



Cover photograph: *Ochthebius anatolicus* Janssens, 1963, taken by N. Kozlov in the Tsakhsaddon Rover, North Ossetia. New for Russia and the North Caucasus, previously known from Turkey, Armenia and Georgia. See page 4. Photograph by Alexey Sazhnev

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LACCOBIUS ALBESCENS ROTTENBERG, 1874 SUR LA CÔTE ATLANTIQUE DE BRETAGNE (FRANCE, FINISTÈRE) Pierre Queney

In August 2000 Ron Carr discovered on the French Atlantic coast, at Puits d'Enfer (Les Sables-d'Olonne, Vendée), a series of *Laccobius albescens* in water seepages through fissures in the stone down the face of the cliffs. Elio Gentili identified the beetles, only previously known in Italy and from the alpine regions.



Recently, on May 8, 2022, I was looking with my friends Vincent Beaufour and Philippe Deschamp for rockpools in the cliffs on the southern coast of Brittany, at Nénez near Concarneau. This site is home to *Ochthebius lejolisii* Mulsant & Rey but, very close to it, were also a trickle of fresh water which fed small basins in the rock. Some beetles stayed there including several specimens of *Laccobius albescens*, males and females. They were in the company of *Hydroglyphus geminus* (F.) and a small colony of *Helophorus brevipalpis* Bedel. It was the only *Laccobius* and the place was therefore less rich in species than the Vendée locality. However, the presence of *L. albescens* is very interesting in this environment and confirms, 250 km further west, that Ron Carr's discovery was not accidental on the Atlantic coast. In both cases the soils are of the same nature: crystalline schists of the Armorican base, chemically acidic.

GENTILI E & CARR R 2001. The *Laccobius* of Les Sables d'Olonne (France, Vendée). *Latissimus* **14** 24-25.

Received September 2022

BRANDENBURG HYDROPORUS LONGICORNIS

Hydroporus longicornis is newly recorded for Brandenburg found in seepage areas at Norduckermärkische Seenlandschaft (shown here at Kesselwiese, courtesy of the Wendlandts) and by the Untersuckersee lake. It was in good company with *Gyrinus suffriani* Scriba, *Hydroporus elongatulus* Sturm, and *H. scalesianus* Stephens.

WENDLANDT L & WENDLANDT N 2022. Erstnachweis des Schwimmkäfer *Hydroporus longicornis* Sharp, 1871 in Brandenburg



(Coleoptera: Dytiscidae, Hydroporinae). *Märkische Entomologische Nachrichten* **24** 49-57.

POLISH PRIMEVAL FOREST

This paper has it all! The Knyszyn Forest in north-east Poland, despite being well known as primeval, has had to date little work done on its water beetles. Fieldwork in 2020-2021 yielded 3,212 water beetles in 128 species. If one adds in nine species the authors did not find then we have 37.5% of the species known in Poland. They include the Polish Red List species *Agabus striolatus* (Gyllenhal), *Hydrophilus piceus* (L.), *Hydroporus brevis* Sahlberg (its habitat in riparian alder forest in Krzemianka Nature Reserve shown here, photographed by Renata Greń), *H. elongatulus* Sturm, *H. morio* Aubé, and *Ilybius wasastjernae* (Sahlberg). Make this photograph full page on your computer screen, get your waders on, and imagine stepping in with the net!

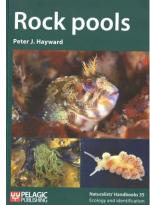


GREŃ C, LUBECKI K & SUĆKO K 2022.Chrząszcze wodne (Coleoptera: Hydradephaga, Hydrophiloidea, Hydraenidae, Dryopoidea) Puszczy Knyszyńkiej. *Rocznik Muzeum Górnośląskiego Bytomiu Przyroda* **28** 1-35.

[TIDAL] ROCK POOLS

HAYWARD P J 2022. Rock pools. *Naturalists' Handbooks* **35**. London: Pelagic Publishing. ISBN 978-1-78427 etc, about £20.

When one mentions rockpools a water beetler will naturally think of *Ochthebius* species. So it seems strange that the only mention of beetles in this handbook comes in the introduction where 4,000 beetle species are used to exemplify that the British terrestrial fauna that can be exceeded by the phyletic range of the coastal marine fauna. So this book must be limited to the fauna of rockpools that get submerged twice a day, certainly a testing regime for any animal, but surely not as



severe as that experienced by beetles living in pools in the rockpools above the main tide line. A useful book, but nothing to do with beetles!

ROCKPOOLS IN ABSTRACTS

The habitat preferences of the coexisting *Ochthebius quadricollis* Mulsant and *O. lejolisii* Mulsant & Rey were examined around the Iberian coast in the Mediterranean. Abundance of larvae of *quadricollis* was negatively correlated with the numbers of *lejolisii* adults. *O. lejolisii* had the wider niche breadth whilst *quadricollis* was associated with deeper pools with more coarse organic material nearer to the sea.

In the next abstract the saline niches of the same species were measured at laboratory exposures. Both species can survive extreme salinities, *O. lejolisii* having the higher tolerance. Larvae of both species were more tolerant of high salinities than adults. Egg hatch declined with salinity up to 140 grams per litre in *quadricollis* and 170 grams per litre in *lejolisii*.

GARCÍA-MESEGUER AJ, MIRÓN-GATÓN JM, BOTELLA-CRUZ M, ABELLÁN P, MILLÁN A & VELASCO P 2022. Evidence of environmental filtering in two coexisting beetles of supralittoral rockpools. *Abstract Book, Second meeting of the Iberian Ecological Society (SIBECOL) and the XXI Conference of the Iberian Association of Limnology (AIL), together with the 21st National Congress of Ecology (Portuguese Ecological Society - SPECO), 3-8 July 2022, Aveiro* 137-138.

MIRÓN-GATÓN JM, BOTELLA-CRUZ M, GARCÍA-MESEGUER AJ, MILLÁN A & VELASCO P 2022. Saline niche differences between two coexisting supralittoral rockpool *Ochthebius* species. *Ibid.* 138.

TELMATOPHILUS REVISITED

Andrew Duff has drawn attention to the paper by Jens Esser (2021) in which Otero's (2012) synonymies of *T. sparganii* (Ahrens) with *caricis* (Olivier) and *schonherrii* (Gyllenhal) with *typhae* (Fallén) are overturned. The four taxa fall into two speciespairs, *caricis* and *sparganii*, with brown bodies and pale femora, the parameres being spatulate apically, and *typhae/schonherrii*, with black bodies, dark femora and with narrow parameres. Otero failed to detect differences in the genitalia within each species-pair, probably as Esser and Arved Lompe say, because he was not looking at correctly identified material. Esser's paper gives a key to the four species based on colour characters plus some not-so-good photographs of parameres that must have dried out and become full of bubbles. Go back to John Bratton's notes in *Latissimus* (1997 **8** 7-9; 2000 **12** 4; 2005 **19** 3-4). John had already speculated in the 2005 note that *sparganii* and *caricis* might be colour forms of the same species, the male genitalia being indistinguishable.

BRATTON J H 2005. An identification aid for British *Telmatophilus* species. *Latissimus* **19** 3-4.

ESSER J 2021. Bestimmungstabelle der in Deutschland vorkommenden Arten der Gattung *Telmatophilus* Heer, 1841 nebst taxonomischen Bemerkungen (Coleoptera, Cryptophagidae). *Entomologische Nachrichten und Berichte* **65** 39-41.

LOMPE A accessed 2022. <u>http://coleonet.de/coleo/texte/telmatophilus.htm</u> OTERO J C 2012. *Telmatophilus* Heer, 1841 (Coleoptera: Cryptophagidae) of western Palaearctic region. *Entomologica Fennica* **23** 113-120.

PTILODACTYLIDS IN AUSTRALIA

Nine new species of *Byrrocryptus* are described from Australia. These include *castratus* - "A fanciful reference to the fate of many of the type series". A key is provided for thirteen species plus *Austrolichus monteithi* Lawrence & Stribling.

WATTS C H S 2022. Review of the Australian species in the Ptilodactylidae genus *Byrrocryptus* Broun (Insecta, Coleoptera). *Transactions of the Royal Society of South Australia* doi.org 10.1080/03721426.2022.2121679

OSSETIAN BEETLES



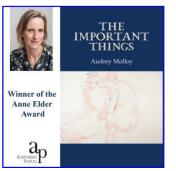
Six species are newly recorded from North Ossetia in the Caucasus: Agabus dilatatus (Brullé), Laccobius alternus Motschulsky, Cercyon lateralis (Marsham), Ochthebius anatolicus Janssens, Praehelichus asiaticus (Motschulsky), and Pomatinus substriatus (Müller). A. dilatatus is similar to A. glacialis Hochhuth, from which it differs in having pale epipleura, and also illustrated are its aedeagus and that of A. guttatus (Paykull). The habitat of L. hindukushi is illustrated, a sulphurous spring, here in a photograph taken by Sasha Prokin, and where it was accompanied by Helophorus faustianus (Sharp), Enochrus fuscipennis (Thomson) and L. alternus. Also illustrated are the dark and maculate forms of Hydroporus transgrediens Gschwendtner, this species having earlier been reported from North Ossetia as H. discretus ponticus Zaitzev.

SAZHNEV A S & PROKIN A A 2022. New data on Dytiscidae, Hydrophilidae, Hydraenidae, Dryopidae and Heteroceridae (Coleoptera) of North Ossetia. *Transactions of Papanin Institute for Biology of Inland Waters, Borok* **98** 38-45.



