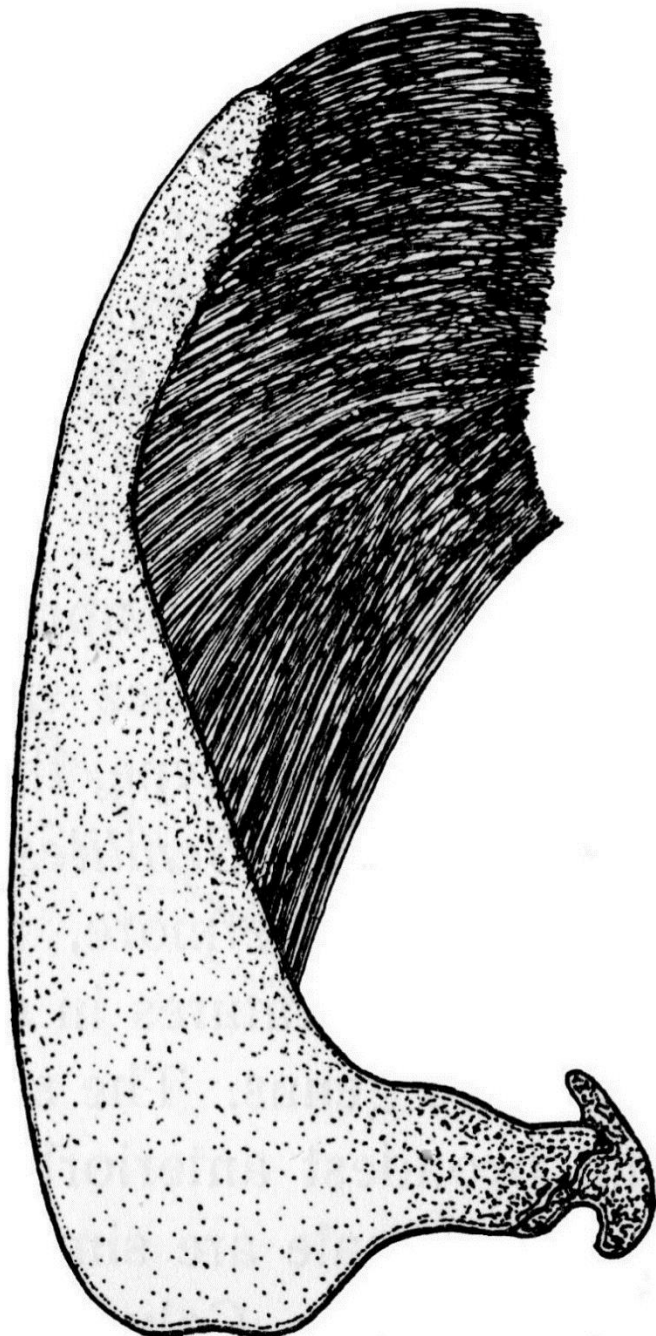


ISSN 0966 2235

LATISSIMUS

NEWSLETTER OF THE BALFOUR-BROWNE CLUB



Number 37

March 2016



In memoriam Per Brinck, 1919-2013

Front cover: the paramere of *Rhantus tristanicola* (Brinck, 1948), as illustrated in the description of this species as *Senilites tristanicola* from Tristan da Cunha, and a photograph of the beetle
courtesy of Jérôme Morinière

KOLEOPTEROLOGISCHE RUNDSCHAU 85

“A journal with high impact (and without factor!)”

The subtitle on the front page says it all, a journal that claims no impact factor and yet continues to attract the most important coleopterological papers. Volume **85** kicks off with a great rarity, a new *Agabus* in Europe.

AGABUS LOTTI

This new *Agabus* strongly resembles *uliginosus* (L.), the male genitalia providing the best characters. It was detected originally from the Abruzzi National Park in Italy, and is also known from Austria, the Czech Republic, Hungary and Slovakia. *A. uliginosus* also occurs in Slovakia but the two species have not so far been found together. More material needs to be checked, but specimens from England, Belarus, France, Germany, Poland, Scotland and Sweden are definitely *uliginosus*. The type of *Agabus reichei* Aubé is considered not to be *lotti*, being more like the reddish form of *uliginosus*. The new species is of course named after the late Derek Lott.

TURNER C R, TOLEDO M & MAZZOLDI P 2015. A previously unrecognised species of *Agabus* Leach, 1817 in Italy and Central Europe. *KR 85* 1-6.

HYDATICUS SEXGUTTATUS GROUP

Fourteen species, including five newly described ones, are listed as constituting the group, with four “resembling species” including one new one and one new subspecies. Although mainly black these *Hydaticus* are often brightly marked in yellow or reddish brown. Unlike some other *Hydaticus* these species are comparatively scarce in collections. They appear to specialise in habitats in lowland rainforests and they are now largely confined to remnants of primary forest. The paper is comprehensively illustrated and with a key and distribution maps.

WEWALKA G 2015. Revision of the *Hydaticus (Prodaticus) sexguttatus* species group, and resembling species from the Palaearctic, Oriental, Australian and Pacific Regions. *KR 85* 7-35.

SRI LANKAN PESCHETIUS

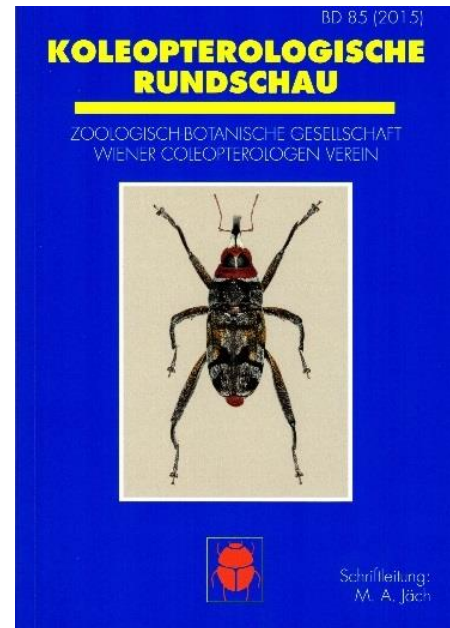
P. taprobanicus is described from material collected in 1985 by the late Tor-Erik Leiler. This brings the total known *Peschetius* to ten species.

BISTRÖM O & BERGSTEN J 2015. A new species of *Peschetius* Guignot described from Sri Lanka (Coleoptera: Dytiscidae). *KR 85* 36-60.

HYDROPORUS INCOMMODUS IN AUSTRIA

Some members will remember this species from the Club meeting in Slovakia in 2009. In the field it looks like a large *H. palustris* (L.) perhaps combined with an *H. incognitus* Sharp. The habitat is in small ponds with sedges and other emergent vegetation, sometimes partly shaded. It is suggested that this species should be regarded as Critically Endangered in Austria.

JÄCH M A 2015. *Hydroporus incommodus* Fery, 2006 neu für Österreich! (Coleoptera: Dytiscidae). *KR 85* 61-66.



KOLEOPTEROLOGISCHE RUNDSCHAU 85 (continued)

NEW GREEK OCHTHEBIUS

O. marijanmatoki is newly described from the Greek island of Evia (also known as Euboea). It is in the *metallescens* group and is similar to the Montenegrin *pretneri* Jäch.

JÄCH M A & DELGADO J A 2015. Revision of the Palearctic species of the genus *Ochthebius* Leach, 1835 XXX. *Ochthebius marijanmatoki* sp.n. from Greece (Coleoptera: Hydraenidae). **KR 85** 67-71.

SOUTH AFRICAN HYDRAENID

Sebasthetops altimontanus is described from mountains in the Western Cape Province of South Africa as the second species in the genus.

BILTON D T 2015. A second species of *Sebasthetops* Jäch from South Africa (Coleoptera: Hydraenidae). **KR 85** 73-80.

BOLIVIAN TROPICUS

Twenty species of Heteroceridae are known from Bolivia, plus this newly described species named after Stanislav Skalický's cat.

SKALICKÝ D T 2015. *Tropicus kolouseki* sp.n. from Bolivia (Coleoptera: Heteroceridae). **KR 85** 239-242.

DONACIA AS A GENUS

The practice of dividing large genera into smaller ones is criticised using as an example *Donacia*. The subgeneric classification was studied with reference to morphology, host plants and DNA. *Askevoldia* Kippenberg (type *D. reticulata* Gyllenhal), *Cyphogaster* Goecke (type *D. provostii* Fairmaire) *Donacia* s. str., (type *D. crassipes* Fab.), *Donaciella* Reitter (type *D. tomentosa* Ahrens) and *Pseudodonacia* Reitter (type *D. kraatzii* Weise) are re-established as subgenera. *Donacocia* Gistel (type *D. brevicornis* Ahrens) has priority over *Donaciomima* Medvedev and is also used as a subgenus. No less than nine new subgenera are proposed, *Arundodonacia* (type *D. clavipes* Fab.), *Brevidonacia* (type *D. semicuprea* Panzer), *Crassodonacia* (type *D. polita* Kunze), *Extradonacia* (*D. hirticollis* Kirby), *Flavodonacia* (type *D. fennica* Paykull), *Glabrodonacia* (type *D. edentata* Schaeffer), *Mergodonacia* (type *Leptura versicolora* Brahm), *Smaragdonia* (type *D. dentata* Hoppe), and *Sotaiana* (type *D. sparganii* Ahrens – also includes *D. aquatica* L.). A key to these 16 subgenera is provided with a hint of things to come in that four species (*caerulea* Olivier, *flemola* Goecke, *mistschenkoi* Jacobson, and *rugosa* LeConte) are keyed out separately, presumably meaning that they might yet need more subgenera. This paper covers previous attempts at subgeneric division, including the treatment by Kölsch and Pedersen (2008. Molecular phylogeny of reed beetles (Col., Chrysomelidae, Donaciinae): the signature of ecological specialization and geographical isolation. *Molecular Phylogenetics and Evolution* **48** 936-952 – see **Latissimus 25** 24) that indicated five species-groups.

KIPPENBERG H 2015. Strukturierung von artenreichen Chrysomelidae- Gattungen, am Beispiel der Gattung *Donacia* Fabricius (Coleoptera: Chrysomelidae). **KR 85** 249-282.

NEW FINDS IN AUSTRIA

New provincial records are given for *Acilius canaliculatus* (Nicolai), *Hydraena intermedia* Rosenhauer, *Macronychus quadrituberculatus* Müller, and *Tanysphyrus lemnae* (Paykull). The *Macronychus* was caught in a light trap that also caught *Ilybius*

quadriguttatus (Lacordaire), *Rhantus grapii* (Gyllenhal), *R. suturalis* (MacLeay), *Hydroglyphus geminus* (Fab.), *Anacaena limbata* (Fab.), *Contacyphon laevipennis* (Tournier), *C. padi* (L.), *C. pubescens* (Fab.), *Scirtes hemisphaericus* (L.), *Heterocerus fenestratus* (Thunberg), and *H. fuscus* Kiesenwetter.

SCHUH R, JÄCH M A, SCHÖNLEITHNER W, BROJER M, HOLZER E, KAHLEN M & LINK A 2015. Bemerkenswerte Käferfunde aus Österreich (XXI) (Coleoptera). *KR* **85** 329-333.

YEMENI BEETLES

This paper appears to have grown out of a survey of Socotra. Socotra Island lies in the Indian Ocean about 240 km east of the Horn of Africa. It is associated with Yemen – and this paper also concerns Dhofar. *Hyphydrus dioscoridis* is newly described from Socotra as a species in the *signatus* group. Sixty described species of Hydradephaga are discussed.

Five new species of Limnichidae are described in the second paper, these being the first of this family from the area. The various parts of the genitalia are depicted, the female parts looking to be just as diagnostic as those of the male.

The new *Ochthebius* in the third paper is a member of the *foveolatus* subgroup. It was found on wet travertine rock. *Limnebius dioscoridus* Jäch & Delgado occurred with it. To save you rushing for Google®, travertine rock is a sedimentary rock based on calcium carbonate and often produced around hot springs.

HÁJEK J & REITER A 2014. Adephagous water beetles (Coleoptera: Gyrinidae, Haliplidae, Noteridae, Dytiscidae) of Yemen and Dhofar region (Oman) with description of a new *Hyphydrus* from Socotra Island. *Acta entomologica musei nationalis Pragae* **54** 63-99.

HERNANDO C & RIBERA I 2014. The Limnichidae (Coleoptera) of the Arabian Peninsula and the island of Socotra. *Acta entomologica musei nationalis Pragae* **54** 173-189.

JÄCH M A & DELGADO J A 2014. *Ochthebius hajeki* sp. nov. from Socotra Island (Coleoptera: Hydraenidae). *Acta entomologica musei nationalis Pragae* **54** 115-119.

TURKISH HYDRADEPHAGA

The following beetles were identified from samples in this lake in north-east Turkey:- *Noterus clavicornis* (De Geer), *Rhantus suturalis* (MacLeay), *Graphoderus cinereus* (L.), *Hydaticus ponticus* Sharp, *Hydroglyphus geminus* (Fab.), *Scarodytes halensis* (Fab.), *Hygrotus impressopunctatus* (Schaller), *H. parallelogrammus* (Ahrens), *H. inaequalis* (Fab.), and *Laccophilus minutus* (L.).

DARILMAZ M C, POLAT A, İNCEKARA Ü & TAŞAR G E 2015. Faunistic study on Noteridae and Dytiscidae (Coleoptera: Adephaga) in Ramsar Site Kuyucuk Lake (Turkey), with further distributional notes. *Munis Entomology & Zoology* **10** 441-445.

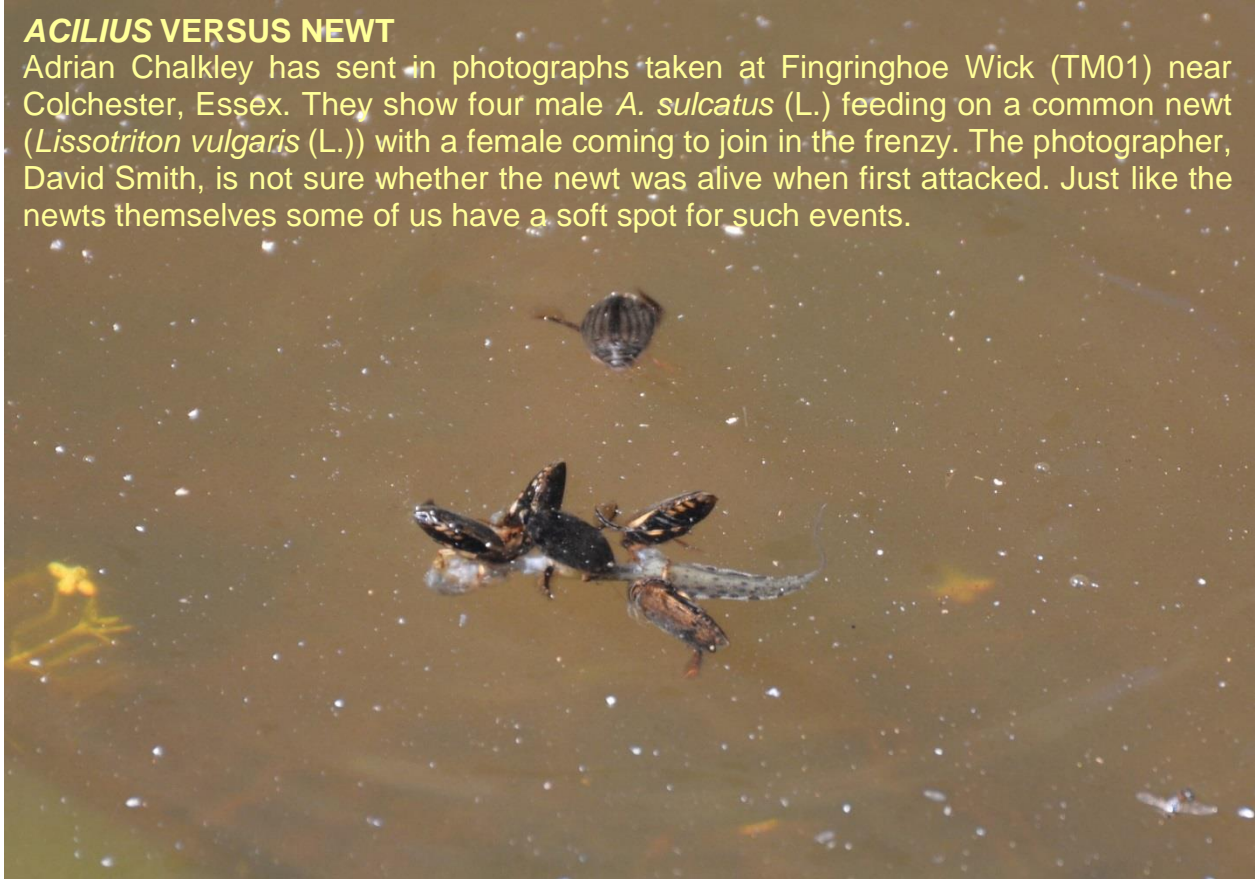
STERNHYDRUS LARVA

Sternhydrus Brinck is an Australasian cybistrine diving beetle genus. The larvae of *Sternhydrus atratus* (Fab.) are described. The genus is thought to be nearest to *Onchohydrus* Schaum & White and *Spencerhydrus* Sharp.

MICHAT M C, ALARIE Y & WATTS C H S 2015. Phylogenetic placement of the genus *Sternhydrus* (Coleoptera: Dytiscidae: Cybistrini) based on larval morphology, with description of *S. atratus*. *Annals of the Entomological Society of America* doi: 10.1093/aesa/sav067 12 pp.

ACILIUS VERSUS NEWT

Adrian Chalkley has sent in photographs taken at Fingringhoe Wick (TM01) near Colchester, Essex. They show four male *A. sulcatus* (L.) feeding on a common newt (*Lissotriton vulgaris* (L.)) with a female coming to join in the frenzy. The photographer, David Smith, is not sure whether the newt was alive when first attacked. Just like the newts themselves some of us have a soft spot for such events.



TUSCAN BYRRHOIDEA

This is an update of a 1997 paper in *Quaderni del Museo di Storia Naturale di Livorno*. The checklist is impressive – 17 species of Elmidae including four *Esolus* species, 13 species of Dryopidae, 6 Limnichidae and *Eubria palustris* Germar. *Elmis obscura* (Müller) is removed from the list and *Limnichus auricomus* Reitter, as recorded previously, has been reduced to a synonym of *L. pygmaeus* Sturm.

