus* Guignot, also from Burma, is redescribed.

WEWALKA, G. 1992. Die *Canthydrus flavus* (Motschulsky)-Gruppe aus Südostasien (Coleoptera: Noteridae). *Linzer biol. Beitr.* **24** 803-811.

TAIWAN BEETLES

Allopachria wangi Wewalka & Nilsson is described from northern Taiwan. *Agabus taiwanensis* Nilsson & Wewalka is a species close to the *Agabus guttatus*-group, but the row of punctures on the pronotum is continuous and the male third mesotarsal segment has sucker hairs.

NILSSON, A.N. & WEWALKA, G. 1994. Two new species of the genera *Allopachria* and *Agabus* from Taiwan (Coleoptera, Dytiscidae). *Linzer biol. Beitr.* **26** 991-998.

PALAEARCTIC SPECIES IN THE *HYDROPORUS PLANUS*-GROUP

This group is considered to comprise 17 species, which are keyed in this important work. *Hydroporus inscitus* Sharp is redescribed from Iraq. *H. carli* is newly described from the Yemen and *H. oasis* from Egypt. *H. goldschmidti* Gschwendtner is redescribed from Uzbekistan and China. *H. recidivus* Gschwendtner was formally described as a variety of *goldschmidti*, but is redescribed as a distinct species from Kirgisia. *H. transgrediens* Gschwendtner, from Turkmenia, is upgraded to species status from being a subspecies. A new species, *H. askalensis*, is recognised from central Anatolia, Turkey, being distinguished from *H. pubescens* by the last two sternites being microreticulate. *H. ineptus* Sharp is accepted as a distinct species, known from Syria, the lectotype being either Egyptian or Syrian. Perhaps the most interesting addition is *H. feryi*, a species from Northern Tunisia and Algeria. It resembles *H. analis* Aubé in the microsculpture of the dorsum, but it is smaller and less pointed at the rear. It is similar to small specimens of *H. pubescens* but has more extensive pronotal and ventral reticulation. *H. feryi* is perhaps worth bearing in mind as a species that might occur in running waters in southern Spain.

WEWALKA, G. 1992. Revisional notes on Palearctic species of the *Hydroporus planus* group (Coleoptera: Dytiscidae). *Koleopterologische Rundschau* **62** 47-60.

PAPERS IN BRIEF

HODGE, P.J. 1995. *Haliplus mucronatus* Stephens (Haliplidae) in Sussex. *The Coleopterist* **4**(2) 54.

WEWALKA, G. 1994. A new species of *Chostonectes* from Australia (Coleoptera: Dytiscidae). *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* **46** 140-142.

SCHISM IN PORTRAIT ECOLOGY

Readers may recall an earlier article featuring the Holistic Institute of Portrait Ecology (HIPE). This was intended as an alternative to an unfortunate development known as Landscape Ecology. The problems associated with LE are best exemplified by a paper in a conference at Digne-les-Bains in which a photograph was shown of La Crau, an entirely flat area by the Rhône, evenly covered with a mixture of xerophytic vegetation and stones; this was described as a landscape. Portrait ecologists are more concerned with portraying elevated land features (ELFs), fjords and similar vertical features which are so much better described by the bottoms up approach as opposed to the top down approach of LE theorists. LE devotees talk about metapopulations. Regrettably one must report a split between two PE factions, one favouring the orthopopulation theory (where individuals develop separately in ones and twos and then come together as a single mobile population, often consuming vegetation in large quantities) and parapopulation theory, in which clusters of individuals appear to arrive on a portraitscape from the sky. This debate has proved so fierce that a new organisation has been formed, The Real Institute of Portrait Ecology, which is entirely concerned with the redevelopment of words rather than theories. Some examples are given below, based on the real life experience of the Third International Conference of Carabidology.

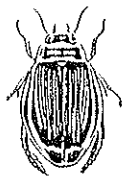
Beta-diversity	Use of side roads when the main road is blocked
Landform sequence	A sort of dance
Localised extinction event	Death
Rarefaction	Ventilation of a room after a diffusion lead process has occurred
Patch size functionality	Number of beetles lost through holes in net as a function of the net's age
Net production efficiency	GB Nets. Need we say more?

