

Lodged with Joja Geiger since 2019 the Ierse Kevers Trophy is on the move again. See page 23.

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THE NEAR-INVISIBLE LIVES OF IRELAND'S WATER BEETLES



With this image accompanying his article in the *Irish Times* on 6 November 2021 Michael Viney doubtless intended to recall the only confirmed occurrence(s?) of *Hydrophilus piceus* L. in Ireland. Frank Balfour-Browne (1962) reported

“a letter I received from John Clegg, Curator of the Haslemere Educational Museum in April, 1961. He had received a letter from J.C. Stewart of Downpatrick, Co. Down, Ireland who told him that, in the previous year he had dipped a bucket in water near his house and caught a male *Hydrophilus*. This is the first Irish record but is it a record of a newly-arrived migrant or ... ? In 1909 I was breeding the beetle in enclosed tubes in my garden at Holywood [also County Down] and in July of that year I had a number of young larvae which I did not want and I planted them in a suitable pond on Ballymenoch Hill near my home. I examined the pond again in October but found no sign of *Hydrophilus* and I assumed that the larvae had all died. Had they?”

The key word in all this, assuming J.C. Stewart had limited expertise in water beetles, is “male”. The male sucker tarsi of a *Dytiscus semisulcatus* Müller are more likely to have been noticed than the spur on the claw of a *Hydrophilus*, and this kind of misidentification of large water insects is not uncommon. These records passed without any comment in the original Red List published in 2008, as they were then at best considered a failed introduction.

Here is a hefty abstract of Michael’s article.

Such special histories mark others among the 1,000 Irish species considered “vulnerable”, “near threatened” or “in danger of extinction” in Red Lists for protection. These were drawn up for the National Parks and Wildlife Service (NPWS) and the Northern Ireland Environment Agency. The latest list of protected and threatened Irish species, published online (NPWS Wildlife Manual 116), took 10 scientists to compile, each a specialist in one branch of living nature. From seabirds and dolphins to dragonflies and lichens, the species were selected from estimated 18,000-plus birds, animals, plants, fish and insects in the Republic alone. Many of the man-made threats to their existence are known and even measurable, but the vagaries and intensities of climate change have yet to be experienced. Floods, droughts and heat waves will all have impact, for example, on the near-invisible lives of water beetles, which are such a distinctive part of Ireland’s natural world.

Until it sprang a leak and slowly sagged into a bog, my fabricated garden pond housed a host of water beetles. The largest and most fiercely carnivorous was the great diving beetle, which flies at night to avoid interception by birds. It is suggested that it looks for glints of reflected moonlight and has sometimes ended up in a water trough or flooded wheelbarrow. Its pursuit of frog tadpoles is shared by its offspring, a singularly sinister style of prawn. I include the great diving beetle in my drawing. This was made in response to an experimental Irish recording of the chirps and stridulations of underwater life, captured by a dangled hydrophone. So beetles, like whales, can share the language of submarine song.

The study of Ireland's water beetles has a long and dedicated history, revived in recent years by the discovery of new Irish species in the lakes of the Burren and elsewhere. Of some 240 known wetland species, almost 70 have been listed for Red List protection. Scientific names come first, but English common names follow in almost every case – the Bubblegum Diver and Bald-beaked Sloth Weevil among them. The one exception in the NPWS list is the *ciarogínbán*, presumably named by the science team sifting the beetles from Ireland hardwater limestone lakes. It [was] discovered that Ireland holds most of the global population of *Ochthebius nilssoni*, a species never reported from Britain. This gives the country not only the right to award the beetle a native common name but also, as the team emphasises, “a responsibility to protect it”. Between 2006 and 2016, the *ciarogínbán* was found in five Burren lakes and later in Co Mayo's Lough Carra. There, in Ireland's most famously pristine and closely studied karst limestone lake, the flea-sized (1.6mm) beetle browses on a spongy, bright cream-yellow biofilm on rocks called *krustenstein*. A tiny Irish beetle in such a wild and whitish habitat does come together in a likely sort of Irish name, though *krustensteinfloh* might work well in certain foreign quarters.”

Thanks to Bruce Philp for drawing attention to the article, to Áine O Connor for obtaining Michael Viney's permission, and, of course, to Michael himself.

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FLORENCE BEETLES

Records are divided into three periods, with the number of species found before 1966 (114 species) dominating 1966-1999 (41 species) and 2000-2020 (59 species). Fifty-five Hydradephaga are recorded plus 44 Hydrophilidae, 19 Hydraenidae, only one scirtid (*Elodes denticulata* (Klausnitzer)), three Elmidae, eight Dryopidae, five Limnichidae and five Heteroceridae. Species of interest include *Ilybius pederzanii* (Fery & Nilsson), *Graphoderus austriacus* (Sturm) *Helophorus liguricus* Angus, *H. rinki* Angus, four species of *Georissus*, *Limnebius nitiduloides* Baudi di Selve, and *Heterocerus fuscus etruscus* Mascagni. The paper disposes of old records for *Hydraena nigrita* Germar (probably *subimpressa* Rey).

ROCCHI S, TERZANI F, MASCAGNI A & CIANFERONI F 2021. Gli Insetti di Firenze. La coleotterofauna acquatica (Coleoptera: Hydradephaga, Hydrophiloidea, Hydraenidae, Scirtidae, Elmidae, Dryopidae, Limnichidae, Heteroceridae). *Quaderni del Museo Civico di Storia Naturale di Ferrara* 9 81-102.

COMMON SPECIES NAMES OF ADEPHAGAN WATER BEETLES FROM TEN EUROPEAN COUNTRIES LISTED AND COMPARED

Anders N. Nilsson

Introduction

Common names (or trivial, vernacular etc.) of organisms represent the antithesis of both *proper names* and *scientific names*. Whereas proper names refer to single individuals, like David Sharp, common names refer semantically to multiple entities belonging to the same taxon or class of objects. Unlike the Latinized scientific taxon names, common names are based on the normal language of everyday life and are not regulated by specific sets of rules, although attempts to standardize their usage are by no means rare. In Europe, there is a long tradition of using common species names for organisms such as plants, mushrooms and vertebrates. The scientific resistance to the construction of new common names also has a long history, and already Augustin de Candolle in his 1868 *Laws of Botanical Nomenclature* wanted to stop such meaningless activities. Today we cannot but accept the total success of common names in botany or ornithology, and it is more or less impossible to imagine a world without them.

Common names of bug species have traditionally been rare in most European languages (Frank 2004). The few older names that existed have normally been attached to pest species, really big bugs, or otherwise conspicuous kinds. As butterfly collecting became a widespread hobby early on, common names started to accumulate, and in many countries were constructed also for the smaller and more poorly known species of Lepidoptera. In some countries such as Germany, dragonfly species also got their trivial names fairly early on. It seems that beetle collectors were more reluctant about common names because the scientific names served their purpose and most beetles in fact are rather small, dark-coloured, and difficult to identify without the dissection of genitalia. However, the lepidopterists have also experienced severe disputes on the value of common names. Murphy and Ehrlich (1983) listed some of the arguments against them and concluded: "What needs to be done with common names is to discourage their use whenever possible."

For most insects, the urge for common names increased markedly when nature conservation clerks started to realise that organisms other than plants and vertebrates were negatively affected by man's transformation of nature. Environmental pressures and fragmentation of habitats due to such things as large-scale farming, industrialization, and the expanding forestry could be linked to a trivializing effect on nature. Among beetles, especially those developing in dead wood and associated fungi, became an important part of species conservation, soon developing into red-listing (Bachman *et al.* 2019).

Expanding human activities also affected freshwater environments, and aquatic insect larvae soon became an important tool for monitoring. Forestry drainage, eutrophication, pollution, and acidification became important issues that placed many aquatic insects on the red-lists, including some water beetles (e.g. Foster *et al.* 2009, Spitzenberg *et al.* 2016).

The red-listing activities created a space where governmental clerks got to meet the insect experts, amateurs or professionals. The common urge to help insect species to survive created a common ground for disparate groups of people like bureaucrats and nerdish collectors, and lots of different committees were formed. The enormous mass of knowledge gathered by the experts now had to fit into systems of categories that even politicians could understand. An important part of this popularization was the construction of new common species names. The role of common names in conservation was evaluated by Tim New (2008), who reached the

following conclusion: “In contexts such as conservation advocacy, where nonspecialist interests become paramount, well-focused common names for insects are important in facilitating communication, and should indeed be coined and used with pride.” Mattias Forshage (2000) presented a well-balanced review of the usage of common species names, with a focus on Swedish dung beetles. Foster and Bilton (2014) noted a certain hostility towards common names for water beetles, and found it justified when such names were being used without their Latin counterparts or were simply misleading. They provided *Sieltitia balsetensis* Abeille de Perrin named “Perrin’s cave beetle” on the IUCN Red List as an example of the latter category as it lives in deep river gravel beds rather than caves.

The red-listing system also brought a renewed interest in faunistics, resulting in national online registration systems of species records. Also here common names of species were requested. At least in Sweden, the production of lavishly illustrated national key books has increased the demand for common names, as all species dealt with are supposed to have one, in most cases constructed by specific committees.

Common names of more recent origin tend to be rather long and complicated as supposedly to mirror the scientific nomenclature and hierarchic taxonomic categories, often including at least three parts corresponding to the family, genus and species levels. Using the Dutch name of *Dytiscus latissimus* L as an example, “brede geelgerande waterroofkever” (broad yellow-fringed diving beetle), the three taxonomic levels are quite evident. As a contrast, the more traditional German name “Breitrand” is much simpler. In the Hydradeptera it is chiefly in the Dytiscidae that the three part names are common, whereas in the other, smaller, families two parts is the rule. One problem with common names constructed to match a classification is that it tends to change now and then in connection with new insights into the favoured phylogenies.

Official online biodiversity databases are today used as tools for establishing national lists of common names of species. Staff handling such systems have the power to create names from scratch where no common names exist, or to impose a particular choice of name where there is more than one common name. There exists also a practice of improving existing common names or replacing them with names that conform more to the relatedness of the organisms. As a rule, only native species get common names. Hungarian names are available also for some expected but as yet unrecorded species. These are not included in this study. Another exception is the South American diving beetle *Megadytes ducalis* Sharp, largest in the world, known as The Duke (Hendrich *et al.* 2019). In my opinion, also the remarkable *D. latissimus* would benefit from an international common name, and here I suggest it should be called “The Big D”.

Common names normally refer to the species’ appearance, anatomy, habitat or behaviour. As an example, the Finnish name for *Nectoporus sanmarkii* (Sahlberg), “puroraitasukeltaja”, translates as “creek striped diver”, thus combining habitat, appearance and behaviour. Some names are related to geography, like the Danish name of *Agabus clypealis* (Thomson) “Holmegårds damvandkalv” (Holmegård pond diving beetle), known from this locality. In a few cases the smell of the beetle has also been used in forming names, most likely with reference to defence chemicals. Another possibility is a common name that relates more directly to the scientific name, like “Suffrian’s whirligig” for *Gyrinus suffriani* Scriba. For the construction of such names, my list (Nilsson 2010), which has explanations of all given species epithets, may come in handy. Names based on obscure associations seem to be part

of a largely oral tradition, and at least in Great Britain reflect the jargon used by beetle collectors on excursions and in pubs. An example is The Dualist as common name for *Laccornis oblongus*. This species was long known in Great Britain only from England, but many Scottish records were made later such that it was judged to have a dual nationality, The Dualist being in my material associated with Ireland.

Uniformity in the usage of common names within a language or nation may be desirable but difficult to establish. The Entomological Society of America is responsible for the Common Names of Insects Database, now including more than 2,000 names. New name suggestions received are reviewed by a specific committee. Only the names in the database are allowed in the publications of the society. Such a strict system may be justified in a big federation like the US.

The Australian Insect Common Name database can be searched online (AICN 2021). Their only named dytiscid is *Cybister tripunctatus* (Olivier), known as “three-punctured diving beetle”. The “common whirligig” when you’re down under refers to *Gyrinus convexiusculus* Macleay, and, when saying “large water beetle”, the Australians will think you mean *Hydrophilus latipalpus* Castelnau. That’s about it! In more widespread languages like English, there is always the possibility that common names already in use in the northern hemisphere, will be reinstated for other species in the southern one.

Common species names of aedephantan water beetles from ten selected European countries are here listed together and translated into English. The proportions of species with common names are compared among countries. The number of names per species is studied in relation to the number of countries it is known from. The meanings of names are categorized and the number of names per category calculated. Distributions of names over categories are compared among selected countries.

Material and methods

Lists of common species names of aedephantan water beetles were prepared for the following: Denmark, Finland, Germany, Great Britain, Hungary, Iceland, Ireland, the Netherlands, Norway, and Sweden. All names from the non-English speaking countries were translated into English in order to enable comparisons of meanings. The selection of countries or languages were based on practical reasons, limited to Latin letters and excluding South Europe as the interest in common names there seemed very low. Most common names were gathered from the national red-lists or online recording or taxonomic databases listed as references below, with the help of local contacts. The separation of names in the English language used in Great Britain and Ireland, respectively, was a bit tricky. The Irish names were chiefly got from Foster (2016) and Foster *et al.* (2009), whereas the British names originate from Foster (2008, 2010) and the NBN Atlas (2021).

The *Balfour-Browne Club Newsletter* (1-50) and *Latissimus* (1-48) were scanned for common names. Several of the names found are absent from the official lists. Likewise, a quick survey of the Swedish popular insect literature and some older encyclopedias produced forty Hydradephaga species common names, most of which are absent from the official lists. My interpretation is that in most countries, many more names exist than those having been approved by those responsible for the official listings. Either these names have been overlooked or they have been judged as not up to current standards.

The meanings of all 378 common names were classified according to the following categories and subcategories: *anatomy* (body, head, legs), *appearance* (colour, hairiness, sculpture, shape, size), *association* (free, Latin name), *behaviour*

(preference, movement, sound-production), *distribution* (altitude, direction, occurrence), *environment* (landscape, substrate, wetland), and *rarity* (common). The classification was based on the species-part of the name, thus neglecting the parts that were supposed to match the genus or family name. Common family names, available in all studied languages are not dealt with separately, but only as part of the species names. Common names referring to the genus level as a rule only exist as part of the species names.

Name list

Common species names of adepagan water beetles from: Denmark (DK), Finland (FI), Germany (DE), Great Britain (GB), Hungary (HU), Iceland (IS), Ireland (IE), the Netherlands (NL), Norway (NO), and Sweden (SE). English direct translations are given for all other languages in order to communicate meaning.

Dytiscidae

Agabinae

Agabus adpressus Aubé - (FI) Purotaitosukeltaja (creek skilled diver).

Agabus affinis (Paykull) - (FI) Pikitaitosukeltaja (pitch skilled diver), (HU) Lápi gyászcsíkbogár (bog mourning diving beetle).

Agabus arcticus (Paykull) - (FI) Pohjantaitosukeltaja (northern skilled diver), (IE) Arctic diver.

Agabus biguttatus (Olivier) - (HU) Pataki gyászcsíkbogár (stream mourning diving beetle).

Agabus bipustulatus (L.) - (FI) Isotaitosukeltaja (big skilled diver), (IS) Brunnklukka (well beetle), (DE) Gemeiner Schnellschwimmer (common fast-swimmer), (HU) Gyakori gyászcsíkbogár (common mourning diving beetle), (NL) Tweepuntbeekkever [alt. Gewone snelzwemmer] (two-spotted brook beetle).

Agabus brunneus (Fab.) - (GB) Brown diving beetle.

Agabus clypealis (Thomson) - (DK) Holmegårds damvandkalv (Holmegård pond diving beetle), (FI) Kilpitaivosukeltaja (shield skilled diver).

Agabus confinis (Gyllenhal) - (FI) Jänkätaitosukeltaja (marsh skilled diver).

Agabus congener (Thunberg) - (FI) Metsätaitosukeltaja (forest skilled diver), (IE) Relative diver, (HU) Erdei gyászcsíkbogár (forest mourning diving beetle).

Agabus conspersus (Marsham) - (IE) Spattered diver, (HU) Vörhenyes gyászcsíkbogár (reddish mourning diving beetle), (NL) Brakwaterkever (brackish water beetle).