MASCAGNI A, MONTE C, ROCCHI S & TERZANI F 2015. Contributo alla conoscenza dei Coleotteri degli ambiente acquatici della Toscana (Italia centrale). IV. Aggiornamenti: Elmidae, Dryopidae, Limnichidae, Psephenidae (Coleoptera: Byrrhoidea). *Onychium* **11** 127-138.

HETERO CERIDAE PART 2

In *Latissimus* **35** (page 22) Part 1 was described...”The work is so comprehensive that it is difficult to envisage what might be in part 2.” The answer is an interesting compilation on the ecology of Heteroceridae, plus some amendments to the first part. The natural enemies of the family are also reviewed, with *Augyles flavidus* (Rossi) and *Heterocerus obsoletus* Curtis as new hosts for the laboulbenialian *Botryandromyces heteroceri* (Maire). Chalcid wasps have been hatched from heterocerid pupae – but not yet identified.

MASCAGNI A 2015. The variegated mud-loving beetles of Europe (second part) (Coleoptera: Heteroceridae). *Onychium* **11** 117-126.



VILAFRANCA DEL BIERZO, LEÓN 26-29 JUNE 2015

Villafranca is a town surrounded by mountains, the Cantabrians, the Montes de León and those of Galicia. Permits were obtained for the Biosphere Reserve of Ancares Leoneses, with a very diverse beetle fauna with many endemics, most notably the well-named *Hydraena monstruosipes* Ferro.

The meeting started with sad news, a loss in Josefina Garrido's family, but we were delighted to see her appear in time for the main proceedings. Luis-Felipe Valladares was also pleased, as it reduced the burden on him a little. We always try to say that no organisation is necessary for our meetings, but that is of course not true. The absolute basics are that permits have to be negotiated for key sites and accommodation needs to be fixed, bedrooms allocated and money prised out of people before they leave. And then there are all those little extras...like dances.

Not many of our meetings can claim to have organised an advance party but Clive Turner, for the very good reason of wishing to escort his son on his holiday, stuck to the original dates proposed for this meeting and did the rounds of the proposed sites. He had promised to leave some sloe gin behind the bar but it may have been carried off by a ghostly nun. Certainly, the bar was inspected very thoroughly in the cause of rehydrating in temperatures rising to 41 °C. Another marker for Clive was what appeared to be a pillowcase hanging beside the Río Berbia at a point where *Stictotarsus bertrandi* (Legros) was frequent.

The accommodation was a 17th Century religious college, now the Albergue San Nicolás El Real Hospedería. It is on the Camino de Santiago, the pilgrims' route taken from the Holy Land and then across northern Spain to Santiago de la Compostela. Our pilgrimage was good by our standards, 41 people from 11 countries, but nothing like the stream of pilgrims on the Camino, all bearing their badge of a scallop shell – we missed a trick here in that we should each have pinned on a *Cybister*.

One expects heat in Spain, in fact looks forward to it, but it was noticeable that even the locals were suffering and that siesta was essential to survive the hottest part of the afternoon (this is a lie, we just kept driving in air-conditioned hire cars). The evenings were spent well with excellent food at the Albergue on the Friday in strong competition with the Club Dinner set at a local restaurant on the Saturday, followed on the Sunday by a wine-tasting at Vinos Valtuille, which included so much quality food that it couldn't possibly be described as tapas.

Popular pastimes included video clip viewing, notably the belly of an anaesthetised beaver being vacuumed with a pooter and Anders Nilsson dancing in the fiesta after the wine-tasting.

Although there were no talks arranged the speechifying after dinner on the Saturday took a little time – in order – Robert Angus noting the 25th anniversary of the Club in Spain (and in León); Pierre Queney detailing the interest and problems associated with the insect lists from the 2014 meeting in Charité-sur-Loire; Robert recounting the history of



the Ierse Kevers trophy and presenting it this year to Andres Millán for his work on the Spanish Atlas; Andres himself concerned to stress the importance of work by his colleagues on the Atlas; Hans Fery to pass on regards from those who could not make the meeting this year; and almost lastly – a nice surprise visit by Juan Régil Cueto, who



had organised the meeting 25 years ago. Somewhere in amongst all of that was the extraction from Robert of the strong possibility of a meeting in Hungary (see page 41) eastern Europe early in 2016 – and the formal meeting ended with a competition. It has been hoped that everyone present might receive a copy of the Atlas but that was going to be too costly. Instead, eight copies were raffled to those who not received one earlier, a very reasonable approach excellently prosecuted by Josefina and Luis-Felipe.

An itinerary had been arranged to which many people adhered. We didn't because I persuaded my carload to leave to avoid the tradition milling-around on the first morning. Thus we took the wrong road, slightly to the west and could not get to the top of the Ancares, but got as far as Porcarizas.

We found most of the river species in the Río Berbia near Veguellina, and I was particularly pleased with a single male *Ochthebius heydeni* Kuwert.

Sunday was devoted to Las Médulas, a Roman gold-mining area with several lagoons. This time we found them and others didn't, mainly because of an altercation with the lady in charge of the car park. But her restaurant proved alluring as the temperature went crazy again. The lagoon list was very Iberian – *Rhantus hispanicus* Sharp, *Liopterus atriceps* (Sharp), and *Hydroporus vagepictus* Fairmaire & Laboulbène. Monday was time

Lago Somido with the peaks of Las Médulas in the background – for the benefit of those who could not find it (Franck Bameul with the net)



to return to the coast for the flight home. This time we took the earlier advice and got to the Alto del Puerto at the top of Los Ancares. This has of course been Clubbed to Death two days before but we still managed to find *monstruosipes*. The bog on road into Galicia was a good place to be on such a fine day but it was so familiar, just like some valley fens in Sussex. What took place when we got back to Piedras Blancas ready for the flight from Asturias Airport is another story but I think we are alright now.



A great group photograph, presumably taken by whoever is missing unless of course they Photoshopped themselves into it. More photographs on Facebook at BalfourBrowneClub.

SILESIAN HYDROPHILIDAE

Fifty-nine species are listed for Lower Silesia, Poland, and 62 for Upper Silesia. There are no surprises other than perhaps uptake of the speculative idea that *Megasternum* should be split into two species, *concinnum* (Marsham) s. str. and *immaculatum* (Stephens), something where we are still waiting for confirmation using DNA and formal specification of types.

GREN C, SZOŁTYS H, GRZYWOCZ J & KRÓLIK R 2015. Chrzążczce (Coleoptera) Śląska Dolnego i Górno – dotychczasowy stan poznania oraz nowe dane faunistyczne: kaluźnicowate (Hydrophilidae). *Acta entomologica silesiana* **23** 1-24.

MITE ON SCIRTID

In June 2015 Peter Zwick found a specimen of *Contacyphon laevipennis* (Tournier) in the Hainich National Park in Thuringia bearing six larvae and a large protonymph attached to the body underneath the elytra. This has been identified as *Piersigia intermedia*, differentiated from two other species of *Piersigia* known from Germany, *P. koenikei* Viets and *P. limophila* Protz. The ecology and life history of *P. limophila* was originally described from *Enochrus ochraceus* (Melsheimer) in Japan. An unnamed piersigiid has been noted in association with an *Anacaena*.

MÜLLER H 2015. Erste Nachweis parasitischer Wassermilbenlarven an Sumpfkäfern: *Piersigia intermedia* Williamson, 1912 (Acari: Hydrachnidia: Piersigiidae) parasitert *Contacyphon laevipennis* (Insecta: Coleoptera: Scirtidae). *Lauterbornia* **80** 112-114.

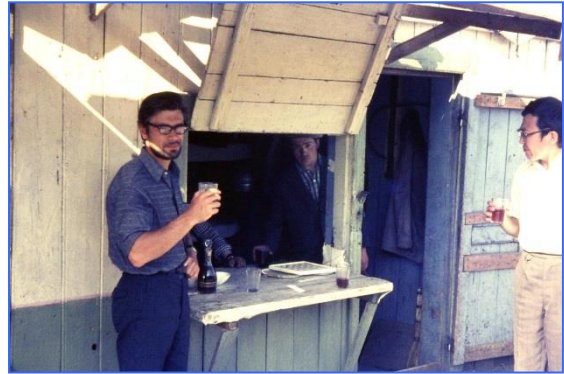
IN THE LAND OF THE GREAT RIVER

Robert Angus

In 2011 (*Latissimus* 30 2-7) I gave an account of the first part of my East Siberian travels in 1970, accompanied by Dima Kasparyan of the Zoological Institute in Leningrad. I ended the narrative with “Next was Yakutia – Land of the Great River (The Lena) – but that is another story.” This is my attempt at that other story.

We flew from Irkutsk to Yakutsk and were duly met by my hosts in the Biological Institute of the Yakutsk Filial of the Soviet Academy of Sciences, Dr I. P. Shcherbakov, head of the Institute, a forest scientist, and the head of the Entomology Laboratory, Dr Yu. N. Ammosov, a lepidopterist and forest entomologist. They suggested an interesting programme of activities which occupied our time in Yakutia.

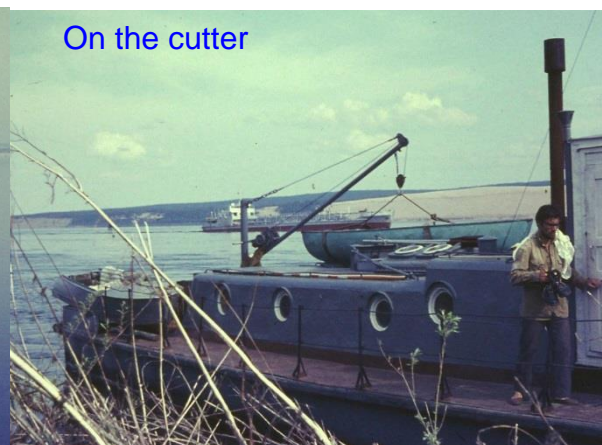
First was an exploration of the town. We were shown the oldest building they had, a larchwood tower dating from the time of the founding of St Petersburg, originally one of four at the corners of a palisaded square. Then the rather undistinguished main streets of the town, but also some interesting old wood houses, some rather twisted about by frost-heave in the ground. And the market place where we ended up drinking some rather dreadful Georgian wine sold by an enterprising Georgian stallholder, who had a picture of his compatriot Stalin on the back wall of his stall!



Our first trip was up the Lena, on the Academy’s cutter. The Lena is something else – a truly enormous river, the like of which I had never seen before – and have never seen since! From time to time we pulled in to the bank for beetle-collecting in riverside pools and marshes. Highlights included *Helophorus croaticus* Kuwert and *Gyrinus pullatus* Zaitsev. Sleep that night was not good – it was very hot and the mosquitoes were much in evidence. It was a relief to come up on deck in the early morning stillness, to be rewarded with a magical view over the wide, wide river. Then up the sandy bank to see a marsh behind filled with brilliant blue irises and white Calla lilies.



Morning on the Lena



On the cutter

Next trip was to Chuchur Muran, site of the Yakutsk botanic garden, lying at the western edge of the Lena valley, about 10 km west of Yakutsk. At present the river by Yakutsk flows along the eastern edge of its valley, and the eastern bank rises as a line of steep bluffs. The western bluffs are at the edge of the Chuchur Muran site, which was a fascinating place, bits of cut-off river Lena forming freshwater pools, with saltmarsh ground between them. Highlights included *Ochthebius marinus* Paykull and *O. lenensis* Poppius. It was very hot and the mosquitoes were joined by hordes of vicious horse-flies. Swimming in the pools was a welcome relief from the heat, and sunbathing on a large floating plank was made possible by a fortunate piece of Applied Entomology – as the horse-flies set out to get us they were intercepted and despatched by the resident dragonflies! It was at Chuchur Muran that an attractive blonde girl, having discovered I was British, came up and introduced herself as Katya Douglas, with an English surname. I told her that her surname was in fact Scottish, like my own. It was certainly a surprise to meet a local with a Scottish surname in Yakutsk! I wondered if her distant ancestor had been what my sister-in-law would call “some Jimmy” who had jumped ship on a voyage to find the Northeast Passage – but that seemed a bit fanciful!



After Chuchur Muran we had a few days collecting along the Vilyuyskiy Trakt, a road leading west from Yakutsk. We collected to about 50 km west of Yakutsk. Picnic lunch was accompanied by billy-tea, which we drank sitting up to our necks in the river to avoid the mosquitoes. And in this area the first big surprise – “Dima, I’ve just found a Canadian water-beetle!” “How do you know it is Canadian?” “I described it.” It was *Helophorus parasplendidus* Angus, originally described from the Canadian Arctic. To find such a surprising range-extension for a known species is even more exciting than finding a new species.

Our next foray was to Olëkminsk (“ë” is pronounced “yo” in Russian, but remains a form of e) in southern Yakutia. The Biological Institute had a field-camp there, and I was interested to visit the place as it was one of the localities where Poppius had collected at the beginning of the 20th Century. The journey by paddle-boat up the Lena took more than a day, and involved passing the spectacular “Pillars of the Lena” (Lenskije stolby), stacks of rock lining the west bank of the river for many miles. Again it was very hot and Dima and I stripped to the waist, just wearing shorts. This brought a reprimand from the crew. “This is



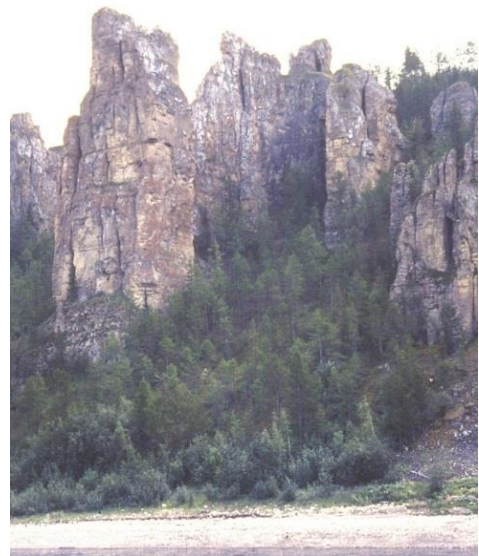
very hot and Dima and I stripped to the waist, just wearing shorts. This brought a reprimand from the crew. “This is

not a tourist boat, read the notice.” The notice said “It is forbidden to go on the decks in swimming-trunks (I indicated that I was not wearing swimming-trunks and had underpants beneath my shorts), and in ‘mykakh’”. “What are mykakh Dima?” “What you say (from TV programmes!) we wear to sleep in and you don’t.” I pointed out that I wasn’t wearing a vest! They gave up and said we could sunbathe on the upper deck normally reserved for crew. So there we sat, drinking champagne – but don’t get too envious, it was very sweet Soviet champagne, with added dead yeast at the bottom of the bottle for extra flavour.

Olëkminsk was interesting – shallow riverside pools had abundant *Helophorus oblongus* LeConte, and in a trickling stream I took my only specimen (ever) of *H. tuberculatus* Gyllenhal. A vagrant – there was no burnt ground and that was the only specimen.

Our final trip was to Olenëk in the forest-tundra zone of northern Yakutia. Olenëk means a Reindeer fawn and the local people are the Evenki who herd Reindeer in much the same way as the Lapps. It was certainly an interesting place, with sparse stunted larch woodland by the Olenëk River, this giving way to more open ground higher up. At one stage we found a boggy area with the stunted trees less than a metre high. I was told that these little trees were just as old as the rather larger ones either side. In this bog I found my only Siberian *Hydroporus glabriusculus* Aubé. Then we were warned that an Arctic storm was approaching and we had the choice of leaving tomorrow or being trapped for some days till it passed. We opted for tomorrow.

So, back to Yakutsk. Dima suggested we took the car-ferry across the Lena as the fauna east of there was sometimes different, more like the Soviet Far East. I hoped to collect some fresh *Helophorus* to bring home alive, but now, at the end of the third week in July, the season had changed. The shallow early-season pools had dried up and there



were almost no *Helophorus* to be found. Only a few *H. pallidus* Gebler, not a species I needed alive. Otherwise the most useful beetles were a pair of the East Palaearctic *Graphoderus elatus* Sharp – a granulate female of the “*verrucifer*” form and a male with broadened mid-tarsi.

And that was that. We flew back to Irkutsk in an Antonov 10, a lumbering lorry of a plane. I was fascinated to see ice forming on the heads of the rivets pinning the upholstery to the sides of the fuselage – in my mind’s eye I see crystals growing outwards, but I fear memory may have “improved” the image! Then I took the flight to Moscow and Dima left for the Soviet Far East. All that remains is to thank all who gave me such a splendid time. Drs Shcherbakov and Ammosov are sadly no longer with us, but Dima still is. The end of a truly epic trip. After that I had two years in Oxford and was able to mount up all my Siberian beetles. Holotypes of new species are in the Zoological Institute (ZIN) in St Petersburg, and the rest of the material is in the Natural History Museum in London.

Below is the list of beetles taken. Most Dytiscidae were identified by Anders Nilsson, *Hygrotus* by Hans Fery, *Laccobius* by Elio Gentili and Hydraenidae by Manfred Jäch.

