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Patrick Wyse Jackson, President

Catherine Reid, Secretary

Abigail Smith, Treasurer

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Comments regarding this Bulletin should be addressed to the IBA Secretary: catherine.reid@canterbury.ac.nz

Further information at www.bryozoa.net/iba

IBA President Elect

The elections for IBA President drew a very good response and I can announce that Tim Wood received the majority of votes and is the new IBA President Elect, and he will take up the post at the next IBA meeting in Melbourne. Congratulations Tim!

Catherine Reid

Treasurers News

Since the meeting in Sicily (and including donations received there), we have acquired \$2575 NZD from 33 donations. That's about E1579 and USD \$2133. We would love to be able to make four travel grants of about 1000E each so still need more donations! It's easy, just email the treasurer abby.smith@otago.ac.nz or the secretary catherine.reid@canterbury.ac.nz and we will send the form.

Abby Smith

News from the Membership

Alan Cheetham (Santa Fe, New Mexico, USA): My hearty thanks go to Patrick and the Council for the handsome IBA President's medal that I received last July, and for the sentiment it expresses. Marjorie and I are grateful also for the postcard from Catania signed by so many of our dear friends. Although I am retired from bryozoology and my traveling is done, we are constantly reminded of the many meetings at wonderful venues, from Stockholm to Dublin, that we were privileged to attend.

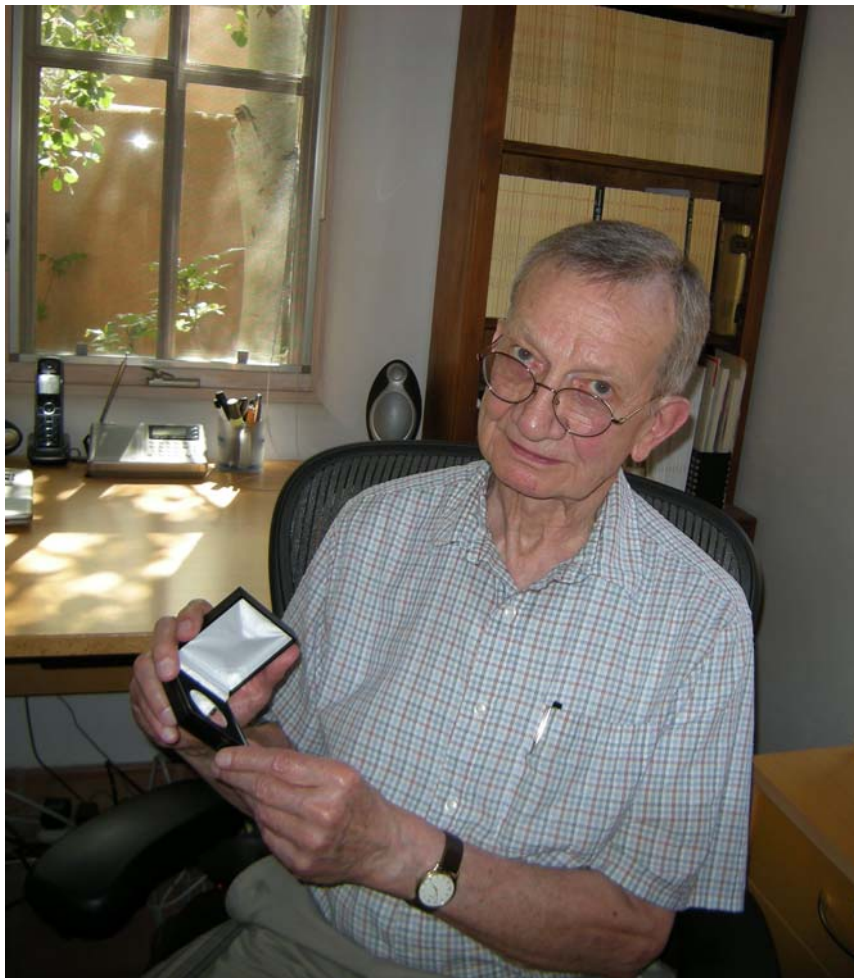


Photo: Alan receives his medal in the post.