Agabus elongatus (Gyllenhal) - (FI) Suikutaitosukeltaja (slim skilled diver).

Agabus fuscipennis (Paykull) - (HU) Vöröslábú gyászcsíkbogár (red-legged mourning diving beetle).

Agabus guttatus (Paykull) - (FI) Täplätaitosukeltaja (spotted skilled diver), (HU) Hegyi gyászcsíkbogár (mountain mourning diving beetle).

Agabus infuscatus Aubé - (FI) Hämytaitosukeltaja (diffuse skilled diver).

Agabus labiatus (Brahm) - (FI) Kielataivosukeltaja (birch-fen skilled diver), (IE) Lipped diver, (HU) Kis gyászcsíkbogár (small mourning diving beetle).

Agabus lapponicus (Thomson) - (FI) Lapintaitosukeltaja (Laplandish skilled diver).

Agabus melanarius Aubé - (IE) Wallow diver, (HU) Kormos gyászcsíkbogár (sooty mourning diving beetle).

Agabus moestus (Curtis) - (FI) Sysitaitosukeltaja (charcoal skilled diver).

Agabus nebulosus (Forster) - (HU) Sárgás gyászcsíkbogár (yellowish mourning diving beetle).

Agabus paludosus (Fab.) - (FI) Suotaitosukeltaja (bog skilled diver), (HU) Barnaszárnyú gyászcsíkbogár (brown-winged mourning diving beetle).

Agabus pseudoclypealis Scholz - (FI) Kuolantaitosukeltaja (Kola skilled diver).

Agabus serricornis (Paykull) - (FI) Sahataitosukeltaja (saw skilled diver).

Agabus setulosus (Sahlberg) - (FI) Sukastaitosukeltaja (hairy skilled diver).

Agabus striolatus (Gyllenhal) - (DK) Smal damvandkalv (slender pond diving beetle), (HU) Recés gyászcsíkbogár (reticulated mourning diving beetle).

Agabus sturmii (Gyllenhal) - (FI) Rutataitosukeltaja (ooze skilled diver).

Agabus thomsoni (Sahlberg) - (FI) Tunturitaitosukeltaja (fjeld skilled diver).

Agabus uliginosus (L.) - (FI) Kaltiotaitosukeltaja (cold spring skilled diver), (IS) Tjarnaklukka (tarn beetle), (HU) Réti gyászcsíkbogár (meadowy mourning diving beetle).

Agabus undulatus (Schrank) - (HU) Harántsávós gyászcsíkbogár (transverse-banded mourning diving beetle), (NL) Gegolfde beekkever (undulated brook beetle).

Ilybius ater (De Geer) - (FI) Isoliejusukeltaja (big mud-diver), (HU) Nagy orsócsíkbogár (big spindle diving beetle).

Ilybius chalconatus (Panzer) - (IE) Copper diver, (HU) Rezes gyászcsíkbogár (coppery mourning diving beetle).

Ilybius crassus Thomson - (FI) Rahkaliejusukeltaja (peatmoss mud-diver), (HU) Zömök orsócsíkbogár (dumpy spindle diving beetle).

Ilybius erichsoni (Gemminger & de Harold) - (HU) Erichson-gyászcsíkbogár (Erichson's mourning diving beetle).

Ilybius fenestratus (Fab.) - (FI) Lampiliejusukeltaja (pond mud-diver), (HU) Vörhenyes orsócsíkbogár (reddish spindle diving beetle), (NL) Vensterwaterroofkever (window diving beetle).

Ilybius fuliginosus (Fab.) - (DK) Gulrandet damvandkalv (yellow fringed pond diving beetle), (FI) Laitaliejusukeltaja (fringed mud-diver), (DE) Rußfarbener Schlammschwimmer (ash-coloured mud swimmer), (HU) Szegélyes orsócsíkbogár (margined spindle diving beetle).

Ilybius guttiger (Gyllenhal) - (FI) Pikiliejusukeltaja (pitch mud-diver), (HU) Kis orsócsíkbogár (small spindle diving beetle).

Ilybius neglectus (Erichson) - (HU) Fényes gyászcsíkbogár (shiny mourning diving beetle).

Ilybius quadriguttatus (Lacordaire) - (FI) Ruonaliejusukeltaja (reed-bottom mud-diver), (HU) Gyakori orsócsíkbogár (common spindle diving beetle).

Ilybius similis Thomson - (HU) Sötét orsócsíkbogár (dark spindle diving beetle).

Ilybius subaeneus Erichson - (FI) Häiveliejusukeltaja (shiny mud-diver), (IE) Dull bronze diver, (HU) Fényes orsócsíkbogár (shiny spindle diving beetle).

Ilybius subtilis (Erichson) - (HU) Hegyesvállú gyászcsíkbogár (pointed-shoulder mourning diving beetle).

Ilybius wasastjerna (Sahlberg) - (FI) Kuljuliejusukeltaja (forest pool mud-diver).

Platambus maculatus (L.) - (DK) Gulstribet åvandkalv (yellow striped river diving beetle), (FI) Kirjosukeltaja (multicoloured diver), (DE) Gefleckter Flussschwimmer [alt. Gefleckter Schnellschwimmer] (spotted river swimmer), (HU) Tarka csíkbogár (variegated diving beetle), (NL) Gevlekte beekroofkever (spotted brook diving beetle).

Colymbetinae

Colymbetes dolabratus (Paykull) - (FI) Pohjansoikosukeltaja (northern oval diver), (IS) Fjallaklukka [alt. Grænlandsklukka] (fjeld beetle).

Colymbetes fuscus (L.) - (DK) Tværridset vandkalv (cross grooved diving beetle), (FI) Ruskosoikosukeltaja (brown oval diver), (DE) Gemeiner Teichschwimmer

(common pond-swimmer), (HU) Gyakori recéscsíkbogár (common reticulated diving beetle), (NL) Bruine duiker (brown diver).

Colymbetes paykulli Erichson - (FI) Tummasoikosukeltaja (dark oval diver).

Colymbetes striatus (L.) - (FI) Juovasoikosukeltaja (striped oval diver), (HU) Sárgalábú recéscsíkbogár (yellow-legged reticulated diving beetle).

Nartus grapii (Gyllenhal) - (HU) Fekete particsíkbogár (black shore diving beetle).

Rhantus bistratus (Bergsträsser) - (FI) Viirurantusukeltaja (striped streak diver), (HU) Sávosnyakú particsíkbogár (banded-necked shore diving beetle).

Rhantus consputus (Sturm) - (HU) Lapos particsíkbogár (flat shore diving beetle).

Rhantus exsoletus (Forster) - (HU) Tavi particsíkbogár (lake shore diving beetle).

Rhantus fennicus Huldén - (FI) Suomenrantusukeltaja (Finnish streak diver), (SE) Finsk gulbuk (Finnish yellow belly).

Rhantus frontalis (Marsham) - (HU) Sárgamellű particsíkbogár (yellow-chested shore diving beetle).

Rhantus latitans Sharp - (HU) Sárgahasú particsíkbogár (yellow-bellied shore diving beetle).

Rhantus notaticollis (Aubé) - (FI) Laikkarantusukeltaja (spotted streak diver).

Rhantus suturalis (Macleay) - (DK) Marmorvandkalv (marble diving beetle), (GB) Supertramp beetle, (DE) Punktierter Tauchschwimmer (punctured pond swimmer), (HU) Gyakori particsíkbogár (common shore diving beetle), (NL) Bepoederde waterroofkever [alt. Slijktor] (powdered diving beetle).

Rhantus suturellus (Harris) - (FI) Saumarantusukeltaja (suture streak diver), (HU) Északi particsíkbogár (northern shore diving beetle).

Copelatinae

Liopterus haemorrhoidalis (Fab.) - (HU) Rozsdás csíkbogár (rusty diving beetle).

Dytiscinae

Acilius canaliculatus (Nicolai) - (FI) Pikkukiekkosukeltaja (small disc-shaped diver), (GB) Lesser diving beetle, (DE) Furchenschwimmer (grooved swimmer), (HU) Sárgacombú barázdáscsíkbogár (yellow-thighed furrowed diving beetle), (NL) Gestreepte haarwaterroofkever (striped hairy diving beetle).

Acilius sulcatus (L.) - (DK) Stribet skivevandkalv (lined disc-shaped diving beetle), (FI) Isokiekkosukeltaja (big disc-shaped diver), (DE) Gemeiner Furchenschwimmer (common grooved swimmer), (HU) Gyűrűscombú barázdáscsíkbogár (ringed-thighed furrowed diving beetle), (NL) Gegroefde haarwaterroofkever (grooved hairy diving beetle).

Cybister lateralimarginalis (De Geer) - (DK) Dykkervandkalv (scuba diving beetle), (FI) Jymysukeltaja (huge diver), (DE) Gaukler (juggler), (HU) Nagy búvárbogár (big diver beetle), (NL) Tuimelaar (tumbler).

Dytiscus circumcinctus Ahrens - (DK) Brillvandkalv (spectacled diving beetle), (FI) Rillisukeltaja (spectacled diver), (IE) Ring-eyed great diving beetle, (HU) Barnahasú csíkbogár (brown bellied diving beetle), (NL) Brilgeelgerande waterroofkever (spectacled yellow fringed diving beetle).

Dytiscus circumflexus Fab. - (DK) Hvepsebuget vandkalv (wasp-bellied diving beetle), (HU) Foltoshasú csíkbogár (spotted-bellied diving beetle), (NL) Gevlekte geelgerande waterroofkever (spotted yellow fringed diving beetle).

Dytiscus dimidiatus Bergsträsser - (DK) Rundhøftet vandkalv (round-hipped diving beetle), (FI) Etelänsuursukeltaja (southern great diver), (DE) Mittlerer Gelbrand (middle yellow fringe), (HU) Tompacsípős csíkbogár (blunt hip diving beetle), (NL) Veengeelgerande waterroofkever (peaty yellow fringed diving beetle).

Dytiscus lapponicus Gyllenhal - (DK) Hede vandkalv (moor diving beetle), (FI) Pohjansuursukeltaja (northern great diver), (IE) Highland great diving beetle, (DE) Kleiner Großtauchkäfer (smaller big diving beetle), (NL) Noordse geelgerande waterroofkever (Nordic yellow fringed diving beetle).

Dytiscus latissimus L. - (DK) Bred vandkalv (broad diving beetle), (FI) Jättsukeltaja (giant diver), (NO) Bred vannkalv (broad diving beetle), (SE) Bredkantad dykare (broadly edged diver), (DE) Breitrand (broad fringe), (HU) Óriás csíkbogár (giant diving beetle), (NL) Brede geelgerande waterroofkever (broad yellow fringed diving beetle).

Dytiscus marginalis L. - (DK) Stor vandkalv (great diving beetle), (FI) Keltalaitasukeltaja (yellow fringed diver), (NO) Stor vannkalv (great diving beetle), (SE) Gulbrämäd dykare (yellow-fringed diver), (GB) Great diving beetle, (IE) Great diving beetle, (DE) Gemeiner Gelbrand (common yellow fringe), (HU) Sárgaszegélyű csíkbogár [alt. Szegélyes csíkbogár] (yellow-fringed diving beetle), (NL) Gewone geelgerande waterroofkever [alt. Geelgerande watertor] (common yellow fringed diving beetle).

Dytiscus semisulcatus Müller - (DK) Sortbuget vandkalv (black-bellied diving beetle), (DE) Schwarzbauch (black belly), (NL) Zwartbuikgeelgerande waterroofkever (black belly yellow fringed diving beetle).

Eretes sticticus (L.) - (HU) Szegélyesnyakú csíkbogár (marginated-necked diving beetle).

Graphoderus austriacus (Sturm) - (HU) Kis tavicsíkbogár (small lake diving beetle).

Graphoderus bilineatus (De Geer) - (DK) Lys skivevandkalv (pale disc-shaped diving beetle), (FI) Isolampisukeltaja (big pond-diver), (SE) Bred paljettdykare (broad spangled diver), (GB) Chequered history beetle, (DE) Schmalbindiger Breitflügel-Tauchkäfer (narrow-lined broad elytron diving beetle), (HU) Széles tavicsíkbogár (wide lake diving beetle), (NL) Gestreepte waterroofkever (striped diving beetle).

Graphoderus cinereus (L.) - (HU) Gyakori tavicsíkbogár (common lake diving beetle).

Graphoderus zonatus (Hoppe) - (GB) Spangled diving beetle, (HU) Tompakarmú tavicsíkbogár (blunt-clawed lake diving beetle), (NL) Gordelwaterroofkever (belt diving beetle).

Hydaticus aruspex Clark - (FI) Viirukaarisukeltaja (striped vaulted diver), (HU) Csíkos mocsáricsíkbogár (striped marshy diving beetle).

Hydaticus continentalis Balfour-Browne - (HU) Sávos mocsáricsíkbogár (banded marshy diving beetle).

Hydaticus grammicus (Germar) - (HU) Déli mocsáricsíkbogár (southern marshy diving beetle).

Hydaticus seminiger (De Geer) - (FI) Juovakaarisukeltaja (fringed vaulted diver), (HU) Fekete mocsáricsíkbogár (black marshy diving beetle), (NL) Zijrandwaterroofkever [alt. Grote plasduiker] (side edge striped diving beetle).

Hydaticus transversalis (Pontoppidan) - (DK) Tværtribet vandkalv (cross-lined diving beetle), (FI) Pikkukaarisukeltaja (small vaulted diver), (HU) Harántsávos mocsáricsíkbogár (transverse-banded marshy diving beetle), (NL) Dwarsbandwaterroofkever (transverse striped diving beetle).

Hydroporinae

Bidessus grossepunctatus Vorbringer - (FI) Rahkaripesukeltaja (peatmoss crumb diver), (HU) Pontozott törpecsíkbogár (dotted pygmy diving beetle).

Bidessus minutissimus (Germar) - (GB) Minutest diving beetle, (IE) Diminutive diver [alt. Minutest diving beetle].

Bidessus nasutus Sharp - (HU) Tarka törpecsíkbogár (variegated pygmy diving beetle).

Bidessus unistriatus (Schrank) - (FI) Lampiripesukeltaja (pond crumb diver), (GB) One-grooved diving beetle, (HU) Barna törpecsíkbogár (brown pygmy diving beetle).

Boreonectes multilineatus (Falkenström) - (IE) Bubblegum diver.

Clemnius decoratus (Gyllenhal) - (IE) Decorous diver, (HU) Keresztes aprócsíkbogár (crossed minute diving beetle).

Deronectes latus (Stephens) - (FI) Vajeraitasukeltaja (unstriped diver), (SE) Älvdykare (river diver), (HU) Nagy rücsköscsíkbogár (big rugged diving beetle).

Deronectes platynotus (Germar) - (HU) Kis rücsköscsíkbogár (small rugged diving beetle).

Graptodytes bilineatus (Sturm) - (FI) Suikujuovasukeltaja (slim-striped diver), (IE) Two-lined diver, (HU) Gyakori csíkbogárka (common diving small beetle).

Graptodytes granularis (L.) - (FI) Soikokuovasukeltaja (oval striped diver), (HU) Zömök csíkbogárka (dumpy diving small beetle).

Graptodytes pictus (Fab.) - (HU) Gyűrűs csíkbogárka (ringed diving small beetle).

Hydroglyphus geminus (Fab.) - (DE) Gelbbrauner Zwergschwimmer (yellowish brown dwarf swimmer), (HU) Gyakori paránycsíkbogár (common tiny diving beetle).

Hydroglyphus hamulatus (Gyllenhal) - (FI) Kirjoripesukeltaja (motley crumb diver).

Hydroporus angustatus Sturm - (HU) Karcsú kiscsíkbogár (slender small diving beetle).

Hydroporus discretus Fairmaire - (HU) Erdei kiscsíkbogár (forest small diving beetle).

Hydroporus dobrogeanus Leniștea - (HU) Forrás-kiscsíkbogár (spring small diving beetle).

Hydroporus dorsalis (Fab.) - (HU) Kerekvállú csíkbogár (round-shouldered diving beetle).

Hydroporus elongatulus Sturm - (FI) Soikokääpiösukeltaja (oval dwarf diver), (HU) Északi kiscsíkbogár (northern small diving beetle).