Table Beetles taken in Yakutia - 1 by River Lena to 140 km south of Yakutsk; 2 Chuchur Muran; 3 Vilyuysky Trakt to 50 km west of Yakutsk; 4 east of River Lena to 18 km east of Yakutsk; 5 Olëkminsk; 6 Olenëk

Beetles	1	2	3	4	5	6
Noteridae						
<i>Noterus crassicornis</i> Müller	+					
Dytiscidae						
<i>Laccornis oblongus</i> (Stephens)			+			
<i>Hygrotus inaequalis</i> (Fab.)	+	+				
<i>H. quinquelineatus</i> (Zetterstedt)	+					
<i>Hydroporus glabriusculus</i> Aubé						+
<i>H. notabilis</i> LeConte (<i>arcticus</i> Thomson)			+			+
<i>H. punctipennis</i> J. Sahlberg			+			
<i>H. sibiricus</i> J. Sahlberg						+
<i>H. umbrosus</i> (Gyllenhal)						+
<i>Ilybius angustior</i> (Gyllenhal)						+
<i>I. erichsoni</i> (Gemminger & Harold)	+	+	+			
<i>I. subaeneus</i> (Erichson)	+					
<i>Agabus adpressus</i> Aubé	+					
<i>A. coxalis</i> Sharp	+					
<i>A. fuscipennis</i> (Paykull)	+			+		
<i>A. poppiusi</i> Nilsson ¹		+				
<i>A. pallens</i> Poppius	+		+			
<i>A. serricornis</i> (Paykull) ²						+
<i>A. thomsoni</i> (J. Sahlberg)						+
<i>A. unguicularis</i> (Thomson)	+					
<i>Rhantus frontalis</i> (Marsham)	+					
<i>Colymbetes dahuricus</i> Aubé					+	
<i>Graphoderus austriacus</i> (Sturm)	+	+				
<i>G. elatus</i> Sharp				+		

Table continued

Gyrinidae						
<i>Gyrinus pullatus</i> Zaitzev	+					
Hydrochidae						
<i>Hydrochus brevis</i> (Herbst)					+	
<i>H. elongatus</i> (Schaller)					+	
<i>H. kirgisticus</i> (Motschulsky) ³					+	
Helophoridae						
<i>Helophorus tuberculatus</i> Gyllenhal					+	
<i>H. bergrothi</i> J. Sahlberg			+			
<i>H. aspericollis</i> Angus	+	+	+		+	
<i>H. browni</i> McCorkle	+		+			
<i>H. croaticus</i> Kuwert	+					
<i>H. lapponicus</i> Thomson	+	+	+		+	
<i>H. nanus</i> Sturm	+	+	+			
<i>H. nigricans</i> Poppius	+		+		+	
<i>H. oblongus</i> LeConte	+	+	+		+	
<i>H. orientalis</i> Motschulsky (♀♀)	+				+	
<i>H. pallidus</i> Gebler	+			+	+	
<i>H. parasplendidus</i> Angus		+	+			+
<i>H. poppii</i> Angus (long struts) ⁴			+		+	
<i>H. poppii</i> Angus (short struts) ⁴		+	+			
<i>H. praeanus</i> Łomnicki	+	+	+			
Hydrophilidae						
<i>Laccobius cinereus</i> Motschulsky		+	+			+
<i>Enochrus bicolor</i> (Fab.)		+				
<i>E. quadripunctatus</i> (Herbst)	+	+	+		+	
<i>Hydrobius fuscipes</i> Leach ⁵	+	+			+	+
<i>Hydrophilus dauricus</i> Mannerheim	+					
Hydraenidae						
<i>Ochthebius costatellus</i> Reitter		+				
<i>O. lenensis</i> Poppius		+				
<i>O. marinus</i> (Paykull)		+				
? <i>O. pusillus</i> Stephens	1♀					

Notes.

1. *A. poppiusi* is the eastern member of a species-pair, the western one being the very similar *A. lineatus* Gebler (Nilsson, 2003).

2. The pronotal reticulation is less regular than in Scandinavian material, and resembles an English fossil from the middle of the Last Glaciation (Angus, 1997)

3. Angus (1977) placed *H. kirgisticus* as a synonym of *H. flavipennis* Küster, but Shatrovsky (1993) placed it as a separate species. Ignacio Ribera tells me that DNA analysis indicates that there is a species-complex here.

4. *H. poppii* has two forms of aedeagus, with either long or short struts. I don't know whether they are truly conspecific.

5. For what it is worth, none of the material appears referable to *H. arcticus* Kuwert.

References

ANGUS R B 1977. A re-evaluation of the taxonomy and distribution of some European species of *Hydrochus* Leach (Col., Hydrophilidae). *Entomologist's Monthly Magazine* **112** (1976) 177–201.

ANGUS R B. 1997. Challenges and rewards in the identification of Pleistocene fossil beetles, with description of a new species of *Hydraena* Kugelann (Coleoptera: Hydraenidae) from the Hoxnian Interglacial. *Quaternary Proceedings* **5** 5–14.

NILSSON A N 2003. The *Agabus lineatus* Group (Coleoptera, Dytiscidae, Agabinae) *Special Bulletin of the Japanese Society of Coleopterologists* **6** 91–102.

SHATROVSKY A G 1993. On some new and poorly-known water beetles of the genus *Hydrochus* Leach (Coleoptera, Hydrophilidae). *Entomologicheskoye Obozreniye* **72** 827–829. [in Russian]

Received January 2016

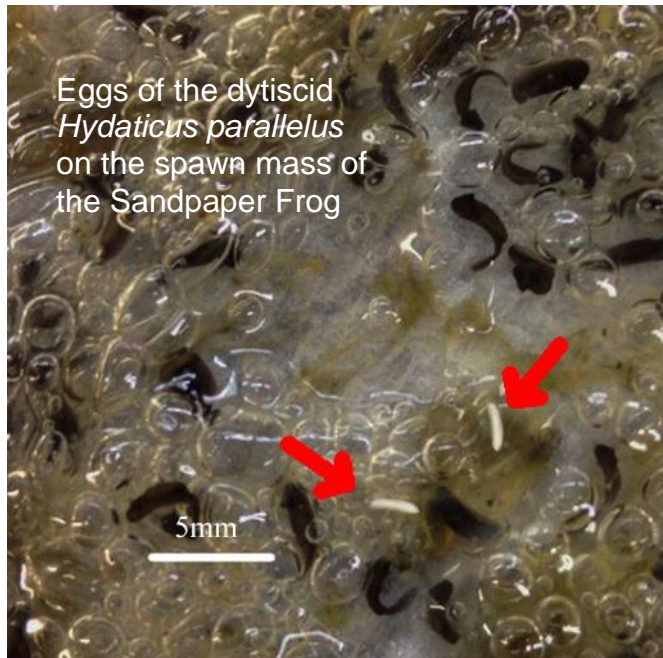
MORE SOUTH AFRICANS

The two new species are wet rock-living hydraenids, *Coelometopon glenavoni* and *Oomtelecopon disjunctum*, described from the Eastern and Western Cape provinces respectively,

BILTON D T 2015. Two new species of macicolous water beetle from South Africa (Coleoptera: Hydraenidae). *African Invertebrates* **56** 181–190.

AN OBSERVATION OF EGG LAYING BY THE AUSTRALIAN DYTISCID, *HYDATICUS PARALLELUS* CLARK

J Gould & C H S Watts



Eggs of the dytiscid *Hydaticus parallelus* on the spawn mass of the Sandpaper Frog

The Sandpaper Frog, *Lechriodus fletcheri* Boulenger, is a small ground dwelling amphibian that breeds in highly ephemeral water bodies situated along fire tracks and trails. On occasions, *L. fletcheri* spawn collected in summer in Watagans National Park, New South Wales, Australia, have been found to contain beetle eggs which are either laid across the surface of the spawn body (see figure) or interspersed amongst the developing frog embryos, in numbers that can range from just a couple of eggs to a few dozen. Under laboratory conditions, these eggs will hatch synchronously with the frog embryos, which the beetle larvae will subsequently feed on throughout their

development. These beetle larvae are voracious predators and have the capacity to consume multiple tadpoles during a single 24 hour period. Identification of the larvae confirmed suspicions that the beetle concerned was *Hydaticus parallelus*, a relatively common species on the east coast of Australia. Adults of this species were also found with the spawn.

Received July 2015

AN UPDATED CHECKLIST OF HALIPLIDAE, GYRINIDAE, DYTISCIDAE, NOTERIDAE & HYDROPHILIDAE FROM HONG KONG

Fenglong Jia, Eric K W Chan, Yingming Lee & Paul Aston

The fauna of aquatic beetles has been poorly known from Hong Kong, with only 1 species of Haliplidae, 8 Gyrinidae, 18 Dytiscidae, 2 Noteridae and 48 Hydrophilidae having been recorded. Water beetle collecting trips totaling eight days were made in September 2013 and June 2014. Some specimens in the fourth author's collection were also included. Seventy species of aquatic beetle were obtained, assigned to five families.

HALIPLIDAE

Haliplus regimbarti Zaitzev

Peltodytes sinensis (Hope)

DYTISCIDAE

Agabus sp. (1 ♀)

Hydroglyphus japonicus (Sharp)

Copelatus oblitus Sharp

Hydroglyphus orientalis (Clark)

Copelatus sp. (2 ♀♀)

Hydrovatus acuminatus Motschulsky

Cybister guerini Aubé

Hydrovatus sp. (1 ♀)

Cybister sugillatus Erichson

Hyphydrus lyratus Swartz

Hydaticus luczonicus Aubé

Laccophilus chinensis Boheman

Hydaticus rhantoides Sharp

Leiodytes perforatus (Sharp)

Hydaticus vittatus (Fab.)

Platynectes dissimilis dissimilis (Sharp)

NOTERIDAE

Canthydrus sp. (1 ♀)

Hydrocanthus indicus Wehncke

Neohydrocoptus bivittis (Motschulsky)

? *Neohydrocoptus rubescens* (Clark)

[This species was reported from Hong Kong. Wewalka thought it might be *N. rubescens* (Clark) although he was not sure (Toledo 2003). Toledo thought it should be either *N. rubescens* (Clark) or *N. distinctus* (Wehncke)]

Noterus japonicus Sharp

GYRINIDAE

Gyrinus orientalis Régimbart

Orectochilus melli Ochs

Orectochilus sculpturatus Régimbart

HYDROPHILIDAE

Agraphydrus sp.1 *Agraphydrus* sp.2 *Agraphydrus* sp.3 *Agraphydrus* sp.4

Amphiops coelopunctatus Jia

Amphiops coomani d'Orchymont

Berosus elongatulus elongatulus Jordan

Cercyon subsolanus d'Orchymont

Chasmogenus sp.

Coelostoma bifidum Jia, Aston & Fikáček

Coelostoma fallaciosum d'Orchymont

Coelostoma hongkongensis Jia, Aston & Fikáček

Coelostoma subditum d'Orchymont

Coelostoma stultum (Walker)

Coelostoma sp. (an undescribed species)

Cryptopleunum sp. (1 ♀)
Dactylosternum abdominale (Fab.)
Dactylosternum hydrophiloides (MacLeay)
Dactylosternum corbetti Balfour-Browne
Enochrus esuriens (Walker)
Enochrus flavicans (Régimbart)
Helochares pallens (MacLeay)
Helochares atropiceus Régimbart
Helochares lentus Sharp
Helochares neglectus (Hope)
Hemisphaera sp. (1 ♀)
Hydrobiomorpha spinicollis (Eschscholtz)
Hydrophilus cavisternum (Bedel)
Oocyclus shorti Jia & Maté
Pachysternum nigrovittatum Motschulsky
Paracymus orientalis d'Orchymont
Parosternum saundersi (d'Orchymont)
Pelthydrus dudgeoni Schönmann
Pelthydrus fenestratus Schönmann
Pelthydrus horaki Schönmann
Pelthydrus incognitus Schönmann
Pelthydrus insularis Schönmann
Pelthydrus speculifer Schönmann
Pelthydrus vitalisi d'Orchymont
Regimbartia attenuata (Fab.)
Sphaeridium quinquemaculatum Fab.
Sphaeridium seriatum d'Orchymont
Sternolophus inconspicuus (Nietner)
Sternolophus rufipes (Fab.)

Acknowledgements We thank Weicai Xie, Yun Li, Zhenhua Liu and Jian Bao who attended parts of the field expeditions. The field survey in Hong Kong was done in collaboration with the Agriculture, Fisheries and Conservation Department of the Hong Kong SAR Government. Special thanks are given Dr Robert Angus for his kind help with the English. This work was supported by the National Natural Science Foundation of China (31272266).

References

- HANSEN M 1999. *World Catalogue of Insects 2: Hydrophiloidea (s. str.) (Coleoptera)*. Stenstrup: Apollo Books.
- JÄCH M A & JI L (eds). 1995. *Water Beetles of China, 1*. Vienna: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein.
- JÄCH M A & JI L (eds). 1998. *Water Beetles of China, 2*. Vienna: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein.
- JÄCH M A & JI L (eds). 2003. *Water Beetles of China, 3*. Vienna: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein.
- JIA F L, ASTON P & FIKÁČEK M. 2014. Review of the Chinese species of the genus *Coelostoma* Brullé, 1835 (Coleoptera: Hydrophilidae: Sphaeridiinae). *Zootaxa* **3887** 354–376.
- JIA F L & VONDEL B J van 2011. Annotated catalogue of the Haliplidae of China with the description of a new species and new records from China (Coleoptera, Adephaga). *ZooKeys* **133** 1–17.

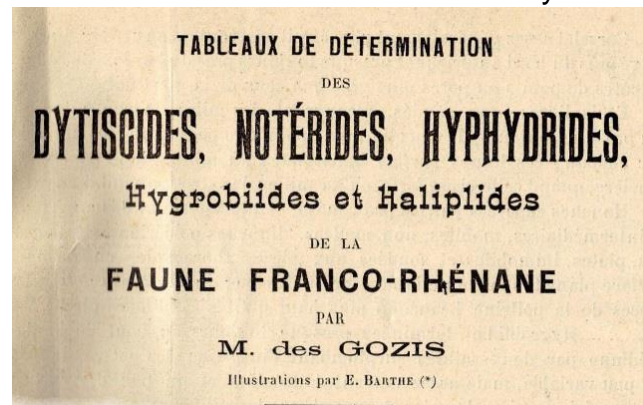
TOLEDO M 2003. Noteridae: Synopsis of the Noteridae of China, based mainly on material collected during the China Water Beetle Survey (1993-2001) pp. 67-88. in M A Jäch & L Jia (eds) *Water Beetles of China*, 3. Vienna: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein.

VONDEL B J van 2005. Haliplidae. in: Nilsson A & Vondel BJ van *World Catalogue of Insects 7. Amphizoidae, Aspitytidae, Haliplidae, Noteridae and Paelobiidae (Coleoptera, Adepaga)*. Stenstrup: Apollo Books.

Received May 2015

SO EVERYONE KNOWS 'IS DES GOZIS

A few misrepresentations have slipped into the literature about Maurice Perrot des Gozis (1851-1909). It is not the end of the world if one gets it wrong but his surname is **des Gozis**. Maurice was a polymath – a lawyer, a genealogist, a philatelist, a numismatist and a musical composer. He also found time to prepare a catalogue of the beetles of France and he is, of course, commemorated in the names of many genera and species. His family could be traced back to the 15th Century in the



land of Gozis, near Montluçon in the Auvergne.

HYDROCHUS LIFE-HISTORY

Little appears to have been usefully published about *Hydrochus* larvae since Avery Richmond (1920) described the egg cocoon and first instar of *H. squamifer* LeConte. In a presentation to the Immature Beetles Meeting Robert Angus noted that he had obtained egg cocoons of six species in the 1980s, plus the first instar larvae of three species. The cocoons are placed on vegetation in the water, in some species each with one egg and a mast but, in *H. brevis* (Herbst) and *H. megaphallus* van Berge Henegouwen, two eggs and no mast.

ANGUS R B 2015. Egg cocoons and larvae of *Hydrochus* Leach (Coleoptera: Hydrophiloidea) in: M Fikáček, J. Skuhrovec & P. Šípek (eds) Abstracts of the immature beetles meeting 2015, October 1-2, Prague. *Acta Entomologica Musei Pragae* 55 872-873.

RICHMOND E A 1920. Studies on the biology of the aquatic Hydrophilidae. *Bulletin of the American Museum of Natural History* 42 1-93, 16 plates.

BRITAIN'S FIRST?

If one is forced to list Britain's best water beetle sites it boils down to Norfolk, either Thompson Common or Catfield Fen, with Wicken Fen in Cambridgeshire a runner-up. In fact Thompson is essentially part of a much larger expanse of periglacially scarred landscape, with STANTA, more notable for its fluctuating meres than for its lithalsa (pingo) fens. STANTA is the Stanford Training Area, 110 km² of land used for military training and established in 1942 involving the evacuation of six villages. When we first went there we were obliged to sign the Official Secrets Act and at a later visit we were required to view the macabre remains of animals blown up by some of the ordnance lying around the area. So it is at the risk of imprisonment to recall how, on 14 April 1981, Magnus Sinclair and I were quietly looking at our collecting sheets (trays had yet to be invented!) at the Bagmore Pit when a helicopter disgorged a squad of troops from several metres above the ground

beside us, only for them to disappear into the bushes. The photograph of Bagmore Pit is more recent, in 2007 courtesy of Geoff Nobes. You can occasionally get glimpses when Dad's Army is rerun of the television.



beside us, only for them to disappear into the bushes. The photograph of Bagmore Pit is more recent, in 2007 courtesy of Geoff Nobes. You can occasionally get glimpses when Dad's Army is rerun of the television.

Bryan Sage has assembled all of the water beetles from those times onwards. The list extends to 139 species with that pit scoring 81 species alone. Water abstraction is now considered to be a threat to this mosaic of wetland habitats, with the meres fed by groundwater from the chalk. The way in which what are called here pingos (called lithalsa scars by the originator of the usage of pingo) get their water is not clear. Generally these "pingo" pools rarely support the larger species or whirligigs but there are nevertheless 104 species associated with them. Species rare in England that have been recorded from STANTA include *Agabus uliginosus dispar* Bold, *A. undulatus* (Schrank), *Hydroporus elongatulus* Sturm, *H. glabriusculus* Aubé, *H. scalesianus* Stephens, *Hydrochus ignicollis* Motschulsky, *Cercyon granarius* Erichson, *Hydraena palustris* Erichson, *Limnebius aluta* Bedel, *Dryops anglicanus* Edwards, and *D. griseus* (Erichson). This detailed account is accompanied by colour photographs of 11 of the sites. The listing stops short of Scirtidae, of which at least eight species are known, and Donaciinae (five species), but notes the paucity of weevil records, *Bagous lutosus* (Gyllenhal) being perhaps the most important. There are possible as many as 200 water bodies in the area, only 54 of which have actually been surveyed. However, it must be pointed out that gaining access to this military area is impossible without permission from the Army.

SAGE B 2013. An analysis of the water bodies and water beetles (Coleoptera) of the Stanford Training Area (STANTA), Norfolk. *Transactions of the Norfolk and Norwich Naturalists' Society* **46** 5-44.

REMOVAL OF INCORRECT *HELOPHORUS* RECORDS FROM THE CATALOGUE OF PALAEARCTIC COLEOPTERA

Robert Angus

“The best laid plans o’ mice an’ men gang aft a’gley.” So wrote Robbie Burns, and alas how right he was. Thus, having felt quite satisfied with the *Helophorus* section of the latest edition of the Palaearctic Catalogue, I was somewhat mortified when Garth Foster and Andrew Duff enquired about a British entry for *Helophorus asperatus* Rey. I checked the entry, and there it was, in the row of countries for *H. asperatus*, “GB”. The Catalogue does not give the sources of the records and it took me a while to fathom a possible origin for this one. However, it seems to be based on *H. crenatus* Rey, 1884, a junior homonym of *Elophorus crenatus* Fabricius, 1792 (*Hydrochus crenatus*) and considered to be either a synonym of *H. asperatus*, 1885 (if Rey’s attribution of his Morlaix material is correct) or possibly *H. strigifrons* Thomson, 1868, if the original specimen really came from England, via Pandellé (Sharp, 1915: 271). In any event, there is no genuine record of *H. asperatus* from the British Isles. This may be a species which is extending its range. Thus in recent years Joja Geier has twice taken it on the Swedish island of Öland. The nearest locality to England where I have taken it is Mesnil-Rousset in the Département of Eure, where I took it in March 1978. It looks like a rather large *H. flavipes*, but with the pronotum coarsely granulate, not shining, and rather flat.

