

ISSN 0966 2235

# ***LATISSIMUS***

**NEWSLETTER OF THE  
BALFOUR-BROWNE CLUB**



**Number Fifty Nine**

**April 2025**

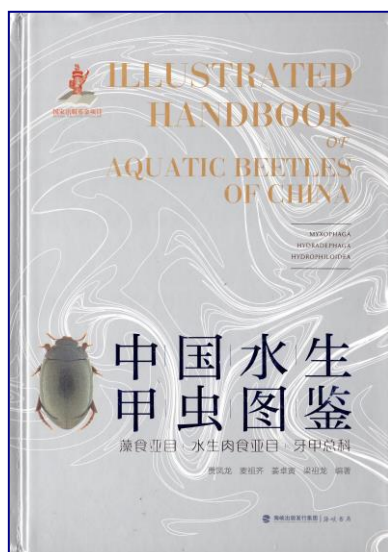
Cover photograph: *Sandracottus hunteri* (Crotch). See page 3 for a review of this genus. Reproduced here, courtesy of the authors.



FREE ACCESS applies to the text. Most figures come from publications with the permission of the authors, who would need to be approached again if the images are to be reused.

ADDRESSES Contacts for articles and reviewed works are given at the end of this issue of ***Latissimus***. The address for other correspondence is: Garth Foster, 3 Eglinton Terrace, Ayr KA7 1JJ, Scotland, UK – [latissimus@btinternet.com](mailto:latissimus@btinternet.com)

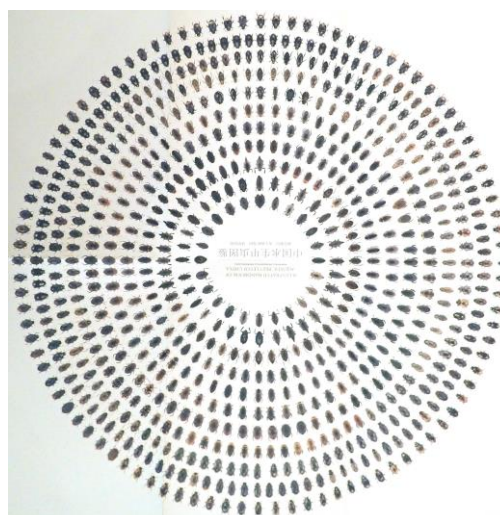
## AQUATIC BEETLES OF CHINA



📖 JIA F, MAI S, ZHUOYIN J & ZULONG L 2024. *Illustrated Handbook of Aquatic Beetles of China (Myxophaga, Hydradephaga, Hydrophiloidea)*. ISBN 978-7-5567-1261-8. [in Chinese] Obtainable from the China Scientific Book Services [www.hceis.com](http://www.hceis.com) US\$99 + shipping charges.

The book starts with a general discussion intended to help beginners get started - and it begins with a true first, you can feel the texture of the *Hydrotupes chinensis* Nilsson on the front cover! Six hundred and sixty-two species are covered: five *Satoni* species in the Torridincolidae, *Hydroscapha hunanensis* Pu in the Hydroscaphidae, *Bezesporum minutum* (Liang & Jia) in the Sphaeriusidae, 50 species and subspecies of Gyrinidae, 26 species of Haliplidae, 14 species in Noteridae, two *Amphizoa* species in the Amphizoidae,

*Sinaspidytes wrasei* (Balke, Ribera & Beutel) in the Aspitytidae, *Hygrobia davidi* Bedel in the Paelobiidae/Hygrobiidae, 215 Dytiscidae, and 26 Helophoridae. In the Hydrophiloidea included are *Eumetopus acutimontis* Ji & Jäch (Epimetopidae), the wide-ranging *Georissus crenulatus* (Rossi) (Georissidae), *Hydrochus japonicus* Sharp (Hydrochidae), two *Spercheus* species (Spercheidae), and 315 Hydrophilidae. The book includes 1,530 colour photographs, including 261 of morphological characteristics, 899 of specimens, and 370 of habitats. There is a key for each family divided into subfamilies, tribes and genera. Each identification feature is accompanied by a corresponding photograph, and each species or subspecies is accompanied by a complete photograph on the back. Of course, the whole book is in Chinese and Latin only, but the photographic support is so good that most beetles could be identified by a non-Chinese-speaking visitor with some confidence. An electronic version is available. A 90 × 90 cm chart was inside the back cover of the book and is presumably included in the package: it shows all the Chinese species illustrated in the book. Thanks to Suqi Mai as well as to Professor Fenglong Jia for the Club copy.



## CYBISTER AS INDICATOR OF HEAVY METALS

Levels of arsenic, cadmium, lead, mercury and selenium, as well as some biomarkers, were measured in *Cybister lateralimarginalis* (De Geer) from three Croatian floodplains. Differences in levels could be explained in relation to agricultural practice, pollution from the petrochemical industry or even illegal hunting. The correspondent is Nataša Turić.

BJEDOV D, TURIĆ N, MIKUŠKA A, VIGNJEVIĆ G, KOVAČIĆ L S, PAVIČIĆ A M, JAKELJIĆ L T, & VELKI M 2025. The diving beetle, *Cybister lateralimarginalis* (De Geer, 1774), as a bioindicator for subcellular changes affected by heavy metal(loid) pollution in freshwater ecosystems. *Aquatic Toxicology* pp. 8.

### CONSTRUCTED WETLANDS - TRAPS OR OASES?

The term constructed wetland (CW) has come to mean a dampond intended to reduce water pollution by holding a pollutant long enough for it to be degraded. The authors note that little is known about the impact of the contaminants of CWs on the local fauna, and question the role of CWs either as ecological refuges or as traps. Inventories of benthic macroinvertebrates, which appear to include some beetles, were acquired based on litterbags within CWs in northern France with contrasting levels of agrochemical contamination and in one unpolluted comparison pond. Diversity and ecological sensitivity indices, shredder/scrapper frequencies, and leaf-litter breakdown rates. Changes in pesticide levels could be related to changes in community composition, taxonomic diversity and shredder/scrapper ratios. CWs may act as ecological traps for benthic macroinvertebrates and this study highlights the approach as offering what the authors claim as an "early-warning indicator of chemical risk in nature-based solutions". Taking a longer view, agricultural land must by now be dotted with hundreds of abandoned CWs that should ultimately offer a refuge rather than a threat.

MICHEL A, LEBRUN J D, CHAUMONT C, GIRONDIN M, TOURNEBIZE J, ARCHAIMBAULT V & JELIAZKOV A 2025. Benthic macroinvertebrate diversity and function in an agricultural constructed wetland affected by agrochemical pressure (Seine-et-Marne, France). *Environmental Sciences and Pollution Research* doi.org/10.1007/s11356-024-35722-4

---

### WHIRLIGIGS LIKE WHALES WITH PROPELLORS

Whirligig beetles can reach speeds of up to 1m/s – or 100 body lengths per second – as they skirt across the water. It was previously thought that they did this using their oar-like hind legs to generate “drag-based” thrust, rather like a rodent swims. But that would need the beetle to move its legs faster than its swimming speed, which in turn would require pushing against the water at unrealistic speeds. High-speed camera work at Cornell University showed that the swimming action actually used lift-based thrust, as has been found in whales, dolphins and sea lions. The thrusting motion is perpendicular to the water surface and the researchers calculate that the forces generated by the beetle in this way explain their speed in the water. According to Cornell’s Yukun Sun, that makes whirligig beetles “by far the smallest organism to use lift-based thrust for swimming”. Further (in litt.) Sun says "we discovered that whirligig beetles are by far the smallest organism that uses lift-based thrust. What helps benefit the thrust is how they move their legs. In this case, whirligig beetles rotate their legs like ship propeller blades, which use lift-based thrust generation. So we can say that they are basically flying in water!"

SUN Y, SHIELDS J & ROH C 2024. Whirligig beetle uses left-based thrust for fastest insect swimming. *Current Biology* **34** R12-R13.

---

### LIOPTERUS GENOME

The genomic sequence of *Lioporus haemorrhoidalis* (Fab.) is reported, based on 16 chromosomes including the X chromosome plus the mitochondrial DNA. An unusual feature is that the corresponding "author" is named as Mark Blaxter even though he is not an author.

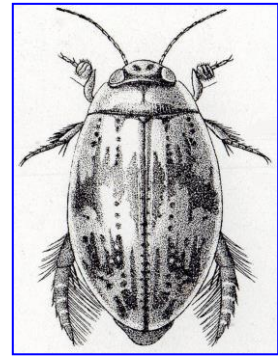
TURNER C R, BARCLAY M V L, CRISTÓVÃO J P & GEISER M F 2025. The genome sequence of a diving beetle, *Lioporus haemorrhoidalis* (Fabricius, 1787) [version 1; peer review: awaiting peer review] *Wellcome Open Research* **10** 105 [https://doi.org/10.12688/wellcomeopenres.23756.1]

---



## SANDRACOTTUS

This review was promised a while ago, and proves worth waiting for. Eleven species including *S. bakewelli* (Clark) with two subspecies are recognised. All are fully described, illustrated and keyed. The commonest species was originally illustrated (right) by David Sharp in the magnum opus, and compares well with our cover photograph, courtesy of the authors, as a species with black streaks on a pale base colour. Other species are much more heavily marked in black, the wholly black *S. jaechi* Wewalka & Vazirani, 1975 being known in the 1930s from a peatland area in Sri Lanka. That area is now cultivated and it is possible that this, the rarest known *Sandracottus* is now extinct.



The commonest species must now be known as *S. hunteri* (Crotch, 1872): it occurs in Cambodia, China, Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, and Vietnam. It was originally "*Dytiscus fasciatus* Fabricius, 1775" but the name *fasciatus* had already been used for either *Acilius canaliculatus* or *sulcatus*. Crotch (1872) suggested *hunteri* as a replacement name honouring Fabricius's friend William Hunter but the earlier name *mixtus* (Blanchard, 1853) was preferred. Now it turns out that *mixtus* is a synonym of *S. chevrolati* (Aubé, 1838), both names being originally used for specimens from Timor. So the name reverts to Crotch's suggestion of *hunteri*.

HANCOCK E G 2015. The shaping role of Johan Christian Fabricius: William Hunter's insect collection and entomology in Eighteenth-Century London. Chapter 9, pp. 151-163 in E.G. Hancock, N. Pearce & M. Campbell (eds) *William Hunter's World. The art and science of Eighteenth-Century collecting*. Farnham: Ashgate Publishing Ltd.