Hydroporus erythrocephalus (L.) - (HU) Vörösfejű kiscsíkbogár (red-headed small diving beetle).

Hydroporus ferrugineus Stephens - (HU) Rozsdás kiscsíkbogár (rusty small diving beetle).

Hydroporus foveolatus Heer - (HU) Alpesi kiscsíkbogár (alpine small diving beetle).

Hydroporus fuscipennis Schaum - (HU) Barnaszárnyú kiscsíkbogár (brown-winged small diving beetle).

Hydroporus glabriusculus Aubé - (IE) Three Bs diver.

Hydroporus hebaueri Hendrich - (HU) Hebauer-kiscsíkbogár (Hebauer's small diving beetle).

Hydroporus incognitus Sharp - (HU) Vöröshasú kiscsíkbogár (red-bellied small diving beetle).

Hydroporus longicornis Sharp - (IE) Sharp's parallel diver, (HU) Fényes kiscsíkbogár (shiny small diving beetle).

Hydroporus marginatus (Duftschmid) - (HU) Szegélyes kiscsíkbogár (marginated small diving beetle).

Hydroporus melanarius Sturm - (HU) Zömök kiscsíkbogár (dumpy small diving beetle).

Hydroporus memnonius Nicolai - (HU) Érces kiscsíkbogár (metallic small diving beetle).

Hydroporus morio Aubé - (IE) Quicksilver diver.

- Hydroporus necopinatus roni*** Fery - (GB) Ron's diving beetle.
- Hydroporus neglectus*** Schaum - (IE) Neglected diver, (HU) Apró kiscsík bogár (tiny small diving beetle).
- Hydroporus nigrita*** (Fab.) - (IS) Lækjaklukka (stream beetle), (HU) Fekete kiscsík bogár (black small diving beetle).
- Hydroporus notatus*** Sturm - (HU) Nagyfejű kiscsík bogár (big-headed small diving beetle).
- Hydroporus obscurus*** Sturm - (FI) Tummakääpiösukeltaja (dark dwarf diver), (HU) Sötét kiscsík bogár (dark small diving beetle).
- Hydroporus obsoletus*** Aubé - (IE) Semisubterranean diver.
- Hydroporus palustris*** (L.) - (FI) Mutakääpiösukeltaja (mud dwarf diver), (DE) Sechsfleckiger Zwergschwimmer (six-spotted dwarfswimmer), (HU) Mocsári kiscsík bogár (marshy small diving beetle), (NL) Moeraswaterroofkevertje (small swamp diving beetle).
- Hydroporus planus*** (Fab.) - (DK) Fladtrykt vandkalv (flat diving beetle), (HU) Gyakori kiscsík bogár (common small diving beetle), (NL) Dwergwatertor (dwarf water beetle).
- Hydroporus rufifrons*** (Müller) - (GB) Oxbow diving beetle, (HU) Termetes kiscsík bogár (burly small diving beetle).
- Hydroporus scalesianus*** Stephens - (GB) Mr. Scales' diving beetle, (IE) Mr Scales's diver, (HU) Pöttöm kiscsík bogár (petite small diving beetle).
- Hydroporus striola*** (Gyllenhal) - (HU) Tarka kiscsík bogár (variegated small diving beetle).
- Hydroporus tristis*** (Paykull) - (HU) Gyászos kiscsík bogár (mournful small diving beetle).
- Hydroporus umbrosus*** (Gyllenhal) - (HU) Barnás kiscsík bogár (brownish small diving beetle).
- Hydrovatus clypealis*** Sharp - (IE) Buckler diver.
- Hydrovatus cuspidatus*** (Kunze) - (HU) Hegyesszárnyú csík bogár (pointed-wing diving beetle).
- Hygrotus confluens*** (Fab.) - (HU) Sárga aprócsík bogár (yellow minute diving beetle).
- Hygrotus impressopunctatus*** (Schaller) - (HU) Barázdás aprócsík bogár (furrowed minute diving beetle).
- Hygrotus inaequalis*** (Fab.) - (HU) Gyakori aprócsík bogár (common minute diving beetle).
- Hygrotus novemlineatus*** (Stephens) - (IE) Nine-lined diver.
- Hygrotus pallidulus*** Aubé - (HU) Barnahasú aprócsík bogár (brown-bellied minute diving beetle).
- Hygrotus parallelogrammus*** (Ahrens) - (HU) Pettyesnyakú aprócsík bogár (spotted-necked minute diving beetle).
- Hygrotus versicolor*** (Schaller) - (IE) Rash diver, (HU) Tarka aprócsík bogár (variegated minute diving beetle).
- Hyphydrus anatolicus*** Guignot - (HU) Déli gömbcsík bogár (southern ball diving beetle).
- Hyphydrus ovatus*** (L.) - (DK) Rød kuglevandkalv (red globose diving beetle), (FI) Pallosukeltaja (globose diver), (DE) Glatter Kugelschwimmer (smooth ballswimmer), (HU) Gyakori gömbcsík bogár (common ball diving beetle), (NL) Eirond watertorretje [alt. Eironde watertor] (egg-shaped small water beetle).

Laccornis kocae (Ganglbauer) - (HU) Kis zömökcsíkbogár (small dumpy diving beetle).

Laccornis oblongus (Stephens) - (SE) Parallell dvärgdykare (parallel dwarf diver), (IE) Dualist, (HU) Nagy zömökcsíkbogár (big dumpy diving beetle).

Nebrioporus assimilis (Paykull) - (FI) Pikkuraitasukeltaja (small striped diver).

Nebrioporus canaliculatus (Lacordaire) - (HU) Sárga patakcsíkbogár (yellow stream diving beetle).

Nebrioporus depressus (Fab.) - (DK) Totandet strømvandkalv (two-toothed stream diving beetle), (FI) Väkärhaitasukeltaja (spined striped diver), (HU) Karcsú patakcsíkbogár (slender stream diving beetle).

Nebrioporus elegans (Panzer) - (IE) Elegant diver, (HU) Díszes patakcsíkbogár (ornate stream diving beetle).

Oreodytes davisii (Curtis) - (IE) Davis's river diver.

Oreodytes septentrionalis (Gyllenhal) - (FI) Pohjanraitasukeltaja (northern striped diver).

Nectoporus sanmarkii (Sahlberg) - (DK) Kuglestrømvandkalv (globose stream diving beetle), (FI) Puroraitasukeltaja (creek striped diver), (NL) Sanmark's beektorretje (Sanmark's small brook beetle).

Porhydrus lineatus (Fab.) - (HU) Csíkos selyemcsíkbogár (striped silky diving beetle).

Porhydrus obliquesignatus (Bielz) - (HU) Foltos selyemcsíkbogár (spotted silky diving beetle).

Scarodytes halensis (Fab.) - (FI) Goraraitasukeltaja (gravel striped diver), (HU) Zebracsíkbogár (zebra diving beetle).

Laccophilinae

Laccophilus hyalinus (De Geer) - (DK) Plettet springvandkalv (spotted jumping diving beetle), (IE) Dinghy skipper, (HU) Cirpelő bukóbogár (chirping diving beetle), (NL) Kleine geelrand (small yellow fringe).

Laccophilus minutus (L.) - (DE) Grundschwimmer (bottom swimmer), (HU) Néma bukóbogár (mute diving beetle).

Laccophilus poecilus Klug - (GB) Puzzled skipper [alt. Sussex diving beetle], (HU) Tarka bukóbogár (variegated diving beetle).

Gyrinidae

Aulonogyrus concinnus Klug - (HU) Szegélyes keringőbogár (marginated whirligig beetle), (NL) Geelgerande draaitor (yellow fringed whirligig beetle).

Gyrinus aeratus Stephens - (FI) Järvihopeaseppä (lake silversmith), (GB) Bronze whirligig.

Gyrinus caspius Ménétries - (GB) Caspian whirligig.

Gyrinus colymbus Erichson - (HU) Recés keringőbogár (reticulated whirligig beetle).

Gyrinus distinctus Aubé - (FI) Soikohopeaseppä (oval silversmith), (GB) Distinct whirligig, (IE) Distinguished whirligig, (HU) Keskeny keringőbogár (narrow whirligig beetle).

Gyrinus marinus Gyllenhal - (FI) Pallehopeaseppä (beaded silversmith), (GB) Mariner whirligig, (HU) Érces keringőbogár (metallic whirligig beetle).

Gyrinus minutus Fab. - (FI) Pikkuhopeaseppä (small silversmith), (GB) Little whirligig, (HU) Törpe keringőbogár (pygmy whirligig beetle), (NL) Klein schrijvertje (small whirligig beetle).

Gyrinus natator (L.) - (FI) Jokihopeaseppä (stream silversmith), (GB) Shady whirligig, (IE) Shady whirligig.

Gyrinus opacus Sahlberg - (FI) Rämehopeaseppä (marsh silversmith), (GB) Highland whirligig.

Gyrinus paykulli Ochs - (FI) Puikkohopeaseppä (peg silversmith), (GB) Long whirligig, (HU) Karcsú keringőbogár (slender whirligig beetle).

Gyrinus pullatus Zaitzev - (FI) Idänhopeaseppä (eastern silversmith).

Gyrinus substriatus Stephens - (FI) Lampihopeaseppä (pond silversmith), (GB) Common whirligig, (HU) Gyakori keringőbogár (common whirligig beetle), (NL) Slootschrijvertje (ditch whirligig beetle).

Gyrinus suffriani Scriba - (GB) Suffrian's whirligig, (HU) Nádi keringőbogár (reed whirligig beetle).

Gyrinus urinator Illiger - (GB) The Artist, (IE) Artist whirligig.

Orectochilus villosus (Müller) - (DK) Håret hvirvler (hairy whirligig), (FI) Hämyhopeaseppä (twilight silversmith), (GB) Hairy whirligig beetle, (IE) Hairy whirligig beetle, (HU) Szőrös keringőbogár (hairy whirligig beetle), (NL) Harig schrijvertje (hairy whirligig beetle).

Haliplidae

Brychius elevatus (Panzer) - (FI) Harjupisarsukeltaja (ridged drop-diver), (HU) Pataki víztaposó (stream water treader), (NL) Geribde watertreder (costate crawling beetle).

Haliplus apicalis Thomson - (IE) Saltmarsh crawler water beetle, (HU) Tengerparti víztaposó (seashore water treader).

Haliplus flavicollis Sturm - (HU) Sárga víztaposó (yellow water treader).

Haliplus fluviatilis Aubé - (FI) Puropisarsukeltaja (creek drop-diver), (HU) Kecses víztaposó (graceful water treader).

Haliplus fulvicollis Erichson - (HU) Lápi víztaposó (bog water treader).

Haliplus fulvus (Fab.) - (FI) Keltapisarsukeltaja (yellow drop-diver), (IS) Vatnaklukka (water beetle), (HU) Nagy víztaposó (big water treader).

Haliplus furcatus Seidlitz - (HU) Kockás víztaposó (chequered water treader).

Haliplus heydeni Wehncke - (HU) Heyden-víztaposó (Heyden's water treader).

Haliplus immaculatus Gerhardt - (HU) Csíkos víztaposó (striped water treader).

Haliplus laminatus (Schaller) - (HU) Szürkés víztaposó (greyish water treader).

Haliplus lineatocollis (Marsham) - (HU) Sávonyakú víztaposó (band-necked water treader), (NL) Gestrekte watertreder (oblong crawling beetle).

Haliplus lineolatus Mannerheim - (IE) Hydravore crawler water beetle.

Haliplus maculatus Motschulsky - (HU) Foltos víztaposó (spotted water treader).

Haliplus obliquus (Fab.) - (HU) Tavi víztaposó (lake water treader).

Haliplus ruficollis (De Geer) - (HU) Vörhenyes víztaposó (reddish water treader).

Haliplus variegatus Sturm - (IE) Variegated crawler water beetle, (HU) Tarka víztaposó (variegated water treader).

Haliplus varius Nicolai - (FI) Varipisarsukeltaja (painted drop-diver).

Peltodytes caesus (Duftschmid) - (DK) Plettet vandtræder (spotted crawling water beetle), (HU) Zömök víztaposó (dumpy water treader), (NL) Brede watertreder (broad crawling beetle).

Hygrobiiidae (Paelobiidae)

Hygrobia hermanni (Fab.) - (DK) Dyndknirker (mud squeak beetle), (GB) Screech beetle (alt. Squeak beetle), (IE) Screech beetle, (DE) Schlammschwimmer (mud swimmer), (HU) Európai pocsolyaúszó (European puddleswimmer), (NL) Slijkwemmer [alt. Waterpieptor or Modderkever] (mud swimmer).

Noteridae

Noterus clavicornis (De Geer) - (FI) Isopohjasukeltaja (big bottom-diver), (GB) Larger Noterus, (IE) Larger Noterus, (DE) Großer Uferfeuchtkäfer (larger moist shore beetle), (HU) Szélescsápú merülőbogár (broad-antenna sinking beetle), (NL) Knotssprietzwemkevertje (small swimming beetle with clubbed antenna).

Noterus crassicornis (Müller) - (FI) Pikkupohjasukeltaja (small bottom-diver), (GB) Smaller Noterus, (IE) Smaller Noterus, (HU) Keskenycsápú merülőbogár (narrow-antenna sinking beetle), (NL) Diksprietzwemkevertje (small swimming beetle with thick antenna).

Overview

The studied material includes 378 common names for 182 different species. The names are distributed among countries as shown in Table 1, and among families: Dytiscidae 293, Gyrinidae 40, Haliplidae 28, Hygrobiidae 6, and Noteridae 11.

The proportion of native species having common names varied greatly among countries, from only 1% in Norway to 96% in Hungary (Tab. 1). When pooled, the ten countries have 234 species of Hydradephaga, of which 182 have a common name in at least one of the countries, corresponding to 78% of all species.

In my material, a species cannot have more common names than the number of countries it is known from (Figure 1). Only 15 species have a name in each of the countries in which they are known. Of the three species known from all ten countries, *Agabus bipustulatus* is number one with five names. Excluding the poor fauna of Iceland, 65 species are shared among the remaining nine countries. Of these, *Dytiscus marginalis* is the only species named in all nine countries, followed by *Noterus crassicornis* and *Orectochilus villosus*, with six names each. Of the 28 species known from eight countries, *Graphoderus bilineatus* is the only one with seven names. *Dytiscus latissimus* is the only seven country species with a common name in all of them. Of the 89 species with a single common name, only 11 of them are restricted to one country.

Of my categories of meanings of names, appearance dominated as used in 59.5% of all names, with colour as the most frequent subcategory, followed by size and shape (Table 2). The second most common category was environment used in 13.8% of all names, with type of wetland being the most frequent subcategory. The five remaining categories were all markedly less frequently used, with none above 7%. Names based on appearance also dominated the scientific species epithets given before 1900, but since then names based on persons or geographical names have taken over the scene (Nilsson 2008).

Differences among countries in the distribution of names over the seven categories of meaning were studied in the four countries with the highest number of names (Figure 2). In all four countries the appearance category had the highest frequency. Hungary and Finland differ in that the distribution- and environment-based names were used more frequently in the latter, at the same time decreasing the dominance of the appearance-based names. On the other hand, the rarity-based name “common” was favoured chiefly in Hungary, seemingly here linked to a strict use of a genus-part in the common names. The Irish set of names stands out due to the high proportion of names in the association category, reflecting the common name philosophy of the current secretary to the Balfour-Browne Club.