BURREN INVERTEBRATE CONFERENCE 9-11 August 2022

This event was hosted by the National Parks & Wildlife Service, organised by Áine O Connor and Brian Nelson. It was intended to highlight the wealth of invertebrate diversity in the karstic landscape of the Burren in western Ireland. The first session,



on 9 August, reviewed butterflies, moths, hoverflies and water beetles among other invertebrates. There appeared to be some commonality in no commonality, i.e. the species particular to the Burren could be, to use Dave Allen's phrase, a strange brew. The water beetles were, of course, dominated by our President, in that the most important species was *Ochthebius nilssoni* Hebauer. The talk about beetles proved to be a belated launch vehicle for Audrey Molloy's *The Important Things*, and "Aithníonn ciaróg ciaróg eile" (One Beetle, Two Beetle), which roughly translated,

means that it takes one to know one. There was also an opportunity to illustrate the changing fortunes of air flight, from when one might get out of bed late, board a plane at Prestwick Airport arriving at Shannon Airport in time to be out beetling in the Burren by the afternoon, as opposed to now getting out of bed very early in Sicily only to find one's plane cancelled at Palermo, and contract Covid-19 in the maelstrom of Naples the following day. Some of this will make sense if the conference gets onto *YouTube*. Meantime check out

https://www.npws.ie/research-projects/animal-species/invertebrates

AEOLIAN FAUNA

Water beetles are not that frequent on islands with active volcanoes. Eight hundred and sixty-one species of beetle are now known from the Aeolian Islands, which include Stromboli and Vulcano. Only two dytiscids are known, *Hydroglyphus geminus* (Fab.) and *Nebrioporus ceresyi* (Aubé), and within the Hydrophilidae (*Anacaena limbata* (Fab.), *Berosus hispanicus* Küster, *Cercyon haemorrhoidalis* (Fab.), *C. quisquilius* (L.), *Coelostoma hispanicum* (Küster), *Dactylosternum abdominale* (Fab.), *Laccobius neapolitanus* Rottenberg, *Enochrus bicolor* (Fab.), *Helochares lividus* (L.), *Paracymus aeneus* (Germar), *P. relaxus* Rey, *Sphaeridium bipustulatum* Fab., and *S. substriatum* Faldermann), five are terrestrial. Then there is the rockpool Ochthebius quadricollis Mulsant and the saltmarsh *Augyles maritimus* (Guérin-Méneville).

LO CASCIO P, ALTADONNA G & PONEL P 2022. Diversity and distribution of beetles in a Mediterranean volcanic archipelago: an updated checklist of the Coleoptera of the Aeolian Islands (Sicily, Italy). *Biodiversity Journal* **13** 531-585.

BEAVER BEETLE IN ENGLAND

The colonisation of the River Otter in Devon by Eurasian beaver is described as "relatively recent" and "informal". Beavers have been known in the area since 2008 and there was even a thought that the government might try to remove them. That was until 1 October 2020, when, as a result of being included on Schedule 2 of the Conservation of Habitats and Species Regulations (2017), it became illegal to harm them in England. The dead body of an immature beaver was reported by a member of the public to the Devon Wildlife Trust in April 2021 and this was found to support four specimens of beaver beetle. Previous attempts to find beaver beetle on narcotised beavers had failed, possibly because they were lying on their backs and the beetles had been hiding in the dorsal fur. This is the second report of beaver beetles occurring on otters is mentioned.

TURNER C R, ELLIOTT M, COUPER D & CHANT J 2022. The beaver beetle *Platypsyllus castoris* Ritsema (Leiodidae: Platypsyllinae) on beaver in Devon, new to England. *The Coleopterist* **31** 94-96.

HYGROTUS CONFLUENS GOES NORTH

The new record, from the Culbin Sands, Moray, in north-east Scotland, takes this species to 57.6° North, beaten only by some recorded around Oslo.

ROWLEY K W 2022. *Hygrotus confluens* (Fabricius) (Dytiscidae) in Moray, the northernmost record. *The Coleopterist* **31** 98-99.

DERONECTES LATUS IN SOUTHERN ENGLAND

One specimen was found in the River Avon upstream of Salisbury sewage works in 2021. This is well away from other southern sites and new for Wiltshire.

MACKAY-AUSTIN R & McGROGAN A 2022. The first record of *Deronectes latus* (Stephens) (Dytiscidae) in South Wiltshire. *The Coleopterist* **31** 65.

THE GOUDOT BROTHERS

Recent correspondence between Anders Nilsson and Dominique Malécot relates to two brothers, Justin Marie Goudot (1802-1847) and Jules Prosper Goudot (1803-1858). Dominique notes that their honorifics could cause confusion. Species from South America are attributable to Justin whereas species from Spain, Madagascar and Morocco are attributable to Jules, thus

Pseudodisersus goudotii (Guérin-Méneville, 1843), Colombia,

collected by Justin, and for Jules

Rhantus goudoti Sharp, 1882, Madagascar

Aulonogyrus goudoti Régimbart, 1883, Madagascar

Bidessus goudotii (Laporte de Castelnau, 1835), Spain and Morocco.

NILSSON AN 2010. All diving beetle specific and subspecific names explained. *Skörvnöpparn Supplement* **1**1-42.

Received November 2022

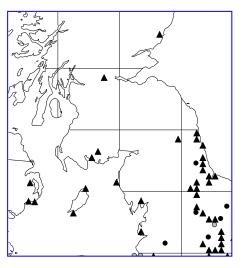
HYDRAENA CAMERO----

Phil Perkins recognises five species groups in Cameroon based on aedeagal structure. Thirty-two are newly described with specific epithets starting with *camero*-, and one is described as *millenaria*, being the 1000th new species described by the author.

PERKINS P D 2022. Thirty-three new species of water beetles in the genus *Hydraena* Kugelann from Cameroon (Coleoptera: Hydraenidae). *Zootaxa* **5203** pp. 66.

LOOK FOR THE ASIDE - BEETLES IN ANGUS

The Bonnyton dampond in Angus in eastern Scotland was originally used to power threshing machinery. It is high on a hill in an agricultural landscape not part of the nearby Rossie Muir SSSI. Rachel describes it as "unassuming". Thirty-six species are mentioned, the main target in the paper being *Enochrus melanocephalus* (Olivier), a relative newcomer to Scotland first detected in 2004 in Edgarton Loch, Kirkcudbrightshire, then in the same vice-county in an effluent treatment pond near the Carrick ponds in 2009. Soon after it was found in Angus in April 2022 it turned up in May in an old fishery at Howietoun, Stirlingshire, the map here slightly updating that in the paper in *The Coleopterist*.



But it is the thirty-sixth "unconfirmed" species not in the main list that is rather

important. Dytiscus dimidiatus Bergsträßer is new for Scotland, the nearest record being on Seal Sands, County Durham in June 1969, when GNF found one moribund female and some larvae. "Moribund" describes also the new female rather well, and explains why Rachel



rejected it. She quite reasonably claims that the beetle had been bitten by a bird. Just



in case anyone thinks this could have been semisulcatus. third dearee confirmed questioning the that underside was darkened ("ochre orange, changing to a lighter orange yellow towards the front legs") and not photograph black. In the here. extracted from a video clip, one can see that the elytral fluting is right for dimidiatus rather than longer as in semisulcatus and the overall size was calibrated at exactly 38 mm based on a caddis larva seen in the video and kept rather than thrown back. The find was followed up with baited bottlewhich caught only trapping, D. marginalis L. and Colymbetes fuscus (L.).

MACKAY-AUSTIN R 2022. A new, northernmost record of *Enochrus*

melanocephalus (Olivier) (Hydrophilidae) in Angus, Scotland. *The Coleopterist* **31** 92-94.

POTAMOPHILUS IN NORTH AFRICA AND ELSEWHERE

Potamophilus acuminatus (Fab.) is recognised as Moroccan in the Rif Mountains, based on adults, larvae and DNA. In North Africa it is otherwise known from Tunisia. Also described are new sites in Slovakia in the Ipel' and Latorica Rivers. This provides an opportunity to correct an oversight in that the report on the Club meeting in 2009 did not include the episode in which The River Hron was investigated on 9 June at 48.115°N 18.632°E. Memory plays tricks so I am not sure who was there apart from Clive Turner. He tried to move the tree by pulling at the iron bar you can see in the photograph protruding from the water. But it sprang back with some force, putting lives at risk in the very fast water. Adult *Potamophilus* were found by feeling the underside of the trunk out of the water, and larvae were found in rotting wood.

ANON 2010. Balfour-Browne Club meeting 2009 - Bratislava - Slovakia. *Latissimus* 27 39-41



KODADA J, BENNAS N, GOFFOVA K & ČIAMPOR F 2022. *Potamophilus acuminatus* (Fabricius, 1792): distribution update in North Africa confirmed by COI barcoding sequencing (Coleoptera, Elmidae). *Zootaxa* **5200** 565-575.

NOTIONOTUS

These are minute globular hydrophilids mainly found in the edges of streams, known from the Neotropical Region and south-east Asia. Eighteen Neotropical species are recognised, twelve of them newly described here, arranged in four groups.

GONZÁLEZ-RODRÍGUEZ L M & SHORT A E Z 2022. Revision of the water scavenger beetle genus *Notionotus* Spangler, 1972 in the Neotropical Region (Coleoptera, Hydrophilidae, Enochrinae). *ZooKeys* **1109** 141-191.



The overview of the New Forest in Hampshire, England, in *The Coleopterist* is a wellbalanced blend of recording detail and reminiscences. Much is to do with the area's importance for saproxylics, but special water beetles covered are *Haliplus variegatus* Sturm, *Agabus brunneus* (Fab.), *Bidessus unistriatus* (Goeze), *Graptodytes flavipes* (Olivier), *Helophorus laticollis* Thomson, *Enochrus nigritus* (Sharp), *Dryops striatellus* (Fairmaire...), *Longitarsus nigerrimus* (Gyllenhal) and four *Bagous*.

This gives an opportunity for an unbalanced set of additional reminiscences. Mine in the New Forest started as pillion on the motor bikes of Robert Angus and Jeff Sands. I also saw out the last days of steam with Merchant Navy pacific engines being thrashed from Waterloo to Brockenhurst. Camping in the Forest recalled an episode in Jerome K. Jerome's Three Men in a Boat (to say nothing of the dog) in which several people got injured opening a tin of pineapple without a tin-opener. Our tin was of peaches, much of the liquid spilling out in the battle. The following morning the tent teemed with Nalassus laevioctostriatus (Goeze), testifying to the value of sugaring as a technique. Another time in the 1960s the bike fell over, flooding the campsite with fuel and obliging an early departure. Some members may recall how, in 1999, we were ripped off by the proprietor of the Watersplash for unexpected room charges, though this story does not feature in the published account in which Dutch members beat the British representatives by about an hour in discovering Bidessus unistriatus at the same spot. Others may recall the hung over trips the day after the Verrall and the snow melt wasteland around Burley Rocks (here in 2004). And then there is a little embarrassment at an overnight stay at the Balmer Lawn Hotel dining out with the amorous couples on St Valentine's Day, 2007.

BROCK P D & ALLEN A J. 2022. An overview of Coleoptera of the New Forest, Hampshire. *The Coleopterist* **31** 66-91.