HENDRICH L & BALKE M 2025. Revision of the Oriental and Australasian diving beetle genus *Sandracottus* Sharp, 1882 (Coleoptera, Dytiscidae, Dytiscinae). *ZooKeys* **1223** 87-147.

STAIG R A 1931. *The Fabrician Types of Insects in the Hunterian Collection at Glasgow University. Part 1*. Glasgow University Publication **19**. Cambridge University Press.

## ELMID PHYLOGENY

Almost overlooked was this phylogeny of Japanese elmids based on genetic analysis combined with adults and larval morphology. Four major groups could be identified, in some cases cutting across the boundaries of currently recognised tribes and the subfamily Larainae. *Gonielmis* Sanderson and *Optioservus* Sanderson are synonymised with *Heterlimnius* Hinton. *Nomuraelmis* Satô is synonymised with *Stenelmis* Dufour. Further appraisal will be needed once data are included in analysis for *Lara*, the type genus for the Larainae. Thanks go to Adrián Villastrigo for drawing attention to this paper.

KOBAYASHI T, HAYASHI M, KAMITE Y & SOTA T 2021. Molecular phylogeny of Elmidae (Coleoptera: Byrrhoidea) with a focus on Japanese species: implications for intrafamilial classification. *Systematic Entomology* **46** 870-886.

## SCARODYTES RUFFOI IN SAN MARINO

Thanks go to Gianluca Nardi for sending a copy of a stamp celebrating *Scarodytes ruffoi* Franciscolo in San Marino.



## KNYSZYŃSKA FOREST

📖 GUTOWSKI J M, SUĆKO K, LASOŃ A, BOROWSKI J, BYK A, GAZUREK T, GREŃ C, KOMOSIŃSKI K, KRÓLIK R, KUBISZ D, MAZUR M A, MOKRZYCKI T & PLEWA R 2024. *Chrząszcze (Coleoptera) puszczy Knyszyńskiej [The beetles (Coleoptera) of the Knyszyńska Forest]* Instytut Badawczy Leśnictwa: Raszyn.

Knyszyńska Forest is an area of 1,767 km<sup>2</sup> in north-east Poland surveyed from 1979 to 2023, resulting in a list of 2,075 beetle species in 90 families. Almost all of the water beetle results were published by Czesław Gren *et al.* in 2022, and reviewed in **Latissimus 53 2**.

GREŃ C, LUBECKI K & SUĆKO K 2022. Chrząszcze wodne (Coleoptera: Hydradeephaga, Hydrophiloidea, Hydraenidae, Dryopoidea) Puszczy Knyszyńskiej. *Rocznik Muzeum Górnosławskiego Bytomiu Przyroda* 28 1-35.



## STOBRAWA LANDSCAPE PARK



This is a protected area in south-western Poland covering 526 square kilometres in the region of the Stobrawa river. Water beetles getting a special mention are *Brychius elevatus* (Panzer), *Dytiscus circumflexus* Fab., *D. semisulcatus* (Müller), *Graphoderus austriacus* (Sturm), *G. bilineatus* (De Geer) - with M. Sierakowski's photograph, *Hydrovatus clypealis* (Kunze), *Rhantus consputus*

(Sturm), *R. incognitus* Scholz, *Hydraena pulchella* Germar, *H. testacea* Curtis, *Helophorus laticollis* Thomson, *Spercheus emarginatus* (Schaller), *Anacaena bipustulata* (Marsham), *Hydrophilus aterrimus* Eschscholtz, *H. piceus* L., *Laccobius gracilis* Motschulsky, and *Macronychus quadrituberculatus* (Müller).

PRZEWOŹNY M, SIERAKOWSKI M & GREŃ C 2024. Chrząszcze wodne (Coleoptera aquatica). pp. 399–425 in: M. Sierakowski & G. Hebda (eds) *Stobrawski Park Krajobrazowy. Monografia przyrodnicza*. Wydawnictwo Uniwersytetu Opolskiego.

## PARALLEL LIVES UNDER GROUND

Genetic analyses of Bidessini, Hydroporini and Leptodorini transitioning to subterranean life establish that the acquisition of new genes occurred before going underground. Those gene repertoires developed during expansion periods above ground facilitated development of the subterranean life style - this "exaptation" may not be as singular as, say, feathers once developed for saving heat coming in handy when you need to fly, but exaptation it is. This paper brings together the Australian and Spanish/Catalan schools [plus a Slovenian] and is adorned with the most extraordinary images based on genomics. As such it is a monument to Ignacio Ribera, whose baby this once was.

BALART-GARCÍA P, ARISTIDE L, BRADFORD T M, BEASLEY-HALL P G, POLAK S, COOPER S J B & FERNÁNDEZ R 2023. Parallel and convergent genomic changes underlie independent subterranean colonization across beetles. *Nature Communications* 14 3842.

**SCIRTIDAE UPDATE*****Contacyphon palmi* split**

Three species are now recognised in this complex, *C. latitans*, known solely from a male from Tangiers, the true *C. palmi* known from Italy, Switzerland and the south-east of France, and *C. incognitus* found in central southern France.

COSANDEY V & KLAUSNITZER B 2024. On the identity of *Contacyphon palmi* (Nyholm, 1948) with description of two new species (Coleoptera: Scirtidae). *Entomologische Blätter und Coleoptera* **118** 121 – 134.

---

**Chinese Scirtidae**

New records include new species of *Contacyphon* and *Herthania*, *C. palustris* (Thomson) and the female of *Prionocyphon jaechi* Yoshitomi & Klausnitzer.

COSANDEY V & KLAUSNITZER B 2024. Zur Kenntnis der Scirtidae (Coleoptera) von China. *Entomologische Nachrichten und Berichte* **68** 71-77.

---

**New Cypriot *Prionocyphon***

KLAUSNITZER B 2023. Eine neue Art der Gattung *Prionocyphon* L. Redtenbacher, 1858 aus Zypern (Coleoptera, Scirtidae). *Entomologische Nachrichten und Berichte* **67** 59-65.

---

**New *Contacyphon* near *laevipennis***

*C. zoltani* is named in honour of the coleopterist Zoltán Kaszab (1915-1986), It was found In Kyrgyzstan near the tourist destination of the Ketmen-Tobo depression in the Suusmyr Mountains. It is close to *C. laevipennis* (Tournier). Similar specimens are discussed from Israel and Tunisia.

KLAUSNITZER B 2023. Geografisch bedingte Variabilität von *Contacyphon laevipennis* (Tournier, 1868) (Coleoptera, Scirtidae) oder mehrere Arten? *Entomologische Blätter und Coleoptera* **118** 145 - 156.

---

**West Palaearctic scirtid update**

Thirty-eight new site records include new records from seven countries.

KLAUSNITZER B 2023. Neufunde von Scirtidae (Coleoptera) aus der Westpaläarktis und Ergänzungen zum "Catalogue of Palaearctic Coleoptera. Volume 3. Revised and Updated Edition (Scirtidae)" V. *Entomologische Nachrichten und Berichte* **67** 17-24.

---

***Contacyphon* from New Guinea**

*C. ulrikae* is described as close to *C. baloghi* (Klausnitzer).

KLAUSNITZER B 2023. Zur Kenntnis von *Contacyphon baloghi* (Klausnitzer, 1979) (Coleoptera, Scirtidae). *Entomologische Blätter und Coleoptera* **118** 135 - 144.

---

***Contacyphon* from Nepal**

Three new species are described bringing the total to sixteen.

KLAUSNITZER B 2024. Neue Arten der Gattung *Contacyphon* Des Gozis, 1886 (Coleoptera, Scirtidae) aus Nepal. *Entomologische Nachrichten und Berichte* **68** 11-21.

---

**Oriental *Scirtes***

Ten new species are described and two new species groups are recognised.

KLAUSNITZER B 2024. Neue Arten der Gattung *Scirtes* Illiger, 1807 (Coleoptera, Scirtidae) aus der Orientalischen Region. *Entomologische Blätter und Coleoptera* **119** 173-211.

---

**The *Scirtes flavoguttatus* group**

Three new species are added to this group, one each from Borneo, Sumatra and the Malayan Peninsula.

KLAUSNITZER B 2024. Neue Arten der *Scirtes-flavoguttatus*-Gruppe aus der Orientalis (Coleoptera, Scirtidae). *Entomologische Blätter und Coleoptera* **119** 163-172.

---

***Scirtes unicolor* Pic**

The Pic Collection in Paris continues to generate biodiversity. There the four specimens in the type series for *unicolor* are actually four species, including the newly described *permutus* and *neglectus*.

KLAUSNITZER B 2024. Neues zu *Scirtes unicolor* Pic, 1914 (Coleoptera, Scirtidae) *Entomologische Nachrichten und Berichte* **68** 83-88.

---

***Scirtes seimundi* species group**

A third Thai species is newly described.

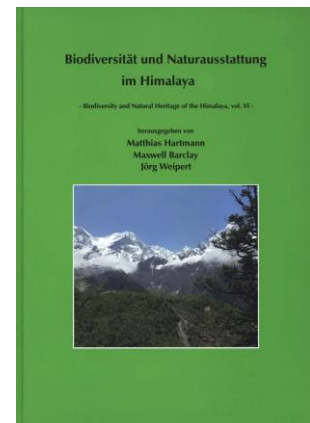
KLAUSNITZER B 2024. Zur Kenntnis der *Scirtes-seimundi*-Artengruppe (Coleoptera, Scirtidae). *Entomologische Nachrichten und Berichte* **68** 147-150.

---

**Himalayan Scirtidae**

Sixty-two species are so listed as from the area, Nepal being the best researched with 49 species, and *Ora*, as *O. atrosignata* (Champion) as additional genus now known from Nepal. Also in the Pic Collection (see above) is a series of *Scirtes nigromaculatus* Pic from southern India, which were presumably easily and, no pun intended, spotted as *Ora picta* (Fab.).

KLAUSNITZER B 2024. Zur Kenntnis der Scirtidae des Himalaya-Gebietes (Insecta: Coleoptera). pp. 395-408 in: M. Hartmann, M. Barclay & J. Weipert: (eds) *Biodiversität und Naturlausstattung im Himalaya* **8**. Erfurt.