Country	Species	Named	Percent
Denmark	150	25	17
Finland	171	80	47
Iceland	6	5	83
Norway	155	2	1
Sweden	183	6	3
Great Britain	152	27	18
Ireland	113	37	33
Germany	185	20	11
Hungary	146	140	96
Netherlands	145	37	26
Total	234	182	78

Table 1 ↑ Total number of species of Hydradephaga, and number of species with common names known from each studied country. The proportions of named species are shown as percentages

Table 2 → Distribution among categories and subcategories of meaning of 378 common species names in adephagan water beetles from ten European countries. Proportions of categories also given as percentages

Category	Names	Percent
Anatomy	24	6.3
Body	17	
Head	6	
Legs	1	
Appearance	225	59.5
Colour	135	
Size	48	
Shape	28	
Sculpture	8	
Hairiness	6	
Association	23	6.1
Latin name	15	
Free	8	
Behaviour	11	2.9
Movement	5	
Sound	4	
Preference	2	
Distribution	26	6.9
Direction	10	
Occurrence	10	
Altitude	6	
Environment	52	13.8
Wetland	36	
Substrate	11	
Landscape	5	
Rarity	17	4.5

Discussion

I can still remember when I first studied a Japanese book on diving beetles and observed that the picture legends used the Japanese common names instead of the scientific names (Mori & Kitayama 1993). I was impressed by the fact that they had their own names for all species, but I was also a bit annoyed by the way in which they were displayed as it made reading more difficult. I now understand that using the Latin alphabet for scientific names has created a very unequal situation when dealing with this supposedly universal name system. It is really part of a historical pattern referred to as Eurocentrism. It seems then that the need for common names of species is greater the more a specific language differs from Latin, and especially so, when the system of signs do not use the Latin letters. On the contrary, most genus names have a Greek origin, and were thus incorporated from a language with a different letter system, the Cyrillic one.

Considering the geographical coverage of the different languages in relation to the usage of common names, some important differences can be seen. Whereas, for example, the names in Finnish will most likely be used only in Finland, especially the names in English are subject to a much wider usage as being part of an international language. As English is the current language of international scientific publications,

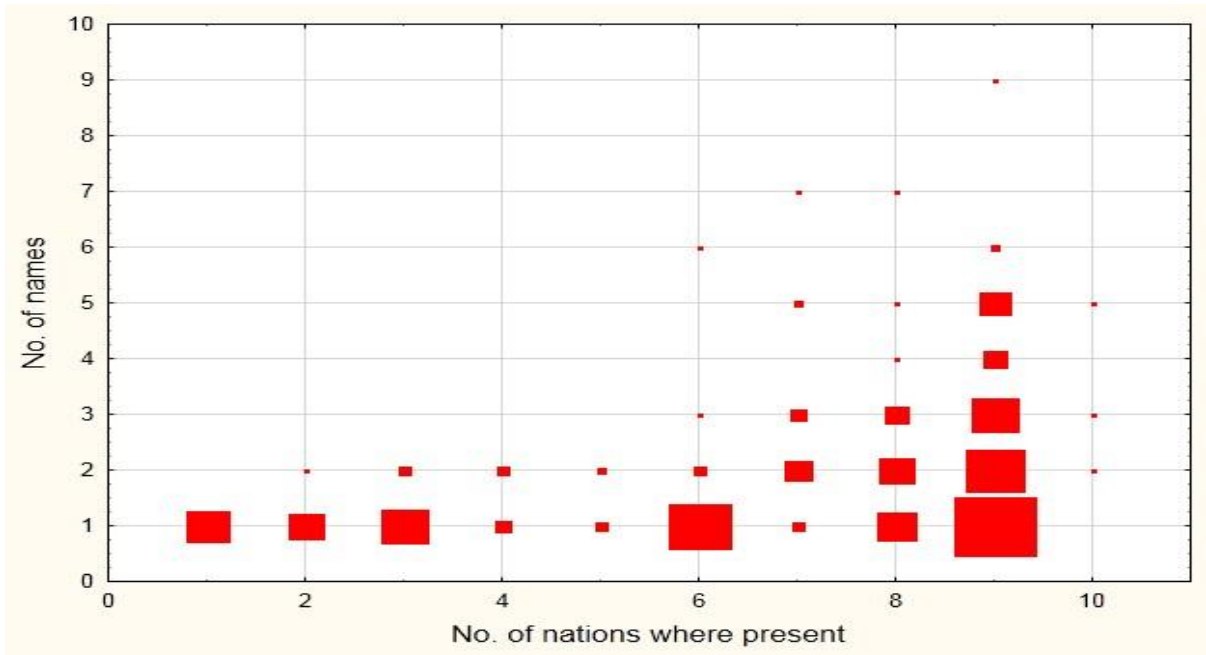


Figure 1 Number of common names per species of hydradephagan water beetles as a function of the number of nations with presence. Maximum dot size corresponds to 21 species

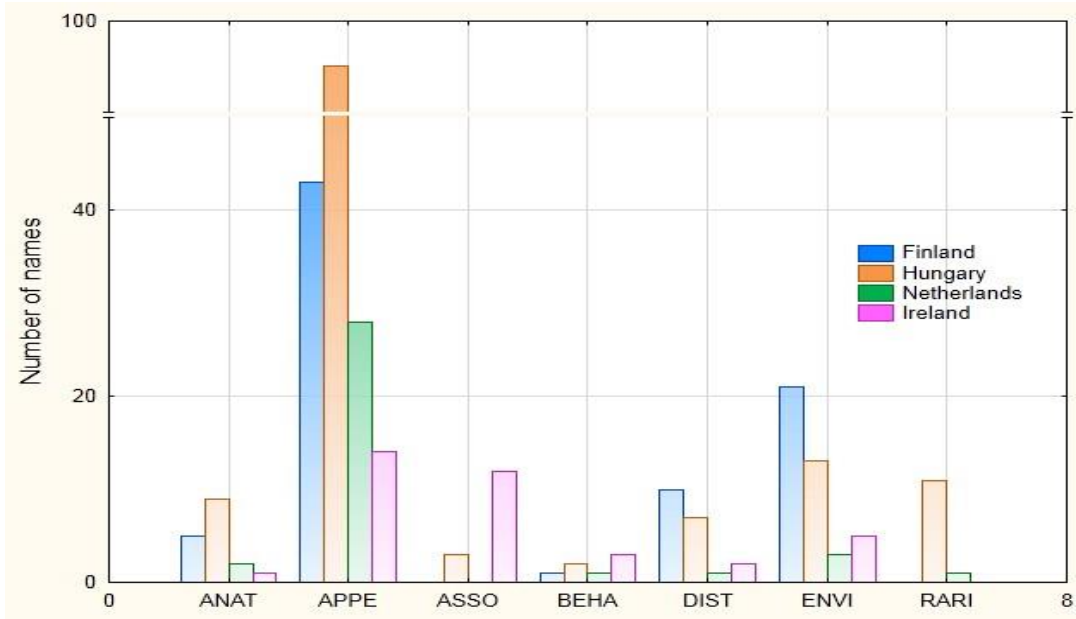


Figure 2 Distribution of meanings of common species names of adephagan water beetles in the four countries with the highest number of names: Finland, Hungary, Ireland, and the Netherlands. Categories of meanings abbreviated as: ANATomy, APPEarance, ASSOciation, BEHAViour, DISTribution, ENVIronment, and RARItY. Note the break in the scale of the Y axis between 50 and 90 names

its common names may reach a wider distribution in a more formalised context. In languages used in more than one nation, one should also consider if names will differ between nations, or some kind of synchronisation is to be aimed at. Moreover, there is also a higher possibility that names in English will be adopted in other languages in translation, as their meaning will be more widely understood than say those in Finnish or Hungarian.

When judged from the situation in Iceland, one might think that a low species diversity promotes the presence of common species names. Another example is Greenland where the larger of their two dytiscids, *Colymbetes dolabratus*, has the inuit name Minngoq, with its larva known as Pamiortoq (Böcher 1988). According to Foster (in litt.) their smaller species, *Hydroporus morio*, is known as the children of minngoq.

One should also have in mind that the relation between nation and language is seldom one to one. For example, in Norway, all common names in the language variant “bokmål” are supposed to be translated to “nynorsk”, and selected names also to the Sami language. Of the latter I have seen only Stuurabuokčigobbá for *Dytiscus marginalis*. In the online species recording database Waarnemingen (2021) I have also seen a few common names in the Western Friesian regional language, related to Dutch, like Grutte gielrâne for *D. marginalis* and Rûge naadwettertuorre for *Acilius sulcatus*. The official Dutch common names are seemingly also used in Flanders, the Dutch-speaking part of Belgium.

My impression is that the observed differences in common name coverage between countries will decrease in the near future. The national name constructing process advances stepwise, and a common pattern is to deal with a family at the time. Different priority schemes and personal interests of the people involved will affect the timing in different ways, but in the end I’m sure most species will get their common names in most European languages.

Moreover, many species will get alternative common names within the same language, most likely resulting in some kind of sorting process. In the absence of any kind of priority rules, like among the scientific names, we can only say: May the best candidates win! Foster and Bilton (2014) viewed this option as one of the benefits of common names and encouraged specialists to contribute actively to the ongoing name-construction race as “the experience is that if the expert does not contrive a name then someone less knowledgeable will come up with one instead.”

Acknowledgements

Thanks to Garth Foster for help with the British, Benedicte Albrechtsen with the Danish, Gert van Ee with the Dutch, Zoltán Csabai with the Hungarian, Brian Nelson with the Irish, Olof Biström and Wenfei Liao with the Finnish, and Lars Hendrich with the German names. Gert also helped me improve the manuscript.

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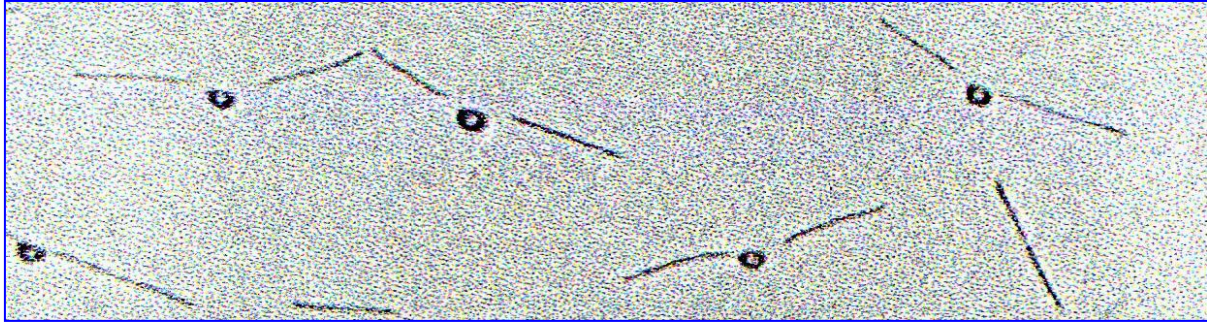
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Received May 2021

FAR EAST DACTYLOSTERNUM



Ten species are keyed from China and Japan, including four newly described species from China. The biology of *Dactylosternum* is discussed. Most would appear to be associated with decaying plant tissue, one species being possibly fungivorous and another found associated with termites. Microsculpture is included in this study with perhaps the most interesting feature being the flying bird-like punctures to be seen on *D. corbeti* Balfour-Browne, which Jack had originally described more esoterically as “...two diverging lines at each puncture, but which do not connect with the neighbouring punctures”. Jack described this beetle as taken in Malaysia by “Corbett, collector”. Despite the extra “t” this must surely relate to Philip Corbet (1929-2008), the famous odonatologist born in Kuala Lumpur. The author for correspondence is Fenglong Jia.

BALFOUR-BROWNE J 1942. On species of *Dactylosternum* related to *subquadratum* (Fairm.) and the description of a new genus *Rhombosternum* related to *Dactylosternum* (Coleoptera, Palpicornia). *Annals and Magazine of Natural History* **11** 855-864.

MAI Z, HU J, MINOSHIMA Y N, JIA F & FIKÁČEK M 2022. Review of *Dactylosternum* Wollaston, 1854 from China and Japan (Coleoptera, Hydrophilidae, Sphaeridiinae). *Zootaxa* **5091** 269-300.

FLANDRIAN SMALL WATER BODIES

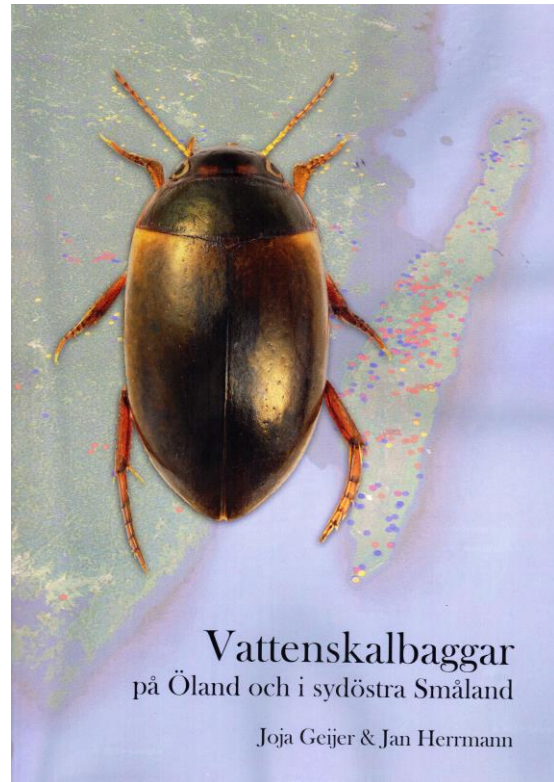
This is a report on an inventory of water beetles in 28 small water bodies in Walenbos, Belgium, an alluvial forest area with much groundwater upwellings. One hundred and seven species have been recorded, with species composition of sites appearing to be mainly dictated by the chemistry of the groundwater, acid in the south and neutral or base-rich in the north. Illustrated is a pond on heavy soil in the east.



THYS N & VANORMELINGEN P 2021. Waterkevers als indicatoren in kleine waterlichamen. A case in Walenbos. *Natuurfocus* **20** 149-156

SWEDISH WATER BEETLES

📖 GEIJER J & HERRMANN J 2021. *Vattenskalbaggar på Öland och i sydöstra Småland*. Borgholm: Bildningsförlaget. ISBN 978-91-88402-54-7. In Swedish with English summary. Available at Swedish natural history bookshops for 248 Swedish Kroner. Joja Geiger has spent 25 years collecting water beetles in south-east Sweden, in particular on Öland, and this book demonstrates the remarkable biodiversity of the area, following up on Nils Bruce's work on the Öland alvar in the 1950s. Two hundred and nine species are listed, among the most interesting of which are *Haliphus furcatus* Seidlitz, *Bidessus grossepunctatus* Vorbringer, *Hydroglyphus hamulatus* (Gyllenhal), *Agabus clypealis* (Thomson), as on the front cover, *Hydaticus aruspex* Clark, *Helophorus lapponicus* Thomson, *H. laticollis* Thomson, *Berosus spinosus* (Steven), and *Dryops griseus* (Erichson).



Many of the rarer species were to be found when the Club visited Sweden in 2011. All species are supported by an entry including a habitus photograph, and most species are mapped with monthly plots of adult phenology. A monumental work.

NUTRITION?

This is either one of the crazier papers this year or it could prove one of the most useful. At first “nutritive” was misunderstood to imply this was about the current obsession with eating insects, but the fourteen variables collected from 104 publications published between 1935 and 2020 indicate more of a concern with energy budgets. Details are available for about 20 beetle taxa, here listed roughly as they are in the supplementary data, i.e. without authorities, as repeated here – *Gyrinus maculiventris*, Dytiscidae (*Agabus bifarius*, *Colymbetes sculptilis*, *Cybister tripunctatus*, *Dytiscus marginalis*, *Rhantus frontalis*); Hydrophilidae (*Cylomissus*, *Enochrus carinatus*, *E. hamiltoni*, *Hydrophilus olivaceus*, *Tropisternus setiger*), Elmidae (*Ancronyx variegata*, *Austrelmis*, *Macronychus glabratus*, *Optioservus*, *Promoresia*, *Stenelmis*), Psephenidae (*Ectopria*, *Psephenus*), Ptilodactylidae (*Anchytarsus bicolor*), Scirtidae (*Hydrocyphon*) and Chrysomelidae (*Galerucella nymphaeae*).

MOREAU A, DUPUY C, BOCHER P & FARAU S. 2021. Morphological, calorific and nutritive characteristics of 656 freshwater invertebrates taxa. *Biodiversity Data Journal* 9 e70214 pp 34.

NEW JAPANESE *HYDROCHUS* BANDAI-HOSOGAMUSHI

H. mitamurai is described as the fifth known Japanese *Hydrochus*. It is similar to *H. chubu* Balfour-Browne & Satô. A new key is provided.