THE MANAGEMENT 2000. The New Forest meeting 1999 - some preliminary notes, *Latissimus* **12** 24-25.

FAROES

The authors have turned poverty into riches in that the impoverished fauna of the Faroes can provide a robust set of data for analysis of habitat preferences. The two species of water boatmen are easily surpassed by the six species of Dytiscidae and Haliplidae. On the island of Eysturoy one remembers in 2004 (as photographed here) a good-looking lake that refused to provide anything more than *Haliplus fulvus* (Fab.), *Agabus bipustulatus* (L.) and *Hydroporus palustris* (L.). In this more complete survey 57 ponds yielded 1,522 individuals of those eight water beetle species. The length of shoreline explained differences in species composition whereas diversity was highest in shallow ponds, supporting our president's rule (Nilsson 1996 p. 116) that "the less water the more beetles".



HANSEN L J & KREILING A-K 2022. Small islands, small ponds, small communities - water beetles and water boatmen in the Faroe Islands. *Insects* **2022** doi.org/10.3390/insects13100923 5 pp.

NILSSON, A.N. (Ed.) 1996. *Aquatic Insects of North Europe.* Volume 1: Ephemeroptera, Plecoptera, Heteroptera, Megaloptera, Neuroptera, Coleoptera, Trichoptera and Lepidoptera. Apollo Books, Stenstrup.

TUSCAN HYDRAENIDS

This is a list of the hydraenids associated with the Pratomagno Massif in Tuscany. It includes 15 *Hydraena* species, 6 *Limnebius* and 11 *Ochthebius*.

PAPI R & ROCCHI S 2022. Catalogo dei Coleotteri Idrenidi del Massiccio del Pratomagno (Preappenino Toscano). *Quaderni di Studi e Notizie di Storia Naturale dell Romagna* **55** 157-178.

NEW BRITISH WEEVIL RELEASED OFFICIALLY



The South American weevil *Listronotus elongatus* (Hustache) has been released in England in an attempt to control the highly invasive floating pennywort *Hydrocotyle ranunculoides* L. f. This is the culmination of work by CABI (Centre for Agriculture and Bioscience International) to prove the value and safety of this biocontrol agent. The URL for this press release is so long that it takes less room to say "look it up on Google!" Photograph by Colin Pratt courtesy of Djami Djeddour, project officer for this biocontrol initiative in CABI. In case anyone is wondering about "L. f." he was Carl Linnaeus's son, also a Carl (1741-1783).

DROUGHT RESPONSE IN POLAND

It is a pity that the author did not take advantage of the availability of several Polish water beetle experts. That way we might have avoided only three taxa being named to species, *Platambus maculatus* (L.), *Scarodytes halensis* (Fab.) and *Oulimnius tuberculatus* (Müller), five being named only to genus and one only to the order Coleoptera. Five streams were studied, with most taxa found in the one with the most stable water flow, but "species richness" is not really a useful idea when so few species have been found or identified.

KOSZALKA J 2022. Aquatic beetle assemblage response to drought in small woodland streams. *Polish Journal of Natural Sciences* **36** 380-401.

POLISH ILYBIUS CRASSUS

A male of *Ilybius crassus* was taken in March 2022 at 174 metres above sea level at Klarów in eastern Poland.

BUCZYŃSKI P, STANIEC B & WAGNER G K 2022. Interusające stwierdzenie borealno-górskiego *Ilybius crassus* C.G. Thomson, 1856 (Coleoptera: Dytiscidae) na niżu Polski. *Wiadomości Entomologiczne* **41** 19-21.

SOUTH AFRICAN DRYOPID

This new find arose from Peter Cranston operating a drift net to catch chironomids overnight. So they do have a use after all! *Rhithrops* is a *Pomatinus*-like dryopid found in a fast stretch of the Matjies River in the Western Cape (illustrated courtesy of DTB). The beetle looks truly adapted to a permanent benthic life, being smooth, with long legs and with relatively huge claws. Given that the bend to be seen in the basal piece of the aedeagus of some of the *Dryops* species associated with fast water is also found in *R. capensis* perhaps this too is an adaptation to benthic life?



BILTON D T 2022. *Rhithrops capensis* gen. et sp. nov., a new aquatic dryopid beetle from the Western Cape of South Africa (Coleoptera: Dryopidea: Dryopidae). *Zootaxa* **5195** 539-553.

SCIRTES IN TAIWANESE OFFSHORE ISLANDS

Scirtes japonicus Kiesenwetter is reported from the islands of Kinmen and Lanyu.

LIU H-C, MA C-H & YOSHITOMI H 2022. First report of the family Scirtidae (Insecta: Coleoptera) from Kinmen Island and Lunyu Island, Taiwan. *Taiwanese Journal of Entomological Studies* **7** 43-45.

ALIEN PLANTS

Water beetles are not mentioned as such but one can gather that they were taken into account by the silhouette used for macroinvertebrates. Two hundred and two accounts of the impact of alien macrophytes were identified, mostly from North America, and dominated by *Myriophyllum spicatum* L., *Hydrilla verticillata* (L.), *Eichhornia* (= *Pontederia*) *crassipes* (Mart.), *Typha* species, and *Phragmites australis* (Cav.). Invasions of alien macrophytes generally have a negative impact on species numbers, but no consistent impact on abundance. At a finer resolution there was a small but significant impact on macroinvertebrates. This work was initiated by realisation that there were so few publications quantifying the effects of New Zealand Pygmyweed, *Crassula helmsii* (Kirk).

TASKER S J L, FOGGO A & BILTON D T 2022. Quantifying the ecological impacts of alien aquatic macrophytes: a global meta-analysis of effects on fish, macroinvertebrate and macrophyte assemblages. *Freshwater Biology* 67 1847-1860.

A MULTIPLE TRIBUTE TO IGNACIO RIBERA



A special supplement to *Boletin de la Asociación española de Entomología* has been prepared to celebrate the life of Ignacio Ribera (1963-2020) as a coleopterist and evolutionary expert. The editorial team (Adrián Villastrigo, Andrés Millán, David Sánchez-Fernández, Javier Fresneda and Luis Felipe Valladares) have overseen delivery of seventeen papers twelve of which concern water beetles. Each paper is written in English, with a summary in Spanish, or *vice versa*.

HELOPHORUS CINCTICOLLIS

H. cincticollis resembles *H. croaticus* Kuwert, a Central European species ranging to Yakutia. *H. cincticollis* is widespread in Morocco and Algeria, with old records by Balfour-Browne from near Málaga Airport. Jonas Köhler had specimens from the Laguna Guadalquitón, Cádiz, in 2014, and

Robert and Lizzie Angus took another male there in 2018.

ANGUS R B, KÖHLER J, GEREND R & ANGUS E M 2022. Rediscovery of *Helophorus cincticollis* Guillebeau (Coleoptera, Helophoridae) en España. *Advances in aquatic and subterranean beetle research: a tribute to Ignacio Ribera, Suplemento del Boletin de la Asociación española de Entomología* **4** 1-2.

COELOMETOPON

C. riberae is newly described as a madicolous beetle in the Horseshoe Falls on the Mkambati River in the Eastern Cape of South Africa.

BILTON D T & MLAMBO M C 2022. A new species of *Coelometopon* Janssens from the Wild Coast of South Africa (Coleoptera: Hydraenidae). Ibid. 3-6.

SCARODYTES

S. ignacio is described from Khenifra, Morocco. *S. ibericus* is given specific rank as a species near to *ignacio*. The lectotype is from Ciudad Rodrigo, Salamanca. *S. ibericus* occurs in Portugal and south-west Spain whereas *S. halensis* (Fab.) is known from north-east Spain. But that's not the end of this catch-up on unfinished business with Ignacio. *Ilybius dettneri* (Fery) is recorded from Burgos in company with *Hydroporus cantabricus* Sharp. *Hydroporus constantini* Hernando & Fresneda is reported from high up on Pico Tres Mares, Palencia.

FERY H 2022. *Scarodytes ignacio* sp. n., elevation to species rank of *S. halensis* var. *ibericus* (Régimbart, 1901), and notes on two other species of Dytiscidae (Insecta, Coleoptera, Dytiscidae). ibid. 19-24.

COPELATUS IGNACIOI

Being cylindrical with small eyes, broad antennal segments, 15 striae on each elytron, an orange band across the elytra, and on the cover of this Supplement, this *Copelatus* stands apart from all the rest. It is best linked to another species from French Guyana, *C. abonnenci* Guignot. A great choice for another honorific.

HAJEK J, HENDRICH L & BALKE M 2022. *Copelatus ignacioi*, an unusually shaped new species of diving beetle from French Guiana (Coleoptera, Dytiscidae). ibid. 43-45.

SOUTH AMERICAN HYDRAENA

Hydraena (*Dnahydnaedna*) *ignacioriberai* and *H. guyanica* are newly described from Suriname and Guyana respectively.

PERKINS P D 2022. Two new species of South American water beetles in the genus *Hydraena* Kugelann 1794, subgenus *Dnahydnaedna* Perkins 2017 (Coleoptera, Hydraenidae). ibid. 46-49.

CANTHYDRUS

It is now realised that *C. diophthalmus* (Reiche & Saulcy) ranges from Egypt to Uzbekistan, and that *C. sicilus* (Ragusa), taken out of synonymy with the former species, is found in Algeria, Egypt, Morocco, Italy (Sicily and Sardinia) and Spain (Andalusia and the Balearics). The extent of yellow markings on the pronotum is a guide, and there are differences in the aedeagi. The closely related Afrotropical *C. koppi* Wehncke can be linked with them to the *diophthalmus* species-group. *C. arabicus* Sharp is redescribed, the type probably being from near Mecca.

TOLEDO M E 2022. The Mediterranean *Canthydrus* Sharp and taxonomic notes on *C. arabicus* Sharp, 1882 (Coleoptera, Noteridae). ibid. 50-59.

SIERRA NEVADA LAKES

Twenty-two taxa are recorded from the alpine lakes in the Sierra Nevada, Granada. The assemblage did not differ significantly between the nineteen open lakes and the ten closed ones, i.e. those without inflows or outflows. *Agabus nevadensis* Lindberg was found in all bar one of the lakes, though the status of this taxon as distinct from *A. bipustulatus* (L.) remains controversial. Other endemics confined to the area are *Hydroporus sabaudus sierranevadensis* Shaverdo and *H. normandi alhambrae* Fery.