Another wrong entry which I noticed after publication of the Catalogue is *H. pallidus* Gebler, 1830, recorded from Slovakia (SK). I have no idea of the source of this record, but it is completely wrong. *H. pallidus* is a northern species, recorded from Fennoscandia, but with one record from Estonia (Matsalu National Park), and over the northern part of European Russia to West and East Siberia and northern Kazakhstan. Details are given by Angus (1974). Interestingly, this is a species which has occurred in England during a brief warm interstadial in the Last Glaciation, at Isleworth, Middlesex (Coope and Angus 1975). The fossil is one well-preserved pronotum.

References

- ANGUS R B 1974. Notes on the *Helophorus* species (Coleoptera, Hydrophilidae) of Fennoscandia and northern Russia. *Notulae Entomologicae* **54** 25 - 32
- BURNS R 1785. *To a mouse, on turning up in her nest with the plough.*
- COOPE G R & ANGUS R B 1975. An ecological study of a temperate interlude in the middle of the Last Glaciation, based on fossil Coleoptera from Isleworth, Middlesex. *Journal of Animal Ecology* **44** 365 – 391.
- SHARP D 1915. Studies in Helophorini. 7. – *Helophorus*. *Entomologist’s Monthly Magazine* **51** 233 – 277.

Received December 2015

NEW GREEK *OREODYTES*

At 3.5 mm long the new species looks like a slightly large *O. sanmarkii* (Sahlberg). The median lobe is slightly blunter than in *sanmarkii*, and the female gonocoxosternum could be useful too. So far it is only known from the Voidomatis River, which turns into the River Aaos, which in turn becomes the River Vjosë when it reaches Albania. The correction concerns an associated species, which should have been *Oreodytes davisii davisii* (Curtis), not *O. septentrionalis* (Gyllenhal).

- FERY H 2015. *Oreodytes angelinii*, a new species from north-eastern Greece (Coleoptera: Dytiscidae: Hydroporinae). *Klapalekiana* **51** 39-47.
- FERY H 2015. Corrigendum. *Klapalekiana* **51** 162.

SCILLONIAN BEETLES



Soon after arrival there was a polite correction when I said “Scilly Isles”. Seventy-five species are now known from the Isles of Scilly. These are 45 km from the Cornish coast and, although they support much exotic foliage, the weather can be anything but pleasant. Ours was the last plane that managed to land that weekend in stormy conditions and we were so glad not to have chosen the Scillonian III, described by locals as a “gut pump” owing to its shallow draught guaranteeing even the crew sea sickness if the wind gets up. On our first day on St Mary’s we intruded upon many green-faced twitchers who had braved the boat trip to see the young Great Blue Heron (*Ardea herodias* Linnaeus), looking a bit sick itself recently arrived from America. The accompanying photograph gives you an idea of my skill as a photographer and also of the gloom enveloping the island on the first day. But things picked up for the rest of week, but with a strong wind conveniently drying out the net bag. A particularly drying trip to the uninhabited island of The Gugh was memorable for generating an embarrassing bird record, a cuckoo that my faulty grid reference reading placed in the Irish Sea. Probably the most interesting taxon of the week was to be found near where the heron had been, the shining female form of *Hydroporus memnonius* Nicolai. Apart from a few sites around the Lake District this form is not known in England, being confined to Ireland, Scotland, the Isle of Man and the extremities of Wales. There were very few new records for the islands, a single *Rhantus suturalis* (MacLeay) in a pond recently dug to decoy birds for ringing, and a single *Hydroporus planus* (Fab.) in a ditch, both on St Mary’s. Other new records were mostly technical, plus a few weevils, in particular *Pelenomus quadricorniger* (Colonelli), easily recognised by its appendiculate claws, and the Azolla weevil *Stenopelmus rufinasus* Gyllenhal in the complete absence of its hostplant. Other records included eating twelve species of fish eaten in the Star Castle Hotel over the week’s stay. This was known as the Garrison in 1931 when Professor Balfour-Browne presumably stayed there.

FOSTER G N 2015. Wetland Coleoptera and related species in the Isles of Scilly. *Coleopterist* **24** 171-180.

SCIRTID MATTERS

The Australian *Nothocyphon* is devised for small *Contacyphon*-(formerly known as *Cyphon*)-like beetles, with 39 species, 37 of them being newly described. In the other paper there are not only five newly described genera but also 18 new species.

The second paper about Australia is interesting in a European context in providing one of the very few examples of a Palaearctic water beetle being transported (sorry!). *Contacyphon putonii* (Brisout de Barneville) was taken by Chris Watts in 2006 in Western Australia. It is otherwise known from Austria, France, Germany, Poland, Spain and Switzerland. The Australian's DNA is known, as noted by Cooper *et al.* 2014 (see **Latissimus 36** 16 - COOPER S J B, WATTS C H S, SAINT K M & LEIJS R 2014. Phylogenetic relationships of Australian Scirtidae (Coleoptera) based on mitochondrial and nuclear sequences. *Invertebrate Systematics* **28** 628-642). Chris described this find when he was at Villafranca del Bierzo for the Club meeting and some of us kept a lookout for *Contacyphons*, then, though the only one GNF saw was *C. iberus* (Nyholm).

The paper about the North American *Sarabandus robustus* concerns a reappraisal of its relationships, mainly on the basis of the male genitalia. Peter Zwick regards it as a Pleistocene relict with no known close relatives. He also disagrees with Nyholm's theory that the male genitalia of Scirtinae evolved as two fundamentally different types, proposing instead that they are all descendants of a *Microcara*-like ancestor.

The last paper describes two new *Prionocyphon* species and *Mescirtes javanicus*.

ZWICK P 2015. Australian marsh beetles (Coleoptera: Scirtidae). 7. Genus *Nothocyphon*, new genus. *Zootaxa* **3981** (3) 301-359.

ZWICK P 2015. Australian marsh beetles (Coleoptera: Scirtidae). 8. The new genera *Cygnocyphon*, *Eximioocyphon*, *Paracyphon*, *Leptocyphon*, *Tectocyphon*, and additions to *Contacyphon* de Gozis, *Nanocyphon* Zwick and *Eurycyphon* Watts. *Zootaxa* **3981** (4) 451-490.

ZWICK P 2015. To the knowledge of *Sarabandus robustus* (LeConte) (Col.: Scirtidae: Scirtinae), and on the groundplan of male marsh beetle genitalia. *Linzer biologische Beiträge* **46** 1439-1449.

ZWICK P 2015. Three new marsh beetles (Col.: Scirtidae) from New Guinea and Java. *Linzer biologische Beiträge* **46** 1885-1895.

FRIESIAN SURVEY

The Netherlands Entomological Society fielded 48 arthropodologists to record 1,329 arthropod species in the National Park Drents-Friese Wold in 2014. Coleoptera records were collated by Oscar Vorst. The most interesting water beetle was *Hygrotus novemlineatus* (Stephens).

FRANKEN O & BERG M P (eds) 2015. Entomofauna van het Drents-Friese Wold. Verslag van de 169e NEV-Zomerbijeenkomst. *Entomologische Berichten* **75** 154-175.

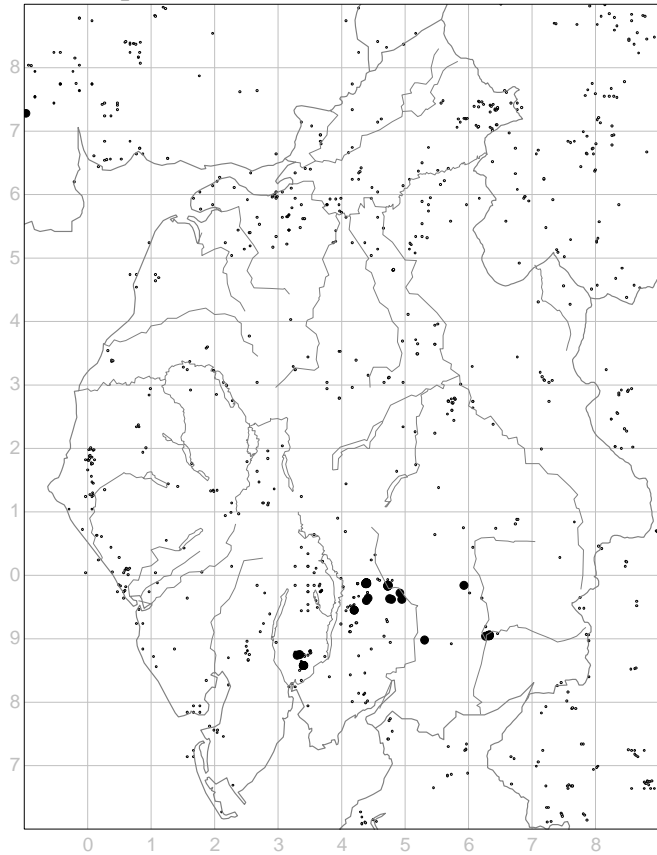
SEKALIPORUS IN NORTHERN AUSTRALIA

Sekaliporus was originally described by Chris Watts as a monotypic genus with *S. kriegii* Watts found in running water across coastal northern Australia. The new species, *S. davidi*, ranges from Kimberley to north-eastern Queensland.

HENDRICH L & BALKE M 2015. Review of the genus *Sekaliporus* Watts, 1997 with description of a new species from northern Australia (Coleoptera: Dytiscidae, Hydroporinae). *Zootaxa* **3981** 107-116.

HYDROPORUS RUFIFRONS IN THE [ENGLISH] LAKE DISTRICT

This is an update of a previous review (FOSTER G N, BILTON D T, ROUTLEDGE S & EYRE M D 2008. The past and present statuses of *Hydroporus rufifrons* (Müller) (Coleoptera, Dytiscidae) in Great Britain. *The Coleopterist* **17** (1) 51-63). We've added a few more sites to the distribution, taking it to the very edge of the Yorkshire border in the Lune Valley. The map is worth reproducing. The larger black circles are for records from 2000 onwards; the smaller black ones for before 2000, and other ponds with beetle records as open circles. You can see that *rufifrons* is concentrated in the south of the Lake District with what would appear to be an extinct population between Carlisle and Penrith to the north. The last known site in Kirkcudbrightshire peeks in top left.



FOSTER G N, ROUTLEDGE S, HOWARD L & BILTON D T 2015.

The status of the Oxbow Diving beetle

Hydroporus rufifrons (Müller) in and around the Lake District. *Lakeland Naturalist* **3** (1) 26-32, plates 5, 6a, 6b.

BARCELONA MUSEUM TYPES

This catalogue includes information on the types available of eight species of Dytiscidae and five Hydraenidae. The corresponding author is G. Masó.

VIÑOLAS A, CABALLERO-LÓPEZ B & MASÓ G 2014. The collection of type specimens of the families Dytiscidae, Histeridae, Hydraenidae and Staphylinidae (Coleoptera) hosted in the Natural History Museum of Barcelona, Spain. *Anxius de Miscel.lània Zoològica* **12** 130-161.

SINASPIDYTES

Sinaspidytes Balke, Beutel & Ribera is described as a new genus in this paper based on a new analysis of the known two species of Aspdytidae, one in South Africa and the other in China. This is based on newly acquired molecular data for *S. wrasei* (Balke, Ribera & Beutel). The larva of the Chinese species is very similar to that of Amphizoidae, emphasising the strong relationship between the two families. The corresponding author is Michael Balke.

TOUSSAINT E F A, BEUTEL R G, MORINIÈRE J, JIA F, XU S, MICHAT M C, ZHOU X, BILTON D T, RIBERA I, HÁJEK J & BALKE M 2015. Molecular phylogeny of the highly disjunct cliff beetles from South Africa and China (Coleoptera: Aspdytidae). *Zoological Journal of the Linnean Society* **2015** 1-10.

LACCOMIMUS

As the name suggests, *Lacomimus* is a *Laccophilus*-like genus whose members were previously thought to be in the Neotropical *Laccodytes* Régimbart. However it appears that the genus is sister to the Oriental *Laccosternus* Brancucci, about the same size, with similar female genitalia and prosternal process. Eleven new species are described plus *Lacomimus pumilio* (LeConte) as a new combination. Four more potential species are briefly described from the Dominican Republic, Mexico and Venezuela, all needing more material. In the subsequent paper the larvae are established as belonging within Laccophilini

MICHAT M C & TOLEDO M 2015. Phylogenetic relationships and larval morphology of the recently described diving beetle genus *Lacomimus* (Coleoptera: Dytiscidae: Laccophilinae). *European Journal of Entomology* **112** as 1802-8829 online.

TOLEDO M & MICHAT M 2015. Description of *Lacomimus* gen. n. and eleven new species from the Neotropical region (Coleoptera, Dytiscidae, Laccophilinae). *Zootaxa* **3990** 301-354.

THE MAIN TREE IN THE FOREST

The massed authors note that beetle have about 380,000 named species accounting for 25% of species on Earth and 40% of insects. In fact, one wonders why anyone ever bothers with the other miscellaneous life forms at all. This evaluation is based on 367 species representing 172 of the 183 extant families. As ever, the analyses of the relationships between water beetle groups were a little equivocal depending on which array of nucleotides was used, and presumably the result of these being amongst the oldest of the beetle lineages, with so many groups extinct and missing from the analysis.

McKENNA D, WILD A L, KANDA K, BELLAMY C L, BEUTEL R G, CATERINO M S, FARNUM C W, HAWKS D C, IVIE M A, JAMESON M L, LESCHEN R A B, MARVALDI A E, McHUGH J V, NEWTON A F, ROBERTSON J A, THAYER M K, WHITING M F, LAWRENCE J F, ŚLIPIŃSKI A, MADDISON D R & FARRELL B D 2015. The beetle tree of life reveals that Coleoptera survive end-Permian mass extinction to diversify during the Cretaceous terrestrial revolution. *Systematic Entomology*, doi: 10.1111/syen.12132, 1-46.

DYTISCID FEEDING PREFERENCES

Feeding preferences of adult dytiscids were studied in relation to the natural variation in potential prey at five sites. The beetles were divided into small species (*Hydroporus palustris* (L.), *Hygrotus decoratus* (Gyllenhal) and *H. impressopunctatus* (Schaller), medium-sized ones (*Ilybius ater* (De Geer), *Acilius canaliculatus* Nicolai and *Hydaticus transversalis* (Pontoppidan)), and the largest beetles (*Dytiscus circumcinctus* Ahrens, *D. marginalis* L. and *Cybister lateralimarginalis* (De Geer). Ephemeroptera, Odonata and Chironomidae were the most numerous prey items detected regardless of beetle size. Asellidae and Planorbidae were abundant at four of the sites but were not detected in beetle guts. Surprisingly, there is no mention of *Daphnia* or copepods.

FRELIK A & PAKULNICKA J 2015. Relations between the structure of benthic macro-invertebrates and the composition of adult water beetle diets from the Dytiscidae family. *Environmental Entomology* 1010 doi: 10.1093/ee/nvv113

LAKE SARYSU

This lake lies in the Kura River basin in Azerbaijan. Surveying of the macroinvertebrates and fish in 2011 generated the following water beetle records:- *Gyrinus caspius* Ménériés, *G. minutus* Fab., *G. suffriani* Scriba, *Peltodytes caesus* (Duftschmid), *Noterus clavicornis* (De Geer), *N. crassicornis* Müller, *Hydroporus planus* (Fab.), *Porhydrus lineatus* (Fab.), *Herophydrus musicus* (Klug), and *Bidessus signatellus* (Klug).

ALIEV S I, GADZHEV R V & AKHUNDOV M A 2012. [Aquatic fauna of Lake Sarysu]. [Bulletin of Al-Farabi Kazakh National University. Ecological series] **1** (22) 159-162.

STENELMIS IN THE CAUCASUS

Stenelmis consobrina consobrina Dufour and *S. puberula* Reitter are recorded from around the Caucasus, both new for Krasnodar Krai, *consobrina* also possibly new for Armenia, and *puberula* new for Adygea and Abkhazia. This is well illustrated with habitus and habitat photographs and a very pretty map.

SHAPOVALOV M I, PROKIN A A, PALATOV D M & KOVALEV A V 2015. Notes on the distribution and ecology of the genus *Stenelmis* Dufour, 1835 (Coleoptera: Elmidae) in the Caucasus. *Zootaxa* **4052** 366-372.

MORE COPELATINAE

Agaporomorphus julianae is described from central Peru. It was collected mainly in shaded temporary ponds in lowland rainforest surrounded by Aguaje palm trees. It was associated with *A. tambopatensis* Miller, *Hydrodytes opalinus* (Zimmermann), *Vatellus grandis* Buquet, *Hydaticus subfasciatus* Laporte, *Tropisternus chalybeus* Laporte and several unidentified *Copelatus* – so more copelatines to come.

HENDRICH L, APENBORN R, BURMEISTER E-G & BALKE M 2015. A new species of *Agaporomorphus* Zimmermann, 1921 from Peru (Coleoptera, Dytiscidae, Copelatinae). *ZooKeys* **512** 63-76.

ARGENTINIAN INVENTORY

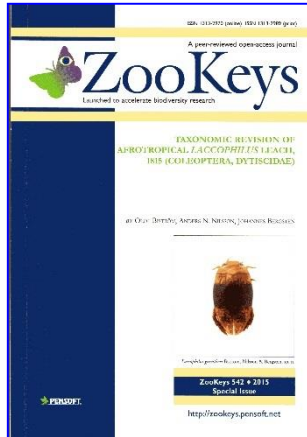
Seventy-seven taxa are recorded from El Cristal, a 15 ha wildlife reserve created in 1992 and covering the shore of a pond and a part of the forests of the Humid Chaco ecosystem. The list covers 14 Noteridae, 25 Dytiscidae, 5 Hydrochidae, 31 Hydrophilidae, one dryopid (a *Pelonomus* species), and one scirtid, *Ora semibrunnea* Pic. This is all the more impressive as a list when you realise that it was all assembled from light trap catches! The author for correspondence is Patricia Torres.

MACCHIA G A, LIBONATTI M L, MICHAT M C & TORRES P L M 2015. Aquatic Coleoptera from El Cristal Natural Reserve (Santa Fe Province, Argentina). *Revista de la Sociedad Entomológica Argentina* **74** 111-116.