***Contacyphon palustris* larvae as specialist bacteria feeders?**

Large numbers of larvae of what proved to be *Contacyphon palustris* were found in groundwaters in Vienna and Mondsee in Austria. It is likely that they feed on iron or sulphur oxidising bacteria.

KLAUSNITZER B 2024. Nicht völlig gelöste Rätsel im Lebenszyklus von *Contacyphon palustris* (C. G. Thomson, 1855) (Coleoptera, Scirtidae). *Entomologische Nachrichten und Berichte* **68** 457-459.

---

**NEW WORLD *PLATAMBUS* LARVAE**

There are now seven *Platambus* species for which the larval morphology has been detailed. They can be divided into three distinct types indicating the *Platambus* as currently understood is polyphyletic, with the Palearctic species monophyletic. *P. apache* Young, from mountains in Arizona, is particularly distinctive and its habitat is depicted along with the adult habitus in addition to descriptions of the three larval stages. Presumably a new genus may be announced coupled with genetic analysis and further morphological work on the adults.

ALARIE Y, MICHAUD M C, GOMEZ R A & DETTNER K 2025. Larval morphology of *Platambus* Thomson, 1859: evidence of contrasting morphotypes and phylogenetic considerations (Coleoptera: Dytiscidae, Agabinae). *Zootaxa* **5601** 401-428.

---

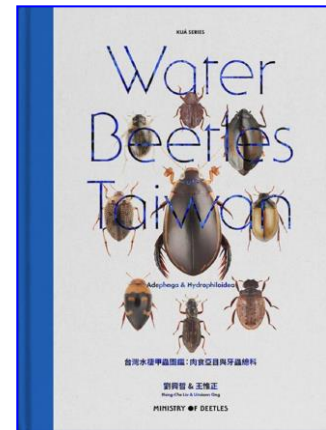
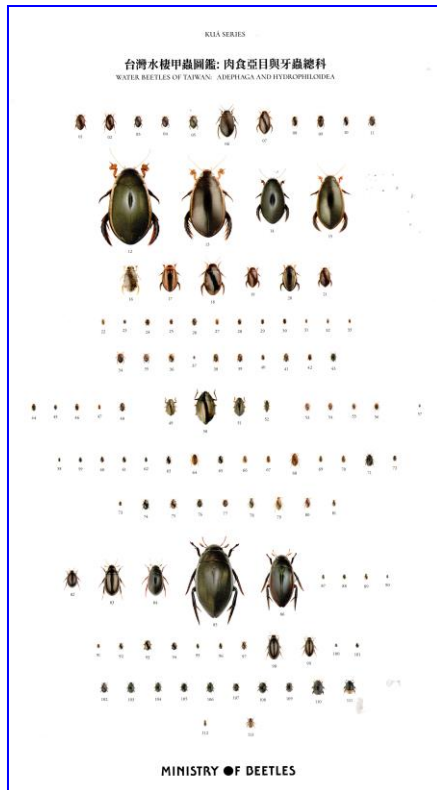


## TAIWAN WATER BEETLES

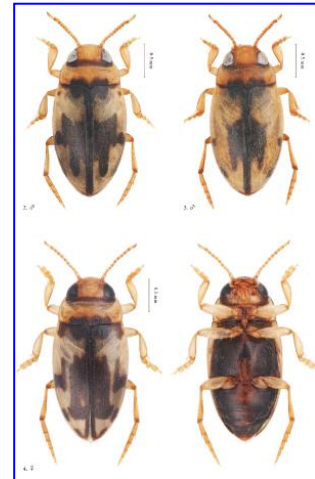
LIU H-C & ONG U 2025. *Water Beetles of Taiwan: Adephaga & Hydrophiloidea*. Taiwan: Ministry of Beetles. ISBN 978-986-97623-2-8. about \$NT2,250, £55.63, \$US67.95, €66.24 + postage. There was [or is] a pre-publication offer. An order link is:

<https://ministryofbeetles.com/book2/?v=255a5cac7685>

*Water Beetles of Taiwan* is the first book in Taiwan dedicated to aquatic beetles. There are descriptions of over 100 species, including several for Taiwan. There were extensive surveys in preparation for the book, including visits to the



islands of Matsu, Kinmen, Lanyu, Green Island, and Penghu. The research history of each species is provided, plus habitats, identification keys, distribution and illustrations of male genitalia. Habitus photographs include these examples of variation in *Hydroglyphus flammulatus* (Sharp). The importance of examining the underside is emphasised by matching front and back covers, the copious habitus photographs being similarly treated. One challenge might be to find the first *Helophorus* in Taiwan, so Oriental that none is known, though 26 *Helophorus* species are listed for China in the other recent book (see page 1). This book is accompanied by an A5 chart showing 113 species at life size.



## BURNT GROUND BEETLES

Twenty-five hectares of the Augustów Forest burnt in 2019 were surveyed to see what beetles became associated with the area. Interception traps caught 781 species in 67 families including a ptiliid new to Poland. Water beetles found were *Cercyon sternalis* Sharp, new for the Masurian Forest, *Graptodytes granularis* (L.), *Hygrotus impressopunctatus* (Schaller), *Ilybius neglectus* (Erichson), *Helophorus granularis* (L.), *Anacaena lutescens* (Stephens), *Cymbiodyta marginella* (Fab.), *Hydrobius fuscipes* (L.), *Enochrus coarctatus* (Gredler), *Cercyon convexiusculus* Stephens, *C. lateralis* (Marsham), *C. pygmaeus* (Illiger), *C. quisquilius* (L.), and *Cryptopleurum minutum* (Fab.). The contact is Rafał Ruta.

GUTOWSKI J M, SUĆKO K, BOROWSKI J, BYK A, GAZUREK T, GREŃ C, JĘDRYCZKOWSKI W, KOMOSIŃSKI K, KONWERSKI S, KRÓLIK R, KUBISZ D, LASOŃ A, MAZUR M A, MELKE A, MIŁKOWSKI M, MOKRZYCKI T, PLEWA R & RUTA R 2024. Interesting species of beetles (Coleoptera) in burnt part of the Augustów Forest (NE Poland). *Polish Journal of Entomology* **93** 23-62.

## THE WAY OF THE TIGER - NEW LIGHT ON THE COPTOCLAVIDAE

*Tigrivia* is redescribed from an impression fossil from the Early Cretaceous in China. It shows evolutionary parallels with the Gyrinidae - raptorial fore-legs, a very small prosternal process, an unusually large mesoventrite, and truncated elytra with exposure of the rear abdomen. But its eyes are undivided and its mid and hind legs are not modified as in whirligigs. Nevertheless it must have been a water surface-active predator. The authors argue against coptoclavids using the fore-leg bristles for filter-feeding, as was suggested by Soriano *et al.* (2007 - see **Latissimus 23** 18).

The epithet *biaii* pays homage, not as it might appear to the senior author, but to Bai Bingyang, a fossil collector. The fossil was found in Daohugou village, once a tiger hunting ground for Emperor Qianlong.

BAO L, BEUTEL R G, KECHENG N & BAO T 2025. Redescription of the highly specialized aquatic *Tigrivia* and the classification of the Mesozoic Coptoclavidae (Coleoptera, Adephaga, Dytiscoidea). *Zootaxa* **5588** 401-425.

SORIANO C, PONOMARENKO A G & DELCLÒS X 2007. Coptocladid beetles (Coleoptera: Adephaga) from the Lower Cretaceous of Spain: a new feeding strategy in beetles. *Palaeontology* **50** (2) 525-536.

## WATER BEETLE ACHIEVES RAMSAR MENTION

South Africa marked World Wetlands Day on 2 February 2025 by naming Mkambati Nature Reserve as a Wetland of International Importance. Mkambati Nature Reserve in Eastern Cape Province is South Africa's 31st "Ramsar Site", no. 2554 on the world list. It lies beside the Indian Ocean about 71 kilometres from the town of Flagstaff. The Reserve spans over 1,000 hectares and is home to rare ecosystems, including unique swamp forests and estuaries. The two larger estuaries are those of the Msikaba and Mtentu Rivers. The Reserve is one of only a few protected areas within the Pondoland Centre of Plant Endemism, which holds 196 endemic plant species. It is also home to diverse animals, including the nationally endangered giant legless skink (*Acontias poecilus* Bianconi), the globally threatened Boneberg's frog (*Natalobatrachus bonebergi* Methuen & Hewitt), and the semisubterranean endemic diving beetle *Copelatus mkambati* Bilton & Mlambo. See **Latissimus 52** 10. The image is © Graham Grieve, 2017.



<https://rsis Ramsar.org/ris/2554>.

BILTON D T & MLAMBO M C 2022. A new *Copelatus* with small eyes from the Eastern Cape Wild Coast, South Africa (Coleoptera: Dytiscidae). *Acta Entomologica Musei Nationalis Pragae* **62** 15-21.

## NEW AFRICAN COPELATUS

*C. annae* is described from a single male taken at light in Senegal. Externally it resembles *C. crassus* Régimbart but the median lobe of the aedeagus is distinctive.

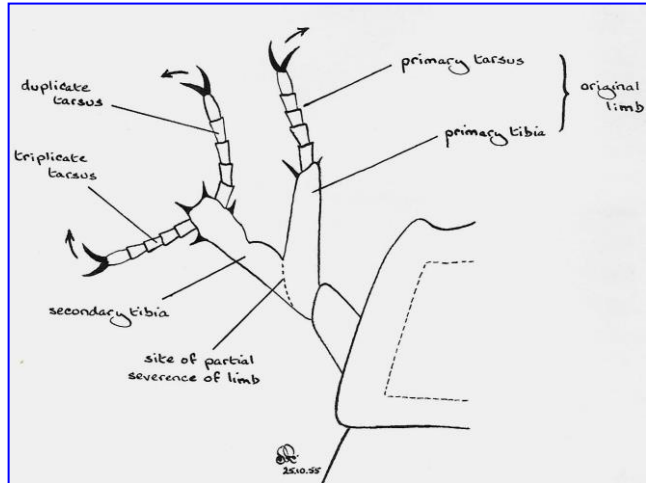
SCHIZZEROTTO A & TOLEDO M 2024. *Copelatus annae* n. sp., a new Afrotropical species of the *irinus*-group (Insecta: Coleoptera: Dytiscidae). *Quaderno di Studi e Notizie di Storia Naturale del Romagna* **59** 311-317.