ABELLÁN P, CARBONELL J A, PÉREZ-BONET S & FRANCO-FUENTES E 2022. Water beetle assemblages in the alpine lakes of Sierra Nevada (Spain). ibid. 60-68.

BEETLES OF LA MANCHA

Conservation priorities are identified for Castilla-La Mancha. *Hydraena madronensis* Castro, García & Ferreras and *H. quetiae* Castro are priority species apparently confined to the area. Thirty-two priority sites for conservation are identified, mainly in mountains but also in some saline lowland areas. David Sánchez-Fernández is the correspondent.

PALLARES S, PICAZO F, RODRÍGUEZ M I & SÁNCHEZ-FERNÁNDEZ D 2022. Water beetles from Castilla-La Mancha (Central Iberia): species and areas of interest. ibid. 69-83.

CLUB MEETING IN SPAIN 2015

Anyone reading *Latissimus* **37** 5-7 will know that a lot of what is contained here would be a revelation to some, given their ability to get lost. The authors have brought together records of 139 species and subspecies, helping to raise the known number of species in El Bierzo to 184. Beetles with detailed notes are *Deronectes costipennis gignouxi* Fery & Brancucci, *Hydrovatus cuspidatus* (Kunze), *Ilybius dettneri* (Fery), *Oreodytes davisii rhianae* Carr, *Stictonectes rebeccae* Bilton, *Helophorus schmidti* Villa & Villa, *Georissus costatus* Laporte de Castelnau, *Hydrochus interruptus* Heyden, *Cercyon sternalis* Sharp, *Chaetarthria similis* Wollaston, *Hemisphaera seriatopunctata* (Perris), *Hydraena bisulcata* Rey, *H. monstruosipes* Ferro, *Limnebius myrmidon* Rey, *Dryops nitidulus* (Heer), and *Heterocerus aragonicus* Kiesenwetter.

VALLADARES L F, BENETTI C J & GARRIDO J 2022. Los coleópteros acuáticos y semiacuáticos de la comarca de El Bierzo (León, NO de España) (Coleoptera: Gyrinidae, Haliplidae, Noteridae, Hygrobiidae, Dytiscidae, Helophoridae, Georissidae, Hydrochidae, Hydrophilidae, Hydraenidae, Scirtidae, Dryopidae, Elmidae, Heteroceridae) - Reunión del Balfour~Browne Club, 25-39 junio 2015. ibid. 84-99.

MORE ON ROCKPOOL OCHTHEBIUS

This is a compilation of a lot of work in the western Palaearctic, mainly around the Mediterranean. Thirty species and three subspecies of *Ochthebius* are associated with coastal habitats, twenty-one of them restricted to rockpools above the tide line. Balfour-Browne (1958. *British Water Beetles* **3**) is recorded as the first to report coexistence of two species in rockpools when referring to *O. heeri* Wollaston and what is now known as *O. lanthanus* Ribera & Foster on Gran Canaria. Sympatry is a common phenomenon in rockpools, it being frequent to find together species from the two largest lineages, the *Cobalius* subgenus and the *quadricollis* species group. Sympatry of species in the same lineage can also be observed at the edges of their ranges, and also within the *lejolisii* and *biltoni* species group of *Cobalius*.

VILLASTRIGO A, HERNANDO C & MILLÁN A 2022. The Ochthebius (Coleoptera, Hydraenidae) from western Palaearctic supratidal rockpools. ibid. 100-108.

IGNACIO'S TREE OF LIFE

The Coleoptera Tree of Life contains at least 17,479 of Ignacio's entries on DNA sequences, almost 8,000 being of the Cytochrome oxidase 1 (*cox1*) enzyme in beetles. Most are the *cox1*, 6,217 sequenced from the 3'-end and 1,508 from the 5'-end. The equivalent numbers for Dytiscidae are 4,521 and 588, and have been used to make a major impact on our understanding of the family. A circular cladogram of the 6,217 3'-end sequences is used to demonstrate this, laying claim to the title of the Latter Day David Sharp. The authors also refer to the Groenlandia song by the Zombies being Ignacio's favourite. Funny, I thought it was the Macarena.

PONS J & GÓMEZ-ZURITA 2022. Ignacio Ribera's Tree of Life. ibid. 122-130.

ROCKPOOL COHABITATION

Ochthebius quadricollis and O. lejolisii breed over most of the year with the latter not so affected by low temperature in oviposition and larval development. In the laboratory, at 20° C, there were no differences between the species in oviposition rate and larval development. However, egg development was significantly longer in *quadricollis* but its hatching success was much higher than in *lejolisii* thereby conferring an advantage in the face of climate change.

VELASCO J, MIRÓN-GATON J M, GARCÍA-MESEGUER A J & BOTELLA-CRUZ M 2022. Life cycle differences between two coexisting species of supratidal rockpools: *Ochthebius quadricollis* Mulsant, 1844 and *Ochthebius lejolisii* Mulsant & Rey, 1861 (Coleoptera, Hydraenidae). ibid. 131-136.

LIPETSK RECORDS

One hundred and two newly recorded species of beetle for the western Russian Oblast of Lipetsk include *Donacia sparganii* Ahrens and *Notaris aethiops* (Fab.). No e-mail addresses given, but some of the authors are regularly listed in the contacts.

MAZUROV S G, URBANUS Y A, PROKIN A A, ISHIN R N & SAZHNEV A 2022. [To the fauna of beetles (Coleoptera) of the Lipetsk Province. Addition 5.] *Eversmannia* **70** 26-31. [in Russian with English summary]

eDNA SOON TO TAKE OVER RECORDING?

We have come a long way from one of the first experiences with eDNA when it did not prove possible to detect Graphoderus bilineatus (De Geer) seeded into a Danish pond although even a passing red deer had been picked up. Lowri Watkins, Evidence Officer for the Wildlife Gwent Trust. contacted GNF on 7 October 2022 regarding an eDNA sample from the Magor Marsh

Nature Reserve. Sampling was done in July 2022 using the kit provided by Nature Metrics, and the following species were detected: *Haliplus heydeni* Wehncke, *H. ruficollis* (De Geer), *Agabus sturmii* (Gyllenhal), *Nartus grapii* (Gyllenhal), *Liopterus haemorrhoidalis* (Fab.), *Dytiscus marginalis* (L.), *Hydroporus figuratus* (Gyllenhal), *H. alamus* (Fab.), *Liopterus figuratus* (Gyllenhal), *H. alamus* (Fab.), *Liopterus figuratus* (Gyllenhal), *H. alamus* (Fab.), *Liopterus* (Fab.), *Liopterus* (Fab.), *Liopterus* (Fab.), *Liopterus* (Fab.), *Hydroporus* (Fab.), *Liopterus*

planus (Fab.), Hydrophilus piceus (L.), Enochrus testaceus (Fab.), and Scirtes hemisphaericus (L.). In other words, a perfectly good list including a tricky member of a cryptic species-pair and one or two species that probably escape the pond-net more than most. It is only 10.3 per cent of what is known from Magor, and has no hydraenids, leaf beetles or weevils, which are just over a third of the total list. So, we must be getting nearer to the point where a drone takes the sample and you don't need to leave your front door! Congratulations to Lowri for being the first to add an eDNA list to the British water beetle data-base. The photographs supplied by Lowri show part of the Marsh Reserve and Andy Karran, whose idea it was to run the project, and to complete the fieldwork along with volunteer Peter Hunt.



THOMSEN PF, KIELGAST J, IVERSEN LL, WIUF C, RASMUSSEN M, GILBERT MTP, ORLANDO L & WILLERSLEV E 2011. Monitoring endangered freshwater biodiversity using environmental DNA. *Molecular Ecology* **21** 2565-2573.

For more information on the Gwent Levels see a recent review by Gemma Bodé. It illustrates *Dytiscus dimidiatus* Bergsträsser and mentions species such as *Hydaticus transversalis* (Pontoppidan).

BODÉ G 2022. The Gwent Levels. British Willdife 34 32-41.

BRICKYARD BEETLES

Clay pits in an old brickyard in north-west Poland were investigated for their beetles. These include *Sphaerius acaroides* Waltl, *Limnichus sericeus* (Duftschmid), *Augyles hispidulus* (Kiesenwetter), and *Donacia cinerea* Herbst.

RUTA R & MELKE A 2022. Chrząszcze (Insecta: Coleoptera) wyrobisk dawnej cegielni w Osieku nad Notecią (NW Polska). [Beetles (Insecta: Coleoptera) of clay pits of the former brickyard in Osiek and Notecią (NW Poland)]. *Wiadomości Entomologiczne* **41** 3-6.

SLAVÍČ RIVER BASIN

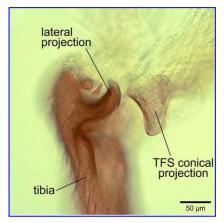
This survey was concerned with the mountainous basin of the Slavíč River in the Moravian-Silesian Beskids, most sites being more than 600 metres above sea level. Forty-six species were found, the most interesting being *Ochthebius melanescens* Dalla Torre, seen here as an inset on the wet edge of a sunlit rock in the main river, courtesy of Michal Straka's photographs. The most notable species otherwise was *Elodes pseudominutus* Klausnitzer, found with *E. minutus* (L.).



STRAKA M & KROČA J 2022. Water beetles (Coleoptera: Haliplidae, Dytiscidae, Helophoridae, Hydrophilidae, Hydraenidae, Elmidae, Scirtidae) of the Slavič river basin, Czech Republic. *Acta Musei Silesiae, Scientiae Naturales* **71** 193-206.

HOW SCIRTES JUMP

In *Scirtes hemisphaericus* (L.) jumping is achieved by a catapult mechanism based on a conical projection of the hind tibia flexor sclerite (TFS in the photograph courtesy of Springer Nature) inserted into a socket in the base of the tibia. The extensor ligament has resilin, a rubbery protein, and is elastic. Jumps achieved an acceleration of up to 1,536 metres per second squared and a speed of 1.9 metres per second. The legs act independently of each other, and jumps can be achieved with one leg alone and with the elytra open or closed.



NADEIN K, KOVALEC A & GORB S N 2022. Jumping mechanism in the marsh beetles (Coleoptera: Scirtidae). *Scientific Reports, Nature* **12** 15834.