CARPATHIAN STREAM

There are obviously some interesting terrestrial beetles in this paper, but the beetles are all rather ordinary – *Agabus guttatus* (Paykull), *Anacaena globulus* (Paykull), *A. limbata* (Fab.), *Cercyon analis* (Paykull), *Coelostoma orbiculare* (Fab.), a *Chaetarthria*, a *Megasternum*, and *Odeles marginata* (Fab.).

STANOVSKÝ J & KOLONIČNÝ L 2014. Přehled brouků (Coleoptera) lokality Bylničky v Bílých Karpatech. *Acta Carpathica Occidentalis* **5** 74-80.



AFROTROPICAL LACCOPHILUS

Here is a magnum opus to sit alongside Felix Guignot's *Hydrocanthares d'Afrique* in the library, i.e. it is surely too big to possess just as a PDF. You can buy it from Pensoft (<http://zookeys.pensoft.net>) for €76, for which you get 149 colour photographs of whole beetles. One hundred and five species are now recognised, divided into 17 species groups. Twenty-two new species are described, a few being quite well distributed, such as the well named *L. inobservatus* and *L. cryptos*. The European *L. hyalinus* (De Geer) and *L. minutus* (L.) are in the *L. hyalinus* group, and one must note that *L. testaceus* Aubé is treated as no more than a synonym of *hyalinus* without further comment. *L. poecilus* Klug is alone in its own species group. Although there is the

assurance that the colour plates are the right way around, Figure 386 must be a very poor representation of the average *hyalinus*.

BISTRÖM O, NILSSON A N & BERGSTEN J 2015. Taxonomic revision of Afrotropical *Laccophilus* Leach, 1815 (Coleoptera, Dytiscidae). *ZooKeys* **542** 1-379.

HAWAI'IN HYGROTUS

This *Hygrotus* is recorded from the dormant Mauna Kea volcano in Hawai'i, based on 1970s material in the Bishop Museum. This species is otherwise widely distributed in boreal America east of the Rockies and south to northern Mexico. Speculation about how it got to Hawai'i centres on the possibility of migrant birds. The genitalia are depicted showing the most unusually shaped paramere.

FERY H & CHALLET G 2015. *Hygrotus* (*Coelambus*) *nubilus* (LeConte, 1855) on Mauna Kea (Hawaii) – first record of the genus from the Pacific zoogeographical region (Coleoptera: Dytiscidae). *Linzer biologische Beiträge* **47**1303-1309

ERETES IN CENTRAL EUROPE

Eretes griseus (Fab.) does not appear to have been found in Central Europe for at least a hundred years, whereas *E. sticticus* L.) has recently been found in Slovakia and Hungary. The first specimens were taken at light. They may indicate recent spread from the Mediterranean area. *E. sticticus* is noted as from Bulgaria, Croatia, Greece, Israel, Libya, South European Territory of Russia, and Tunisia.

HÁJEK J, HENDRICH L, VYHNÁLEK V & CSABAI Z 2015. *Eretes* diving beetles (Coleoptera: Dytiscidae) in Central Europe – witnesses of climate change? *Aquatic Insects* doi: 10.1080/01650424.2015.1079639

COLYMBETES PAYKULLI GROUP

Members of the *paykulli* group were studied with respect to DNA, variations in the reticulation on the pronotum and basic morphological form. All three features separate the Palearctic *C. paykulli* Erichson as a species from the Nearctic *C. longulus* LeConte. The separation of Palearctic and Nearctic *C. dahuricus* Aubé was far less clear, and demands further work.

DROTZ M K, BRODIN T & NILSSON A N 2015. Changing names with changed address: integrated taxonomy and species delimitation in the Holarctic *Colymbetes paykulli* group (Coleoptera: Dytiscidae). *PLOS ONE* doi:10.1371/journal.pone.0143577 15 pp.

POLISH RECORDS

Ochthebius colveranus Ferro was found in the Bieszczady Mountains in Poland in 2014. Four other *Ochthebius* are also recorded – *O. foveolatus* Germar, *O. gibbosus* Germar, *O. melanescens* Dalla Torre, and *O. metallescens metallescens* Rosenhauer. *Pomatinus substriatus* is also recorded as new for the Bieszczady Mountains in south-east Poland. Contact details not known.

TWARDY D 2015. Nowe stwierdzenie *Pomatinus substriatus* (Ph. Müller, 1806) (Coleoptera: Dryopidae) w Polsce. *Wiadomości Entomologiczne* **34** 70.

TWARDY D 2015. Pierwsze stwierdzenie *Ochthebius (Enicocerus) colveranus* Ferro, 1979 w Polsce oraz dane o występowaniu innych rzadkich gatunków z rodzaju *Ochthebius* Leach, 1815 (Coleoptera: Staphylinidea: Hydraenidae). *Wiadomości Entomologiczne* **35** 5-11.

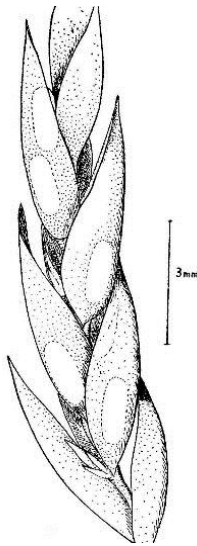
MOSSES

This book chapter by Janice Glime is a delightful hotchpotch of thoughts about mosses and water beetles. It makes a good read but there are rather too many factoids and it appears to have been assembled from random web searches alone, culminating in a picture of *Brychius elevatus* (Panzer) because its generic name begins with “*Bry-*” for bryophytes. Useful for identifying some sources of photographs not spotted on the web before, particularly those by Tim Faasen at

http://www.nederlandsesoorten.nl/linnaeus_ng/app/views/species/nsr_taxon.php?id=152657

and Niels Sloth at

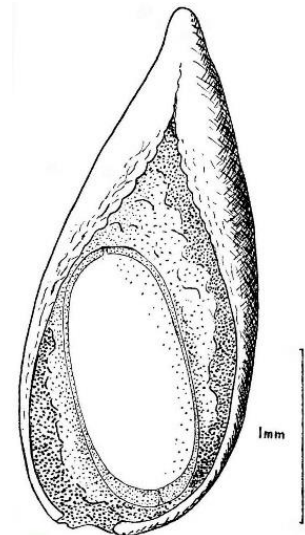
<http://www.fugleognatur.dk/gallery.asp?page=63&mode=familie&ID=&lokid=&familieid=85&ordenid=&klassid=&rigeid=&GruppelD=&AlderKLID=&AlderKLDefID=>



Some tricks have been missed in this chapter, in particular the value of mosses as oviposition sites, as was for example pointed out by Dorothy Jackson (1958. Egg-laying and egg-hatching in *Agabus bipustulatus* L., with notes on oviposition in other species of *Agabus* (Coleoptera: Dytiscidae). *Transactions of the Royal Entomological Society* **110**: 53-80).

The assumption that mosses have a poor fossil record because they do not preserve well has been challenged experimentally. Their absence from those huge Carboniferous (300 mya +) coal swamps appears to be they were simply not there. DNA studies put divergence of the liverworts into the late Ordovician (440 mya). Protosphagnales are known from the Permian (300-250 mya) and *Sphagnum* spores are known from the Jurassic (200-145 mya). Fossil evidence is based largely on Cenozoic (70 mya and later) amber. Some authoritative speculation on the coevolution of mosses and beetles might be good.

GLIME J M 2015. Chapter 11-9 Aquatic insects: Holometabola – Coleoptera, Suborder Adephaga. 14 pp. in: J.M. Glime (ed.) *Bryophyte ecology*. Volume 2. *Bryological interaction*. Ebook, Michigan Technological Institute and the International Association of Bryologists @ www.bryoecol.mtu.edu



DYTISCIDAE 4,359 SPECIES

President Nilsson, now retired, is at Mullsjö, Nordmaling, Sweden with a new email address ([andersn Nilsson258 /at/ gmail.com](mailto:andersn Nilsson258@atgmail.com)). He has moved catalogues to Jiří Hájek's home page.



A new version of *A World Catalogue of the Family Dytiscidae, or the Diving is Beetles (Coleoptera, Adephaga)* Version 1.I.2016 is available.

http://www.norrent.se/images/stories/upload/Skorvnopparn/Worldcatalogues/wcd_2016a.pdf

You can also find

A World Catalogue of the Family Noteridae, or the Burrowing Water Beetles (Coleoptera, Adephaga) Version 16.VIII.2011

http://norrent.se/images/stories/upload/Skorvnopparn/Worldcatalogues/WCN_20110816.pdf

EXOCELINA

The evolution of *Exocelina* Broun has been reported on many times, most recently the “Towering Orogeny” paper (see **Latissimus 36**, page 26). This prestigious paper reviews the situation. The phylogeny of Melanesian *Exocelina* was investigated using some recently developed techniques. The 141 mostly endemic species are concentrated in New Guinea, New Caledonia and Australia, with one or two species each in China, Hawai'i and Vanatu. Species diversity is unevenly distributed between Australia (15 described and 10 undescribed species) New Caledonia (37 and about 10) and New Guinea (88 and more than 70). Most are riparian, often in puddles at the edges of streams, with a few in stagnant water and even in Australian aquifers. The principal findings are that the Australian species are relatively ancient and the source of the colonisations of the islands, diversification within Australia being limited by the mid-Miocene aridification. The colonisation of the more distant New Caledonia was rare and most species arose “in house”. In contrast the *Exocelina* species of New Guinea, being nearer to Australia, arose from multiple colonisations, with diversification increasing as the island complex expanded.

TOUSSAINT E F A, HENDRICH L, SHAVERDO H & BALKE M 2015. Mosaic patterns of diversification dynamics following the colonization of Melanesian island. *Scientific Reports* 5 16016 doi: 10.138/srep16016 11pp.

KOREAN ELMIDAE

Thirteen species in nine genera are recognised as occurring in Korea. They include three new species, *Grouvellinus aerosus* and two species of *Zaitzeviaria*, plus an unidentified species of *Ordobrevia*. Various new synonyms and new records are given, plus a checklist and a key amongst other items in this comprehensive treatment. The corresponding author is Yeon Jae Bae.

JUNG S W, JÄCH M A & BAE Y J 2014. Review of the Korean Elmidae (Coleoptera: Dryopoidea) with descriptions of three new species. *Aquatic Insects* 36 93-124.

SAALE MEADOWS

The beetles of the floodplain between Halle and Merseburg are discussed. Water beetles get a brief mention – *Cybister lateralimarginalis* (De Geer), *Hyphydrus ovatus* (L.), *Hydrophilus piceus* L., and *Hydrochara caraboides* (L.).

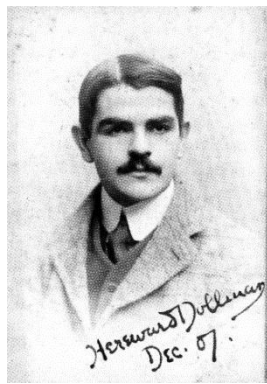
NEUMANN V & GROSSE W-F 2015. Besonderheiten der Käferfauna in der Restauenlandschaft von Halle (Saale) bis Merseburg. *Hercynia* 48 51-67.

CYBISTER SEXUAL ACTIVITY

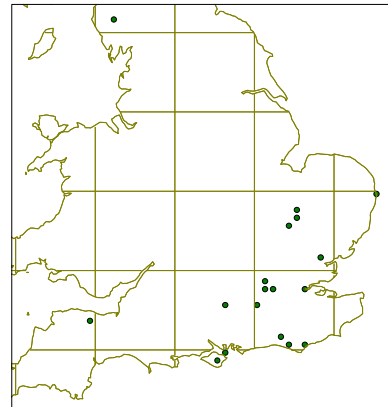
This paper has good citation potential in showing that the potential sexual activity of male and female dytiscids can differ strongly. Breeding work showed that egg hatching might occur from May to September, with a peak in July, and copulation observed from March to June. Ovary development was greatest in May, and very low at other times. On the other hand, the development of testes and the accessory glands was constant. However, high sperm motility was seen in May and September, being lowest in December and March. Females mature at the beginning of the breeding season whereas males have a wide-ranging maturation period and are sexually mature earlier than the females.

INODA T, OHBA S-Y & RULLAN J K 2014. Gonad development and sperm motility of the diving beetle *Cybister brevis* Aubé, 1838 (Coleoptera: Dytiscidae) in response to seasonal changes in Japan. *Aquatic Insects* (2013) **35** 39-45.

HEREWARD CHUNE DOLLMAN 1888-1919



An article in *The Linnean* is mainly concerned with the bringing together of his works that are owned by the Natural History Museum, London, centring on illustrations of butterflies. But he was also interested in beetles and published several items concerning his finds, which included water beetles, starting when he was only ten years old and ending in his last year. He cast his net quite widely (see the map), producing



some good material. Most of it is in the NHM but I have seen at least one specimen in the Hancock Museum, Newcastle upon Tyne. Why such a short life? Sadly, he went to what is now Zambia in 1913 to study the ecology of the tsetse fly and there contracted sleeping sickness, which took some time to overcome him.

PETHERS H & HUERTAS B 2015. The Dollman Collection: a case study of linking library and historical specimen collections at the Natural History Museum, London. *The Linnean* **31** 18-22.

PRASOCURIS HANNOVERIANA IN LIMBURG

P. hannoveriana (Fab.) has been rediscovered in numbers of *Caltha palustris* in Sint-Odiliënberg in Limburg in the Netherlands. The habitat was in alder carr on peaty soil with continuous groundwater seepage.

WILLIAMS A T 2015. Na 34 jaar herontdekt in Nederland: het goudhaantje *Prasocuris hannoveriana* (Coleoptera: Chrysomelidae), *Entomologische Berichten* **75** 243-246.

WEEVILS TO THE RESCUE

This note records the history of successful introduction of the erirhinid weevil *Cyrtobagous salviniae* Calder & Sands to control giant salvinia (*Salvinia molesta* Mitchell) in Kerala, south India. The *Salvinia* originated in south-east Brazil and the weevil came from Australia.

KUMAR P S & VERGHESE A 2015. *Cyrtobagous salviniae* – Godsend in God's Own Country. *Antenna* **39** 175-177.

DUCKWEEDS VERSUS STYROFOAM

This experiment took place in a small forest lake in the Voronezh Oblast, comparing the composition of the fauna colonising *Spirodella polyrhiza* (L.), *Lemna minor* L., *Wolffia arrhiza* (L.), mixtures of all three, and crushed styrofoam.

Sixty-four macroinvertebrate species were found to colonise these floating masses with many species of water beetle, including *Haliphus ruficollis* (De Geer), *Noterus crassicornis* (Müller), *Hygrotus inaequalis* (Fab.), *Graphoderus cinereus* (L.), *Helochaeres obscurus* (Müller), *Enochrus fuscipennis* Thomson, and *Enochrus* larvae being found on most.



There were no significant differences between the substrata in their attractiveness to different species, the faunal composition being dictated by the characteristic of the water body. The photographs supplied by Sasha Prokin show Pavel Dubov weighing out the duckweed top left, the floating container top right, the same bottom left with styrofoam granules, and the lake floating

in the lake bottom right.

PROKIN A A, DUBOV P G & BOLOTOV S E 2015. Formation of macroinvertebrates communities in duckweed (Lemnaceae) and artificial surface-floating substrate: results of the experiment under natural conditions. *Inland Water Biology* **8** 373-383.

COLEOPTERA PHYLOGENY AGAIN

This paper does not make for easy reading and is more about methodology than the beetles. The analysis is based on 245 mitochondrial sequences from 97 families including 159 new ones. The resulting line-up, as portrayed in their Figure 1, reveals some differences from Figure 2 in Hunt *et al.* (2007) (see **Latissimus 24** p. 32). Judging from the number of people involved in the production of this type of paper it must be a happy hunting ground for molecular ecologists. The average coleopterist might only get involved if they feel the need to rearrange their collection again. This type of analysis is more thought-provoking when it is coupled with calculation and speculation about the timescales.

TIMMERMANS M J T N, BARTON C, HARAN J, AHRENS D, CULVERWELL C L, OLLIKAINEN A, DODSWORTH S, FOSTER P G, BOCAK K, & VOGLER A P 2015. Family-level sampling of mitochondrial genomes in Coleoptera: compositional heterogeneity and phylogenetics. *Genome Biology and Evolution* doi:10.1093/gbe/evv241

VAL DE LOIRE 2014

Pierre Queney has put together a faunistics paper based on the Club meeting at Charité-sur-Loire in May 2014. Pierre did a great job of criticising the lists that were sent in, getting rid of some (hopefully all) of the mistakes inevitable when one visits a new part of the world. He singles out the following for special mention: *Peltodytes rotundatus* (Aubé), *Nebrioporus canaliculatus* (Lacordaire), *Helophorus croaticus* Kuwert, *H. longitarsis* Wollaston, *H. pumilio* Erichson, *Georissus costatus* Laporte de Castelnau, *G. crenulatus* (Rossi), *G. laesicollis* Germar, *Hydrochus grandicollis* Kiesenwetter, *H. smaragdineus* Fairmaire, *Chaetarthria similis* Wollaston (including new figures of the aedeagophores of this species, *C. seminulum* Herbst and *C. simillima* Vorst & Cuppen), *Coelostoma hispanicum* (Küster), *Laccobius albipes* Kuwert, *L. femoralis mulsanti* Zaitzev, *Hydraena atrata* Desbrochers des Loges, *H. belgica* d'Orchymont, *Ochthebius flavipes* Dalla Torre, *O. nanus* Stephens, *O. viridis fallaciosus* Ganglbauer, *Elmis obscura* (Müller), *Limnius muelleri* (Erichson), *Macronychus quadrituberculatus* Müller, *Potamophilus acuminatus* (Fab.), *Pelochares versicolor* (Waltl), and *Bagous claudicans* Boheman. All told there were 147 taxa, a great international effort.

QUENEY P 2015. Les Coléoptères aquatiques de la Réserve naturelle du Val de Loire et ses alentours – France: Bourgogne et Centre-Val de Loire (Coleoptera: Curculionidae, Dryopidae, Dytiscidae, Elmidae, Eirrhinidae, Gyrinidae, Haliplidae, Helophoridae, Hydraenidae, Hydrochidae, Hydrophilidae, Limnichidae, Noteridae, Scirtidae). *Le Coléoptériste* **18** 177-192.