## ABNORMAL REGENERATION IN *DYTISCUS*

Malcolm Greenwood has sent this item, prepared by Neville Phillips when he was a PhD student at the London School of Tropical Medicine. Malcolm notes that Phillips may well have intended to publish it in the *Entomologist's Monthly Magazine*, the *Entomologist's Gazette*, or the journal of the Essex Field Club, but we cannot trace a published version.

### A NATURALLY OCCURRING EXAMPLE OF ABNORMAL REGENERATION IN *DYTISCUS* Neville R Phillips

The female specimen of *Dytiscus marginalis* depicted here was taken from a small stream in Essex during September, 1955, and shows abnormal regeneration of the left fore-limb. According to Megusar (1907), quoted in Wigglesworth (1942, 1954), there is no regeneration of the appendages in Dytiscidae during the larval stages. The wound, or site of amputation, heals over and (normally) a properly organised limb is regenerated at pupation.



Bodenstein (1937, 1941), quoted in Wigglesworth (1954), has shown experimentally that partial amputation of a limb is followed by double regeneration, resulting in triplication of the components distal to the point of injury. In such cases, the regenerated components always conform to Bateson's law, i.e. the plane of the duplicate component is a mirror image of the original limb, and of the triplicate component a mirror image of the duplicate.

In the specimen exhibited, partial severance of the left fore-limb presumably occurred during the larval stage. At pupation, double regeneration took place, the various components being indicated in the accompanying diagram. In the actual specimen, torsion through manipulation of the insect in setting has masked the natural lines of action of the regenerated parts.

BODENSTEIN D 1937. Beintransplantationen an Lepidopteranraupen. IV. Zur Analyse experimentell erzeugter Bein-Mehrfachbildungen. *Wilhelm Roux' Archiv für Entwicklungsmechanik der Organismen* **136** 745-785.

BODENSTEIN D 1941. Investigations on the problem of metamorphosis. VIII. Studies on leg determination in insects. *Journal of Experimental Zoology* **87** 31-53.

MEGUSAR F 1907. Die Regeneration der Coleopteren. *Wilhelm Roux' Archiv für Entwicklungsmechanik der Organismen* **25** 148-234.

WIGGLESWORTH V B 1942. *Principles of Insect Physiology*, 2nd Edition, Chapter 3 p. 65. London: Methuen.

WIGGLESWORTH V B 1954. *The Physiology of Insect Metamorphosis*. Chapter 5 pp. 120-122. Cambridge University Press.

Received January 2025

## MORE ZAITZEVIA

*Zaitzeviaria chenzhitengi* and *Z. guiyangensis* are newly described from China as the 19th and 20th species of these minute elmids. A key is provided for the four species known from China. The correspondent is Xiang-Sheng Chen.

JIANG R-X & CHEN X-S 2025. Two new species of the genus *Zaitzeviaria* Nomura, 1959 (Coleoptera: Elmidae) from China. *Zootaxa* **5584** 137-145



## BALFOUR-BROWNEIANA



The Earthbound Trophy, so-named because it would take all of a Ryanair baggage allowance, may well have reached its final resting place after being awarded to GNF "in perpetuity" in Hereford in 2023. The logical place for it, once quarantined, must be next to Professor Balfour-Browne's collection at Granton, Edinburgh in the National Museums of Scotland storage facility.

Ashleigh Whiffin is seen here next to the collection. A pond is promised at Granton and its investigation could become a part of any future pilgrimage.



In the course of this transfer Ashleigh had checked the museum's files and found several photographs of what appears to be Frank Balfour-Browne as a young man, demonstrating ways of sampling terrestrial insects. Such non-aquatic activity lends some uncertainty to this claim but there is a strong physiognomic resemblance to the well known image of FB-B using a microscope in later life (see the front cover of *Latissimus* 50).

## DESMAN DENIZEN

*Silphopsyllus desmanae* Olsufiev is a member of the Platypsyllinae and like the beaver beetle (*Platypsyllus castoris* Ritsema) lives in fur of a water-going mammal. in this case the Russian Desman, *Desmana moschata* (L.) or "vykhukhol". Comparison with the beaver beetle indicates that *Silphopsyllus* is much less adapted to life as a semiaquatic commensal. In passing, the authors note one other member of the Platypsyllinae associated with a single mammalian host, the Holarctic *Leptinillus validus* Pavlovsky found on "mountain beaver", *Aplodontia rufa* (Rafinesque), a species now thought to be related to squirrels rather than previously as ancestral to rodents. These contrast to the blind *Leptinus testaceus* Müller which even I can remember found regularly in association with nests of mice and shrews in southern England. The author for correspondence is Rolf Beutel.

JALOSZYŃSKI P, MEIRA O M, YAVORSKAYA M I, PROKIN A, GRABE V & BEUTEL R G 2025. The morphology of the rare beetle *Silphopsyllus desmanae* (Leiodidae), a commensal of the semiaquatic Russian Desman. *Journal of Morphology* 2025 286:e70031. <https://doi.org/10.1002/jmor.70031>

## GENOESE LIGHT TRAP

Alessandro Bisi's light trap in Genoa is reported as having attracted *Eretes griseus* (Fab.) and *Stenelmis consobrina* Dufour in 2024.

POGGI R 2024. Su due non comuni specie di coleotteri acquatici catturati caon lampada a luce UV nella città di Genova (Liguria) (Coleoptera, Dytiscidae & Elmidae). *Doriana, Annali del museo civico di storia naturale "G. Doria"* 9 1-7.



# THE FIRST RECORD OF *MEGASTERNUM IMMACULATUM* (STEPHENS, 1829) (COLEOPTERA, HYDROPHILIDAE) FROM IRELAND Alexander Shatrovskiy

It all started in 2023 when we traditionally spent the summer with our daughter in Galway on the Emerald Isle. In front of their modern home there was a vast protected area named Tully and created to protect waterfowls, mainly the corncrake. I often visited small puddles and flooded lowlands, and sometimes even the Carrowmoneash river there. However, there were no significant finds among water beetles. But one interesting discovery among terrestrial Hydrophilidae did take place.

I buried kitchen scraps of chicken meat in a small container in the plant belt that delimits the protected area. The belt is represented mainly by hawthorn and beech, intertwined with ivy, and thus forming a hedge (Fig. 1). Digging a hole for the trapping container was not easy as the soil was stony. The container was dug below the soil surface and sprinkled on top. This significantly reduced the number of flies developing in decomposing corpses.



**Fig. 1** A flooded lowland near the edge of a conservation area, and adjacent to the hedge



**Fig. 2** Male genitalia of an Irish specimen of *Megasternum immaculatum*. Scale length 0.5 mm but the paramere's tip is shown to the right out of scale

Among other insects, I came across three small beetles belonging to the Megasternini. They had to be studied under a binocular microscope, which I did on returning to Portugal. Three turned out to be a male and two females of *Megasternum immaculatum*. These are the first recorded for Ireland. Its presence here had been unmistakably suspected by British authors (Foster *et al.* 2014). The male genitalia are shown in Fig. 2.

Detailed information about the collected specimens: South-east Galway, Oranmore, Tully; soil trap with meat bait in the forest belt; 53.270429°N, 8.926124°W, M382862848; 22 July 2023; A. Shatrovskiy – 1♂, 2♀♀. All specimens, as with all the material collected by author since 2022, are stored in the National Museum of Natural History and Science, University of Lisbon, Portugal.

The distribution map of *M. immaculatum* in western Europe (Fig. 3) is based on the data of the international GBIF database (GBIF.org). It is clear that the species' range is disjunctive, of the boreo-montane type. My colleagues and I are preparing a joint publication for this species in eastern Europe now.



⇨**Fig. 3** Distribution of *Megasternum immaculatum* in western Europe

FOSTER G N, BILTON D T, FRIDAY L E 2014. Keys to Adults of the Water Beetles of Britain and Ireland (Part 2). *Handbooks for the Identification of British Insects* 4, Part 5b. 16. *Megasternum* pp. 90-91. St. Albans: Royal Entomological Society.

GBIF - GLOBAL BIODIVERSITY INFORMATION FACILITY. *Megasternum immaculatum* occurrence.

Downloaded <https://doi.org/10.15468/dl.y4nm4h>

GBIF.ORG accessed 7 January 2025.

Received January 2025

## BUOYANCY

Cephalopods and teleost fish control gas volume inside their hydrostatic organs either by osmosis to withdraw fluid from a rigid chamber or by secreting oxygen to inflate a flexible chamber. Among insects some fly larvae rely on temporary stabilising a compressible bubble using oxygen from their haemoglobin and hydraenids contract a gas-filled volume with rigid but gas-permeable walls. The air-filled tracheal system in insects makes them float to the surface if the gas volume cannot be reduced - either that or they might use ballast or a well-developed ability to cling. Here the author goes back to the observations of the leading studier of animal behaviour, Bill Thorpe (1902-1996), and others in the 1940s. They had shown how depression of the abdominal tergites below the subelytral space causes oxygen and nitrogen to be taken in from the surrounding water via the plastron and then expelled as a bubble. Disappointingly, the paper makes no reference to the study on the rectum of an *Ilybius* might be used to regulate buoyancy (see **Latissimus 7** 16). Space might also have been found for Phil Perkins's work on how the bubble and plastron are maintained in Hydraenidae. The paper is more of a review of the tracheal system pre-adapted to function as a semi-rigid air sac.

HICKS, B. & LARSON, D.J. 1991. The rectum as a hydrostatic organ in the predaceous diving beetle genus *Ilybius* Erichson (Coleoptera: Dytiscidae). *The Coleopterists Bulletin* **45**(3) 274-278.

MATTHEWS P G D 2025. Buoyancy regulation in insects. *Physiology* **40** 1-15.

PERKINS P D 1997. Life on the effective bubble: exocrine secretion delivery systems (ESDS) and the evolution and classification of beetles in the family Hydraenidae (Insecta: Coleoptera). *Annals of Carnegie Museum* **66**(2) 89-207.

THORPE W H & CRISP D J 1949. Studies on plastron respiration. IV. Plastron respiration in the Coleoptera. *Journal of Experimental Biology* **26** 219-260.

## SUBFOSSIL CARLISLE

Thanks to Paul Buckland for noting this work on deposits near Holme Lane, Carlisle (NY375571), one of the few around Carlisle that is not Roman, the insects all being from the Mesolithic or the Neolithic, dominated by beetles with a limited number of aquatic ones identified to species, the most notable being *Riolus subviolaceus* (Müller) and *Pomatinus substriatus* (Müller).