HIRASAWA K & YOSHITOMI H 2021. A new species of the genus *Hydrochus* (Coleoptera, Hydrochidae) from Fukushima, northeastern Japan. *Elytra*, Tokyo 11 301-305.

KOLEOPTEROLOGISCHE RUNDSCHAU 90 AND 91

The online version of *KR 90* was reviewed in *Latissimus 48*. The printed version became available in November 2021. A printed version of *KR 91* was similarly delayed, becoming available in February 2022. Plenty of water beetle interest as usual.



PHALILUS REDISCOVERED

The cover of *KR 91* celebrates the rediscovery of *Phalilus oberthuri*, in three sinkholes in the southern tip of New Caledonia. It is otherwise known from Australia in New South Wales, Queensland and Northern Territory. Variations in colour of 21 of the known specimens (the other one is a larva) led to some suspicion that more than one species was involved, as did



the difference in the last visible ventrite, keeled in males but simple in females. The sinkhole (or doline) here was photographed by Nathalie Mary. In the background one can see some underwater searching in progress.

VONDEL B J van, PÖLLABAUER C, PARPET J-F, MARY N, CHARPIN N & JÄCH M A 2021. On the rediscovery of *Phalilus oberthuri* (Guignot, 1835) in New Caledonia (Coleoptera: Haliplidae) *KR 91* 311-322

AUSTRALASIAN HALIPLIDAE

The checklist is based on eleven species of *Halipilus* and eight of *Phalilus*. Records are detailed and mapped.

VONDEL B J van 2021 Annotated checklist and distribution of the Australasian Haliplidae (Haliplidae) *KR 91* 1-19.

HOLOTYPE MOVES

Günther Wewalka's types of 26 dytiscid and two noterid species have been transferred from his personal collection to that of Vienna Natural History Museum.

JÄCH M A 2021. New depositories for holotypes of coll. G. Wewalka (Coleoptera: Dytiscidae, Noteridae). *KR 91* 20, 152.

MADAGASCAR ANACAENA

The twelfth species to be described from Madagascar is *schoenleithneri*, named after the "exceptionally likeable" Wolfgang Schönleithner (1951-2020 - see *KR 91* 303-308). A new key is provided.

KOMAREK A 2021 A new species of *Anacaena* from Madagascar (Hydrophilidae) *KR 91* 125-130.

PARAGUAYAN TOOTHY LIMNICHID

Phalacrichus monday can easily be recognised by the dentate front margin of its pronotum. The name refers to the Monday River, not to when the beetle was found.

HERNANDO C & RIBERA I 2021 Description of a remarkable new *Phalacrichus* from Paraguay (Limnichidae) *KR 91* 137-143.

KOLEOPTEROLOGISCHE RUNDSCHAU (CONTINUED)**ARGENTINIAN HETERO CERUS**

Heterocerus kocouri is newly described, with other new records bringing the Argentinian checklist to 22 species.

SKALICKÝ S 2021 New species and new records of Heteroceridae from Argentina (Heteroceridae) *KR* **91** 145-151.

DONACIA NAMES

This is a most welcome exposition on the naming of *Donacia*, explaining some changes to be found in the revised catalogue of Palaearctic Chrysomelidae. Sixty-eight species and subspecies will be listed, three less than in the previous edition. The name *bicolora* Zschach is nailed (again!) by reiterating that the name is to be regarded as the original spelling, “*bicolor*”, which is still being used by some, being an incorrect subsequent spelling rather than an unjustified emendation. The name *marginata* Hoppe, 1795 is not yet secure as either more work needs to be done on the exact dates of competing names or a case needs to be made to ICZN to preserve the most commonly used name. The many additional country records are detailed.

GEISER E & JÄCH M A 2021 Explanatory notes on the updates concerning the genus *Donacia* in the second edition of the Catalogue of Palaearctic Coleoptera, Vol. 6/2 (Chrysomelidae) *KR* **91** 155-178.

NEW RECORDS IN AUSTRIA

...include *Spercheus emarginatus* (Schaller), *Elmis rioloides* (Kuwert), *Limnius opacus* Müller, *L. perrisi* (Dufour), *Potamophilus acuminatus* (Fab.), and *Prionocyphon serricornis* (Müller).

DOSTAL A, BARRIES W, BROJER M, FUCHS K GROSS H, HOVORKA W, JÄCH M A, LINK A, OCKERMÜLLER E & SCHERNHAMMER T 2021 Bemerkenswerte Käferfunde aus Wien (Coleoptera) *KR* **91** 279-302.

NEW CALEDONIAN ANACAENA

Five species of *Anacaena* are known from New Caledonia, including the newly described *dumbeana*.

KOMAREK A 2021 *Anacaena* Thomson, 1859 from New Caledonia: description of a new species, and corrections and additions concerning two previously described species (Hydrophilidae) *KR* **91** 323-326.

BELIZE BIDESSIONES

In 2015 nine species of bidessine beetle were collected in Belize. These included six species newly reported for Belize, bringing the total known to eleven. The pond illustrated is in the Bladen Nature Reserve in the transition zone between savannah and tropical wet forest. Here four species were found – *Anodocheilus francescae* Young, *A. guatemalensis* (Zaitzev), *Bidessonotus mobilis* Balfour-Browne and *B. vicinus* Young.



SCHEERS K & THOMAES A 2022. A preliminary checklist of the minute diving beetles of Belize (Coleoptera: Dytiscidae: Bidessini). *Belgian Journal of Entomology* **125** 1-15.

CHINESE DRAGONS IN FINLAND

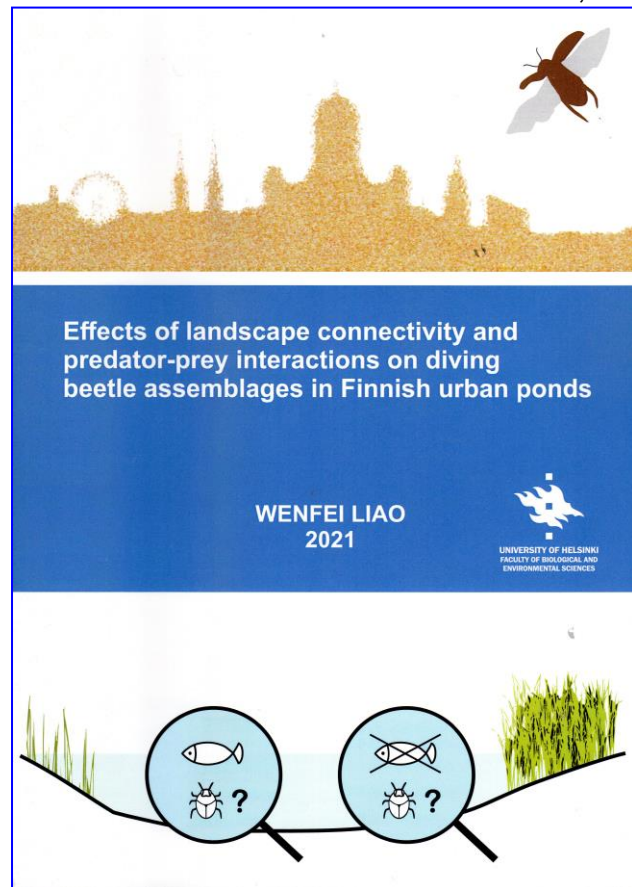
📖 LIAO W 2021. *Effects of landscape connectivity and predator-prey interactions on diving beetle assemblages in Finnish urban ponds*. University of Helsinki: doctoral dissertation. PDF is ISBN 978-951-51-7522-9. Electronic publication available at <http://ethesis.helsinki.fi>.



The Chinese name of dytiscids is '龙虱' (lóng shī). 龙Lóng means Chinese dragons, which are aquatic. They are holy creatures that can summon wind and rain, and they live in wells, streams, rivers, and seas. They control weather and climate at different scales. So there are hierarchies in their power. 虱shī means louse, bugs, etc. Diving beetles were thought to be bugs on Chinese dragons, hence the dragon on the back of Wenfei Liao's thesis. One might note that the one illustrated is five-toed, an Imperial Dragon.

The thesis was successfully defended on 2 November 2021 in Helsinki. There are four main chapters, the first two concerning urban landscape ecology and the second two concentrating on predator-prey interactions. The first paper appeared in *Biodiversity and Conservation* – see **Latissimus 46** 10. The second paper, as yet unpublished except in this thesis, concerns how dissimilarity between beetle communities can be related to landscape connectivity. The other two papers concern the importance of emergent vegetation in providing refuges from fish predators and how predation pressure modifies habitat selection and use by diving beetles.

The PhD viva happily coincided with Joja Geijer returning the Ierse Kevers he had been awarded during our Arctic meeting in 2019. It was therefore entirely logical and unanimous within the nebulous committee that the Ierse Kevers trophy should be awarded to Wenfei until such times as we hold another meeting. One point that distracted me was that Wenfei had found 61 species of diving beetle from 2017 to 2020, many being far from those one normally associates with man-made lowland habitats. Ninety-six species are known from Uusimaa Region of Finland, so where are the other thirty-five? And why?



THERMONECTUS IN THE ANTILLES

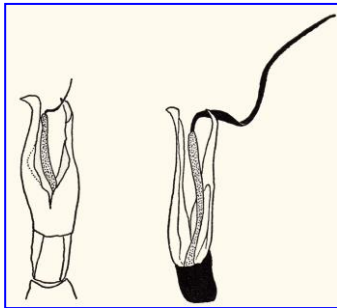
St Eustatius is one of the northern Leeward Islands in the Antilles. A good range of beetles is recorded from 2020 including *Thermonectus basillaris* (Harris), which is illustrated. It was caught at light.

COLIJN E O & MEKKES J-J 2021. Results of an entomological collecting trip to St. Eustatius (Coleoptera). *Entomologische Berichte* **81** 182-190.

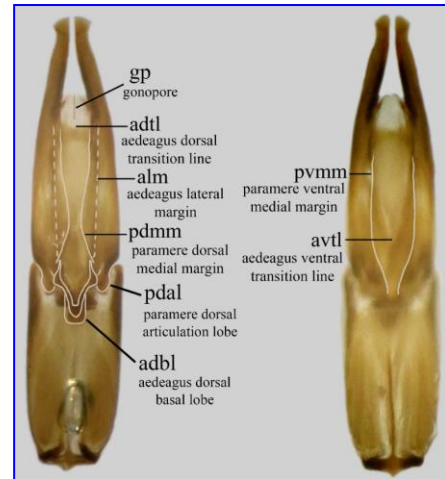
NEW WORLD *HYDROCHUS*

Phil Perkins has been busy on New World *Hydrochus*, including at least 88 new species, plus others resulting from changes in status. Anyone interested should read the papers concerned and draw their own conclusions. There is a lot of history here – see *Latissimi* 12: 14, 17:12, 19: 6, 21:7, etc.

Phil's paper on Venezuela includes a discussion involving the naming of parts of the male genitalia that may find a use elsewhere. It has, for example, "transition lines" where the sclerotisation begins. It is suggested that species in which this sclerotised strengthening is lacking may insert the whole structure into the female during copulation whereas others may splay their parameres ventrally and insert only the median lobe, requiring



a strengthened pivotal joint at the base of each paramere as well as stronger parameres overall. A great follow-up study for someone! But then, of course, one must remember that most Old World *Hydrochus* have another feature, the flagellum attached to the median lobe. So that needs even further explanation. Sperm competition has taken us some way since Frank Balfour-Browne (1962 – see left) described the flagellum as "a kind of elephantiasis", but there is plenty of mileage left.



BALFOUR-BROWNE F 1962. *Water beetles and other things. Half a Century's work.* Blacklock Farries & Sons Ltd., Dumfries.

JÄCH M A 2006. Taxonomy and nomenclature threatened by D. Makhan. *KR* **76** 360.

MAKHAN D, HAWKESWOOD T J & KABIR A 2020. *Hydrochus spanglerorum* Perkins, 2019 (Coleoptera: Hydrochidae) is a synonym of *Hydrochus battjai* Makhan, 1992. *Calodema* **757** 1-2.

PERKINS P D 2019. Type designations for Neotropical water beetles in the genus *Hydrochus* Leach, 1817 (Coleoptera: Hydrochidae). *Zootaxa* **4701** 149-167.

PERKINS P D 2019. *Hydrochus spanglerorum* n. sp., a remarkable, highly derived species from Brazil, Guyana and Suriname (Coleoptera: Hydrochidae). *Zootaxa* **4701** 581-587.

PERKINS P D 2019. Taxonomy of Venezuelan water beetles in the genus *Hydrochus* Leach, 1817, and an analysis of male genitalia morphology (Coleoptera: Hydrochidae). *Zootaxa* **4708** 1-59.

PERKINS P D 2020. Taxonomy of Guatemalan water beetles in the genus *Hydrochus* (Coleoptera: Hydrochidae). *Acta Entomologica Musei Nationalis Pragae* **60** 291-301.

PERKINS P D 2020. Taxonomy of Ecuadorian water beetles in the genus *Hydrochus* Leach, 1817 (Coleoptera: Hydrochidae). *Zootaxa* **4790** 358-374.

PERKINS P D 2020. Taxonomy of Peruvian water beetles in the genus *Hydrochus* Leach, 1817 (Coleoptera: Hydrochidae). *Zootaxa* **4868** 61-89.

PERKINS P D 2021. Taxonomy of Central American water beetles in the genus *Hydrochus* Leach, 1817 (Coleoptera: Hydrochidae). *Zootaxa* **4974** 459-503.

PERKINS P D 2021. Taxonomy of water beetles in the genus *Hydrochus* Leach, 1817, from Bolivia, Brazil and Paraguay (Coleoptera: Hydrochidae). *Zootaxa* **4994** 1-93.

ROCKPOOL CONGENERS

Ochthebius lejolisii Mulsant & Rey and *O. quadricollis* Mulsant may share the same rockpools in Murcia, but what are their preferences? The abundances of the two were negatively correlated in monthly counts in ten pools. The best models were based on distance from the sea, conductivity, pool depth and the amount of periphyton cover. *O. quadricollis* preferred deeper pools whereas *O. lejolisii* was in the shallower ones. *O. quadricollis* was more abundant the higher the conductivity and periphyton coverage, the opposite being true for *O. lejolisii*.

The main paper explores differences in tolerances of *O. lejolisii*, *O. quadricollis* and *O. subinteger* Mulsant & Rey by measuring heat coma, including some work on the effect of salinity on coma, and temperature thresholds for heat avoidance by either flight or moving into water. Larvae and adults of *O. quadricollis* were the most heat tolerant. High salinity conferred great heat tolerance to larvae of *O. lejolisii* but lower tolerance in adults. Avoidance was mainly below 40° C, with differences following the patterns for heat coma. These differences between species must be great for exploiting the wide range of niches provided in Mediterranean supratidal pools as a result of the low amplitude of the tides – in contrast with the Atlantic.

GARCÍA-MESEGUER A J, MIRÓN-GATÓN J M, BOTELLA-CRUZ M, MILLÁN A & VELASCO J 2021. Environmental variables influencing abundance of two congeneric water beetle species from supratidal rockpools. *14th International Conference of the ISSRL (International Society for Salt Lake Research, 18-22 October 2021 Murcia, Spain. Abstracts. Communication session 5 (5) Ecology and biodiversity* 106.

MIRÓN-GATÓN J M, BOTELLA-CRUZ M, GARCÍA-MESEGUER A J., MILLÁN A & VELASCO J 2022. Thermal tolerance differs between co-occurring congeneric beetle species in marine supratidal rockpools. *Marine Ecology Progress Series* **681** 185-196.

POLISH HYDROPHILID RECORDS

A second location for *Paracymus aeneus* is reported from an inland saltmarsh in one note while the other one points out that 1960s records of *Cymbiodyta marginella* (Fab.) in the Iżera Mountains should be referred to *Crenitis punctatostriata* (Letzner), rediscovered from 1992 onwards, as here in a puddle photographed by Alicja Złotogórska-Lubecka.



GREŃ C, ALEKSANDROWICZ O & LUBECKI K 2021. Nowe stanowisko *Paracymus aeneus* (Germar, 1824) (Coleoptera: Hydrophilidae) w Polsce *Acta entomologica silesiana* **29** (028) 1-2.