WEST SIBERIAN SUBFOSSILS

This material from Novosibirsk at 11,550 B.P. is dominated by weevils. The only water beetles (plus related species) named beyond genus are *Helophorus sibiricus* (Motschulsky), *Hydrobius fuscipes* (L.), *Heterocerus fenestratus* (Thunberg), *Tournotaris bimaculata* (Fab.), *Notaris aethiops* (Fab.), and *Eubrychius velutus* (Beck). The assemblage indicates a tundra-steppe landscape lacking in any forest development.

ZINOVYEV E V, DUDKO R Y, GURINA A A, PROKIN A A, MIKHAILOV Y E, TSEPELEV K A, TSHERNYSHEV S E, KIREEV M S, KOSTYUNIN A E & LEGALOV A A 2015. First records of sub-fossil insects from Quaternary deposits in the southeastern part of West Siberia, Russia. *Quaternary International* <http://dx.doi.org/10.1016/j.quant.2015.09.023> 12 pp.

PERITRICH CILIATES ON WATER BEETLES**GNF**

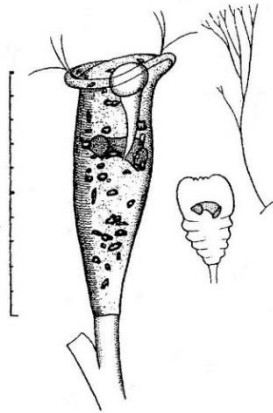
Over the years there have been many requests for information on the “fungal growths” and the like that are to be found on water beetles. I always knew that these were protozoans or protocistans or whatever they are supposed to be called and I had assumed them to be a colonial form of *Vorticella*, a common inhabitant of pond water. So it was quite a surprise, quite recently, to discover how diverse they are, and how many species appear to be faithful to particular genera, suggesting an extremely ancient co-lineage surely worthy of some modern analysis. Perhaps that analysis has been done or is planned, but I have yet to find evidence of it. Instead we must go back to the pioneering work of M.E. Fauré-Fremiet (1906), and a review by Siegmund Lust (1950) following on a major contribution by Ursula Nenninger (1948).

Under the microscope it is possible to spot a range of these ciliates attached to the legs or main body, and their shrivelled up stumps can often be seen on dry-mounted beetles. These animalcules are crying out for a modern treatment using good quality photographs and DNA analysis. They can be classified and identified by the size and shape of their body and its stalk, by the branching of the colony, by the shape of the main nucleus (each body has two, the larger one known as the macronucleus), by features of the disc and then, presumably by where they are attached to the host and by the identity of their host.

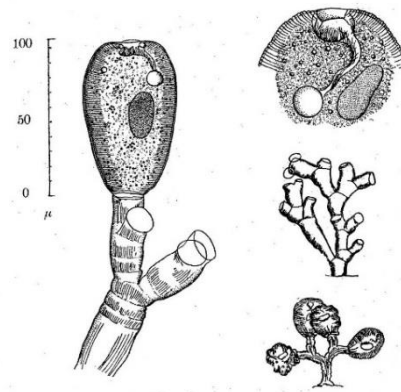
I have constructed a key to the genera mainly following characters used by Lust (1950). I offer this key with the strongest possible warning that I have not yet fired it in anger! Similarly, although anyone can contact me to get the latest working document, I claim no expertise at all and the notes do not constitute a citable publication so far as I am concerned.

At least 48 taxa are recorded from water beetles in the literature. A few appear to cross over to other animals, mainly water bugs. Perhaps the most interesting, and still one I have yet to see, is *Operculariella parasitica* described by Hans-Jurgen Stamme (1948) from the oesophagi of several large diving beetles. It would be difficult to classify that as anything other than parasitic, unless the beetle gains some sort of advantage in return for having its food stolen directly – but the species living externally are usually regarded as commensals

1	On external surfaces. Cilia protrude from peristome.		2
-	In the beetle's oesophagus. Nothing protruding from the peristome.	<i>Operculariella</i> Stammer	
2	On contractile, spring-like stems	<i>Vorticella</i> Linnaeus	
-	On rigid stems		3
3	Prominent rim to peristome. Disc not stalked.	<i>Epistylis</i> Ehrenberg	
-	No rim to peristome. Disc with a stalk.		4
4	Macronucleus elongate and formed into a half ring	<i>Opercularia</i> sensu Lust	
-	Macronucleus round or oval.	<i>Orbopercularia</i> Lust	



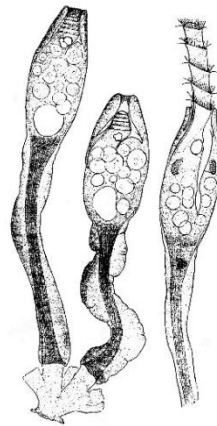
Epistylis plicatilis Ehrenberg var. *dytiscarum* Nenninger – from the leg of a larva of *Dytiscus marginalis* L.



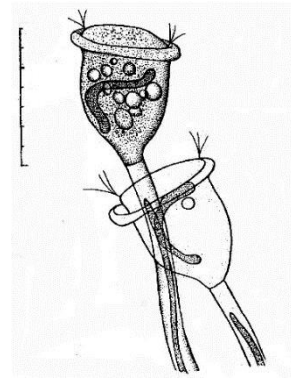
Operculariella parasitica (Stammer), found in the oesophagi of adult *D. marginalis*, *Acilius sulcatus* (L.), *Hydaticus transversalis* (Pontoppidan), *Graphoderus bilineatus* (De Geer) and *G. zonatus* (Hoppe), but not in any Colymbetini or Agabini



Orbopercularia gyryni (Nenninger) – known from at least three *Gyrinus* species



Opercularia faurei Collin - from the mouthparts of *Hydrophilus piceus* – Collin's figure has no scale but this appears to be a relatively large species



Vorticella intermissa Nenninger – from the legs of *D. marginalis*

I am particularly grateful to Professor Jim Green for his advice, also John Bratton for suggesting I contact Jim in the first place. Librarians and others who helped me track down and copy the original publications are properly acknowledged in the working notes available to anyone wanting to take this further. Dr Cathrin Kortz confirmed that any rights associated with Gustav Fischer Verlag, who published the *Zoologische Jahrbücher*, now belong with Elsevier. They would allow us to use the illustrations but the copyrights belong with the authors: unfortunately it has not been possible to trace any of them or their descendants.

There are other ciliates associated with water beetles, the suctorians with their sticky tentacles. Delving into their history has proved far more difficult than for the peritrichs, their taxonomy, in particular the naming of genera, being a mess. Maybe later, maybe never.

- COLLIN B 1909. Sur deux formes nouvelles d'infusoires discotriches. *Archives de zoologie expérimentale et générale* **5** (2) 21-29.
- FAURÉ-FREMIET M E 1906. Le commensalisme spécifique chez les vorticelles d'eau douce. *Comptes rendus hebdomadaires, Séances et mémoires de la Société de Biologie* **2** 456-458, 544—545, 583-585.
- LUST S 1950. Symphorionte Peritrichen auf Käfern und Wanzen. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere* **79** 321-448.
- MATTHES D 1955. Über eine an *Hydraena britteni* Joy gebundene *Orbopercularia* (*O. lusti* n.sp.) und das Vorkommen Individuengruppen umschliessender Gehäuse bei 'aloricaten' Peritrichen. *Archiv für Protistenkunde* **100** 435- 446.
- NENNINGER U 1948. Die Peritrichen der Umgebung von Erlangen mit besonderer Berücksichtigung ihrer Wirtsspezifität. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere* **77** 169-266.
- STAMMER H-J 1948. Eine neue eigenartige entoparasitische Peritriche, *Operculariella parasitica* n.g.n.sp. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere* **77** 163-168.
- STEFFAN A W 1966. Ectosymbiosis in aquatic insects. pp. 207-289 in: S M Henry (ed.) *Symbiosis* **2**. New York: Academic Press.

NORWEGIAN RED LIST

The beetle entries in this comprehensive review are by Frode Ødegaard, Oddvar Hanssen and Stefan Olberg. Water beetles include

Regionally Extinct - *Agabus undulatus* (Shrank), *Hydrochus megaphallus* van Berge Henegouwen, *Hydrophilus piceus* (L.), *Laccornis oblongus* (Stephens).

Endangered - *Bagous brevis* Gyllenhal, *Dytiscus semisulcatus* Müller, *Graphoderus cinereus* (L.), *Hydaticus transversalis* (Pontoppidan), *Hydraena nigrita* Germar, *Hydrochara caraboides* (L.), *Notaris scirpi* (Fab.).

Vulnerable - *Agabus conspersus* (Marsham), *A. uliginosus* (L.), *Augyles hispidulus* (Kiesenwetter), *Bagous claudicans* Boheman, *B. diglyptus* Boheman, *B. frit* (Herbst), *B. limosus* (Gyllenhal), *B. lutulosus* (Gyllenhal), *Graphoderus bilineatus* (De Geer), *Gyrinus caspius* Ménétrés, *Haliphus apicalis* Thomson, *H. fulvicollis* Erichson, *H. variegatus* Sturm, *Helophorus griseus* Herbst, *H. nubilus* Fab., *Hydraena testacea* Curtis, *Hydroporus elongatulus* Sturm, *Hygrotus parallelogrammus* (Ahrens), *Laccophilus biguttatus* Kirby, *L. poecilus* (Klug), *Neophytobius muricatus* (Brisout), *Ochthebius lenensis* Poppius, *Paracymus aeneus* (Germar).

Near threatened - *Augyles intermedius* (Kiesenwetter), *Bagous lutosus* (Gyllenhal), *Donacia brevicornis* Ahrens, *Dryops nitidulus* (Heer), *Enochrus quadripunctatus* (Thomson), *Georissus crenulatus* (Rossi), *Gyrinus distinctus* Aubé, *G. natator* L., *G. suffriani* Scriba, *Helophorus fulgidicollis* Motschulsky, *H. tuberculatus* Gyllenhal, *Hydaticus aruspex* Clark, *Hydroporus neglectus* Schaum, *Hygrotus confluens* (Fab.), *Ilybius guttiger* (Gyllenhal), *I. quadriguttatus* (Lacordaire), *I. similis* Thomson, *Laccobius colon* (Stephens), *L. striatulus* (Fab.), *Neophytobius quadrinodosus* (Gyllenhal), *Normandia nitens* (Müller), *Ochthebius bicolon* Germar, *Oulimnius troglodytes* (Gyllenhal), *Pelenomus waltoni* (Boheman), *Plateumaris braccata* (Scopoli), *Prionocyphon serricornis* (Müller), *Rhantus grapii* (Gyllenhal), *Stenelmis canaliculata* (Gyllenhal).

Data-deficient - *Bagous glabrirostris* (Herbst), *Donacia semicuprea* Panzer, *Eubrychius velutus* (Beck), *Haliphus obliquus* (Fab.).

ØDEGAARD F, HANSSSEN O & OLBERG 2015. Biller. pp. 38-60 in: Snorre Henriksen Olga Hilmo (eds) 2015. *Norsk rødliste for arter 2015*. Artsdatabanken.

AMBER *HYDROTRUPES*

The dytiscid *Hydrotrupes* Sharp is known from the west of North America and from China as two species only. Lithuanian amber is reckoned to be Eocene, 40-55 million years old, and it has yielded this single beetle, the oldest known agabine fossil. The only other fossil beetles in an extant genus are *Copelatus aphroditae* Balke and *Hydroporus carstengroehni* Balke, Beigel & Hendrich, also in Baltic amber, plus the Jurassic *Hydroporus petrefactus* Weyenberg from Bavaria, though the latter's classification as a dytiscid, let alone a *Hydroporus*, has been disputed.

GÓMEZ R A & DAMGAARD A L 2014. A rare diving beetle from Baltic Amber. *Hydrotrupes prometheus* new species reveals former widespread distribution of the genus (Coleoptera, Dytiscidae). *Journal of Paleontology* **88** 814-822.

BEETLES AS INDICATORS

The answer to the question posed by the title of this paper has to be “yes”, otherwise the paper might well escape attention! The paper is based on seven sample sites on the shores of Lake Wukśniki, a mesotrophic lake in the Olsztyńskie Lakeland of north-east Poland. The lake is the deepest in the area and is very clean with *Chara* meadows. The samples included 2,893 individuals of six orders of insect, the beetles having the highest numbers of genera (27) and species (44). Analysis was complex, starting with “Remaining Richness” (the total species number minus the number of species of a particular taxon), a series of correlations and then Principal Components Analysis. The power of beetles to act as an effective indicator of total biodiversity is demonstrated. The analysis further demonstrated that the invertebrate fauna could be divided into three groups of organisms preferring different habitats in the lake, the beetles generally preferring areas dominated by dense vegetation over a substratum of organic matter. Analyses like these can perhaps never establish whether beetles are the best indicators in their own right, or simply because they are the most speciose group.

PAKULNICKA J, BUCZYŃSKA E, BUCZYŃSKI P, CZACHOROWSKI S, KURZAŃKOWSKA A, LEWANDOWSKI K, STRYJECKI R & FRELIK A 2015. Are beetles good indicators of insect diversity in freshwater lakes? *Oceanological and Hydrobiological Studies* **44** 487-499.

SIBERIAN LAKE FAUNA

Twenty-five species are recorded from Shara-Nur, a salt oligotrophic lake the south of Tuva in Eastern Siberia. Shara-Nur is Buryat for yellow lake. Some of the fauna will be familiar to those in the western Palaearctic, with some typical of brackish conditions, e.g. *Haliphus sibiricus* Motschulsky, *Noterus clavicornis* (De Geer), *Rhantus frontalis* (Marsham), *Hydroglyphus geminus* (Fab.), *Berosus signaticollis* (Charpentier), *Enochrus bicolor* (Fab.), and *Paracymus aeneus* (Germar). Other taxa include *Agabus coxalis coxalis* Sharp, *Ilybius poppui* Zaitzev, *Colymbetes dolabratus* Paykull, *Dytiscus dauricus dauricus* Gebler, *Graphoderus zonatus verrucifer* (Sahlberg), *Hydroporus tuvaensis* Pederzani, and *Berosus fischeri* Schödl.

KUZHUGET C N 2014. Water beetles (Insecta. Coleoptera) of the lake basin Shara-Nur in southern Tuva. Families Dytiscidae, Haliplidae, Noteridae and Hydrophilidae. *Euroasian Entomological Journal* **13** (6) 589-593. [in Russian with English abstract]

CZECH CYBISTER LATERALIMARGINALIS

The English translation of the title is given as “Strong population of *Cybister*...at lignite spoil heaps in western Czech Republic”. In the Republic this species is classified as Critically Endangered but numerous records are given for the brown coal region of the north of Bohemia.

KOLÁŘ V, TICHÁNEK F & TROPEK R 2015. Početná populace potápníka *Cybister lateralimarginalis* (De Geer, 1774) (Coleoptera: Dytiscidae) na mosteckých hnědouhelných výsypkách. *Elateridarium* **9** 160-162.

LITHUANIAN RARITIES

The first paper reviews on some of the 17 *Agabus* species occurring in Lithuania – *affinis* (Paykull), *congener* (Thunberg), *didymus* (Olivier), *fuscipennis* (Paykull), *guttatus* (Paykull), *labiatus* (Brahm), *melanarius* Aubé, *nebulosus* (Forster), *paludosus* (Fab.), *striolatus* (Gyllenhal), *uliginosus* (L.), *undulatus* (Schrank), and *unguicularis* (Thomson).

The second paper is mainly concerned with terrestrial beetles, but includes a record for *Ilybius guttiger* (Gyllenhal). The third paper covers beetles found on a reserve in the Anykščiai district and include the following water beetles:- *Dytiscus dimidiatus* Bergsträsser, *Graphoderus austriacus* (Sturm), *G. cinereus* (L.), *G. zonatus* (Hoppe), *Hydaticus continentalis* Balfour-Browne, *H. seminiger* (De Geer), *H. transversalis* (Pontoppidan), *Hygrotus polonicus* (Aubé), *Rhantus frontalis* (Marsham), *R. notaticollis* (Aubé), *Hydrochara caraboides* (L.), and *Hydrophilus aterrimus* Eschscholtz.

FERENCA R & TAMUTIS V 2015. New data on *Agabus* species (Coleoptera: Dytiscidae) in Lithuania. *New and Rare for Lithuania Insect Species* **27** 18-22.

IVINSKIS P, RIMŠAITĖ J & MERŽIJEVSKIJ A 2015. New species and new records of rare species of beetles (Coleoptera) from Lithuania. *New and Rare for Lithuania Insect Species* **27** 24-34.

OBELEVIČIUS Ž 2015. Rare species of beetles (Coleoptera) found in Žaliosios Pievų botanical-zoological preserve. *New and Rare for Lithuania Insect Species* **27** 39-46.

BELGIAN DYTISCUS LAPPONICUS

Professor Balfour-Browne (1950, volume 2, p. 284) noted of this species “It is known in Holland in several localities, and an odd female was found in a farm pond at Warsage in Belgium in November, 1933, the first record for that country and almost certainly a stray specimen from a nearby Dutch habitat.” The authors note that this Liège record as doubtful but Kevin has subsequently (*in litt.*, 24 February 2016) located the specimen, but confirming that there is no suitable habitat within at least 20 km of the area. Other old records are from Limburg (Beverlo) in 1897, Antwerp (Kalmthout) in 1956 and 1994, also at Brasschat. According to the authors the two latter locations still have small numbers of *D. lapponicus*. Their new sites, where the beetle was found in baited traps in 2015, are in two oligotrophic lakes at Ophovenerheide. Most females are sulcate, but there are some smooth var. *septemtrionalis* Gyllenhal. Threats to these lakes are discussed, principal among which are alien fish.

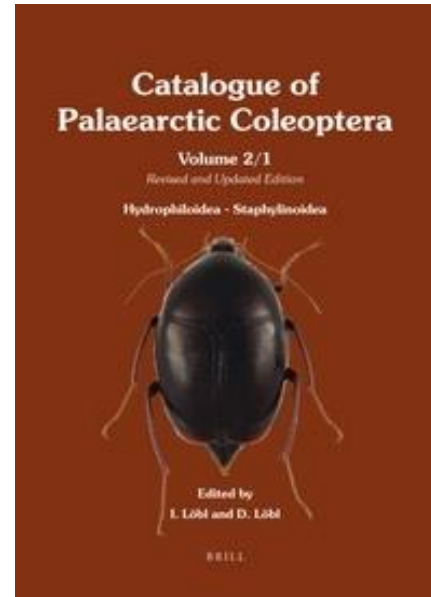
SCHEERS K & PACKET J 2015. A new population of *Dytiscus lapponicus* Gyllenhal, 1808 from Belgium with notes on the distribution and ecology of the species (Coleoptera: Dytiscidae). *Bulletin de la Société royale belge d'Entomologie* **151** 226-232.