SMITH D N 2023. Appendix 14: Insect remains. From an ancient Eden to a new frontier: an archaeological journey along the Carlisle northern development route. F. Brown, P. Clark, A. Dickson, R. A. Gregory & J. Zant. Lancaster, *Oxford Archaeology* **30** 1225-1257.



### BORYS MALKIN'S COLLECTION

The collection of Borys Malkin (1917-2009) comprises 871 water beetles of 86 species, collected from 1973 to 1996 in the Canaries, France, Greece, Italy (Sardinia), Morocco, Poland and Turkey. The collection is dominated by specimens from the Białowieża National Park. There is also *Bidessodes* cf. *charaxinus* Young, labelled as from Warsaw in 1992 but obviously taken in the visits of Borys and Helena Malkin to South America. Included is *Megasternum immaculatum* (Stephens) from Crete, quite possibly new for Greece.

GREŃ C & KOMOSIŃSKI K 2024. Chrząszcze wodne (Coleoptera aquatica) w zbiorze Borysa Malkina [Water beetles in the collection of Borys Malkin]. *Acta entomologica silesiana* **32** 1-12.

---

### A CLUB SEQUEL

Some may recall "a livid green patch in the distance" (*Latissimus* **57** 31) when searching for water in the Club meeting in 2024 on La Sila. This was mostly dry, but still with the proven potential to fall in. The dry part yielded some dung beetles reported here, the illustration showing non water beetle work going on overseen by our Carabinieri. Photograph by Zuqi Mai.



ANGUS R B, MATÉJ F, ANGUS EM & KRÁL D 2025. Addenda and corrigenda: Angus RB, Maté JF, Angus EM, Král D (2024) Towards a revision of the Palaearctic species of *Aphodius* Hellwig, 1798, subgenus *Liothorax* Motschulsky, 1860 (Coleoptera, Scarabaeidae, Aphodiinae). *ZooKeys* **1207**: 205–299. <https://doi.org/10.3897/zookeys.1207.117225>. *ZooKeys* **1228** 307-313.

---

## NEW DATA ON DYTISCIDAE FROM KAZAKHSTAN

Sergey K Ryndevich, Alexander P Kashtalian

The study of aquatic beetle fauna in the southern and eastern Kazakhstan has yielded several interesting findings including that of *Dytiscus thianschanicus* (Gschwendtner, 1923) (Figs 1 and 2).

***Dytiscus thianschanicus*** - Kazakhstan, Mangystau region, Mangyshlak Peninsula, plateau Ustyurt, vill. Sayotis, after rain in the afternoon, 20.VI.2024, leg. A. P. Kashtalian, 1 specimen; Kazakhstan, Jetisu reg., Sarkand distr., near vill. Lepsi, 46.381464°N, 78.950389°E, lake Balkhash, littoral, 30.VI.2024, leg. A. P. Kashtalian, 1 specimen. Both specimens are immature. This species is recorded for the first time for Kazakhstan. *D. thianschanicus* is known from Afghanistan, India (Kashmir), southern European Russia, Tajikistan, and Turkey (Kirejchuk 2001; Nilsson & Hájek, 2024). It differs from the closely related *Dytiscus circumflexus* Fab., 1801, which has the side of the pronotum weakly indented (Fig. 3), sometimes best seen in side view. An immature specimen of *D. thianschanicus* was found together with *Graphoderus austriacus* (Sturm, 1834) from the Ustyurt plateau on the ground after rain. The Plateau Ustyurt is a clay desert, and it is noteworthy that the collection site was very far from any sources of water. The specimen of *D. thianschanicus* (body length 32 mm) from Balkhash has damage to the elytra (Fig. 1). It was collected in brackish water among rare macrophytes in the littoral zone of the lake (Fig. 4). Lake Balkhash is located in the eastern part of Kazakhstan and sits in the Balkhash-Alakol Basin. It is an endorheic semi-freshwater lake. The salinity of the east half of the lake resembles sea water, with 3.5–6 g sodium chloride per litre. *Colymbetes semenowi* (Jakovlev, 1896) was also found with *D. thianschanicus*. Some species of diving beetle were taken on the edge of Balkhash where artesian waters arise (Fig. 5). Also in the Kyzylkum Desert *Cybister lateralimarginalis torquatus* (Fischer von Waldheim, 1829) and *Colymbetes semenowi* were caught at light.

***Colymbetes semenowi*** – Kazakhstan, Jetisu reg., Sarkand distr., near vill. Lepsi, where artesian waters emerge, 46.560067°N, 79.43834°E, leg. A. P. Kashtalian, 1 specimen; Kazakhstan, Jetisu reg., Sarkand distr., near vill. Lepsi, 46.381464°N, 78.950389°E, lake Balkhash, littoral, 30.VI.2024, leg. A. P. Kashtalian, 1 specimen; Kazakhstan, Kyzylkum Desert, Turkistan reg., Otyrar distr., Koksaray, at lighth, 8-12.V.2024 leg. A. P. Kashtalian, 2 specimens; same but 12-13.V.2024, leg. A. P. Kashtalian, 1 specimen.

***Cybister lateralimarginalis torquatus*** – Kazakhstan, Kyzylkum Desert, Turkistan reg., Otyrar distr., Koksaray, at lighth, 25.V.2024, leg. A. P. Kashtalian, 2 specimens; Kazakhstan, Jetisu reg., Sarkand distr., near vill. Lepsi, where artesian waters emerge, 46.560067°N, 79.43834°E, 30.VI.2024, leg. A. P. Kashtalian, 1 specimen. The third and fourth records from Kazakhstan (Ryndevich, 2023).

***Dytiscus circumflexus*** – Kazakhstan, Jetisu reg., Sarkand distr., near vill. Lepsi, where artesian waters emerge, 46.560067°N, 79.43834°E, 30.VI.2024, leg. A. P. Kashtalian, 2 specimens.

KIREJCHUK A G 2001. Family Dytiscidae (imago). In: *Keys to freshwater invertebrates of Russia and adjacent lands* 5 St-Petersburg. Nauka 130–227, 516–685 [in Russian].

NILSSON A N & HÁJEK J 2024: Catalogue of Palearctic Dytiscidae (Coleoptera). Internet version accessed 1 January 2024

[https://waterbeetles.eu/documents/PAL\\_CAT\\_Dytiscidae\\_2024.pdf](https://waterbeetles.eu/documents/PAL_CAT_Dytiscidae_2024.pdf)

RYNDEVICH S K 2023. *Cybister lateralimarginalis torquatus* (Fischer von Waldheim) in Kazakhstan. *Latissimus* 54 9-10.





**Figs 1–3** Habitus of *Dytiscus*:  
 1 – dorsal side of *D. thianschanicus*;  
 2-3 – right side of pronotum;  
 2 – *D. thianschanicus*;  
 3 – *D. circumflexus*.  
 Arrow shows weak curvature of the edge

**Figs 4–5** Habitats of diving beetles:  
 4 the coast of Balkhash;  
 5 where artesian waters emerge

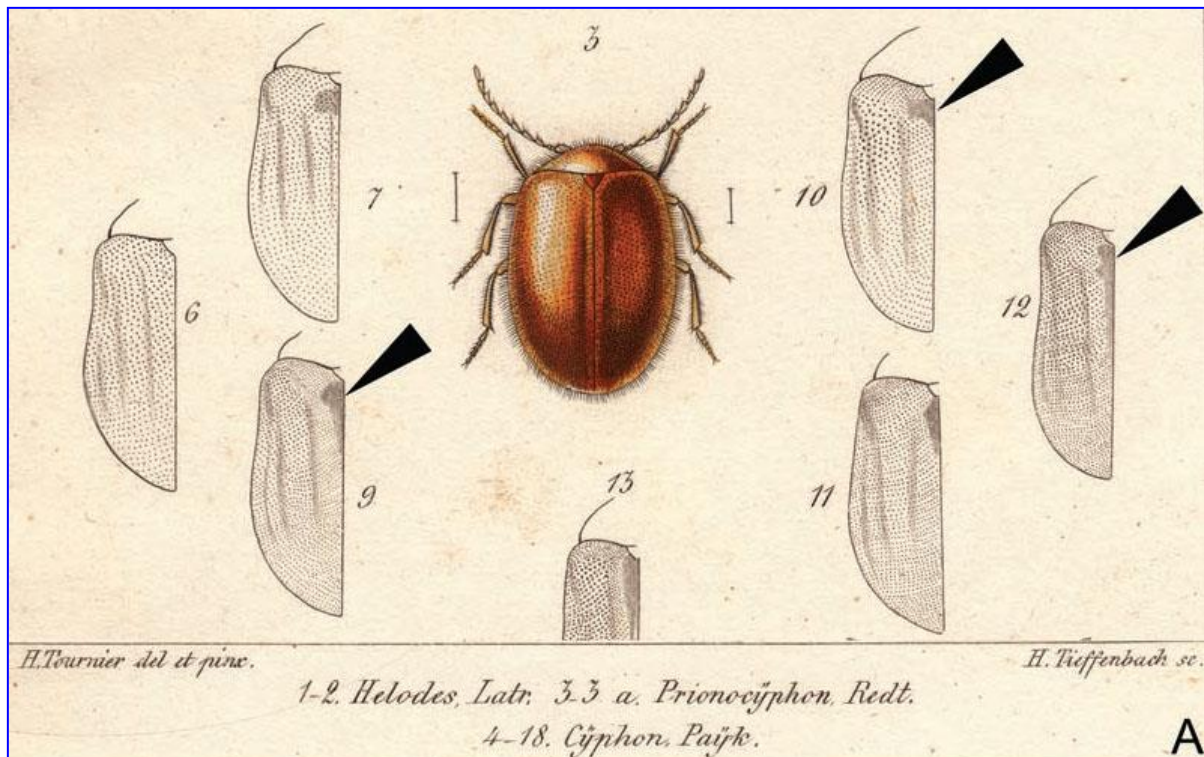
Received August 2024

#### QUATERNARY ENTOMOLOGY BIBLIOGRAPHY FROM TUTAKHAMUN TO SCUNTHORPE

Paul Buckland notes an upgrade of the bibliography in October 2024 to 4,746 entries.  
 BUCKLAND P C, BUCKLAND P, COOPE G R & SADLER J P 2024. A bibliography of Quaternary Entomology. <http://www.bugscep.com/qbib.html>

### SCIRTID EXCITATORS 1868-PRESENT

The authors recount how the Scirtidae, then the Dascillidae, were reviewed by Henri Tournier (1834-1904) in 1868, who showed that females of *Contacyphon coarctatus* (Paykull) and *C. palustris* (Thomson) had glandular openings on the elytra, arrowed here by the authors of this fascinating paper. And fascinators the pores must be, also detected by George Charles Champion (1851-1927) in the South American scirtid now known as *Ypsilonocyphon* Klausnitzer, and likened by the Wonderhorse to the structures found in male Malachiidae. Rafał Ruta (2008) might take the credit for calling them excitators, and he and Hiroyuki Yoshitomi (2018) first noted them on scirtid pronota. The paper goes on to review the types of excitator to be found across the Scirtidae, and includes a histological study of *Calvariopsis yanayacuense* Ruta.