CYBISTER AND MEGADYTES IN ENGLAND



In August 2022 Kevin Jones, working for APEM, reported a larva found by Kirsty Tennant when sampling a ditch near Dunwich in East Suffolk, the first evidence of *Cybister lateralimarginalis* (De Geer) breeding in Britain since perhaps the Palaeolithic, from the remains of which Russell Coope (2006) identified fragments at Pakefield, 24 km further north in the same vice-county. The mature larva should be unmistakable by virtue of its large size, and see, for example, Arno van Berge Henegouwen's photograph of its head on the front cover of *Latissimus* 47 plus Kev Jones's photograph here of the head of the larva found in Suffolk. Richard Gilbert, Property Operations Manager for the National Trust

at Dunwich Heath, has reminded would-be trappers that they should get permission from the landowner. Also, this is not an invitation to visit the exact site, rather it is an alert to check in East Anglia as a whole. *Cybister* is a bit wider than most water beetles at 19 mm, so make sure the bottle traps are accessible!

At about the same time as this modern find Keith Alexander drew attention to an entry in the Cornish Biodiversity Network's ERICA database for the *Cybister:* "Anon (1840) Address. In Objects and Laws of the Penzance Natural History Society. P6. Found at Marazion Marsh Anon (but possibly by F Holme in 1837, who has records from that time). Only the second British record." The beetle was named at "Cybister Roselii". This was either ignored or overlooked by James Clark (1906) in his Victoria County History account of Cornish Coleoptera. Frederick Holme is known for some early records in the Isles of Scilly, see Holme (1840). Thanks go to Kate Rose, Archivist of Cornwall Council for copying the 1840 paper.

One might add to this Andrew Duff in 2019 drawing attention to a note by K.G. Blair in 1934. He had reidentified the *Cybister* in the Power Collection taken on 30 September 1826 at Walton on the Naze, North Essex as *C. tripunctatus* (Olivier). This specimen has yet to be traced (Robert Angus pers. comm.). Blair's paper was mainly about another find, the South American *Megadytes costalis* Aubé, a specimen found at Palmers Green, Middlesex, a great excuse for showing this photograph of an unusually mounted specimen taken by Jutta Drabek-Hasselmann, of the Zoological Museum, Kiel - arranged thanks to Claudia Eulitz.

ANONYMOUS 1840. Address. pp. 3-8 in: *Objects and Laws* of the Penzance Natural History Society with lists of the donors, subscribers, and officers. Penzance: E. Paddy.



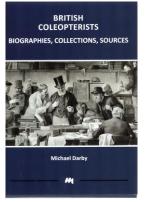
BLAIR K G 1934. A South American dytiscid beetle in Britain, and the correction of an old British record. *Entomologist's Monthly Magazine* **70** 161.

CLARK J 1906. Insects. pp. 163-245 in W. Page (Ed.) *The Victoria County History of the County of Cornwall* **1**. London: Archibald Constable & Co. Ltd.

COOPE G R 2006. Insect faunas associated with palaeolithic industries from five sites of pre-Anglian age in central England. *Quaternary Science Reviews* **25** 1738-1754.

HOLME F 1840. Notice of the coleopterous insects observed in the Scilly Islands in July and August, 1836. *Transactions of the Entomological Society of London* **2** 58-64.

BRITISH COLEOPTERISTS



DARBY M 2022. British Coleopterists. Biographies, Collections, Sources. Salisbury: Malthouse Books. ISBN 9780955850639. Distributed by Pemberley Books, 18 Bathurst Walk, Iver, Bucks SL0 9AZ, England, UK. £24 + postage.

Users of the UK Beetle Recording site will be familiar with Michael Darby's Biographical Dictionary, which he has been developing since 1981. This book is an updated version of this work, mostly covering deceased British coleopterists but also "one or two very elderly former Coleopterists who have not been active for some time." Some of the over 1,700 entries for those who have generated beetle records include small photographs,

inevitably of varying quality but all useful and many familiar. There is also an introductory essay, "Darwin's War-horse" by Peter Marren. Two entries will have to suffice as examples. Hereward Chune Dollman, a Scholar at St John's College, Cambridge, did his earliest collecting in Sussex. He worked on Sleeping Sickness in Central Africa from 1913 to 1918 when he succumbed to it. He married Norah Holloway in February 1916 but she died after a trek in Africa later in that year. I knew his material, held in the Natural History Museum, but the sadness and the productivity associated with one short life was then not appreciated any more than how his records should have been used in a paper about Sussex in 1972. At the other extreme there might be George Edwards, who lived in St John's Wood in London and was in 1857 noted as having an interest in beetles. Maybe someone will find out more about him? One litmus test for such works has to be checking someone you yourself have studied. Consequently it is disappointing that entries for Frederick Muir and David Sharp have inaccuracies and omissions. Nevertheless, this will be one of the most dippable books on the shelf reserved for books consulted almost daily. But one might also hope for regular updates.

SOUTH KOREAN FINDS

Thirty species are recorded from the islands of Nohwa and Bogil. *Copelatus japonicus* Zimmermann acquires the new common name Nam-bang-deung-jul-mulnag-gae on the basis of being discovered on Bogil island. Similarly *Scirtes sobrinus* Lewis on Nowra might now be known as Al-kkot-byeo-ruk-sa-chon. Thirty-one habitus figures are provided.

JUNG S W, MIN H K & LEE D-H 2020. Aquatic beetle fauna in Nohwa and Bogil Islands, and *Copelatus parallelus* (Coleoptera: Dytiscidae) and *Scirtes sobrinus* (Coleoptera: Scirtidae) new to South Korea. *Animal Systematics, Evolution and Diversity* **36** 128-138.

CONGRUENT COLEOPTERANS

This paper surfaced as a result of reading one of these multi-authored reviews about which group of macroinvertebrates to use. It is worth citing if only because it admits to the difficulties of using one taxonomic group to work out the ecological patterns of others. To quote the abstract "In contrast [to plants and crustaceans] coleopterans had the highest level of successional changes and a different relationship between local and regional diversity, with regard to the hydroperiod phase." Not sure what that means, but it might have been better to name one or two beetles.

BAGELLA S, GASCÓN S, CARIA M C, SALA J & BOIX D 2011. Cross-taxon congruence in Mediterranean temporary wetland: vascular plants, crustaceans, and coleopterans. *Community Ecology* **12** 40-50.

VOLOGDA OBLAST



Thirty species are recorded from the Vologda Oblast for the first time, including some species of considerable interest across the Palaearctic. These include *Gyrinus pullatus* Zaitsev (illustrated here), *Agabus pseudoclypealis* Scholz, *Ilybius wasastjernae* (Sahlberg), *Hydrobius rottenbergii* Gerhardt (also shown here), *Hydraena pulchella* Germar, *Ochthebius alpinus* leniştea, *O. remotus* Reitter, and



Riolus nitens (Müller). *Ochthebius flavipes* Dalla Torre and *O. foveolatus* Germar are new for the Northern Territory of Russia.

SAZHNEV A S, PROKIN A A, KOMOROVA A S & PHILIPPOV D A 2022. New records of aquatic and riparian beetles (Coleoptera) for the fauna of the Vologda Oblast (Russia). *Russian Entomological Journal* **31** 132-139.

SIERRA NEVADA DYTISCID THERMAL TOLERANCES

The thermal tolerances were studied for five diving beetle species living in the Sierra Nevada. This involved the supercooling point, the lethal temperature, and tolerance to freezing and to submersion. *Boreonectes ibericus* (Dutton & Angus) showed the highest cold and freezing tolerance and *Agabus nevadensis* Lindberg the least. All species showed freezing tolerance based on supercooling ability and all species except *nevadensis* showed tolerance to submersion when adult, such tolerance being regarded as a key way to avoid lethal air temperatures. *A. nevadensis* persists on the 2018 World Catalogue as a species distinct from *A. bipustulatus* (L.), presumably on the basis of the reproductive isolation conferred by genetic differences and identified by Marcus Drotz *et al.* (2010). See also the paper in this issue on the Sierra Nevada lagoons (p. 14).

CARBONELL J A, PALLARÉS S, VELASCO J, MILLÁN A C, PICAZO F & ABELLÁN P 2022. Thermal biology of alpine aquatic insects: the case of the diving beetles of Sierra Nevada (Spain). Abstract Book, Second meeting of the Iberian Ecological Society (SIBECOL) and the XXI Conference of the Iberian Association of Limnology (AIL), together with the 21st National Congress of Ecology (Portuguese Ecological Society - SPECO), 3-8 July 2022, Aveiro 137.

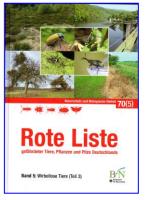
DROTZ M K, BRODIN T & NILSSON A N 2010. Multiple origins of elytral reticulation modifications in the West Palearctic *Agabus bipustulatus* complex (Coleoptera, Dytiscidae). *Plos One* **5** (2) e9034 1-13.

AMBER LIMNICHIDS

Burmochares groehni is newly described as a genus and species from Burmese (Myanmar) Amber. The amber seems to have had a peculiar history. It was found in mines and is thought to have been redeposited in sediments, the pieces, often still soft in the middle, having been bored by pholad molluscs. Wood fibre inclusions indicate that the amber was originally from Monkey Puzzle trees. *Hernandochares* is proposed as a new genus for *Platypelochares electricus* Hernando & Ribera from Eocene Baltic Amber.

KIREJTSHUK A G & PROKIN A A 2022. New genus and species of limnichines from the Cretaceous Amber of Myanmar and taxonomic notes on the family Limnichidae (Coleoptera, Polyphaga). *Insects* **13** 891 doi.org/10.3390/insects 13100891 12 pp.

GERMAN RED BOOK 5



□ RIES M et al. (eds) 2021. Rote Liste gef\u00e4hrdeter Tiere, Pflanzen und Pilze Deutschlands 5. Wirbellose Tiere (Teil 3). Naturschutz und Biologische Vielfait 70 (5). Bonn - Bad Godesberg: Bundesamt f\u00fcr Naturschutz. €49.95.

It is customary for water beetles to be covered in a single treatment for most Red Lists, but here some water beetles have become detached. Within this volume there are a series of papers some of which mention aquatic beetles and their allies.

SCHMIDL J, BUSSLER H, HOFMANN G, ESSER J & SCHÜLER M. 2021. Rote Liste und Gesamtartenliste der Kurzflüglerartigen, Stutzkäferartigen, landbewohnenden Kolben-

wasserkäfer und Ufer-Kugelkäfer (Coleoptera: Polyphaga: Staphylinoidea, Histeroidea, Hydrophiloidea partim; Myxophaga: Sphaeriusidae) Deutschlands. *Naturschutz und Biologische Vielfalt* **70** 31-95.