NEW PALAEARCTIC CATALOGUE

📖 I. LÖBL & D. LÖBL (eds) 2015. *Catalogue of Palaearctic Coleoptera. Hydrophiloidea – Staphylinoidea 2/1*. Leiden: Brill. Hardback set of two volumes ISBN 978-9004-28992-5, **2/2** completing the checklist of Staphylinidae and containing 528 pages of references, plus the generic index.

The previous catalogue of Hydrophiloidea and Hydraenidae in this series was published in 2004. Six reasons are given for deciding to produce a new edition so soon, of which the first reason, the addition of about 6,500 names to what was in the earlier version, seems to be enough. The second reason is claimed to be that many coleopterists have asked for it, so it will be interesting to see how many of them cough up £162 or \$245 or €189. Perhaps they'll buy an E-book (reason 4)? Perhaps there have been enough geopolitical changes in about ten years (reason 5), but an ominous thought – how long before another edition is required? Reason 6 is worth quoting in full “*A desire to counter-balance the effect of poorly supported alpha taxonomy, in an academic climate polluted by fund-holders who base evaluation on bibliometry rather than on the contents and effectiveness of works.*” Wow, someone’s bitter! The editors have enlisted the services of some well-known authorities – Robert Angus, Martin Fikáček, Elio Gentili, Manfred Jäch, Fenglong Jia, Yūsuke Minoshima, Alexander Prokin, Marek Przewoźny, Sergey Ryndevich, and André Skale.

New acts concerning the aquatic groups are surprisingly limited, concerning a few *Enochrus* and *Cercyon*, and highlighting the need to sort out *Megasternum*. Is the latter really represented by two species, are those the same in Britain and mainland Europe, and what should their names be? So the main changes, the ones that justify this purchase, are all those species recognised in the past ten years.



BULGARIAN AND IRISH RIVERS COMPARED

A quality rating system, Q-scheme, developed in Ireland, was applied to eight Bulgarian rivers flowing into the Black Sea for comparison with the rivers associated with the Lough Leane catchment in the Killarney National Park. Oh no! Another of those comparisons where biodiversity is devalued rather than valued. Beetles only get a look-in at genus level, none being named, and the other macroinvertebrates are about the same or vaguer. It is therefore hardly a surprise that the conclusion is that “a system based on invertebrate assemblages is extremely adaptable across a wide biogeographical range”. How could such a crude encoding of biological data not result in a bland comparison? Differences were mainly that the Irish sites had more acidic water, higher oxygen saturation, lower conductivities, and higher temperatures than the sites in Bulgaria, but these could be guessed without any need to measure biodiversity. It is a pity that the authors did not take the opportunity to deal with other European indices to see whether they were just as insensitive.

SOUFI R, VARADINOVA E, McGARRIGLE M & KELLY-QUINN M 2015. Comparison of the performance of a quality rating system in two contrasting ecoregions. *Acta Zoologica Bulgarica* **67** 529-539.

COPTOCLAVID ADVANCES

Three millimetre long coptoclauid beetles with longitudinal dark stripes have been found in the Middle Triassic deposit in Franconia, Germany, and similar but larger (5 mm) specimens have been found in the Keuper (Carnian – about 230 million years ago) deposits, including many hindwings. A small larva has also been found matching these adults. The presence of coptoclauids as early as the Lower Anisian (about 245 mya) shows that the Permian-Triassic crisis was not as serious as is generally considered to be the case for the marine fauna.

PONAMARENKO A G, PROKIN A A & BASHKUEV A S 2015. Coptoclauid beetles (Insecta: Coleoptera: Adephaga) from the Triassic of Lower Franconia, Germany. *Paleontological Journal* **49** 1334-1345.

Browsing Section – ABOMINATIONS ON HAMPSTEAD HEATH

Will Watson has noted the following comments in *Old and new London: a narrative of its history, its people, and its places*, a six volume treatise published by Cassell by Walter Thornbury (volumes 1-2) and Edward Walford (volumes 3-6) in the 1870s.

In the lower part of Lord Mansfield's grounds are several large ponds, of which we have spoken in our account of Highgate; four of these are within the demesne of Caen Wood, and the other three are in the fields lying in the hollow below Fitzroy Park and Millfield Lane, as we have stated previously. The three outside Caen Wood are known as the Highgate Ponds. The stream which feeds the seven extensive and well-known ponds, and gave its origin to the Hampstead Waterworks, takes its rise in a meadow on the Manor Far at Highgate, and forms a spacious lake in Caen Wood Park, whence it approaches Hampstead, and so flows on to Camden Town and London.....In the summer season these ponds are the resort of thousands of Londoners, more especially the possessors of aquariums, for the sake of waterbeetles "and other abominations," whilst the boys fish

in them for tadpoles and sticklebacks, or sail miniature boats on their surface.

The first abomination to be recorded would appear to be *Hygrobia hermanni* (Fab.), noted by Stephens (1828. *Illustrations of British Entomology*, Volume 2, page 44) as having been taken on "Hampstead-heath" by Mr Ingpen. The area has been well recorded in the recent past too, with the *Hygrobia* last noted in 1999.



RECENT ENGLISH RECORDS

The Ouse Washes run through arable farmland in Cambridgeshire and West Norfolk where the drains are regularly cleared to get them to do their job. This unpromising description belies the true state, with 122 water beetle species being found in 2013 and 2014 – including 12 species of Haliplidae, *Dytiscus dimidiatus* Bergsträsser, *Hydaticus transversalis* (Pontoppidan), *Hydrochus crenatus* (Fab.), *Berosus luridus* (L.), *Dryops similis* Bollow, *Oulimnius major* (Rey), *O. rivularis* (Rosenhauer), *Donacia dentata* Hoppe, and *Bagous alismatis* (Marsham).

Whilst the work in 2014, mainly using pitfall traps, undoubtedly produced interesting beetles at Braunton Burrows, the water beetles were all common, the best being *Limnebius nitidus* Marsham. The water beetle list at another well known site, Chartley Moss, was more extensive, dominated by acid water species, with perhaps the best find being *Rhantus frontalis* (Marsham).

There is no risk of extending the search of *Latissimus* to wetland staphylinids but this paper qualifies for Mark Telfer's resumé of all the beetles that appear to have immigrated to Britain via its south-eastern tip at Dungeness without any assistance from human beings. The water-going beetles include *Augyles hispidulus* (Kiesenwetter), *Cercyon bifenestratus* Küster and *Nebrioporus canaliculatus* (Lacordaire).

HAMMOND M 2015. Aquatic Coleoptera of the Ouse Washes fringes, Cambridgeshire and West Norfolk. *The Coleopterist* **24** 124-130.

TELFER M G 2015. *Carpelimus nitidus* (Baudi di Selve, 1848) (Staphylinidae): another beetle new to Britain from Dungeness. *The Coleopterist* **24** 100-105.

WEBB J 2015. Beetle records from Chartley Moss National Nature Reserve, Staffordshire VC 39. *The Coleopterist* **24** 87-92.

WEBB J & MOTT N 2015. Beetle records from dune slacks at Braunton Burrows, North Devon VC 4. *The Coleopterist* **24** 80-86.

HYDROPORUS PRODUCTUS IN TUNISIA

H. productus was described from Algeria, the new site in Tunisia being more than 300 km ENE of the Algerian locations and 54 km NE of El Kef, where Dr Normand found a female in 1937. This could be the first time the species has been illustrated, clearly showing its membership of the *H. normandi* complex within the *Hydroporus memnonius* species-group. The paper is also useful in summarising what is known about the rest of the complex – *H. emergens* Vorst & Fery from Turkey; *H. galloprovincialis* Manuel from France; *H. Iluci* Fery from the Balearics; *H. normandi* Régimbart with its four subspecies – *alhambrae* Fery from the Sierra Nevada, *ifranensis* Fery and *ifnii* Fery for the High Atlas.

ELDER J-F 2015. Confirmation de la présence de *Hydroporus productus* Fairmaire, 1880, en Tunisie (Coleoptera, Dytiscidae). *Bulletin de la Société entomologique de France* **120** 257-259.

CENTRAL RUSSIAN FOREST-STEPPE FAUNA

There are many new records of water beetles here from three Oblasts, with three species wholly new for the Central Russian forest-steppe – *Hydroporus figuratus* (Gyllenhal), *Agabus striolatus* (Gyllenhal) and *Prionocyphon serricornis* (Müller).

PROKIN A A, KOVALENKO Y N, PETROV P N, TSURIKOV M N & PRISNIY A V 2015. [New records of Coleoptera for the Central Russia forest-steppe] *Euroasian Entomological Journal* **14** 188-193. [in Russian with English abstract]

AGABUS RAMBLAE COMPLEX

The paper by Marek Przewoźny and colleagues reports *Agabus ramblae* new for North Africa in Libya and Tunisia, previously known only from Spain and the Balearics. One of the Tunisian locations also had *Noterus laevis* Sturm and *Coelostoma hispanicum* Küster, the other *Deronectes fairmairei* (Leprieur), *Nebrioporus clarkii* (Wollaston), *Anacaena bipustulata* (Marsham), *Laccobius atratus* Rottenberg, and *Dryops luridus* (Erichson). This paper includes a checklist of the 13 species of *Agabus* known to occur in North Africa, including the Canaries and Madeira.

Amparo Hidalgo-Galiana's paper takes us a stage further than this work as reviewed in **Latissimus 36** and page 26 in describing protein extraction in detail. The colonisation of the Iberian peninsula by North African *Agabus ramblae* Millán & Ribera during the Middle Pleistocene was accompanied by a change in response to high temperatures in many proteins related to energy metabolism. The new environment encountered probably experienced lower maximum temperatures and was more seasonal. The most likely scenario is that *A. brunneus* (Fab.) evolved in response to this change with increased tolerance to cold, allowing it to expand its range during the Last Glacial Maximum as far as England. These changes would be accompanied by changes in the expression of several stress-related proteins. The genetic uniformity of *brunneus* indicates that this process occurred before the geographical expansion. The initial colonisation of Iberia did not result in morphological change but the speciation process within Iberia involved genetic isolation and changes in body size, shape and genitalia.

HIDALGO-GALIANA A, MONGE M, BIRON D G, CANALS F, RIBERA I & CIESLAK A 2015. Protein expression parallels thermal tolerance and ecologic changes in the diversification of a diving beetle species complex. *Heredity* doi.10.1038/hdy.201580 10 pp.

PRZEWOŹNY M, JASKUŁA R & REWICZ T 2015. First African records of *Agabus ramblae* Millán & Ribera, 2001. *African Entomology* **23** 275-279.

SIZE PATTERNS IN DYTISCIDAE – A FIVE MILLION YEAR EXPERIMENT

This paper begins with the question “Why are there so many kinds of animals?” as once posed by Evelyn Hutchinson (a student of Balfour-Browne, of course!). He was concerned that there were simply not enough niches to explain the numbers involved. The theory tested here is that a niche may be filled with a large number of species that are not completely identical, this nearness slowing up the process of competitive exclusion enough for each species to survive. The authors invoke not only Hutchinson but also the mathematician Alan Turing, who demonstrated that even a slight difference (a “Turing instability”) was enough to break up an otherwise homogeneous distribution into a regular pattern. The world's (then) known 4,168 diving beetle species were analysed by body length, showing that locally co-existing species are either very similar or differ by at least 35%, with intermediate size differences being rare, not more than 20%. The patterns are consistent for the Nearctic, the Palaearctic, the Afrotropical, the Neotropical, the Oriental and the Australasian faunas, also for the Northern versus the Southern Hemispheres.

SCHEFFER M, VERGNON R, NES E H van, CUPPEN J G M, PEETERS E T H M, LEIJS R & NILSSON A N 2015. The evolution of functionally redundant species; evidence from beetles. *PLOS ONE* doi:10.1371/journal.pone.0137974 1-10.

IN AND OUT OF MADAGASCAR

Biogeographical analyses indicated different colonisation histories for the tribes Hydatiini and Cybistrini. The Madagascan endemics among the Hydatiini were spread out across the tree, with some of elements in basal positions in different species groups and none of the endemic species as sisters. This suggests that Madagascar is the source of *Hydaticus* species in Africa and the Orient. In contrast Malagasy *Cybister* could have originated in the Orient with at least two colonisations. The oldest, at about 29 million years ago, resulted in *C. operosus* Sharp, which is unusual in living in running water. These conclusions need to be tested by similar analyses in Tropical Africa and in the Orient.

BUKONTAITE R, RANARILATIANA T, RANDRIAMIHAJA J H & BERGSTEN J 2015. In or Out-of-Madagascar? Colonization patterns for large-bodied diving beetles (Coleoptera: Dytiscidae). *PLoS One* doi:10.10137/journal.pone.0120777 22 pp.

NORTH ATLANTIC HITCHHIKING

It has got to be unusual to see a DAC (Detrended Correspondence Analysis) “biplot” based on the distribution of subfossil beetles from mainland Scandinavia, the Faroes, Iceland and Greenland. Eleven water beetles feature plus *Megasternum* “*obscurum*” - *Gyrinus opacus* Sahlberg, *Agabus bipustulatus* (L.), *Colymbetes dolabratus* (Paykull), *Hydroporus morio* Aubé, *H. nigrita* (Fab.), *H. palustris* (L.), *H. pubescens* (Gyllenhal), *Boreonectes* spp. (as “*Stictotarsus griseostriatus*”), *Anacaena globulus* (Paykull), *Coelostoma orbiculare* (Fab.) and *Hydraena britteni* Joy. This paper discusses how such beetles might have got around the north of the North Atlantic after retreat of the Ice Cap. Was there survival in refugia or did some parts start with a clean slate, a *tabula rasa*? Analysis of the data suggest that colonisation was east to west, presumably by ice-rafting, followed by introductions in the wake of human settlement, and then a series of local extinctions in the post-Mediaeval period of the Little Ice age.

PANAGIOTAKOPULU E 2014. Hitchhiking across the North Atlantic – Insect immigrants, origins, introductions and extinctions. *Quaternary International* **30** 1-10.

FERN WEEVIL IN DOÑANA

The chances are that, if you have ever found *Stenopelmus rufinasus*, you may well have found it in the complete absence of its host plant. This paper investigates this phenomenon. Ninety-one temporary ponds were sampled in 2005-7. The weevil was found in 17 of them, none of which had the host plant present! All the 48 specimens were found in May or June when production of *Azolla* was highest, suggesting dispersal from *Azolla*-infested sites. Or perhaps that the weevil has found alternative hosts.

FLORENCIO M, FERNÁNDEZ-ZAMUDIO R, BILTON D T & DÍAZ-PANIAGUA C 2015. The exotic weevil *Stenopelmus rufinasus* Gyllenhal, 1835 (Coleoptera: Curculionidae) across a “host-free” pond network. *Limnetica* **34** 79-84.

HEROPHYDRUS MUSICUS DISTRIBUTION

The *Herophydrus* is recorded for the first time from Croatia, Bulgaria and the Peloponnese. Maps are provided showing its overall distribution and its distribution around the Mediterranean.

SCHEERS K 2015. New distribution records of *Herophydrus musicus* (Klug, 1834) (Coleoptera: Dytiscidae). *Bulletin de la Société royale belge d'Entomologie* **151** 184-187.

THE OLDEST INSECT RECORDING SCHEME IN THE WORLD?

There have been no howls of anguish so far but there remains some modest caution in claiming that when Frank Balfour-Browne met for the first time with David Sharp on 20 August 1904 that there was there initiated the first insect, possibly even arthropod, recording scheme in the world. Of course, it all depends on what you mean by a recording scheme, and this is discussed in the paper below. Certainly the botanists and conchologists had got there before us. At the very least one might also claim that there have been no scientific papers in the past in which are depicted a thatched cottage (where Balfour-Browne worked on the scheme from 1903 to 1906) and a village pump, the one at Burwell where the meeting took place. If you want some real science then it is worth seeking out the rest of the papers in this Issue 3, based on a meeting at Bath to celebrate fifty years of the Biological Records Centre.

FOSTER G N 2015. Taking the oldest insect recording scheme into the 21st Century. *Biological Journal of the Linnean Society* **115** 494-504.



An unconvincing reconstruction of the meeting between David Sharp and Frank Balfour-Browne at Burwell village pump in 1904, Stephen McCormack and GNF
nhlioiua

HALIPLUS HOMOLOGY

The long postanal process of the larva is considered to be an outgrowth of the dorsal side of segment X, whereas in the past it has been considered to be the result of fusion of urogomphi.

MAKAROV K & PROKIN A A 2015. About homology of *Halipplus* Latreille, 1802 larvae postanal process (Coleoptera, Haliplidae) in: M Fikáček, J. Skuhrovec & P. Šípek (eds) Abstracts of the immature beetles meeting 2015, October 1-2, Prague. *Acta Entomologica Musei Pragae* **55** 879-881.

KAZAKHSTAN NEW RECORDS

Thirty-nine species are discussed with the following new for Kazakhstan, some of them very familiar to us in the west:- *Noterus crassicornis* (Müller), *Bidessus unistriatus* Goeze, *Colymbetes dolabratus* (Paykull) at 2520 m in the Altai Mountains, *Herophydrus musicus* (Klug), *Hydroporus incognitus* Sharp, *H. lapponum* (Gyllenhal), *H. melanarius* Sturm, *H. umbrosus* (Gyllenhal), and *Rhantus notaticollis* (Aubé). *R. bistriatus* Bergsträsser is newly recorded from the Asian part of Kazakhstan.

HÁJEK J & FERY H 2014. On the border of Western and Eastern Palaearctic – new records of water beetles (Coleoptera: Gyridae, Noteridae, Dytiscidae) from eastern Kazachstan. *Klapelekiana* **50** 151-160

IBERIAN DATABASE

As a sequel to production of the Iberian Atlas (see *Latissimus* 36) the 62,015 records of the database **EScarabajos ACuáticos IBéricos** are announced in Darwin Core Archive format. Unlike the Atlas the data include the Balearic Islands and Portugal. The data are dominated by Dytiscidae (43%), Hydraenidae (16%), Hydrophilidae (14%) and Elmidae (11%). Figure 2, the map, shows that there are still plenty of gaps to be filled.

SÁNCHEZ-FERNÁNDEZ D, MILLÁN A, ABELLÁN P, PICAZO F, CARBONELL J A & RIBERA I 2015. Atlas of Iberian water beetles (ESACIB database). *ZooKeys* **520** 147-154.