CHAMPION G C 1897. Dascillidae. In: F.D. Godman & O. Salvin (eds). *Biologia Centrali-Americana. Insecta. Coleoptera. 3 pt 1. Serricornia. Buprestidae, Throscidae and Eucmenidae. Elateridae - Dascillidae*. London: Taylor & Francis.

RUTA R, BOCK B L & BEUTEL R G 2025. Excitators: female-specific secretory structures in marsh beetles (Coleoptera: Scirtidae). *Annales Zoologici (Warszawa)* **75** 61-84.

RUTA R & YOSHITOMI H 2018. Description of females of *Chilarboreus* Ruta, 2011 (Coleoptera: Scirtidae: Scirtinae). *Zootaxa* **4388** 265-274.

TOURNIER H 1868. *Description des Dascillidés du Bassin du Léman*. Bâle & Geneve, Paris. Association Zoologique du Léman, Année 1867, pp.96.

### THURINGIAN SEARCH

When trying to refind the fairy shrimp, *Eubbranchipus grubii* (Dybowski), in the Sulzensee near Mackenrode the authors came instead on the red copepod, *Hemidiaptomus superbus* (Schmeil) new for Thuringia. Several water beetles were also recorded, e.g. *Helophorus asperatus* Rey and *Hydrochus brevis* (Herbst).

BELLSTEDT R & WILLENBERG A 2023. Der Brillante Riesen-Ruderfußkrebs *Hemidiaptomus superbus* (Schmeil, 1895) neu für Thüringen (Crustacea: Copepoda: Diaptomida). *Thüringer Faunistische Abhandlungen* **28** 21-26.

### DONCASTER MUSEUM ENDARKENING

The highlights and low points of Doncaster Museum's collection of beetles are discussed here. There are about 22,900 entries in a database for the beetles, of which there are around 40,000 specimens. The oldest appear to be two *Contacyphon variabilis* (Thunberg) dated May 1835, the site being an as yet unplaced "Ruston Dollsbury". Edward Alexander Waterhouse (1849-1916) acquired the specimens and it is proposed that his father may have collected them in the first place. However, this cannot have been, as suggested in the paper, Charles Owen Waterhouse (1843-1917), who was brother to Edward, but George Robert Waterhouse (1810-1888).

The slow decline of Doncaster insect collections is described as one of the symptoms of what has been termed the 'Endarkenment' - "a word which surprisingly goes back to the 1820s (OED) [according to the Oxford English Dictionary], where sciences, curation and research are starved of resources and expected to pay for themselves in the overwhelming quest for 'value for money', where museums consist of front of house displays and no maintenance of supporting collections...."

BUCKLAND P C & SKIDMORE P 2024. The Doncaster Collection of Coleoptera: a discussion and database. *The Naturalist* **149** 120-128.

---

### MORPHOLOGY vs DNA IN ECUADOR STREAMS

Pairs of samples were taken in adjacent parts of streams mainly by three-minute sweeping with a D-net fitted with a 250µm mesh net. There was an almost perfect regression (probability  $p < 0.001$ ) between the taxonomic listings based on morphological identification of stream macroinvertebrates in one of a pair of samples and the DNA of the other. But the beetles were linked only in that both noted a *Psephenus*! Examining actual specimens also detected the Hydradephaga genera *Celina*, *Derallus*, *Hydrocanthus*, *Hydrodytes*, *Laccophilus*, the elmids genera *Austrolimnius*, *Cylloepus*, *Heterelmis*, *Macrelmis*, *Microcylloepus*, *Neoelmis*, *Onychelmis*, and *Pharconus*, and a limnichid. Apart from the *Psephenus* (assuming it was the same species in both cases) DNA detected two actual species - elmids *Notelmis bifoveolata* Delève and *Hexanchorus cordillerae* (Guérin-Méneville). The corresponding author is Blanca Rios-Touma. For more on Ecuador see page 21.

JIJÓN G, ERRIGO G, ERRIGO I M, WICKS J, GOLDSTON N N, DAVIS L, DAVIS D, STANDRING S, CHASTON J M, FRANDSEN P B RIOS-TOUMA B 2025. Comparing morphological and DNA-based bioassessment methodologies for macroinvertebrates in Neotropical streams: a case study from Ecuador. *Metabarcoding & Metagenomics* 9:e138172.

---

### TAIWAN WHIRLIGIGS

Five species occur in Taiwan - *Dineutus australis* (Fab.), *D. mellyi mellyi* Régimbart, *D. orientalis* Modder, *Gyrinus convexiusculus* Macleay and *Orectochilus formosans* Takizawa. The beetles are described, illustrated, keyed and mapped.

LIU H-C 2024. The whirligig beetles of Taiwan (Coleoptera: Gyrinidae): taxonomy, distribution and current status. *Formosan Entomology* **44** 124-136.

---

### THURINGIAN GRAVEL PITS

Two hundred and twenty species of beetle were recorded from disused gravelpits in South Thuringia. The few water beetles included pioneers such as *Nebrioporus canaliculatus* (Lacordaire) and *Dryops similis* Bollow.

KLIMA H 2023. Die Käferfauna (Insect: Coleoptera) der Kiesteiche bei Sonneberg/Oberlind (Südthüringen, Landkreis Sonneberg). *Thüringer Faunistische Abhandlungen* **28** 79-88.

---



## DYTISCIDAE REPERTI

These insect reports in the *Bollettino* concern *Acilius sulcatus* in Lombardy and Lazio and *Eretes griseus* in Lazio.

NARDI G & VOMERO V 2024. Reperti. Coleoptera, Dytiscidae. *Acilius* (*Acilius*) *sulcatus* (Linnaeus, 1758). *Bollettino dell'Associazione Roman di Entomologia* **5** 167-169.

NARDI G, ROCCHI S & VOMERO V 2024. Reperti. Coleoptera, Dytiscidae. *Eretes griseus* (Fabricius, 1781). *Bollettino dell'Associazione Romana di Entomologia* **5** 169-171.

## NEW TURKISH HYDROPORUS

*Hydroporus karabegan* is described as a member of the *longulus*-group from the Akdağ Mountains in the east of Turkey. It is very similar to *H. erzerumensis* Erman & Fery and *H. holzschuhi* Fery, also from Turkey. Hans Fery is the correspondent.

AYKUT M, TUSUN S & FERY H 2025. *Hydroporus karabegan* sp. nov. from eastern Türkiye (Coleoptera, Dytiscidae, Hydroporini). *Zootaxa* **5609** 125-131.

## MORE HONORIFICS

More work for Carim Nahaboo then. See *Latissimus* **58** 19, when he painted *Helophorus rufipes* (Bosc d'Antic) for Robert Angus's 80th. Here we have *Helophorus fosteri* Angus from Tajikistan, presented by Robert whilst at a meeting for the Aquatic Coleoptera Conservation Trust in March 2025, and *Dytiscus latissimus* L., presented at the same time by members of the Club. The next 80 year-old is in the middle wearing another gift, a teeshirt bearing the Club motto/maxim "*Deronectes Stictotarsus duodecim pustulatus*". Pace Carim! - we will be using your paintings more honourably in due course.



## A NEW ANACAENA

*Anacaena fosteri* is described from a high altitude bog in Western Cape Province, South Africa. It is most distinctive among *Anacaena* in having the parameres much longer than the median lobe.

BILTON D T, MLAMBO M C & BALKE M 2025. A new species of *Anacaena* Thomson, 1859 from the Cederberg Range, South Africa (Coleoptera: Hydrophilidae). *Zootaxa* **5613** 165-170.





### **HYDROPHILUS PICEUS IN DORSET**

The Great Silver Water Beetle (*H. piceus* L.) continues to make the news in the strangest places, the *Daily Express*, the *Daily Telegraph*, the BBC and even one of the Royal Entomological Society's mouthpieces, *Antenna* (No **49** page 10). This is because Wren Franklin, depicted, found specimens at light and in the water in Dorset in 2024, the first records for that vice-county since 1821.



### **WETLAND LADYBIRDS IN IRELAND**

The first *Anisosticta novemdecimpunctata* (L.) was found at Kenmare during a meeting of the Irish Field Club Union by H.K.G. Cuthbert (Halbert 1898). It was the found in two places in Mid-Cork in 2024. *Coccidula scutellata* (Herbst) is newly recorded from Ireland in 2024 in the Grand Canal, Dublin and in Lough Gall, County Armagh.

HALBERT J N 1898. Irish Field Club Union. Kenmare Conference. Coleoptera. *Irish Naturalist* **7** 211-216.

LISOVSKI E & NELSON B 2025. Spotted Marsh Ladybird (*Coccidula scutellata* (Herbst, 1783) (Coleoptera, Coccinellidae) new to Ireland. *Irish Naturalists' Journal* **41** 123-124.

van der NOLL L, HAMILTON J & POWER B 2025. Water ladybird (*Anisosticta novemdecimpunctata*) (Coleoptera, Coccinellidae) in Co. Cork, the first Irish records since 1898. *Irish Naturalists' Journal* **41** 121-123.

### **CANTHYDRUS TESTACEUS**

*Hydrocanthus testaceus* (Boheman) was described from China, the syntype in Stockholm Museum turning out to be *Canthydrus ritsemae* (Régimbart), which is now synonymised with *Canthydrus testaceus* (Boheman). *Sternocanthus indicus* (Wehncke) is newly recorded from Nepal.

TOLEDO M E, NEGRI I & BERGSTEN J 2025. The identity of *Canthydrus testaceus* (Boheman, 1858) and a new faunistic record of *Sternocanthus indicus* (Wehncke, 1876) (Coleoptera: Noteridae). *Zootaxa* **5618** 284-286.