Virginia Museum of Natural History hosts a visitor from Colombia. Vanessa Yepes-Narváez, a scientist in the Marine Biodiversity and Ecosystems program of INVEMAR, the Colombian Marine and Coastal Research Institute is spending 3 weeks at the VMNH in Judith Winston's Lab. She is using the SEM and bryozoan collection there to help her identify and confirm species of bryozoans from the Pacific and Caribbean coasts of Colombia that were collected in different research programs at INVEMAR. Vanessa is enjoying the bright colored autumn foliage of the Blue Ridge Mountains very much – but the 20 degree C temperature drop from her home in Santa Marta on the Caribbean coast – not so much!

Vanessa is working with a project called "Recruitment dynamic of sessile biota in the marine ecosystems of Malpelo Island. She is undertaking a taxonomic review of the cryptic bryozoan species appearing in the succession process on the underside of the plates. For the study divers placed 48 acrylic plates in two different depths and locations at Malpelo Island. The plates were submerged from July 2010 to September 2011. That period of submergence resulted in a huge bryozoan community on the plates. Her institution allowed her to travel to VMNH to work with Dr. Winston and take SEM pictures to help her identify them correctly. She also plans to briefly visit the National Museum of Natural History before returning to Colombia.



Andrew Ostrovsky spent 1.5 in Colombia doing field works in a frame of Hydrosagamoso Project in June-July 2013. Three bryozoan collections were made in the central Colombia of the Valanginian (Rosablanca Fm, near Zapatoca), Aptian (El Tablazo Fm, near Lebrija) and Maastrichtian (Umir Fm, near Lebrija). Valanginian and Aptian bryozoans have been found in the South America for the first time.

From Andrew's diary: Apart of helping to local palaeontologists with various collecting activities (lobsters, fish, plants, pollen, dinosaurs tracks and "very" heavy pliosaurus that we finally cutted off the rock:-)) I was able to make three collections of the Valanginian, Aptian and Maastrichtian ages. Altogether there are about 140 specimens. Preservation is from very poor to excellent, mostly - satisfactory for studies. All specimens are numbered including the STRI numbers, packed and ready to be sent to Bogota.

I had infected a couple of students with BIDS (bryozoan immunodeficit syndrome). Now they know how bryozoans look like, and will be searching them for me. We predominantly worked in the province called Santander, traveling around Bukaramanga, Lebrija and St Vicente de Chikuri. But last three day we were hammering near Villa de Leyva (2700 m altitude, 8 hours drive from Lebrija). Here are massive shell beds of the Albian-Cenomanian, but we found no bryozoans. Pity! Exactly these ages were my main aim.

Andrew also spent August and September in Marseille at the Station Marine d'Endoume, hosted by Prof. Alexander Ereskovsky. We collected *Adeonella calveti* and *Myriapora truncata* in the underwater semi-caves, trying to get preliminary information on their reproduction. Jo Harmelin was also around being busy with many things including fish, National Parks and bryozoans.



A



B



C

A - shows me and two young Colombian colleagues - Andres Cardenas Roza and Lucia Espitia.

B - shows me and Jo Harmelin (our French colleague) in his office.

C - shows me and Alexander Ereskovsky after dive near Maire Island.

Blanca Figuerola: I finished my thesis titled "Biodiversity and chemical ecology in Antarctic bryozoans". I will give the thesis presentation in November-December 2013. I will be happy to share my thesis (and illustrations) with IBA members by Dropbox!