BEROSINE LARVAE

The most interesting observation in this paper is that *Berosus* larvae do not have the air bubbles in the gut typical of most hydrophilids. This is considered to be an adaptation to their bottom-living habit. *Berosus* larvae are easily distinguished by their long abdominal gill processes, whereas *Regimbartia* have shorter processes. The head spines do not differ greatly. A key is provided to the larvae of *Berosus* Leach, *Hemiosus* Sharp, *Derallus* Sharp, *Allocoterus* Kraatz, and *Regimbartia* Zaitzev.

MINOSHIMA Y N & HAYASHI M 2015. Description of the larval stages of the berosine genera *Berosus* and *Regimbartia* based on the Japanese species *B. japonica* and *R. attenuata* (Coleoptera: Hydrophilidae). *Acta entomologica musei nationalis Pragae* **55** 47-83.

APENNINES

One hundred and seventy-four species and subspecies of water beetle are recorded from the Apennines of Romagna, 16 of them being new for the area. This is compared with those of the Apennine areas of the provinces of Parma and Reggio Emilia, Modena and Bologna, and the neighbouring regions of Umbria and Marches.

ROCCHI S & TERZANI F 2015. Contributo alla conoscenza della coleotterofauna acquatica dell'Appennino romagnolo. *Quaderno di Studi e Notizie di Storia Naturale della Romagna* **42** 63-111.

BALFOUR~BROWNE CLUB MEETING, POLAND 2016

At a meeting is proposed for Chełm in eastern Poland on 27-30 May, organized by Paweł Buczyński and Adam Tarkowski (Maria Curie-Skłodowska University, Department of Zoology, Akademicka Str. 19, 20-033 Lublin), Edyta Buczyńska (University of Life Sciences in Lublin, Department of Zoology, Animal Ecology and Wildlife Management, Akademicka Str. 13, 20-033 Lublin), and Marek Przewoźny (Adam Mickiewicz University, Department of Systematic Zoology, Umultowska Str. 89, 61-614 Poznań). For papers about the area visit Paweł's scientific profile at: https://www.researchgate.net/profile/Pawel_Buczynski. For updates check with the organizers or go to the Club page of www.latissimus.org

Addresses

S.I. Aliev alisaleh@rambler.ru

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

Yeon Jae Bae, Department of Life Sciences, Korea University, Seoul 136-713, Korea yjbae@korea.ac.kr

Michael Balke, SNSB-Bavarian State Collection of Zoology, Münchhausenstraße 21, 81247 Munich, Germany kaefer@zsm.mwn.de

Prof. D.T. Bilton, Marine Biology and Ecology Research Centre, Plymouth University, Drake Circus, Plymouth PL4 8AA, England, UK d.bilton@plymouth.ac.uk

Prof. Dr Olof Biström, Finnish Museum of Natural History, Zoology Unit, PO Box 17, FI-00014 Helsinki, University of Helsinki, Finland olof.bistrom@helsinki.fi

Rasa Bukontaite, Department of Zoology, Swedish Museum of Natural History, Box 50007, Stockholm, Sweden rasa.bukontaite@sm.se

Mustafa Darilmaz, Aksaray University, Science and Art Faculty, Department of Biology, 68100 Aksaray, Turkey email given is for Ahmet Polat ahmetpolat@atauni.tr

Marcus Drotz, Lake Vänem Museum of Natural and Cultural History, Lidköping, Västra Götaland, Sweden Marcus.drotz@lidkoping.se

Jean-François Elder, 2 rue de la Cavée, F-50880 La Meauffe, France jean-francois.elder@wanadoo.fr

Romas Ferenc, Zoological Museum, Laisvės al. 106, LT-44253 Kaunas, Lithuania entomolo@zoomuziejus.lt

Hans Fery, Räuschstraße 73, D-13509 Berlin, Germany hanfry@aol.com

Margarita Florencio, Escatión Biológica de Doñana (CSIC), Sevilla, Spain margarita@ebd.csic.es

Anna Frelik, Department of Ecology & Environment Protection, Faculty of Biology and Biotechnology, University of Warmia and Mazury, Olsztyn 10-727, Poland anial2634@gmail.com

R. Antonio Gómez, Graduate Interdisciplinary Program in Entomology and Insect Science, 1040 E. 4th Street, PO Box 210077, Tucson, AZ 85721-0077, USA ragomez@email.arizona.edu

John Gould John.Gould@uon.edu.au

Czesław Gren, ul. Gaikowa 10, 41-707 Ruda Śląska, Poland Czeslaw.gren@vp.pl

Jiří Hájek, Department of Entomology, National Museum, Cirkusová 1740, CZ-193 00 Praha 9 – Horní Počernice, Czech Republic jiri_hajek@nm.cz

Martin Hammond, 44 Stoneyhurst Avenue, Acklam, Middlesbrough TS5 4RE, Yorkshire, England, UK martinhammond@ecology.at@gmail.com

Lars Hendrich, Mörchinger Strasse 115a, 14169 Berlin, Germany hendrich1@aol.com

Carles Hernando, PO box 118, E-08911 Badalona, Spain leptophylus@gmail.com

Amparo Hidalgo-Galiana, Animal Biodiversity and Evolution, Institute of Evolutionary Biology (CSIC-Universitat Pompeu Fabra), Passaig Marítim de la Barceloneta 37-49, Barcelona 08003, Spain hg.amparo@gmail.com

Toshio Inoda, Conservation Laboratory of Rare Water Insects, Tokyo, Japan inoda@kxb.biglobe.ne.jp

Povilas Ivinskis, Nature Research Centre, Akademijos 2, Vilnius, Lithuania entlab@gmail.com

Dr Manfred A. Jäch, Naturhistorisches Museum Wien, A-1010 Wien, Austria Manfred.jaech@nhm-wien.ac.at

Dr Fenglong Jia, Institute of Entomology, Life Sciences School, Sun Yat-sen University, Guangzhou, 510275, Guangdong, China fenglongjia@alilyun.com

Dr Horst Kippenberg, Langer Platz 21, D-91074 Herzogenaurach, Germany horst.kippenberg@web.de

Vojtěch Kolář, Institute of Entomology, Biology Centre, Czech Academy of Science, Branišovská 31, CZ-370 05 České Budějovice, Czech Republic kolarvojta@seznam.cz

P. Sreerama Kumar, ICAR-National Bureau of Agricultural Insect Resources, PO Box 2491, H.A. Farm Post, Hebbal, Benaluru 560 024, India psreeramakumar@yahoo.co.in

C.N. Kuzhuget, Laboratory of Biodiversity and Gynocology, Tuvianian Institute for Exploration of Natural Resources, Siberian Branch of Russian Academy of Sciences, Internationalnaya Str. 117a, Kyzyl 667007, Russia kuzhuget.chingis@yandex.ru

Kirill Makarov, Zoology & Ecology Department, Moscow Pedagogical State University, Kibalchicha Str. 6, Bld. 5, Moscow 129164, Russia kvmac@inbox.ru

Alessandro Mascagni, Museo Zoologico "La Specola", Via Romana 17, 50125 Firenze, Italy pcfmas@tin.it

G. Masó, Consorci del Museu de Ciències Naturals de Barcelona, Laboratori de Natura, Psg. Picasso s/n, 08003 Barcelona, Spain gmaso@bcn.cat

- Duane McKenna, University of Memphis, Department of Biological Sciences, Memphis, 3700 Walker Avenue, Memphis, TN, USA 38152 mckenna@memphis.edu
- Mariano Michat, IBBEA, CONICET-UBA – Laboratory of Entomology, DBBE-FCEN, University of Buenos Aires, Argentina marianoide@gmail.com
- Yūsuke Minoshima, Natural History Division, Kitaykyushu Museum of Natural History & Human History, Higashida 2-4-1, Yahatahigashi-ku, Kitakyushu-shi, Fukuoka, 805-0071 Japan minosima@kmnh.jp
- Holger Müller, Unterpreilipp 1, D-07407 Rudolstadt, Germany devilmueller@gmail.com
- Volker Neumann, Martin-Luther Universität Halle-Wittenberg, Zentralmagazin Naturwissenschaftlicher Sammlungen, Domplatz 4, 06099 Halle (saale), Germany volker.neumann.col@t-online.de
- Žygimantas Obelevičius, Department of Zoology, Vilnius University, M.K. Čiurlionio 21/27, LT-03101 Vilnius, Lithuania z.obelevicius@gmail.com
- Joanna Pakulnicka, Department of Ecology and Environmental Protection, University of Warmia and Mazury in Olsztyn, Plac Łódzki 3, 10-727 Olsztyn, Poland Joanna.pakulnicka@uwm.edu.pl
- Eva Panagiotakopulu, School of Geosciences, University of Edinburgh, Edinburgh EH8 9XP, Scotland, UK eva.p@ed.ac.uk
- Hellen Pethers, Library & Archives, Natural History Museum, London SW7 5BD h.pethers@nhm.ac.uk
- A.G. Ponomorenko, Borissiak Paleontological Institute, Russian Academy of Sciences, Profsoyuznaya ul. 123, Moscow, 117997 Russia aponom@paleo.ru
- Sasha Prokin, Papanin Institute for Biology and Inland Waters of the Russian Academy of Sciences, Borok, Yaroslavl Oblast' 152742 Russia prokina@mail.ru
- Marek Przewoźny, Department of Systematic Zoology, Faculty of Biology, Agam Mickiewicz University, Umultowska 89, 61-614 Poznań, Poland Hygrotus@amu.edu.pl
- Pierre Queney, 10 rue Descartes, F 92190 Meudon, France Pierre.queney@wanadoo.fr
- Saverio Rocchi, Museo di Storia Naturale dell'Università degli Studi di Firenze, Sezione di Zoologia "La Specola", via Romana, 17, I-50125, Italy rocchisaverio@gmail.com
- Bryan Sage, Waveney House, Wells-next-the-Sea, Norfolk NR23 1HU, England, UK bryan.sage@btinternet.com
- David Sánchez-Fernández, Institut de Biologia Evolutiva (CSIC-Universitat Pompeu Fabra), Passaig Marítim de la Barceloneta 37-49, Barcelona 08003, Spain dauidsan@um.es
- Kevin Scheers, Parkstraat 21, 9100 Sint-Niklaas, Belgium aquatic.adephaga@gmail.com
- Marten Scheffer, Department of Aquatic Ecology & Water Quality Management, Wageningen University, PO Box 47, NL-6700 AA, Wageningen, The Netherlands martin.scheffer@wur.nl
- Rudolf Schuh, Wielandgasse 3/6, A-2700 Wiener Neustadt, Austria Rudolf.schuh@a1.net
- Maksim Shapolovalov, Laboratory of Bioecological Monitoring of the Invertebrates of the Republic of Adygeya, Adyge State University, Pervomayskaya 208, Maykop, 385000 Republic of Adygeya max_bio@rambler.ru
- Stanislav Skalický, Dukla 322, CZ-56201 Ústí nad Orlicí, Czech Republic s.skalicky@wo.cz
- Jiří Stanovský, Na Výspě 18, CZ-700 30 Ostrava-Výškovice, Czech Republic stanovsky.j@seznam.cz
- Rabia Soufi, Bulgarian Academy of Sciences, 2 Gagarin Street, 1113 Sofia, Bulgaria soufi@ecolab.bas.bg
- Mark Telfer, 10 Northall Road, Eaton Bray, Dunstable, Bedfordshire LU6 2DQ, England, UK mark.g.telfer@btinternet.com
- Martijn Timmermans, Department of Natural Sciences, Middlesex University, London NW4 4BT m.timmermans@mdx.ac.uk
- Mario Toledo, Museo di Storia Naturale, Università di Parma, via Farini 90, 43100 Parma, Italy Toledo.pinguicula.mario3@gmail.com
- Patricia Torres, Laboratorio de Entomología, Departamento de Biodiversidad y Biología Experimental, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina patriciamtorres@yahoo.com.ar
- Clive Turner, 13 Forrester Drive, Woolwell, Plymouth, Devon PL6 7QA, England, UK clive.turner@excite.com
- Dariusz Twardy, ul. F. Chopina 105, 36-200 Brzozów, Poland agrilus75@interia.eu
- Oscar Vorst, Poortstraat 55, 3572 HD Utrecht, The Netherlands Vorst@xs4all.nl
- Jon R. Webb, Natural England, Suite D, Unex House, Bourges Boulevard, Peterborough PE1 1NG, England, UK jon.webb@naturalengland.org.uk
- Prof. Dr Günther Wewalka, Starkfriedgasse 16, A-1190 Wien, Austria g.wewalka@t-online.at
- Aidan T Williams, Julianstraat 5, 6067 EV Linne, Netherlands awilliams@home.nl
- Evgenii Zinovyev, Institute of Plant and Animal Ecology, Ural Branch, Russian Academy of Sciences, Ekaterinburg, Russia zin62@mail.ru
- Peter Zwick, Schwarzer Stock 9, Schlitz 36110, Germany pleco-p.zwick@t-online.de
-

CONTENTS			
AN OBSERVATION OF EGG LAYING BY THE AUSTRALIAN DYTISCID, <i>HYDATICUS PARALLELUS</i> J Gould & C H S Watts			13
AN UPDATED CHECKLIST OF HALIPLIDAE, GYRINIDAE, DYTISCIDAE, NOTERIDAE & HYDROPHILIDAE FROM HONG KONG F Jia, E K W Chan, Yi Lee & P Aston			14
IN THE LAND OF THE GREAT RIVER R B Angus			8
REMOVAL OF INCORRECT <i>HELOPHORUS</i> RECORDS FROM THE <i>CATALOGUE OF PALAEARCTIC COLEOPTERA</i> R B Angus			18
Editorial and miscellanea			
ABOMINATIONS ON HAMPSTEAD HEATH	36	Addresses of authors	42
<i>KOLEOPTEROLOGISCHE RUNDSCHAU</i> 85	1	PERITRICH CILIATES	30
Books		NEW PALAEARCTIC CATALOGUE	35
Papers and similar articles (often abbreviated)			
<i>ACILIUS</i> VERSUS NEWT	4	IBERIAN DATABASE	41
AFROTROPICAL <i>LACCOPHILUS</i>	24	IN AND OUT OF MADAGASCAR	39
<i>AGABUS</i> LOTTI	1	KAZAKHSTAN NEW RECORDS	40
<i>AGABUS RAMBLAE</i> COMPLEX	38	KOREAN ELMIDAE	26
AMBER <i>HYDROTRUPES</i>	33	<i>LACCOMIMUS</i>	22
APENNINES	41	LAKE SARYSU	23
ARGENTINIAN INVENTORY	23	LITHUANIAN RARITIES	34
BARCELONA MUSEUM TYPES	21	MITE ON SCIRTID	7
BETLES AS INDICATORS	33	MORE COPELATINAE	23
BELGIAN <i>DYTISCUS LAPPONICUS</i>	34	MORE SOUTH AFRICANS	13
BEROSINE LARVAE	41	MOSSSES	25
BOLIVIAN <i>TROPICUS</i>	2	NEW FINDS IN AUSTRIA	2
BRITAIN'S FIRST?	17	NEW GREEK <i>OCHTHEBIUS</i>	2
BULGARIAN AND IRISH RIVERS COMPARED	35	NEW GREEK <i>OREODYTES</i>	18
CARPATHIAN STREAM	23	NORTH ATLANTIC HITCHHIKING	39
CENTRAL RUSSIAN FOREST-STEPPE FAUNA	37	NORWEGIAN RED LIST	32
COLEOPTERA PHYLOGENY AGAIN	28	POLISH RECORDS	25
<i>COLYMBETES PAYKULLI</i> GROUP	24	<i>PRASOCURIS HANNOVERIANA</i>	27
COPTOCLAVID ADVANCES	36	RECENT ENGLISH RECORDS	37
<i>CYBISTER</i> SEXUAL ACTIVITY	27	SAALE MEADOWS	26
CZECH <i>CYBISTER LATERALIMARGINALIS</i>	34	SCILLONIAN BEETLES	19
<i>DONACIA</i> AS A GENUS	2	SCIRTID MATTERS	20
DUCKWEEDS VERSUS STYROFOAM	28	<i>SEKALIPORUS</i> IN AUSTRALIA	20
DYTISCID FEEDING PREFERENCES	22	SIBERIAN LAKE FAUNA	33
DYTISCIDAE 4,359 SPECIES	26	SILESIA HYDROPHILIDAE	7
<i>ERETES</i> IN CENTRAL EUROPE	24	<i>SINASPIDYTES</i>	21
<i>EXOCELINA</i>	26	SIZE PATTERNS IN DYTISCIDAE	38
FERN WEEVIL IN DOÑANA	39	SO EVERYONE KNOWS 'IS DES GOZIS	16
FRIESIAN SURVEY	20	SOUTH AFRICAN HYDRAENID	2
<i>HALIPLUS</i> HOMOLOGY	40	SRI LANKAN <i>PESCHETIUS</i>	1
HAWAII'IN <i>HYGROTUS</i>	24	<i>STENELMIS</i> IN THE CAUCASUS	23

CONTENTS continued			
HEREWARD CHUNE DOLLMAN 1888-1919	27	STERNHYDRUS LARVA	3
HEROPHYDRUS MUSICUS DISTRIBUTION	39	THE MAIN TREE IN THE FOREST	22
HETEROCERIDAE PART 2	4	THE OLDEST RECORDING SCHEME	40
HYDATICUS SEXGUTTATUS GROUP	1	TUSCAN BYRRHOIDEA	4
HYDROCHUS LIFE-HISTORY	16	TURKISH HYDRADEPHAGA	3
HYDROPORUS INCOMMODUS IN AUSTRIA	1	WEEVILS TO THE RESCUE	27
HYDROPORUS PRODUCTUS IN TUNISIA	37	WEST SIBERIAN SUBFOSSILS	29
HYDROPORUS RUFIFRONS	21	YEMENI BEETLES	3
<i>In memoriam</i>		PER BRINCK 1919-2013	0
Meetings		POLAND 2016	41
VAL DE LOIRE 2014	29	VILLAFRANCA DEL BIERZO 2015	5

ADDRESSES The addresses of authors of articles and reviewed works are mainly given at the end of this issue of *Latissimus*. The address for other correspondence is: Professor G N Foster, 3 Eglinton Terrace, Ayr KA7 1JJ, Scotland, UK – latissimus@btinternet.com

LATISSIMUS 37

IS A PUBLICATION OF THE BALFOUR~BROWNE CLUB.

IT WAS FIRST PRODUCED IN PORTABLE DOCUMENT
FORMAT (PDF) IN-HOUSE ON 8 MARCH 2016.