Thankfully, the publishers have provided a separate card displaying abbreviations associated with each species entry. None of the 24 *Cercyon* has any of the Red List categories **0** and **1-3**. Similarly for the three *Cryptopleurum* species, *Dactylosternum abdominale* (Fab.) and *Megasternum concinnum* (Marsham) [no recognition of *immaculatum* Stephens]. Deep in the table we find *Helophorus nubilus* Fab., *H. porculus* Bedel, *H. rufipes* (Bosc d'Antic) and *H. schmidti* Villa, the latter three rated as **R** (Extrem selten" or extremely seldom), rather than just plain rare. Under S we have the usual four *Sphaeridium*, none in a numbered Red List category and *Sphaerius acaroides* WaltI treated as **G** (Gefährdung unbekannten Ausmasses = endangered to an unknown extent).

SCHMIDL J, WURST C & BUSSLER H. 2021. Rote Liste und Gesamtartenliste der "Diversicornia" (Coleoptera) Deutschlands. *Naturschutz und Biologische Vielfalt* **70** 99-124.

Here one finds the Scirtidae, none of them 0 or 1-3. *Eubria palustris* Germar is 2 and *Limnichus sericeus* (Duftschmid) is a 3. *Heterocerus crinitus* Kiesenwetter and *H. fossor* Kiesenwetter are rated 0 and *H. parallelus* Gebler 2.

FRITZLAR F, SCHŐLLER M & SPRICK P 2021. Rote Liste und Gesamtartenliste der Blatt-, Samen- and Resedakäfer (Coleoptera: Chrysomelidae, Bruchidae; Urodontinae) Deutschlands. *Naturschutz und Biologische Vielfalt* **70** 293-331.

The Donaciinae come here with 0 Donacia reticulata Gyllenhal, 1 D. malinovskyi Ahrens, D. obscura Gyllenhal, D. springeri Müller, D. Macroplea tomentosa Ahrens, appendiculata (Panzer), M. mutica (Fab.) 2 D. brevicornis Ahrens, D. brevitarsis Thomson, D. dentata Hoppe, D. sparganii Ahrens, Plateumaris discolor (Panzer) 3 D. aquatica (L.), D. clavipes (L.), P. braccata (Scopoli), and *P. rustica* (Kunze) (the latter shown here from a photograph by Frank Fritzlar.



SPRICK P, BEHNE L & MAUS C 2021. Rote Liste und Gesamtartenliste der Rüsselkäfer (i.e.S.) Deutschlands (Überfamilie Curculionoidea: exklusive Anthribidae, Scolytidae, Platypodidae). *Naturschutz und Biologische Vielfalt* **70** 335-412.

Of the 26 species of *Bagous* including **0** *B. argillaceus* Gyllenhal, *B. brevis* Gyllenhal, *B. czwalinai* Seidlitz; **1** *B. claudicans* Boheman, *B. elegans* (Fab.), *B. lutosus* (Gyllenhal), *B. lutulosus* (Gyllenhal), *B. majzlani* (Kodada *et al.*), *B. petro* (Herbst), *B. rotundicollis* Boheman; **2** *B. binodulus* (Herbst), *B. collignensis* (Herbst), *B. diglyptus* Boheman, *B. frit* (Herbst), *B. frivaldszkyi* Tournier, *B. limosus* (Gyllenhal), *B. nodulosus* Gyllenhal, *B. puncticollis* Boheman, *B. robustus* Brisout; **3** *B. glabrirostris* (Herbst), *B. lutulentus* (Gyllenhal), *B. tubulus* Caldara & O'Brien. Obviously there are plenty of other wetland species but this is enough for now.

GULF OF GUINEA ISLANDS

The authors of Chapter 12 claim 403 species and subspecies of beetle known from Príncipe, São Tomé and Annobón. Water beetles recorded are *Orectogyrus lionotus* Régimbart, *Copelatus pallidus* Régimbart and *Cybister vulneratus* Klug, plus the sphaeridiines *Coelostoma rufitarse* (Boheman), *Dactylosternum abdominale* (Fab.), *D. intermedium* Régimbart, *D. profundum* Régimbart, *Pachysternum capense* (Mulsant) and *Pelosoma buccalis* (Régimbart). *Hydaticus capricula* Anlar is rejected as a *nomen nudum*. Carles Hernando has drawn attention to an omission from this book, endemic hydraenids known from the Gulf of Guinea on Annobón, *Hydraena pagaluensis* Hernando & Ribera, 2001, and also from Bioko, an island not covered in the chapter on beetles, *Hydraena* (*Hydraenopsis*) *bubi* Hernando & Ribera, 2017 and *H. grebennikovi* Hernando & Ribera, 2017.

HERNANDO C & RIBERA I 2001. *Hydraena (Hydraenopsis) pagaluensis* n. sp., the first known hydraenid from Pagalu island, Gulf of Guinea (Coleoptera, Hydraenidae). *Entomologische Blätter* **97** 9-12.

HERNANDO C & RIBERA I 2017. Two new terrestrial species of *Hydraena* from the island of Bioko, Gulf of Guinea (Coleoptera: Hydraenidae). *Zootaxa* **4238** 281-286.

NÈVE G, BONNEAU P, COACHE A, SERRÁNO A & FILIPPI G 2022. Chapter 12. The beetles (Coleoptera) of Príncipe, São Tomé and Annobón. pp 295-348 in L.M.P. Ceríaco, R.F. de Lima, M. Melo & R.C. Bell (eds) *Biodiversity of the Gulf of Guinea Oceanic Islands*. Cham: Springer.

HETEROCERIDAE BIBLIOGRAPHY

This is an update of the bibliography running to 79 pages. Those items singled out in red are missing from Sasha's files. It is graced by a photograph of *Heterocerus fenestratus* (Thunberg) by K. V. Makarov.

SAZHNEV A 2022. The variegated mud-living beetles (Coleoptera: Heteroceridae) of the World. Bibliographic Index. version 2.1. Borok. pp 79.



FLORENCE CATALOGUE

This compilation is for the Florentine Plain in Tuscany. Eye-catching species are *Rhantus bistriatus* (Bergsträßer), *Hydroporus sanfilippoi* Ghidini, *Etruscodytes nethuns* Mazza, Cianferoni & Rocchi, *Helophorus aequalis* Thomson found alongside *H. aquaticus* (L.), *H. rinki* Angus, *Crephelochares livornicus* (Kuwert), *Ochthebius halbherri* Reitter, *Ptilodactyla exotica* Chapin, *Bagous biimpressus* Fåhraeus on *Ranunculus trichophyllus* Chaix, and *B. czwalinai* Seidlitz.

ROCCHI S, TERZANI F & MASCAGNI A 2022. La coleotterofauna acquatica della Piana fiorentina (Toscana) e relative valutazioni corologiche e cronogeonemiche (Coleoptera). *Onychium* **15** 33-71.

NORFOLK LITHALSA PONDS

Accessing this paper was a bit technical but probably worth the effort. The origin of the Ice Age ponds is reviewed with *Hydroporus glabriusculus* Aubé as a key species. A star certainly but also starring is an aerial view of a lithalsa or palsa field in



Lapland, courtesy of Dentren at English Wikipedia, CC BY-SA 3.0 license. HOLT-WILSON T 2022. Norfolk's Ice Age ponds. *Earth Heritage* **57** 23-25.

GOING SALINE HAS A PRICE

The immune responses are compared for two species-pairs within which one species is found in freshwater and the other can live in hypersaline waters. The pairs are *Nebrioporus clarkii* (Wollaston) and *ceresyi* (Aubé), and *Enochrus salomonis* (Sahlberg) and *jesusarribasi* Arribas & Millán. The extent of an immune response, as measured by phenoloxidase activity, antimicrobial peptide response and encapsulation of parasites, was lower in the species of salt water. This indicates a trade-off between osmoregulation ability and investment in immune defences. However, the thicker cuticle of the salt-adapted species may give better protection against parasites.

BOTELLA-CRUZ M, PALLARÉS S, VELASCO J, MOODY A J, BILLINGTON R, MILLÁN A & BILTON D T 2022. The colonisation of saline water is associated with lowered immune responses in aquatic beetles. *Freshwater Biology* doi: 10.1111/fwb.13993

RUSSIAN NOTARIS

Seven species of *Notaris* are known from Siberia and the Russian Far East. These include *altaicus* Legalov for which a new subgenus, *Asinotaris*, is proposed. The key includes western European species and there are useful photographs of aedeagi.

LEGALOV A A 2021. Species of the genus *Notaris* Germar, 1817 (Coleoptera, Curculionidae) from Siberia and Russian Far East. *Ecologica Montenegrina* **47** 18-27.

MEXICAN VOLCANO BEETLES

You don't often find many water beetles on volcanoes, so this is different. Volcán Tacaná is over 4,000 metres high, sitting on the border of Mexico with Guatemala. Sampling for water beetles was done from 670 to 1,776 metres above sea level (masl). Forty taxa were recorded in nine families, the best represented being the Elmidae with 21 species followed by eleven dytiscids. The fauna falls into two well-defined groups, one found from 670-1,214 masl, the other at 1,619-1,776 masl. The correspondent is Atilano Contreras-Ramos.

LUNA-LUNA A M, MARTINS C C, LÓPEZ-PÉREZ A, RAMÍREZ-PONCE A & CONTRERAS-RAMOS A 2022. Aquatic beetle diversity from Volcán Tacaná, Mexico: altitudinal distribution pattern and biogeographical affinity of the fauna. *ZooKeys* **1111** 301-338.

OJCÓW BEETLES

The Ojców National Park is the smallest in Poland, and is on the karst in the south. One hundred and fifty-eight water beetle species are listed, those in parentheses being new for the Park: Gyrinidae 2, Haliplidae 9 (6), Noteridae 2 (2); Dytiscidae 46 (26); Helophoridae 6(6); Hydrophilidae 39 (7); Hydraenidae 10 (2); Scirtidae 8; Elmidae 12 (6); Dryopidae 5 (1); Limnichidae 1, Heteroceridae 3, Psephenidae 1 (1); Donaciinae 7 (2); Erirhinae 5; Bagoinae 2. Eye-catching are *Graptodytes bilineatus* (Sturm), *Hygrotus novemlineatus* (Stephens), *Rhantus notaticollis* (Aubé), seven species of *Hydraena*, *Contacyphon ruficeps* Tournier, and *Potamophilus acuminatus* (Fab.).