### **CERCYON LAMINATUS IN IRELAND**

A specimen of *laminatus* was caught in a light trap in Armagh, Northern Ireland in September 2023 during an unusually warm period dominated by a southern airflow.

NELSON B 2025. *Cercyon laminatus* Sharp, 1873 (Coleoptera: Hydrophilidae) a beetle new to Ireland from a moth trap. *Irish Naturalists' Journal* **41** 120-121.

---

### **FINDING FOOD, QUICKEST WINS**

*Cybister tripunctatus lateralis* (Fab.) is well known to be on the increase but the similar *C. brevis* Aubé is not. Species extending their distribution will meet up with new species, and the authors go along with the idea that the new encounters could lead to less biodiversity. Here all three instars of the two species are compared for their ability to reach food and to consume it. The larvae of *tripunctatus lateralis* took significantly less time to reach prey than those of *brevis*, but the numbers of prey items consumed were about the same in both species.

FUKUOKA T, OHBA S-Y & YUMA M 2025. Comparison of behavior and foraging ability between two congeneric species of large-bodied diving beetle (Coleoptera: Dytiscidae) larvae, a non-expanding species and a distribution-expanding species. *European Journal of Entomology* **122** 56-64.

---

### **LAINZER TIERGARTEN**

The arrival of the hard copy of *KR 94* came with the realisation that there was a further paper with a water beetle interest. This concerned the old imperial hunting ground, 24 km<sup>2</sup> in the south-west corner of Vienna. Seventy families of beetles, with 901 species, are known from the area, and many primeval forest species. The few water beetles are *Helophorus dorsalis* (Marsham), *Heterocerus fenestratus* (Thunberg), *H. fuscus* Kiesenwetter, *Laccobius obscuratus* Rottenberg, *Contacyphon coarctatus* (Paykull), *Elodes minutus* (L.), *Prionocyphon serricornis* (Müller), and *Sacodes flavicollis* (Kiesenwetter), also, less aquatic, *Cercyon laminatus* Sharp and *Dryops ernesti* des Gozis.

KAHLEN M & ECKELT A 2025. Beitrag zur Kenntnis der Käferfauna des Lainzer Tiergartens (Wien, Österreich) (Coleoptera). *Koleopterologische Rundschau* **94** 219-277.

---

### **OVERWINTERING IN PADDY FIELDS**

Paddy fields in Japan are important for the overwintering of some water beetles. These include *Agabus japonicus* Sharp, *Rhantus suturalis* (MacLeay), *Cybister brevis* Aubé, *Eretes griseus* (Fab.) and *Hydrophilus acuminatus* Motschulsky. It is assumed that *Hydaticus grammicus* (Germar) overwinter on land.

FUKUOKA T, WATANABE R, KUBO S, TAMURA R, KOBAYASHI K & OHBA S-y 2025 兵庫県西部の棚田における側溝とため池で越冬する水生昆虫類 (カメムシ目・コウチュウ目) の記録 (Records of aquatic insects (Hemiptera and Coleoptera) overwintering in agricultural ditches and ponds in the rice terraces of western Hyogo Prefecture, Japan). *Aquatic Animals* **7** [in Japanese with English abstract] doi: 10.34394/aquaticanimals.2025.0\_AA2025-13 pp. 6

---

### **ERRATA - Latissimus 58**

p 33. *Enochrus umbratus* (Sharp) is confined to Japan rather than *E. simulans* (Sharp).

p. 36. The email address given for Professor Adrián Villastrigo Carbajo was wrong. It should be

Departamento de Biodiversidad y Gestion Ambiental, Facultad de Ciencias Biologicas y Ambientales, Universidad de Leon, 24071 León, Spain [avillc/at/unileon.es](mailto:avillc/at/unileon.es)

---

**CROATIAN STREAMS**

Fourteen streams in the Croatian Mountains were surveyed for Ephemeroptera, Trichoptera, Odonata and Coleoptera, 130 macroinvertebrate taxa in total but unfortunately only to genera for the beetles, one exception being *Pomatinus substriatus* (Müller). Feeding functional groups were identified. Scrapers or shredders dominated in the spring, collector-gatherers and scrapers in the summer, and scrapers alone in the autumn. Predators, if that's where many beetle species belong, were not numerous at any point. The correspondent is Čerba Dubravka.

ERGOVIC V, ČERBA D., TUBIĆ B, KOH M & MIHALIJEVIĆ Z 2025. Seasonal dynamics and factors shaping aquatic insect assemblages in mountain streams of the Pannonian Lowland Ecoregion. *Insects* **2025** 16 pp. 19.

<https://doi.org/10.3390/insects16040344>

**ECUADOR'S MOUNTAIN LAKES**

This work covered 202 lakes, with ten being monitored monthly for macroinvertebrates. As is usual in this kind of work, beetles barely get a look-in, though *Liodessus* does get a mention. However no less than 22 "community metrics" were measured, including beetle richness and a combination of odonates, beetles and bugs (OCH). The latter was one of the measurements negatively associated with altitude. There was a positive association with higher ammonia levels ( $>30\mu\text{Eq l}^{-1}$ ) and *Liodessus*. What a huge amount of work. One hopes that the beetles, the adults at least, will be identified. The correspondent is Raúl Vázquez.

VIMOS-LOJANO D, MOSQUERA P V, HAMPEL H & VÁZQUEZ R F 2025. Spatial-temporal distributions of macroinvertebrate communities in high mountain tropical lakes of Ecuador. *Hydrobiologia* doi.org/10.1007/s10750-025-05847-9.

**MEETINGS 2025**  
**OCCITANIE 8-12 May 2025**

The next meeting is in the Montpellier area, initiated by Pierre Queney. It will be from 8 to 12 May 2025 centred on Aniane to the west of Montpellier. Hopefully this will be not too early for the rich river fauna and not too late for a summer drought that seems almost inevitably to follow the floods such as those of 2024. If you are interested let either Pierre or the editor - or both - know by email.

**LA SILA, 2024**

Toby Turner was volunteered to bring together the records for this meeting and expects to issue an update soon. Thanks to all who have already contributed.

**HEREFORDSHIRE, 2023**

Similarly, Will Watson is trying to finalise records from that meeting too.

Email addresses among the contacts overleaf.



## *Latissimus* is the newsletter of the Balfour-Browne Club

### *Latissimus* 59 was produced in April 2025

**STOP PRESS! Manfred Jäch has requested all to know that he is not retired.**

#### **Contact addresses**

Yves Alarie, School of Natural Sciences, Laurentian University, Ramsey Lake Road, Sudbury, Ontario, Canada  
[yalarie@laurentian.ca](mailto:yalarie@laurentian.ca)

Robert Angus, Division of Life Sciences (Insects), The Natural History Museum, Cromwell Road, London SW7 5BD, England, UK [r.angus@rhul.ac.uk](mailto:r.angus@rhul.ac.uk)

Pau Balart-García, Metazoa Phylogenomics Lab, Biodiversity Program, Institute of Evolutionary Biology (CSIC - Universitat Pompeu Fabra), Passeig Marítim de la Barceloneta 37-49, 08003 Barcelona, Spain  
[pau.balart@ibe.upf-csic.es](mailto:pau.balart@ibe.upf-csic.es)

Tong Bao, School of Ecology/State Key Laboratory of Biocontrol, Shenzhen Campus of Sun Yat-sen University, Shenzhen 518107, China [baot3@mail.sysu.edu.cn](mailto:baot3@mail.sysu.edu.cn)

Ronald Bellstedt, Brühl 2, D-99867 Gotha, Germany [ronald.bellstedt@t-online.de](mailto:ronald.bellstedt@t-online.de)

Rolf Beutel, Institut für Zoologie und Evolutionsforschung, Friedrich-Schiller-Universität Jena, Jena 07743, Germany [rolf.beutel@uni-jena.de](mailto:rolf.beutel@uni-jena.de)

David Bilton, Marine Biology and Ecology Research Centre, School of Biological and Marine Sciences, University of Plymouth, Drake Circus, Plymouth PL4 8AA, England, UK [d.bilton@plymouth.ac.uk](mailto:d.bilton@plymouth.ac.uk)

Mark Blaxter, Darwin Tree of Life Consortium, Natural History Museum, Cromwell Road, London SW7 5BD, England, UK [mark.blaxter@sanger.ac.uk](mailto:mark.blaxter@sanger.ac.uk)

Paul C Buckland, Den Bank Close, Crosspool, Sheffield S10 5PA, Yorkshire, UK [paul.buckland@bugscep.com](mailto:paul.buckland@bugscep.com)

Dubravka Čerba, Department of Assessment and Aquatic Ecosystems Research, National Water Reference Laboratory of Slovakia, Water Research Institute, Nábr. arm. gen. L. Svobodu 5 (7), 81249 Bratislava, Slovakia  
[dubravka.cerba@vuvh.sk](mailto:dubravka.cerba@vuvh.sk)

Xiang-Sheng Chen, Institute of Entomology, Guizhou University, Guiyang 550025, Guizhou, China  
[chenxs3218@163.com](mailto:chenxs3218@163.com)

Vivien Cosandey, Muséum d'histoire naturelle, Malagnou 1, 1208 Geneva, Switzerland

[vivien.cosandey@bluewin.ch](mailto:vivien.cosandey@bluewin.ch)

Hans Fery, Räuschstraße 73, D13509 Berlin, Germany [hanfry@aol.com](mailto:hanfry@aol.com)

Wren Franklin [wrenfranklin@yahoo.com](mailto:wrenfranklin@yahoo.com)

Taichi Fukuoka, Department of Environmental Solution Technology, Graduate School of Science & Technology, Ryukoku University, 1-5 Yokotani, Seta Oe, Otsu, Shiga 520-2194, Japan [t.fukuoka01183820@gmail.com](mailto:t.fukuoka01183820@gmail.com)

Malcolm Greenwood [tgreenwood3@gmail.com](mailto:tgreenwood3@gmail.com)

Czesław Greń, 1 Dział Przyrody, Muzeum Górnolśląskie w Bytomiu, pl. Jana III Sobieskiego 2, 41 -902 Bytom, Poland [czeslaw.gren@vp.pl](mailto:czeslaw.gren@vp.pl)