LUBECKI K & GREŃ C 2022. *Crenitis punctatostriata* (Letzner, 1840) a nie *Cymbiodyta marginella* (Fabricius, 1792) na torfowiskach Karkonoszy i Gór Iżerskich. *Rocznik Muzeum Górnośląskiego w Bytomiu Przyroda* **28** 1-8.

CHINESE PTILODACTYLIDS

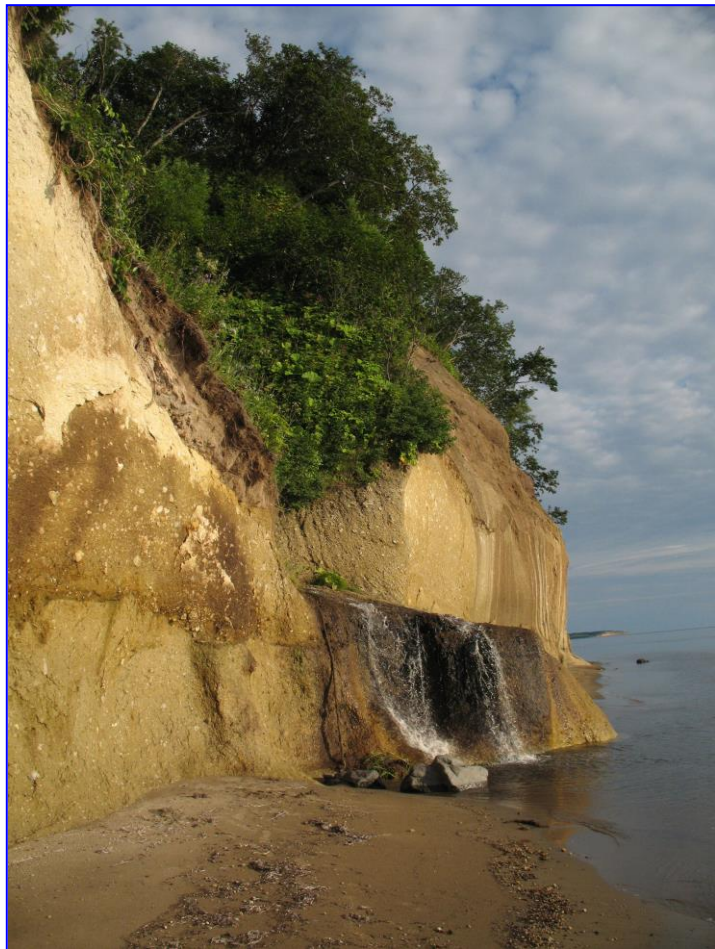
Ptilodactylids are to be found as adults and larvae on wet rock, the males (right here in *D. cheni* Yoshitomi & Hájek) having strongly flabellate antennae. *D. guadunensis* is newly described, with an illustration of a rather similar but as yet unnamed male.

HÁJEK J 2021. A new species of *Drupeus* Lewis from eastern China (Coleoptera: Ptilodactylidae: Cladotominae). *Zootaxa* **4996** 183-188.



KURIL BEETLE FAUNA

Imagine you have travelled through Europe, then through Asia out onto the Pacific Rim on Kunashir island. You find an interesting wet cliff with a cascade and catch *Hydraena*. Ow, all *riparia* Kugelann! The consolation there might be *Heterlimnius hasegawai* (Nomura) and *Georissus canalifer* Sharp. Forty-seven species are reviewed from Kunashir and the Lesser Kurils, with fifteen reported as new from the islands. The commonest *Helophorus* is *matsumarai* Nakane, and Robert Angus has noted the variability of its pronotal sculpture and genitalia, variations in overall appearance being illustrated here. Species other than *riparia* that might be familiar to Westerners are *Hydrobius fuscipes* (L.), *Enochrus affinis* (Thunberg), *E. testaceus* (Fab.), *Coelostoma orbiculare* Fab., *Cercyon analis* (Paykull), *C. laminatus* Sharp, *C. marinus* Thomson, *C. quisquilius* (L.), and *C. unipunctatus* (L.), *Cryptopleurum subtile* Sharp, *Sphaeridium lunatum* Fab. and *S. scarabaeoides* (L.). At the other extreme *Cercyon saluki* Ryndevich and *C. sundukovi* Ryndevich, Hoshina & Prokin can still be regarded as endemic to Kunashir. The discussion covers many interesting topics, too long to be covered here in any useful detail. The photograph is by V.K. Makarov. The corresponding author is Sasha Prokin.



RYNDEVICH S K, PROKIN A A, MAKAROV K V & SUNDUKOV Y N 2021. The beetles of the families Helophoridae, Georissidae, Hydrophilidae, Hydraenidae, and Elmidae (Insecta: Coleoptera) of Kunashir Island and the Lesser Kurils. *Journal of Asia-Pacific Biodiversity* **14** 461-491.

WETLAND WEEVILS

A paper starting with a quotation from the Bible is rare indeed. Deuteronomy refers to Israel as a “land with brooks, streams, and deep springs gushing out in the valleys and mountains”, and certainly wetland weevils are not one would immediately associate with the region in general. Forty-one species in twenty genera are treated here, 34 of them extant, five probably extinct, and two Late Cretaceous only. Central are ten species of *Bagous*, including *B.*



argillaceus Gyllenhal, *B. biimpressus* Fähræus, *B. libanicus* Schilsky, *B. tempestivus* (Herbst), and *B. validus* Rosenhauer. Perhaps the most interesting one is *argillaceus*, the only one known from the desert, where it has been found in an artificial freshwater reservoir in the Negev and in a brackish water spring flowing into the Dead Sea. The Nanophyini have posed some problems, with a *Nanomimus* species and three *Nanophyes* species yet to be identified (but that was in 2018). The photograph, taken by one of Friedman’s children, shows sweeping of purple-loosestrife, *Lythrum salicaria* L., for nanophyines. *Lixus iridis* Olivier is reported as a wetland representative of the genus, from which 23 species are known in Israel. Despite its frequency of occurrence there the host plant remains uncertain, quite unlike its status in Britain, where the second paper here demonstrates a close association with terrestrial umbellifers in England.

FRIEDMAN A-L-L 2018. Review of the hygrophilous weevils in Israel (Coleoptera: Curculionoidea). *Diversity* **10**, 77 pp. 46 doi:10.3390/d10030077

KAUNANG J F, COLLINS G A, BARCLAY M V L, MENDEL H, MORRIS M G, COLLIER M J & BANTOCK T 2021. *Lixus iridis* Olivier (Curculionidae) in Surrey, now established in Britain. *The Coleopterist* **30** 113-117.

TAIWANESE HYDROPHILIDAE

Fields of the vegetable taro were mentioned in *Latissimus 50* as providing a habitat for *Hydrovatus* species and here it is again in connection with a welcome study of Hydrophilidae faunistics, the photograph of a planting courtesy of Hsing-Che Liu. Running water species are found in these wetland cultivations when first planted up, to be replaced by stagnant water species when vegetation starts to grow. *Laccobius formosus* Gentili is an example of one of the running water species, and *Stenolophus rufipes* (Fab.)



and the brightly marked *Enochrus subsignatus* (von Harold) occupy stagnant fields. Twenty-one species are reported in all. The correspondent is Liang-Jong Wang.

LIU H-C, MA C-H, FIKÁČEK M & WANG L-J 2021. Annotated catalogue of the water scavenger beetles from Orchid Island, Taiwan (Coleoptera: Hydrophilidae). *Japanese Journal of Systematic Entomology* **27** 301-309.

THURINGIAN RED LISTS

📖 FRITZLAR F, KORSCH H, FÖRSTER T, WESTHUS W, LEMKE T, BUCHMANN T, ROTHGÄNGER A & GENßLER C (eds) 2021. *Rote Listen der gefährdeten Tier-, Pilz- und Pflanzenarten, Pflanzengesellschaften und Biotope Thüringens*. Naturschutzreport **30**. Jena: Freistaat Thüringer Landesamt für Umwelt, Bergbau und Naturschutz. ISSN 0863-2448

The first list with water beetles was in 2001 (see **Latissimus 15** 19) and there was an update by Ronald Bellstedt in 2011. Ten years further on the new list is accompanied by a living *Graphoderus bilineatus* (De Geer), but with a new image of the whole animal here kindly supplied by Jörg Gebert. Sadly, this also illustrates the problem in that the list contains so many species that have gone extinct in Thuringia. Reciting them sounds like a funereal list for so many European countries – *Agabus labiatus* (Brahm), *A. fuscipennis* (Paykull), *A. striolatus* (Gyllenhal), *Ilybius neglectus* Schaum, *I. similis* Thomson, *I. subtilis* (Erichson), *Rhantus bistriatus* (Bergsträsser), *R. notaticollis* (Aubé), *Dytiscus latissimus* L., *Graphoderus bilineatus*, *Bidessus delicatulus* (Schaum), *B. grossepunctatus* Vorbringer, *B. unistriatus* (Schrank), *Hydroporus elongatulus* Sturm, *H. kraatzii* Schaum, *H. rufifrons* (Müller), *H. scalesianus* Stephens, *Berosus spinosus* (Steven), *Hydraena rufipes* Curtis, *Esolus pygmaeus* (Müller), *Limnius muelleri* (Erichson), *L. opacus* Müller, *Macronychus quadrituberculatus* Müller, *Riolus nitens* (Müller), *Stenelmis canaliculata* (Gyllenhal), *Dryops anglicanus* Edwards, *D. lutulentus* (Erichson), *D. rufipes* (Krynicky), *D. viennensis* (Castelnau), *Pomatinus substriatus* (Müller), and *Potamophilus acuminatus* (Fab.). It is noticeable that nearly all of these species disappeared long before the Second World War and before there was an EU Common Agricultural Policy, the exceptions being *D. latissimus*, last seen in 1962, and *I. neglectus* in 2001. The leaf beetles chapter by Frank Fritzlar lists as endangered thirteen species of Donaciinae, and the chapter on weevils has no less than fifteen species of *Bagous* as well as other wetland species.



APFEL W, KOPETZ A & WEIGEL A 2021. Rote Liste der Rüsselkäfer (Insecta: Coleoptera; Curculionidae) Thüringens. pp. 233-250.

BELLSTEDT R 2011. Rote Liste der Wasserkäfer (Insecta: aquatische Coleoptera) Thüringens. *Naturschutzreport* **26** 180-188.

BELLSTEDT R & FÖRSTER T 2021. Rote Liste der Wasserkäfer (Insecta: aquatische Coleoptera) Thüringens. pp. 171-178.

FRITZLAR F 2021. Rote Liste der Blattkäfer (Insecta: Coleoptera: Chrysomelidae) Thüringens. pp. 219-232.

BELLADESSUS FROM BRAZIL

The genus was previously known from the Andean and Guiana Shield regions of South America. *B. espinhasso* and *B. minutopunctatus* are newly described from the Brazilian Shield far from the previously known species.

BENETTI C J, SHORT A E Z & HAMADA N 2021. First report of *Belladessus* Miller and Short, 2015 from Brazil with description of two new species (Coleoptera: Dytiscidae: Hydroporinae: Bidessini). *The Coleopterists Bulletin* **75** 339-345.

OMANI BEETLES

Fourteen sites were sampled in North Oman in 2010, recording 193 species with four described as new – *Hydraena naja*, *Ochthebius alhajarensis*, *O. bernard* and *Agraphydrus elongatus*. The hydraenids were found in pools in the source of the Bani Awf (illustrated courtesy of Ali Cieslak). Including the new species, 16 species were added to the Omani checklist, which is



tabulated. Authors for correspondence are Carles Hernando and Ali Cieslak. In the later paper it is noted that *Hydaticus dhofarensis* was originally described as a subspecies of the Indomalayan *H. satoi* Wewalka. This was treated as a synonym of *bipunctatus* Wehncke by Wewalka (2020). The Omani specimens differ only in 1% of the usual Cytochrome oxidase gene region from Indian and Chinese *bipunctatus*, and differences in size and patterning are swallowed up in general variation. The distributions of two colour forms are mapped for Oman.

HÁJEK J, REITER A & VONDRÁČEK D 2021. Molecular analysis and morphological variability confirm *Hydaticus dhofarensis* Pederzani, 2003 as the westernmost population of the Indomalayan *H.* RIBERA I, HERNANDO C & CIESLAK A 2019.

Aquatic Coleoptera of North Oman, with description of new species of Hydraenidae and Hydrophilidae. *Acta entomologica Musei Nationalis Pragae* **59** 253-272.

WEWALKA G 2020. Revision of the Asian and Australian/Pacific species of the *Hydaticus* (*Prodaticus*) *vittatus* and *H. (P.) daemeli* species groups (Coleoptera: Dytiscidae). *Koleopterologische Rundschau* **90** 25-72.

HIMACHAL PRADESH

Sixty-seven species of Hydradeephaga are known from this the northernmost Indian state, with thirteen recorded for the first time – *Orectochilus fletcheri* Ochs, *Haliphus kapuri* Vazirani, *Canthydrus laetabilis* (Walker), *Noterus crassicornis* (Müller), *Hydaticus bipunctatus* Wehncke, *H. mexaformis* Wewalka, *Peschetius toxophorus* Guignot, *Pseudovarvatus vitticollis* (Boheman), *Hydrovatus obtusus* Motschulsky, *H. pinguis* (Régimbart), *Herophydrus musicus* (Klug), *Hyphophorus nilghiricus* Régimbart, and *Laccophilus chinensis* Boheman. Thirty-five hydrophiloid species and one epimetopid, *Eumetopus asperatus* (Champion), are also known. Recorded for the first time are *Berosus incretus* d'Orchymont, *B. nigriceps* (Fab.) and *Sternolophus decens* Zaitzev.

GHOSH S K 2021. Insecta: Coleoptera: Adephaga: Gyrinidae, Haliplidae, Noteridae and Dytiscidae. *Zoological Survey of India, Fauna of Himachal Pradesh, State Fauna Series* **26** 537-566.

GHOSH S K, CHANDRA K, GUPTA D, GHOSH J, DAS P, BHUNIA D & DUTTA S 2021. Insecta: Coleoptera: Hydrophiloidea. *Zoological Survey of India, Fauna of Himachal Pradesh, State Fauna Series* **26** 581-588.

INDIAN PESCHETIUS

Two new species of *Peschetius*, *bistroemi* and *nilssoni*, are described, doubling the number of *Peschetius* species known from the Indian mainland, plus *taprobanicus* Biström & Bergsten endemic to Sri Lanka. Illustrated is a roadside pond in Satar, one of the sites for *nilssoni*.

SHETH S D, GHATE H V, DAHANUKAR N & HÁJEK J 2021. Integrative taxonomic review of the genus *Peschetius* (Coleoptera, Dytiscidae, Hydrophorinae) from India with description of two new species. *Arthropod Systematics & Phylogeny* **79** 535-553.



RUSSIAN SALINE RIVER

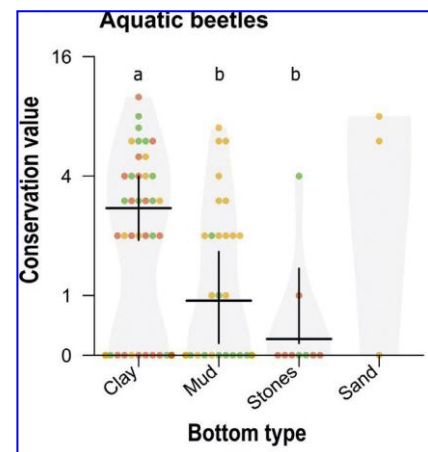
Often when one sees “macrozoobenthos” in a paper’s title you can expect that it will be heavy on chironomids, with some sort of ratio of mayfly and stonefly larvae numbers, some abstruse multivariate calculations, and, if there are any at all, some dodgy sounding beetle names. You would be pleasantly disappointed here as the names are solid, *Hygrotus enneagrammus* (Ahrens), *Berosus bispina* Reiche & Saulcy and *Enochrus quadripunctatus* (Herbst). The Chernavka River ultimately drains into the Caspian and it ranges from 24 to 34 grams of sodium chloride a litre in the research area, with an inevitably poor fauna. Productivity calculations even include *Berosus* in benthic production.