KUBISZ D, BUCZYŃSKI P, WOJAN T, MAZUR M A & BUCHHOLZ L 2021. Order Coleoptera - chrząszcze. pp. 144-212 in A. Klasa (ed.) *Katalog fauny Ojcowskiego Parku Narodowego* **1**. Ojcowski Park Narodowy.

AUSTRALASIAN SCIRTINAE EVOLUTION

Ultraconserved elements again! See *Latissimus* 40 26, 45 9, etc. The presence of these ancient gene fragments, found identical in distantly related species, can be used to establish evolutionary pathways, as here with 79 scirtid species. These are in four Southern Hemisphere groupings plus two Australian-Eurasian groups based on *Prionocyphon* and *Scirtes*. The analysis supports a Gondwanan history for the major divisions.

BRADFORD T M, RUTA R, COOPER S J B, LIBONATTI M L & WATTS C H S 2022. Evolutionary history of the Australasian Scirtinae (Scirtidae; Coleoptera) inferred from ultraconserved elements. *Invertebrate Systematics* **36** 291-305.

MALAGASY BEETLES

The sandstone Makay massif lies in south-east Madagascar. Seventy-four species were found in 62 sites only one of them known in the area before the survey. *Copelatus malavergnorum* and *C. zanabata* are newly described by Michaël Manuel and Andriamirado Tahina Ramahandrison. It was observed that the massif's level of endemism was relatively low and that the peripheral areas had a higher diversity associated with "a rich contingent of western Madagascar lowland species". The correspondent is Michaël Manuel.

RAMAHANDRISON A T, RAKOUTH B & MANUEL M 2022. The aquatic Adephaga of the Makay, central-western Madagascar, with description of two new diving beetle species (Coleoptera, Gyrinidae, Haliplidae, Noteridae, Dytiscidae). *ZooKeys* **1127** 1-60.

SIERRA ESPUÑA

Sixty-three water beetle species dominate this list of 146 taxa for this Murcian Regional Park, 25,000 ha with a large area of pine reafforestation. Species of interest include *Agabus ramblae* Millán & Ribera, *Hydroporus normandi normandi* Régimbart, *Helophorus longitarsis* Wollaston, *Ochthebius delgadoi* Jäch, and *O. jaimei* Delgado & Jäch.

MILLÁN A, GARCÍA-MESEGUER A J, YELO N, VELASCO J & SÁNCHEZ-FERNÁNDEZ D 2022. Macroinvertebrados acuáticos del Parque Regional de Sierra Espuña, Murcia (sureste de España). *Boletín de la Sociedad Entomológica Aragonesa (S.E.A.)* **70** 79-93.

SWISS DUNG MODELS

Over a thousand dung-living beetles were caught using dung-baited traps distributed from 1,000 to 2,500 metres above sea level in the Canton of Vaud. Fourteen well known sphaeridiine taxa were recorded, the rarest being *Megasternum concinnum* s. lat. with a single occurrence. Overall, some interesting statistics alongside those for Geotrupinae, Aphodiinae and Scarabaeinae. The paper also notes 1,329 occurrences of the sphaeridiines in collection data.

COSANDEY V, BROENNIMANN O & GUISAN A 2022. Modeling the distribution of coprophagous beetle species in the Western Swiss Alps. *Alpine Entomology* **6** 25-38.

ERETES IN ROMANIA

Eretes sticticus (L.) is confirmed as Romanian, based on a female caught at light at Cândeşti in 2021.

NITZU E 2022. *Eretes sticticus* (Coleoptera, Dytiscidae) - a new record for the Romanian fauna, and new data regarding the distribution of two rare species - *Acinopus ammophilus* (Coleoptera, Carabidae) and *Sphenoptera* (*Chilostetha*) *laportei* (Coleoptera, Buprestidae) in Dobrogea (Romania). *Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa"* **65** 55-61.

BRAZILIAN HYDRAENA

Thirty-four species are known from Brazil in Adelphohydraena, Hydraena, Parhydraenida and Ochthebius. The great majority are endemic to Brazil. They include *H. bahiana*, newly described in the subgenus *Hydraenopsis*. The male genitalia drawings, presumably by Juan Delgado, reach new heights and include Sternite X and the Spiculum gastrale. The area in which it was found has been identified as an important site for its endemics with a true "cradle of springs".

BENETTI C J & HAMADA N 2022. Annotated checklist of Hydraenidae (Coleoptera, Polyphaga) of Brazil. *Zootaxa* **5165** 425-434.

BENETTI C J, VALLADARES L F, DELGADO J A & HAMADA N 2022. *Hydraena bahiana* sp. n., a new minute moss beetle (Coleoptera, Hydraenidae) from highlands of Northeast Brazil. *Zootaxa* **5128** 538-546.

PRINCE EDWARD ISLAND ADDITIONS

Interception traps were operated in woodland in 2018 and 2019, adding 295 beetle species to the list for this Canadian Province. *Cymbiodyta vindicata* Fall, *Contacyphon padi* (L.) and *Sacodes pulchella* (Guérin-Méneville) were the only water beetle additions. The author for correspondence is Jon Sweeney.

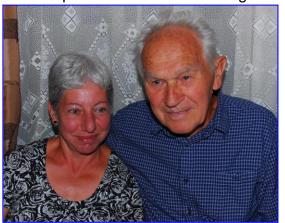
WEBSTER R P, HUGHES C & SWEENEY J D 2022. The Coleoptera of the Province of Prince Edward Island, Canada: 295 new records from Lindgren funnel traps and a checklist to species. *ZooKeys* **1107** 1-158.

ALEŠ SMETANA 6 April 1931- 25 August 2021

Jon Cooter's obituary of Aleš Smetana in the *EMM* prompts this belated entry. Rather like Jack Balfour-Browne Aleš found himself obliged to deal with Hydrophilidae as part of his work on the Canadian National Collection, whereas he would have preferred to work on another group, in his case the Staphylinidae, on which he published from 1952 until his death. As the extract of his bibliography below shows, this obligation to work on Hydrophilidae proved rather productive. For example he produced some of the best images of the Palaearctic *Cercyon*, those had got to North America. I must recall his less than enthusiastic response about reassessing the

species around *C. marinus* Thomson, his illustrations being so good as to suggest that there might be another species in the mix. He was a staph man through and through! Brunke and Davis reckon on 472 publications in all, 34 new genera, 973 new species and at least five genera and 264 species named after him.

Thanks go to Jon for providing a photo of him with wife Lise in Prague in 2011. This item provides an excuse to reproduce from his superb coverage of *Hydrochara* a



strangely alluring image of *H. lineata* (LeConte) by Go Sato. The arrival of 3D-scanning has seen an end to such artistry.

BRUNKE A & DAVIES A 2021. In memory / En souvenir de Aleš Smetana (1931-2021). Bulletin of the Entomological Society of Canada **53** 199-202.

COOTER J 2022. Aleš Smetana 1931-2021. *Entomologist's Monthly Magazine* **158** 230-231.

Publications covering water beetles and other Hydrophilidae

LÖBL I & SMETANA A (eds). *Catalogue of Palaearctic Coleoptera*. Stenstrup: Apollo Books.

2003 1 Archostemata – Myxophaga – Adephaga.
2004 2 Hydrophiloidea – Histeroidea - Staphylinoidea.
2006 3 Scarabaeoidea – Scirtoidea – Dascilloidea – Buprestoidea – Byrrhoidea.
2011 7 Curculionoidea I.

SMETANA A 1974. *Megasternum* Mulsant 1844, and *Cryptopleurum* Mulsant 1844, (Insecta, Coleoptera: Hydrophilidae): two cases of misidentified type species. *Bulletin of Zoological Nomenclature* **31** 244–246.

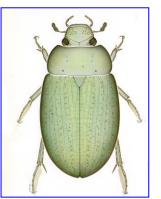
SMETANA A 1974. Revision of the genus Cymbiodyta Bed.

(Coleoptera: Hydrophilidae). *Memoirs of the Entomological Society of Canada* **93** pp 113. SMETANA A 1975. Revision of the New World genera of the tribe Omicrini tribe nov. of the hydrophilid subfamily Sphaeridiinae (Coleoptera). *Studies on Neotropical Fauna* **10** 153–182. SMETANA A 1976. Lectotype designations and remarks on some Sphaeridiinae from the Sharp Collection (Coleoptera: Hydrophilidae). *Coleopterists Bulletin* **30** 213–214.

SMETANA A 1977. A new species of the genus *Cryptopleurum* Muls. from Central America (Coleoptera, Hydrophilidae). *Pan-Pacific Entomologist* **53** 142–144.

SMETANA A 1978. Revision of the subfamily Sphaeridiinae of America north of Mexico (Coleoptera: Hydrophilidae). *Memoirs of the Entomological Society of Canada* **105** pp 292.

SMETANA A 1979. Revision of the subfamily Sphaeridiinae of America north of Mexico (Coleoptera: Hydrophilidae). Supplementum 1. *Canadian Entomologist* **111** 959-966.



SMETANA A 1980. Revision of the genus *Hydrochara* Berth. (Coleoptera: Hydrophilidae). *Memoirs of the Entomological Society of Canada* **111** pp 100.

SMETANA A 1983. Geographical distribution of the water beetle genus Hydrochara (Hydrophilidae). Special Issue Aquatic Coleoptera Workshop, XVI International Congress of Entomology Kyoto **1983** 27-33.

SMETANA A 1984. Remarks on the Sphaeridiine genera *Pelosoma* Mulsant and *Deltostethus* Sharp (Coleoptera: Hydrophilidae). *Coleopterists Bulletin* **38** 192–200.

SMETANA A 1984. Revision of the subfamily Sphaeridinae of America north of Mexico (Coleoptera: Hydrophilidae). Supplementum **2**. *Canadian Entomologist* **116** 555–566.

SMETANA A 1985. Revision of the subfamily Helophorinae of the Nearctic Region (Coleoptera: Hydrophilidae). *Memoirs of the Entomological Society of Canada* **131** pp 154.

SMETANA A 1986. Synonymical notes on Hydrophilidae (Coleoptera). *Coleopterists Bulletin* **39** 328.