New Members

Sergio González Mora. I am Biologist and Math student at Faculty of Sciences in National Autonomous University of Mexico (UNAM). I completed my undergraduate studies in Biology (2013) and I wrote my thesis about a fenestrate bryozoan fauna from the Carboniferous of Oaxaca, Mexico, where I have described five bryozoan forms of the order Fenestrida, found in Pennsylvanian rocks of Ixtaltepec Formation: *Rectifenestella* sp., *Polypora* sp., *Polyporella* sp., *Penniretepora* sp. 1 and *Penniretepora* sp. 2. The results of my work are now in press. Currently I study math and I describing the rest of bryozoan fauna of Ixtaltepec Formation (Pennsylvanian) under the supervision of Dr. Francisco Sour Tovar. I loved having studied bryozoans and I'm most interested in several aspects of its biology. At the next year I plan to continue study carboniferous bryozoan faunas of Mexico for my MSc. My main academic interests include the paleobiology, mathematical modelling, systematics, ecology and evolution of fossil bryozoans, particularly fenestrates. If you have any suggestions about my work or any questions, please contact me via email: gioser@ciencias.unam.mx. Best wishes to all.



***Pectinatella* colonies: Bigger and Badder?**

Tim Wood

I think most of us are reconciled to the fact that few people outside our specialized field have ever heard of a bryozoan. This is not surprising. Bryozoans do not draw attention to themselves. They don't bite, sting, or cause human disease; and they hardly move at all. Being always attached to something else adds to their anonymity.

A possible exception is the freshwater bryozoan, *Pectinatella magnifica*. With its large, gelatinous colonies this species is very conspicuous, especially at the end of the season when colonies float to the water surface. About that time I receive dozens of phone calls, and email inquiries from people anxious about *Pectinatella*. Typical questions are, "How can I get rid of the disgusting things in my pond?" and "Can these jelly blobs harm fish, pets or people?" I am always prepared to respond with basic information and reassurance that *Pectinatella* colonies are completely harmless. I explain that the jelly masses filter large amounts of water 24 hours a day. If I had my own lake I would certainly want *Pectinatella* living in it.

However, I am starting to have second thoughts. Incidents of actual damage caused by *Pectinatella* seem to be increasing. For example:

- Last year a large mass of colonies broke loose and partially obstructed the outlet works of an important reservoir supplying water to New York City. There are now fears of a similar incident occurring at the Occoquan Reservoir serving Washington, D.C.
- Water intake boxes for small irrigation systems sometimes become so covered with *Pectinatella* that the sides collapse from the inward pressure (Figure 1).
- At freshwater marinas it is no longer unusual for colonies of *Pectinatella* cover submerged dock pilings, ladders, and boat hulls. Boat owners routinely arrive for a weekend outing equipped with rakes and shovels to dislodge the slimy masses (Figures 2 and 3).