GOLOVATYUK L V, PROKIN A A, NAZAROVA L B & ZINCHENKO T D 2022. Biodiversity, distribution and production of macrozoobenthos communities in the saline Chernavka River (Lake Elton basin, South-West Russia). *Limnology* doi.org/10.1007/s10201-021-00692-w

CZECH MINING FAUNA

This work is based on surveying the beetles and bugs of 29 pools associated with lignite spoil heaps. The survey took in 975 water beetles in 62 species, including one endangered, two vulnerable and four near threatened species. Conservation value was highest when sites were small, with a wide range of vegetation types and few dominants, with a varied substratum on low and gradually sloping banks exposed to the sun, no fish, and with some forestry in the surroundings. Unlike many papers in this kind of journal the conclusions are fully backed up by reliably identified beetles listed in an Excel file (<https://doi.org/10.5281/zenodo.4974342>). The figure demonstrates the importance of substratum type and there is also a good demonstration of the impact of fish. Very citable.

KOLAR V, TICHANEK F & TROPEK R 2021. Evidence-based restoration of freshwater biodiversity after mining: experience from Central European spoil heaps. *Journal of Applied Ecology* **58** 1921-1932.



RUSSIAN RECORDS

New records are given for the Udmurt Republic and the Republic of Bachkortostan. Catching the eye are *Haliplus varius* Nicolai, *Rhantus bistriatus* (Bergsträsser), *Graptodytes bilineatus* (Sturm), *Helophorus redtenbacheri* Kuwert, and *Limnebius crinifer* Rey.

Seven species are newly recorded from the Lipetsk Oblast – *Haliplus flavicollis* Sturm, *Agabus paludosus* (Fab.), *Ilybius neglectus* (Erichson), *I. wasastjernae* (Sahlberg), *Hydroporus incognitus* Sharp, *Hygrotus versicolor* (Schaller), *Hydrobius rottenbergii* Gerhardt, plus confirmation of *Contacyphon laevipennis* (Tournier).

A rather typical *wasastjernae* habitat is shown here, a deeply shaded pool formed by a windthrown pine, photographed by Yan Urbanus.



SAZHNEV A S, KARGAPOLTSEVA I A, KHOLMOGOROVA N V & BOBKOVA E A 2021. New records of water beetles (Coleoptera) in the territories of Urdmurtiya and Bashkiriya. *Bulletin of Perm University, Biology* **2021** (4) 289-294. [in Russian with abstract in English]

SAZHNEV A S, PROKIN A A & URBANUS Y A 2021. New records of Haliplidae, Dytiscidae, Hydrophilidae and Scirtidae (Coleoptera) from Lipetsk Oblast. *Transactions of Papanin Institute for biology of Inland Waters* **96** (99) 7-14. [in Russian with abstract in English]

NEW MEXICAN CYBISTER

C. poblanus is the fourth *Cybister* to be described from North America and the third from Mexico. At 38 mm long it is larger than the other *Cybister* but liable to be mistaken for *Megadytes Iherminieri* (Guérin-Méneville) and *M. magnus* Trémouilles & Bachmann, hence the need satisfied here for a revised key to all Cybistrinae in America north of Belize. The correspondent is Hans Fery.

ARCE-PÉREZ R, NOVELO-GUTIÉRREZ R & FERY H 2021. *Cybister* (s. str.) *poblanus* sp. n. from Mexico and notes on other species of Cybistrinae (Coleoptera: Dytiscidae). *Zootaxa* **5061** 323-339.

BURMESE CRETACEOUS AMBER FINDS

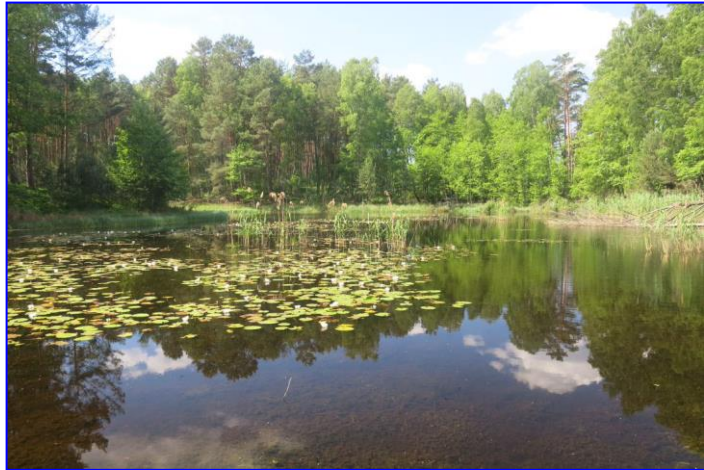
Pseudoataeopsephus burmensis is a water penny beetle based on an adult male from mid-Cretaceous Burmese amber. The corresponding author is Chenyang Cai. *Erichia cretacea* is named based on a very well preserved adult found in Upper Cretaceous amber. This taxon is placed in the Cephalobyrrhinae of the Limnichidae. The corresponding author for the second paper here is Hong Pang.

LI Y-D, HUANG D & CAI C 2021. *Pseudomataeopsephus*, a new genus of water penny beetles from mid-Cretaceous Burmese amber (Coleoptera: Psephenidae). *Cretaceous Research* doi.org/10.1016/j.cretres.2021.105055 pp 5.

YU Y, ŚLIPIŃSKI, REN D & PANG H 2021. The first fossil Limnichidae from the Upper Cretaceous Burmese amber (Coleoptera: Byrrhoidea). *Annales Zoologici* **68** 843-848.

BRANDENBURG RARITIES

Dietrich Braase found a larva of *Dytiscus latissimus* L. in the Trautzke Lakes in Brandenburg in 1989. Survey work in 2018, using handnetting, bottle traps and fish baskets, failed to rediscover this species, but fifty water beetle species were found. These included *Graphoderus austriacus* (Sturm), *G. bilineatus* (De Geer), *G. zonatus* (Hoppe), *Dytiscus circumcinctus* Ahrens, and *Bidessus grossepunctatus*



Vorbringer. Illustrated courtesy of Lars is the south-east part of the lakes where the single specimen of *bilineatus* was found.

HENDRICH L & MÜLLER R 2021. Die Wasserkäferfauna des NSG Trautzke-Seen in Brandenburg, unter besonderer Berücksichtigung des Vorkommens der FFH-Arten *Graphoderus bilineatus* De Geer, 1774 und *Dytiscus latissimus* Linnaeus, 1758 (Coleoptera, Dytiscidae). *Markische Entomologische Nachrichten* **23** 217-224.

WINGS, ARCHOSTEMATA-ELATEROIDEA

This might seem a step back into the past, when morphology was king, but it is in practice a highly citable compendium on the form of the hind wings, largely reconciling phylogeny as measured by structural differences with phylogenomics. Here for example is the most up-to-date terminology for parts of the wing. The general discussion covers the history of wing nomenclature, wing fields, veinal systems, wing folding, wing embayments, hinges and bending zones, cross-veins and other braces, and cells. The current views on evolution of the various groups are discussed. This includes the controversial relationships within the Adephaga, but the enumerated differences between adepagan wings are not analysed with respect to the controversy. Perhaps that is reserved for Part 2 of this review? The authors do not think that the coverage of twelve hydrophilids will be enough to explore the internal relationships of the Hydrophiloidea but, for example, they hope to extend coverage of the Histeridae in Part 2. The first fourteen of twenty-one groups of Coleoptera are then illustrated and discussed. Figures 4-148 depict 435 hind wings! The correspondent is Adam Ślipiński.

LAWRENCE J F, ZHOU Y-L, LEMANN C, SINCLAIR B & ŚLIPIŃSKI A 2021. The hind wing of Coleoptera (Insecta): Morphology, nomenclature and phylogenetic significance. Part 1. General discussion and Archostemata-Elateroidea. *Annales Zoologici* **71** 421-606.

DYTISCUS MARGINALIS NOT GUILTY

The authors challenge the usual idea that *Dytiscus marginalis* L. is a ferocious predator implicated in reducing fish stocks. They observed the foraging behaviour of both adults and larvae and noted that they did not follow up failed initial attacks instead preferring to scavenge for carrion.

HENDRIKS P & van DIJK G 2022. Maakt de gewone geelgerande waterroofkever *Dytiscus marginalis* zijn reputatie als rover waar? *Entomologische Berichte* **82** 2-8.

IDEAS NEEDED ON WHITE BLOBS IN *DYTISCUS*

Wenfei Liao has asked what these white inclusions might be inside a *Dytiscus marginalis* L. Ideas so far offered are fat bodies and encapsulations of a parasite.

***OCHTHEBIUS EXSCULPTUS* IN ENGLAND**

O. exsculptus is reported new for Hampshire in two chalk streams issuing from watercress farms. A great endorsement for an unusual agricultural practice.

AQUILINA R 2021. The first record of *Ochthebius (Enicocerus) exsculptus* Germar (Hydraenidae) in Hampshire. *The Coleopterist* **30** 132.

***ELMOMORPHUS* REVIEW**

These elmid-like dryopids live submerged in running water for most of the time. They appear to divide into a few widely distributed species that can be taken at light and to many living in primary rainforests that are not attracted to light. This is the first part of a review of the genus, and covers full characterisation of *E. brevicornis* Sharp, from Japan and Korea, and the Japanese *E. amamiensis* Nomura.

KODADA J, SELNEVOVIČ D, JÄCH M A, GOFFOVÁ K & VĚAČNÝ P 2021. Taxonomic revision of the genus *Elmomorphus* Sharp, 1888 I. Japanese and Korean species (Coleoptera: Dryopidae). *European Journal of Entomology* **758** 97-121.

STAGNANT WATER INDEX

Monthly monitoring data from the Embalse del Guájara, Colombia, were used to devise a modification of the BMWP for stagnant water. Of the 14,259 individuals sampled, 742 were beetles, including a surprisingly large number of weevils. The author for correspondence is Octavio Luis Franco. The second paper, concerning an equatorial river in the Andes, is perhaps more citable in 43% of the individuals sampled were beetles, mostly elmids. But, of course, not a single species was harmed by being named in these papers! That may not be true as it looks as if some form of supplemental data might have been available when at least one of these items was published.

CASTELLANOS ROMERO K, PIZARRO DEL RÍO J, CUENTAS VILLARREAL K, COSTA ANILLO J C, PINO ZARATE Z, GUTIERREZ L C, FRANCO P L & ARBOLEDA VALENCIA J W 2017. Lentic water quality characterization using macroinvertebrates as bioindicators: an adapted BMWP index. *Ecological Indicators* **72** 53-66.

LIÑERO ARANA I, BALAREZZO V H, ERASO H, PACHECO F, RAMOS C E, MUZO R G & CALVA C J 2016. Calidad del agua de un río andino ecuatoriano a través del uso de macroinvertebrados. *Cuadernos de investigación UNED* **8** 69-75.

BAVARIAN *LACCORNIS*

Laccornis oblongus was trapped and netted in the Murnauer Moos in Upper Bavaria in 2021. This is the most south-western site known for this species. Twenty other dytiscid species are recorded from the same site.

HENDRICH L, MANUEL M & BALKE M 2022. Discovery of the diving beetle *Laccornis oblongus* (Stephens, 1835) in Bavaria, southern Germany (Coleoptera, Dytiscidae, Hydroporinae, Laccornini). *Check List* **18** 79-84.

APENNINE LAKE COMPLEXES

Two lake complexes were surveyed that would have originated from the same glacier on either side of the Apennines along the border between Emilia-Romagna and Tuscany. Easily the most interesting beetle was *Ilybius lagabrunensis* (Schizzerotto & Fery), the ninth known population of this Italian endemic, found in four sites. Thirty-six species are reported including *Hydroporus sanfilippo* Ghidini and *Rhithrodytes crux* (Fab.). Earlier records of *Helophorus flavipes* Fab. and *Anacaena limbata* (Fab.) from Passo del Cerreto are doubted.

TOLEDO M & MAZZOLDI P 2021. La coleotterofauna acquatica dei Laghi Cerretanti (Ventasso RE) e complesso Lago Padule e Lago Lungo (Fivizzano MS). (Insecta: Coleoptera: Gyrinidae, Dytiscidae, Helophoridae, Hydrophilidae, Hydraenidae, Elmidae). *Quaderno di Studi e Notizie di Storia Naturale dell Romagna* **54** 139-170.

FLUKE UPDATE

Descriptions of newly recognised species of fluke found in Brazilian fishes result in a revised genetic analysis of the Allocreadiidae, including *Allocreadium neotenicum* Peters, as found in *Hydroporus rufifrons* (Müller) and other dytiscids. The analysis shows strong divergence of Neotropical species from the Holarctic ones. The correspondent is Lidiane Franceschini.

FRANCESCINI L, AGUIAR A, ZAGO A C, YAMADA P de O F, EBERT M B & da SILVA R J 2021. Three new species of *Creptotremae* (Trematoda, Allocreadiidae) with an amended diagnosis of the genus and reassignment of *Auriculostoma* (Allocreadiidae), based on morphological and molecular evidence. *Parasite* **28** doi.org/10.1051/parasite/2021065 pp 28.

IRANIAN RECORDS

Publications from this area are usually to be welcomed, but there are some problems here. Seven species are reported, including *Berosus spinosus* (Steven), *Enochrus fuscipennis* (Thomson), *E. politus* (Küster), and *E. quadripunctatus* (Herbst). These have been reported from Iran before according to the authors, but *politus* is not listed from there in the Palaearctic Catalogue. The problems arise with the three species illustrated. The *Berosus* specimen looks rather bright for *B. luridus* (L.). The "*Limnebius nitidus*" is a limnichid and then there is an *Ochthebius* claimed to be *nilssoni* Hebauer, but with decidedly smoother elytra than my Irish, Italian and Swedish specimens. However, *O. nilssoni* appears to have been known to the authors only from Franz Hebauer's original description, i.e. they were unaware of the Irish and Italian populations, which, being so widely dispersed, might have lent more credence to the idea. The author for correspondence is Reza Vafaei-Shoushtari, but no email address is given.

ZUNIELMIS IN COLOMBIA

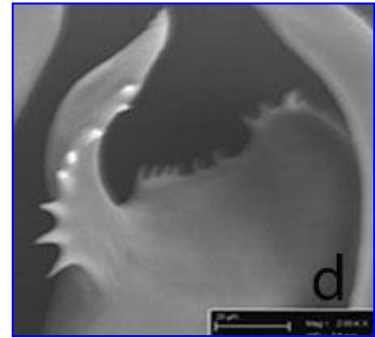
Z. pax is straw-coloured with black markings, and is narrow, the head looking rather like that of a thrips. Plastron cover is extensive.

GONZÁLEZ-CÓRDOBA M, MANZO V & GRABADOS-MARTÍNEZ C E 2021. *Zunielmis pax*, a new genus and species of riffle beetle (Coleoptera: Elmidae) from Colombia. *Zoosystematica Rossica* **30** 248-265.

TURKISH HYDROCHUS

Eight species are keyed in this paper as from Turkey including the newly described *adiyamanensis*, a species similar to *H. farsicus* Hidalgo-Galiana, Jäch & Ribera, but having the large median lobe carrying many small spines.

TAŞAR G E 2017. *Hydrochus adiyamanensis* sp. n. from Adiyaman Province in south-eastern Turkey (Coleoptera: Hydrochidae). *Zoology in the Middle East* **63** 356-361.



POND RESEARCH PRIORITIES

A meeting in May 2019 generated thirty research questions about pond ecology and management.

HILL M J, GREAVES H M, SAYER C D, HASSALL C, MILIN M, MILNER V S, MARAZZI L, HALL R, HARPER L R, THORNHILL I, WALTON R, BIGGS J, EWALD N, LAW A, WILLBY N, WHITE J C, BRIERS R A, MATHERS K L, JEFFRIES M J & WOOD P J 2021. Pond ecology and conservation: research priorities and knowledge gaps. *Freshwater Ecology* **12** e03853 1-22.

BEROSUS STRESS NOISES

Comparisons are made between oscillograms of males and females of these species using a Behringer ECM8000 measuring condenser microphone. The maximum sound was produced by a male *frontifoveatus* at 5842.76 Hz.