SMETANA A 1988. Review of the family Hydrophilidae of Canada and Alaska (Coleoptera). *Memoirs of the Entomological Society of Canada* **142** pp 316.

SMETANA A 1990. Type species designation of *Aculomicrus* Smetana (Coleoptera, Hydrophilidae). *Coleopterists Bulletin* **44** 64.

SMETANA A 1992. Comments on the proposed conservation of the generic name *Helophorus* Fabricius 1775 (Insecta: Coleoptera) as the correct original spelling. *Bulletin of zoological nomenclature* **49** 230–231.

SMETANA A 1996. Comment on the proposed conservation of the generic names *Crenitis* Bedel 1881, *Georissus* Latreille 1809 and *Oosternum* Sharp, 1882 (Insecta, Coleoptera). *Bulletin of zoological nomenclature* **53** 278.

SMETANA A 1996. Review: Jäch M. A. & Ji L. (eds) Water beetles of China. *Coleopterists Bulletin* **50** 269. SMETANA A 1996. Review: Jäch M. A. & Ji L. (eds) Water beetles of China. *Klapalekiana* **32** 142 [in Czech].

SMETANA A 1999. Review: Hansen M.: World Catalogue of Insects. **1** Hydraenidae (Coleoptera). *Coleopterists Bulletin* **53** 231–232. SMETANA A 1999. Review: Hansen M.: World Catalogue of Insects. **1** Hydraenidae (Coleoptera). *Klapalekiana* **35** 85–86 [in Czech].

SMETANA A 1999. Review: Jäch M. A. & Ji L. (eds) Water beetles of China. **2**. *Coleopterists Bulletin* **53** 257–258. SMETANA A 1999. Review: Jäch M. A. & Ji L. (eds) Water beetles of China. **2**. *Klapalekiana* **35** 170–171 [in Czech].

Patronymics for Hydrophilidae and other water beetles

Amphizoa smetanai - ROUGHLEY RE, XIE W & YU P 1998. Amphizoidae. Description of *Amphizoa smetanai* sp.n. and supplementary description of *A. davidi* Lucas (Coleoptera). In: M.A. Jäch & L. Ji (eds) 1998. *Water Beetles of China* **2**. Vienna, Austria. 123-129.

Aculomicrus alesi - FIKÁČEK M 2010 Hydrophilidae: Sphaeridiinae (Coleoptera). pp. 323– 364. In: M.A. Jäch & M. Balke (eds) 2010. Water Beetles of New Caledonia 1. Monographs of Coleoptera 3 1–449.

FERNANDO ANGELINI 1948-2021

Fernando was born in Umbria on 26 August 1948 and was working right up to his death at Francavilla Fontana on 28 May 2021. His huge bibliography and catalogue of described taxa is dominated by Leiodidae, but his publications began with Hydradephaga in the 1970s. He described one water beetle, *Scarodytes pederzanii*, in 1973. The photograph is by M. Bocci, and thanks go to Saverio Rocchi for facilitating its use here. Jonathan Cooter has also produced an obituary



COOTER J 2022. Fernando Angelini (1948-2021).

Entomologist's Monthly Magazine **158** 299-301.

ROCCHI S & BARTOLOZZI L 2022. In memoria di Fernando Angelini. *Memorie della Società Entomologica Italiana* **99** 63-78.

TOM ECCLES - 2022

Tom was mainly interested in terrestrial Coleoptera but he had generated some good water beetle records, for example *Helophorus tuberculatus* Gyllenhal in South Lancashire. He was a member of the Sorby Invertebrate Group and also one of the authors of the book about Lancastrian sandhills. He died in July 2022.

This photograph, taken by Barry Smith and provided by Gary Hedges, was on offer to provide a cropped image of Tom alone, but it seems like a good opportunity for a parade with Tom extreme left with, to the right, Clive Washington, Sue Foster, Garth Foster, Don Stenhouse, Adrian Fowles, Gary Hedges, Steve Judd and - apologies for their anonymity to the ladies concerned - partners/wives of Tom and Adrian. It was taken during a search for *Bagous* in those sandhills on 25 May 2018.



THOMAS J R A, ECCLES T & BOWESTEAD S 2016. *The Coleoptera of the sandhills of South Lancashire*. The Raven Entomological and Natural History Society.

GIORGIO PONTUALE 1964-2022

Giorgio Pontuale died suddenly on 1 August 2022. He was a biologist by profession and often collected water beetles with Vincenzo Volpe, but was mainly interested in Carabidae.

BOOK CURATION The Club Library retains at its core books presented by Jack Balfour-Browne most of which belonged in turn to his father's library. Curation is done when money can be found and, more importantly, the right contact. Elizabeth Lumsden has expertly repaired Jack's copy of his father's text-book of practical entomology, published by Edward Arnold in 1932. It still looks well-used, no fault of Elizabeth, but it is now in one piece. The following note was found inside from Frank Balfour-Browne, dated 2 November 1937... *My dear Jack*

Herewith the book, as promised. I shall be in London on Friday and will come to the museum about 11.am, if you can have a box of named specimens ready by then. Don't reduce the number too much by exchanges with the museum as I want specimens for cutting up.

Your affectionate father

HEREFORDSHIRE FIELD MEETING 27-29 MAY 2023

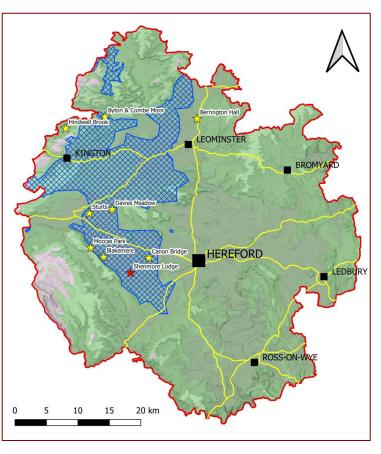
The focus of the field meeting will be northwest Herefordshire, coinciding with the distribution of Ice Age Ponds in this English county, corresponding to the area glaciated briefly in the Devensian. Herefordshire has up 1,500 ponds of glacial origin. Most widespread are kettle holes formed from the gradual melting of large blocks of ice buried within glacial deposits, leaving depressions subsequently filled with water. Kettle hole ponds are associated with a distinctive hummocky moraine landscape, with clusters of ponds interspersed amongst the hummocks. These ponds sit in closed depressions, lacking inflows and outflows. The kettle holes would have been steep-sided initially, but over time the accumulation of sediment has resulted in a much shallower, saucer-shaped, profile. These ponds range in size up to over 100 m in diameter. There are a number of glacial lakebed depressions, the best known being in the Letton Lakes area north of the River Wye between Staunton on Wye and Eardisley. The ponds there are believed to have originated in the bed of a glacial lake some four kilometres in length. After the lake drained, freeze-thaw cycles of saturated sediment under permafrost conditions would have created ice-cored mounds known as lithalsas. When these eventually melted, they left behind waterfilled hollows. Another type of Ice Age Pond lies in glaciofluvial deposits where sediment has been sorted, redeposited and eroded by meltwater, near to or under the glacier. A group of ponds thought to have been formed in this way occur on the south side of the River Wye in the Bredwardine/Moccas/Blakemere area.

This varied range of Ice Age Pond types in Herefordshire creates a mixed range of habitats for beetle faunas. Characteristic water beetles include *Enochrus nigritus* (Sharp) and *Hydrochus elongatus* (Schaller) both of which are widespread in Ice Age Ponds across the county.

Provisional list of sites that should be available

- Moccas Park National Nature Reserve Contains ponds formed in glaciofluvial conditions and a small kettle hole. The largest of these is the Lawn Pool which supports *Graphoderus cinereus* (L.) at its only known Herefordshire site. *Dryops auriculatus* (Fourcroy) and *Helochares obscurus* (Müller) occur here and at a small number of other Ice Age sites nearby. Target species recorded in the 20th Century *Georissus crenulatus* (Rossi), *Heterocerus fenestratus* (Thunberg), *H. marginatus* (Fab.), and *Bagous* species.
- Letton Lakes area. Herefordshire Wildlife Trust has three reserves at The Sturts with over 30 ponds, mostly shallow and seasonal. Norton Wood Orchard and Davies Meadow reserves nearby also contain Ice Age Ponds. All support a diverse water beetle fauna.
- Ponds south of the River Wye between Blakemere and Clehonger include several ponds owned by the Duchy of Cornwall estate including the fen community at the Flits National Nature Reserve and privately owned ponds at Canon Bridge. Agabus undulatus (Schrank) was recently found at the Mere Pool at Blakemere, although this population is under threat following fish colonisation.
- Berrington Hall Pool, National Trust, recently restored through partial desilting and removal of carp, has a broad range of aquatic plants and associated habitats. Target species: *Dytiscus circumcinctus* Ahrens last recorded in 1998.
- Sites near Presteigne, Byton and Combe Moor, where Laccornis oblongus (Stephens) was recorded in 1973, and the Hindwell Brook valley and Knill Farm, both totally unknown to us. The brook is a potential site for *Bidessus minutissimus* (Germar) found in a nearby (but inaccessible) quarry pool in 2009. Knill Farm contains a number of ponds, possibly of Ice Age origin.

We expect to meet up on Saturday 27 May 2023 at Shenmore Lodge, Madley, courtesy of the Duchy of Cornwall. There is a video about the Lodge - just search "Shenmore Facebook for Lodge" and "Whitney Sawmill". Try to get accommodation west of Hereford. We are working on a place for dinner on the Saturday evening. For those of you wishing to come by public transport, there should be plenty of car space available as we have been offered the use of Herefordshire Wildlife Trust's minibus for the period of the survey. We are anxious to make the most economical use of transport SO be prepared to share. Shenmore is 75 miles (120 km) from



Cardiff Airport, 120 miles (193 km) from East Midlands Airport and about half an hour from the nearest motorway, the M50. 1:25,000 Ordnance Survey maps 189, 201 and 202 or 1:50,000 Sheet 149 cover nearly all of the area with good discounts from <u>Dash4it</u>.

<u>Contact</u> Will Watson (<u>w.r.c.watson/at/btinternet.com</u>) to confirm an interest in attending this meeting. Give him an idea of your time of arrival and mode of transport.

SWEDISH SWEETS

Our President assures us that these liquorice pastilles are readily obtainable in Uppsala.



Latissimus is the newsletter of the Balfour~Browne Club.

It was produced in November 2022

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