Jerzy M. Gutowski, Zakład Lasów Naturalnych, Instytut Badawczy Leśnictwa, ul. Park Dyrekcyjny 6, 17-230 Białowieża, Poland

Lars Hendrich, SNSB - Zoologische Staatssammlung München, Münchhausenstraße 21, 81247 Munich, Germany [hendrich@snsb.de](mailto:hendrich@snsb.de)

Manfred Jäch, Naturhistorisches Museum Wien, Burgring 7, A-1010 Vienna, Austria [manfred.jaech@nhm-wien.ac.at](mailto:manfred.jaech@nhm-wien.ac.at)

Manfred Kahlen, Tiroler Landesmuseen-Betriebsgesellschaft m.b.H., Naturwissenschaftliche Sammlung, Sammlungs- und Forschungszentrum, Karajnc-Straße 1, A-6060 Hall in Tirol, Austria [m.kahlen@tiroler-landesmuseen.at](mailto:m.kahlen@tiroler-landesmuseen.at)

Bernhard Klausnitzer, Senckenberg Deutschen Entomologischen Instituts, Lannerstraße 5, D-01219 Dresden, Germany [klausnitzer.col@t-online.de](mailto:klausnitzer.col@t-online.de)

Helmuth Klima, Unterlinder Str. 19, D-96515 Sonneberg, Germany [helmuth.klima@t-online.de](mailto:helmuth.klima@t-online.de)

Takuya Kobayashi, Department of Zoology, Graduate School of Science, Kyoto University, Kitashirakawa-oiwake, Sakyo, Kyoto 606-8502, Japan [tkobayashi925@gmail.com](mailto:tkobayashi925@gmail.com)

Emelian Lisovski, Stepside, Dublin 18, County Dublin, Republic of Ireland [emelian.lisovski@proton.me](mailto:emelian.lisovski@proton.me)

Hsing-Che Liu, Observer Ecological Consultant Co. Ltd, 14F-2, No. 15, Lane 146, Gongxue Road, South District, Taichung City, Taiwan [td965771/at/gmail.com](mailto:td965771/at/gmail.com)

Philip G.D. Matthews, Department of Zoology, University of British Columbia, Vancouver, British Columbia, Canada [pmatthews/at/zoology.ubc.ca](mailto:pmatthews/at/zoology.ubc.ca)

Mariano Michat, Laboratory of Entomology, Department of Biodiversity and Experimental Biology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina [marianoide/at/gmail.com](mailto:marianoide/at/gmail.com)

Alexandre Michel, University Paris-Saclay, INRAE, HYCAR, 1 Rue Pierre-Gilles de Gennes, 10030, 92761, Antony Cedex, CS, France [alexandre.michel.97/at/gmail.com](mailto:alexandre.michel.97/at/gmail.com)

Gianluca Nardi, Centro Nazionale Carabinieri Biodiversità "Bosco Fontana", Strada Montova, 29 - I-46045 Marmirolo (Mantova), Italy [l\\_nardi/at/hotmail.com](mailto:l_nardi/at/hotmail.com)

Brian Nelson, 37 Derrycarne Road, Portadown, Co. Armagh NT62 1PT, Northern Ireland, UK [bsentomologybrian/at/gmail.com](mailto:bsentomologybrian/at/gmail.com)

Leon van der Noll, 13 Hibernian Buildings, Cork, County Cork T12 HN8V, Republic of Ireland [leonvandernoll/at/hotmail.com](mailto:leonvandernoll/at/hotmail.com)

Roberto Poggi, Museo Civico di Storia Naturale "Giacomo Doria", Via Brigata Liguria 9, 16121 Genova, Italy [rpoggi/at/comune.genova.it](mailto:rpoggi/at/comune.genova.it)

Marek Przewozny, Department of Systematic Zoology, Faculty of Biology, Adam Mickiewicz University, Umultowska 89, 61-614 Poznan, Poland [marekprzewozny/at/poczta.onet.pl](mailto:marekprzewozny/at/poczta.onet.pl)

Blanca Rios-Touma, Grupo de Investigación en Biodiversidad, Medio Ambiente y Salud (BIOMAS), Ingeniería Ambiental, Facultad de Ingenierías y Ciencias Aplicadas, Universidad [blanca.rios/at/udla.edu.ec](mailto:blanca.rios/at/udla.edu.ec)

Rafał Ruta, Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Przybyszewskiego 65, 51-148 Wrocław, Poland [rafal.ruta/at/uwr.edu.pl](mailto:rafal.ruta/at/uwr.edu.pl)

Sergey Ryndevich, "Baranovichi State University", 21 Voykova St., 225404 Baranovichi, Belarus [ryndevichsk/at/mail.ru](mailto:ryndevichsk/at/mail.ru)

Antonio Schizzerotto, via Dietro le Mura B.2, I38122 Trento, Italy [antonio.schizzerotto/at/unitn.it](mailto:antonio.schizzerotto/at/unitn.it)

A.G. Shatrovskiy, Departamento de Zoologia e Antropologia, Museu Nacional de História Natural e da Ciência, Rua da Escola Politécnica 56/58, 1250-102 Lisbon, Portugal [ashatrovskiy/at/yahoo.com](mailto:ashatrovskiy/at/yahoo.com)

David Smith, University of Birmingham, Arts Building, Edgbaston, Birmingham B15 2TT, England, UK [d.n.smith/at/bham.ac.uk](mailto:d.n.smith/at/bham.ac.uk)

Yukun Sun, Biological and Environmental Engineering, Cornell University, Ithaca 14853, USA [ys655/a/Cornell.edu](mailto:ys655/a/Cornell.edu)

Mario Toledo, Department of Sustainable Crop Production, Università Cattolica del Sacro Cuore, via Emilia Parmense 84, I-29122, Piacenza, Italy [toledo.pinguicula.mario3/at/gmail.com](mailto:toledo.pinguicula.mario3/at/gmail.com)

Nataša Turić, Department of Biology, Josip Juraj Strossmayer University of Osijek, Cara Hadrijana 8/A, 31000 Osijek, Croatia [nturic/at/biologija.unios.hr](mailto:nturic/at/biologija.unios.hr)

Clive Turner, Natural History Museum, Cromwell Road, London SW7 5BD, England, UK [turnclive/at/gmail.com](mailto:turnclive/at/gmail.com)

Toby Turner [tobyaturner/at/outlook.com](mailto:tobyaturner/at/outlook.com)

CONTENTS			
A NATURALLY OCCURRING EXAMPLE OF ABNORMAL REGENERATION IN <i>DYTISCUS</i> N R Phillips			9
NEW DATA ON DYTISCIDAE FROM KAZAKHSTAN S K Ryndevich, A P Kashtalian			14
THE FIRST RECORD OF <i>MEGASTERNUM IMMACULATUM</i> (STEPHENS, 1829) (COLEOPTERA, HYDROPHILIDAE) FROM IRELAND A Shatrovskiy			11
<b>Editorial and miscellanea</b>			
A CLUB SEQUEL - <i>LIOTHORAX</i>	13	ERRATA - <i>Latissimus</i> 58	20
BALFOUR-BROWNEIANA	10	MORE HONORIFICS	18
CONTACT ADDRESSES	22	WATER BEETLE ... RAMSAR MENTION	8
<b>Books</b>		AQUATIC BEETLES OF CHINA	1
KNYSZYŃSKA FOREST	4	TAIWAN WATER BEETLES	7
<b>Papers</b>		MORE <i>ZAITZEVIA</i>	9
A NEW <i>ANACAENA</i>	18	MORPHOLOGY vs DNA IN ECUADOR STREAMS	17
BORYS MALKIN'S COLLECTION	13	NEW AFRICAN <i>COPELATUS</i>	8
BUOYANCY	12	NEW <i>CONTACYPHON</i> NEAR <i>LAEVIENNIS</i>	5
BURNT GROUND BEETLES	7	NEW CYPRIOT <i>PRIONOCYPHON</i>	5
<i>CANTHYDRUS TESTACEUS</i>	19	NEW TURKISH <i>HYDROPORUS</i>	18
<i>CERCYON LAMINATUS</i> IN IRELAND	20	NEW WORLD <i>PLATAMBUS</i> LARVAE	6
CHINESE SCIRTIDAE	5	ORIENTAL <i>SCIRTES</i>	5
CONSTRUCTED WETLANDS....	2	OVERWINTERING IN PADDY FIELDS	20
<i>CONTACYPHON</i> FROM NEPAL	5	PARALLEL LIVES UNDER GROUND	4
<i>CONTACYPHON</i> FROM NEW GUINEA	5	QUATERNARY ENTOMOLOGY BIBLIOGRAPHY	15
<i>CONTACYPHON PALMI</i> SPLIT	5	<i>SANDRACOTTUS</i>	3
<i>CONTACYPHON PALUSTRIS</i> LARVAE....	6	<i>SCARODYTES RUFFOI</i> IN SAN MARINO	3
CROATIAN STREAMS	21	<i>SCIRTES SEIMUNDI</i> SPECIES GROUP	6
<i>CYBISTER</i> AS INDICATOR OF HEAVY METALS	1	<i>SCIRTES UNICOLOR</i> PIC	6
DESMAN DENIZEN	10	SCIRTID EXCITATORS 1868-PRESENT	16
DONCASTER MUSEUM ENDARKENING	17	STOBRAWA LANDSCAPE PARK	4
DYTISCIDAE REPERTI	18	SUBFOSSIL CARLISLE	12
ECUADOR'S MOUNTAIN LAKES	21	TAIWAN WHIRLIGIGS	17
ELMID PHYLOGENY	3	THE <i>SCIRTES FLAVOGUTTATUS</i> GROUP	6
FINDING FOOD, QUICKEST WINS	20	THE WAY OF THE .... COPTOCLAVIDAE	8
GENOESE LIGHT TRAP	10	THURINGIAN GRAVEL PITS	17
HIMALAYAN SCIRTIDAE	6	THURINGIAN SEARCH	16
<i>HYDROPHILUS PICEUS</i> IN DORSET	19	WEST PALAEARCTIC SCIRTID UPDATE	5
LAINZER TIERGARTEN	20	WETLAND LADYBIRDS IN IRELAND	19
<i>LIOPTERUS</i> GENOME	2	WHIRLIGIGS LIKE WHALES WITH PROPELLORS	2
<b>Meetings</b>		HEREFORDSHIRE, 2023	21
LA SILA, 2024	21	OCCITANIE 8-12 May 2025	21