RODIONOVA E Yu, SAZHNEV A S, KUSTOV S Yu & MIROLIUBOV A A 2021. Stress signals of water scavenger beetles *Berosus frontifoveatus* Kuwert, 1888 and *Berosus spinosus* Steven, 1808 (Coleoptera: Hydrophilidae). *Izvestiya of Saratov University, Chemistry, Biology, Ecology* **21** 309-316. [in Russian with abstract in English]

CHINESE HELOCHARES

The discussion begins with a reminder that “*Helochares* is a typical tropical group that is mainly known from the Oriental and Afrotropical realms.” Twenty species are known from China, most of them found south of the Qiaking-Huathe Line. The mainly Palaearctic *H. obscurus* (Müller) reaches to Xinjiang. Two known species are newly recorded from China and *H. guoi* Yang & Lia and *H. distinctus* Jia & Tang are newly described. Figures 24-26 are instructive on how the aedeagus (presumably) works. The correspondent is Fenglong Jia.

YANG Z-M, JIA F, TANG T & JIANG L 2021. Two new species of *Helochares*, with additional records from China (Coleoptera, Hydrophilidae, Acidocerinae). *ZooKeys* **1078** 57-83.

POND DRYING AND REFILLING EXPERIENCE

These notes are largely concerned with the observations made by Peter Sutton last year, illustrated by photographs of *Noterus clavicornis* (De Geer), *Agabus nebulosus* (Forster) and *Hygrotus impressopunctatus* (Schaller). They can be downloaded from the Amateur Entomologists' Society website www.amentsoc.org.

ANON. 2021. Water beetles and the drying and refilling of water bodies in England. *Invertebrate Conservation News* **100** 5-10.

SUTTON P 2020. Observations on the recolonisation by water beetles of three previously desiccated habitats. *Latissimus* **47** 6-14.

CYBISTER VS CYBISTER VS CYBISTER

Cybister tripunctatus lateralis (Fab.) is expanding its range, coming into contact with two species of more restricted distribution, *C. brevis* Aubé and *C. chinensis* Motschulsky. As a result of much experimentation it was established that *lateralis* swam more frequently, found food more easily and consumed more of it than either *brevis* or *chinensis*.

OHBA S-Y, TERAZONO Y & TAKADA S 2022. Interspecific competition amongst three species of large-bodied diving beetles: is the species with expanded distribution an active swimmer and a better forager? *Hydrobiologia* doi.org/10.1007/s10750-021-04774-9

L'ASSAULT TENACE DES MÂLES

We were honoured. Professor Hervé Le Guyader recounted the story of the sexual arms race in dytiscids and its consequences in *Pour la Science*, aided by an image from Michael Manuel.

LE GUYADER H 2019. Les dytiques mâles ne manquent pas d'air. *Pour la Science* **501** 92-94.

DNA - VIRUSES IN DYTISCIDAE?

Nudiviruses are double-stranded DNA viruses found in insects and aquatic crustaceans. They are now considered apart from the baculoviruses (Baculoviridae) in the Nudiviridae. The authors speculate that "Predaceous diving beetles might form a possible bridge between insects and brackish or freshwater nudiviruses in Crustaceans". But we do need more evidence that diving beetles harbour DNA-viruses. The correspondent is Monique van Oers.

PETERSEN J M, BÉZIER A, DREZEN J-M & van OERS M M 2022. The naked truth: an updated review on nudiviruses and their relationship to bracoviruses and baculoviruses. *Journal of Invertebrate Pathology* 107718.

AGRAPHYDRUS LARVAE

The authors point out that members of *Agraphydrus* from different habitats were so unlike that they were originally placed in three genera, *Horelophopsis*, *Megagraphydrus* and *Agraphydrus* itself. The same has been found not true for their larvae, one found on wet rock being morphologically similar to those found beside streams and in river estuaries. The paper is dedicated to the memory of Dr Shun-Ichi Uéno, who died on 3 October 2020.

MINOSHIMA Y N, LIU H-C & FIKÁČEK M 2021. Description of the larva of a hygropetric *Agraphydrus* (Coleoptera, Hydrophilidae, Acidocerinae). *Elytra, Tokyo* **11** 95-105.

NORTH-WEST MOROCCO

Helophorus atlantis Angus & Aouad is new for the Rif, and *Hydroporus memnonius* Nicolai and *H. rifensis* Manuel are new for the Occidental Rif. Other species additional for the Martil Basin are *Peltodytes caesus* (Duftschmid), *Agabus conspersus* (Marsham), *Deronectes theryi* (Peyerimhoff), *Hydrochus grandicollis* Kiesenwetter, and *Helochares punctatus* Sharp. Sixty-five water beetle species are recorded.

GUELLAF A, BENNAS N, EI HAISSOUFI M, L'MOHDI O & KETTANI K 2021. New data on the biodiversity and chorology of aquatic insects (Odonata, Coleoptera and Hemiptera) of Martil Basin (northwestern Morocco). *Graellsia* **77** (2) 1-15.

BYRRHINUS IN THE PHILIPPINES

B. negroensis and *B. villarini* are newly described on the basis of specimens light-trapped on riverbanks. Seven *Byrrhinus* species are now known from the Philippines, but three specimens are listed that have genetically distinct DNA but are not described as new species.

DELOCADO E D & FREITAG H 2021. Two new species of *Byrrhinus* Motschulsky, 1858 (Coleoptera, Limnichidae, Limnichinae) from Negros, Philippines. *ZooKeys* **1070** 51-72.

BYRRHINUS AGAIN

B. satoi and *B. uenoi* are newly described from Japan, and *B. tainanensis* is a new species from Taiwan. It is possible that the Taiwanese record of *B. orientalis* (Sharp) belongs to *B. formosanus* Pic, redescribed here.

YOSHITOMI H & HAYASHI M 2021. Revision of the genus *Byrrhinus* (Coleoptera, Limnichidae) of Japan and Taiwan. *Elytra, Tokyo* **11** 141-150.

IRAQ MARSHES

This is a most welcome update on the fauna of the marshes around the Tigris and Euphrates. Named, mainly from survey work in 2020, are *Agabus biguttatus* (Olivier), *A. caraboides* Sharp, *A. conspersus* (Marsham), *A. guttatus* (Paykull), *A. paludosus* (Fab.), *A. safei* Abdul-Karim & Ali, *Bidessus exornatus* Reiche & Saulcy, *Colymbetes fuscus* (L.), *C. piceus* (Klug), *Cybister tripunctatus* (Olivier), *Eretes sticticus* (L.), *Herophydrus guineensis* (Aubé), *H. musicus* (Klug), *Hydaticus dorsiger* Aubé, *H. ponticus* Sharp, *Hydroglyphus confusus* (Klug), *Hydroporus tessellatus* (Drapiez), *Hydrovatus badeni* Sharp, *H. clypealis* Sharp, *H. meridionalis* Abdul-Karim & Ali, *Hyphoporus solieri* (Aubé), *Hyphydrus aubei* Ganglbauer, *Laccophilus*, the usual three plus *sharpi* Régimbart, *Nebrioporus laeviventris* (Reiche & Saulcy), *Platambus maculatus* (L.), and *Rhantus suturalis* (MacLeay). The sole *Gyrinus*, *natator* L., sits rather uncomfortably among the Hydradephaga, given that fifteen gyrid species were reported in the past. The only polyphagan species named is *Enochrus melanocephalus* (Olivier), so there is plenty of scope for further work. Thus, still “a true paradise of pleasure” for some!

AL-SAFFAR H & AUGUL R S 2021. Survey of insects in some southern Iraqi marshes. *Bulletin of the Iraq Natural History Museum* **16** 571-621.

MALTESE CERCYON

Hardly aquatic but we do like to keep track of all Hydrophilidae, there is here a Maltese light trap record for *Cercyon quisquilius* (L.), confirmed by its DNA. The correspondent is Adriana Vella.

MIFSUD C M, VELLA N & VELLA A 2021. Contribution to the knowledge of the beetle fauna (Insecta, Coleoptera) of Malta: new records of seven species with supporting DNA barcodes. *Check List* **17** 1443-1449.

CARIBBEAN CERCYON

The Maltese note (above) drew to attention an overlooked larger work on the *Cercyon* of the Great Antilles from four or more years ago. Ten species were recorded, five of them being described as new, the other including the introduced and near-cosmopolitan *C. nigriceps* (Marsham) and *C. quisquilius* (L.). There are two examples here of larvae and adults being linked by DNA sequences.

ARRIAGA-VARELA E, SEIDEL M, DELER-HERNÁNDEZ A, SENDEROV V & FIKÁČEK M 2017. A review of the *Cercyon* Leach (Coleoptera, Hydrophilidae, Sphaeridiinae) of the Great Antilles. *ZooKeys* **681** 39-93.

DAVID SHARP – TWO MORE! Hans Fery

In 2013 a bibliography was issued which lists "800 contributions to science" by David Sharp (Fery 2013: 4). In the meantime two additional "contributions" were discovered – the first (Sharp 1864a) by Oscar Vorst (communicated ca 2014), the second one (Sharp 1909) only recently by myself.

I was quite astonished when I checked the list of Sharp's works in the bibliography and found that the first "contribution" (on *Stenolophus brunnipes* Sturm; today in genus *Acupalpus* Latreille, 1829) was already included, but with conflicting publishing data (Sharp 1864b - as "Sharp 1864a" in Fery 2013: 5).

The solution for this "surprise" is as follows: The short note by Sharp on the inside of the back-cover of the June issue is what might be called a "preview" of what appeared one month later in the July issue. I could not check whether similar "previews" of other Sharp "contributions" exist in the Entomologist's Monthly Magazine (EMM). The Biodiversity Heritage Library (BHL) gives only the inner parts of the monthly issues, but the green front and back covers are missing there. It seems to be a big coincidence that Oscar found a complete version of the first issue of the first volume of EMM.

One might suspect that in some similar cases the existence of two versions of articles in EMM can be problematic. However, as far as I have found, there appears no conflict in priority for the taxa described by Sharp – at least not in the Hydradephaga. The only two taxa published by Sharp in EMM which are accepted to date as valid species are *Hydroporus incognitus* Sharp, 1869, and *Dineutus truncatus* Sharp, 1873. Subjective synonyms of the latter do not exist and those of the former were published much later. Additionally, both articles are much too long to be placed on the inside of a cover.

Sharp's so far undiscovered second "contribution" is a "normal" one. I found it accidentally when checking in BHL volumes of the *Bulletin de la Société Entomologique d'Égypte*. The two parts in Trägårdh's work deal with *Laccophilus restrictus* Sharp, 1882 (five lines; description of a new variety, but without giving it a name) and *Ochthebius niloticus* Sharp, 1904 (11 lines; to date treated as junior subjective synonym of *Ochthebius lividipennis* (Peyron, 1858)). Both parts were already published in Sharp (1904, pp. 3 and 9) with similar content, but in English instead of French.

*FERY H 2013. David Sharp (1840–1922). A bibliography and a catalogue of his insect names. *Skörvnöpparn – Insekter i Norr, Supplement 4* 1–114.

SHARP D 1864a. Occurrence of *Stenolophus brunnipes*, Sturm, in Britain. *Entomologist's Monthly Magazine* 1 (1) inside of back-cover [published in June 1864].

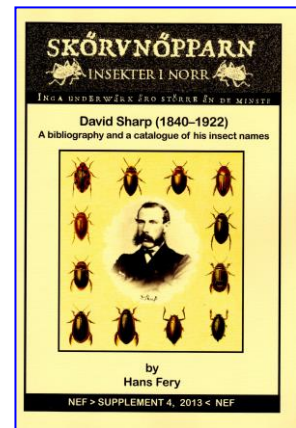
SHARP D 1864b. Occurrence of *Stenolophus brunnipes*, Sturm, in Britain. *Entomologist's Monthly Magazine* 1 (2): 48 [published in July 1864].

SHARP D 1904. Water beetles (Dytiscidae & Hydrophilidae) of the Swedish Zoological Expedition to Egypt and the White Nile. in L.A. Jägerskiöld (ed.). Results of the Swedish Zoological Expedition to Egypt and the White Nile 10 1–10

SHARP D 1909. Dytiscidae [sic!], Hydrophilidae, p. 21. in I. Trägårdh. Coléoptères égyptiens *Bulletin de la Société Entomologique d'Égypte* 2 (1) 21–23.

Received February 2022

*Anders Nilsson notes that he still has copies of this publication.



RUSSIAN *LUMETUS* IN ENGLISH

This study was described (*Latissimus* 50 36) as “Another paper to have by your side in European studies”. Then it was in Russian, now we have the English translation, making it even more desirable for some.

LITOVKIN S V, SAZHNEV A S & PROKIN A A 2021. Species of the subgenus *Lumetus* Zaitzev (Coleoptera, Hydrophilidae: *Enochrus* Thomson) of the fauna of Russia and adjacent counties. *Entomological Review* **101** 677-699.

LIMERICK LIST

Griston Bog in County Limerick is dry but there is an artificial pond with *Potamogeton alpinus* Balbis (red or alpine pondweed) and some ditches. From a European perspective the most interesting species is *Hygrotus quinquelineatus* (Zetterstedt).

REYNOLDS J D & FOSTER G N 2021. Water beetles from Griston Bog, Ballylanders, Co. Limerick. *Irish Naturalists' Journal* **38** 51-52.

BRAZILIAN DRYOPIDS

Platyparnus beatriceae and *B. glaucoi* are newly described as the first of the genus known from Brazil and south of the Equator.

POLIZEI T T S, FERNANDES A S & HAMADA N 2022. “Out of the Shield”: the discovery of *Platyparnus* Shepard & Barr, 2018 (Coleoptera: Dryopidae) in Brazil with new species. *Neotropical Entomology* doi.org/10.1007/s13744-022-00943-0

FERN WEEVIL IMPLICATED IN IRISH EXTINCTION

An infestation of water fern in Lough Derg, County Clare, abundant from 2012 to 2014, was found to have disappeared by 2016. This might be correlated with the arrival, somewhere between May 2014 and November 2015 of *Stenopelmus rufinasus* Gyllenhal.

MINCHIN D & BAARS J-R 2020. The water fern *Azolla filiculoides* Lam. (Azollaceae); from well-established to disappeared (H9). *Irish Naturalists' Journal* **37** 14-17.

RICHARD CHADD 3 October 1964 – 5 November 2021

The sad loss has been reported of Richard Chadd, who, in working for the Environment Agency (of England and Wales), was a long-time promoter of freshwater invertebrate monitoring. He should be particularly known to water beetlers for the CCI index he developed with Chris Extence on evaluating all macroinvertebrates. A full obituary is planned for the next issue of *FBA News*, which will be dedicated to Richard overall. He leaves his wife Sarah and daughter Eleanor. Thanks go to Chris and to Drew Constable for updating this note. The unattributed photograph right was found online.

CHADD R & EXTENCE C 2004. The conservation of freshwater macroinvertebrate populations: a community-based classification scheme. *Aquatic Conservation: Marine & Freshwater Ecosystems* **14** 597-624.



COLIN JOHNSON 1943-2021

The more lengthy obituary promised in *Latissimus* 50 is now published.

DENNIS R H L 2022. Colin Johnson M.Sc., F.R.E.S. 30 April 1943-25 August 2021. Keeper of Entomology at the Manchester Museum *Entomologist's Monthly Magazine* **158** 72-76.

FRED WOODWARD 1939-2020

With only 35 water beetle records on file the passing of Fred Woodward might go unremarked but he was one of the old guard of museum curators in the north of Britain. His expertise was primarily in the freshwater pearl mussel, *Margaritifera margaritifera* (L.), hence the aquatic input, with his bibliography in the obituary by Dance *et al.* demonstrating a wider command.

DANCE S P, HANCOCK E G & SUTCLIFFE R 2022. Obituary of Frederick Richard Woodward (1939-2020). *Journal of Conchology* **44** 1-5.

SUTCLIFFE R 2021. Frederick Richard Woodward 1939-2020. *Glasgow Natural History Society Newsletter* **2021** 2-3.

Latissimus 50 – correction – “Plate 5 y” on page 20 should be Plate 6.

Latissimus is the newsletter of the Balfour~Browne Club.

It was produced on 19 February 2022

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