Anyone wishing to join the Real Institute should apply to TRIPE@PU.AC.UK.

The e-mail file *Updates can be notified to Anders Nilsson or to the editor.*

FIFTH INTERNATIONAL CONFERENCE ON CLASSIFICATION, PHYLOGENY & NATURAL HISTORY OF HYDRADEPHAGA 1-8 September 1996

This symposium is planned to take place immediately after the XX International Congress in Florence (Firenze), for which see page 8 for more details. If you are interested in attending this symposium, you should contact Michel Brancucci by fax on ++ 41 61 266 55 46)(e-mail also available).



BALFOUR~BROWNE CLUB MEETING 199

Details will be issued on a separate form.

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Correspondence should be addressed to the Club Secretary:-
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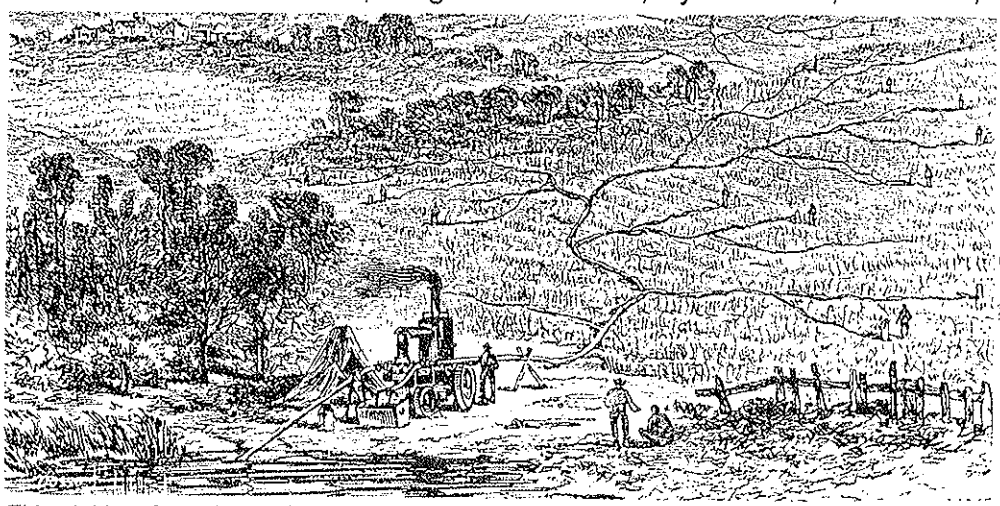
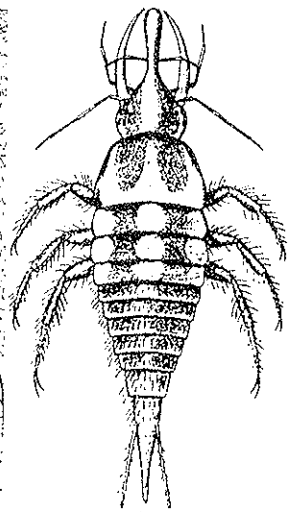
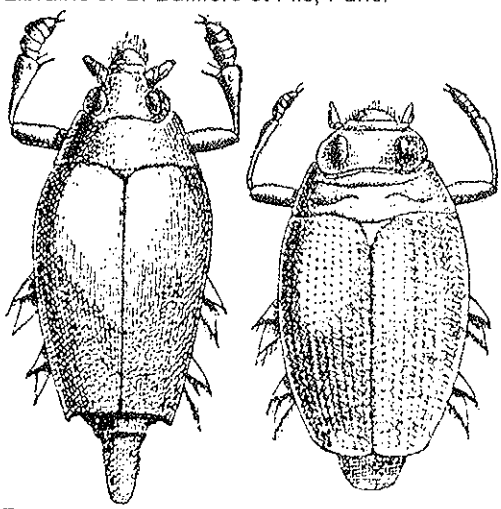




This etching, from the back cover of a paper by Régimbart, shows an attempt to mechanise a meeting of the Balfour~Browne Club in 1898. Librairie J.-B. Baillière et Fils, Paris.



Franck Bameul had to complete a thesis on midges (Ceratapogonidae) in order to complete his studies as a medical doctor earlier this year. Photograph: Robert Constantin.

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