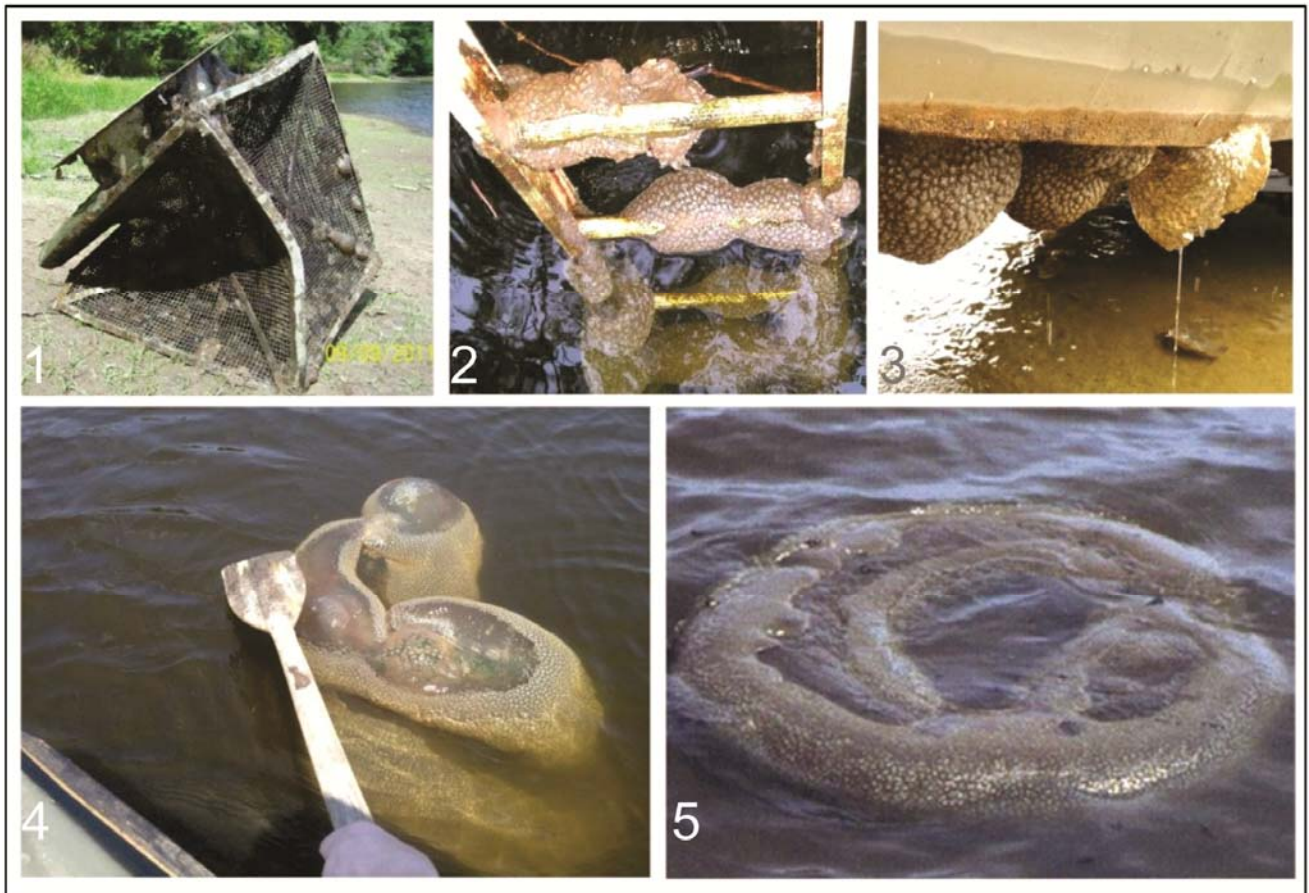
Problems caused by *Pectinatella* are not new. A published account in 1937 describes the intake of a hydro-electric plant threatened by detached gelatinous colonies following a storm. In that case it was the number of colonies, not their size, that was causing concern.

But now *Pectinatella* colonies in North America appear to be getting larger. The evidence so far is weak, coming only from random photos sent to me every year. Thirty years ago the colonies were about fist-sized. More recently they have been comparable to basketballs. Last week I received a photo of a colony that appeared to be considerably larger than myself (Figure 4).

In 1974 when Shuzitu Oda reported invasive *Pectinatella* in Japan he described some of the giant colonies the size of a "sheep's body" (Figure 5). I wondered why we never saw such large sizes in North America, their native land. In the transition to Japan did *Pectinatella* somehow escape the factors that stunted their growth back home? The puzzle was never solved, but meanwhile we are now seeing colonies the same size or larger in North America.

As the colonies grow larger, *Pectinatella* is also expanding its range in Europe and northern Asia; it is also spreading further north through Canada. Even within its native home of eastern North America the species seems to be increasingly abundant. Most people who write to me about *Pectinatella*, including many naturalists, are emphatic that they have never before seen it in their area.

And while I ponder the changes occurring with *Pectinatella* one thing is clear: this bryozoan ambassador is attracting a lot more attention.



Photos of *Pectinatella magnifica*. 1) Collapsing a water intake box of a small irrigation system; 2) Growing on a submerged ladder; 3) Growing on the underside of a recreational fishing boat; 4) Recent photo from a private lake in Mississippi; 5) Large colony in Japan (photo by S. Oda).

References:

Geiser, S.W. 1937. *Pectinatella magnifica* Leidy: an occasional river-pest in Iowa. Field and Lab. 5: 65-76.
 Oda, S. 1974. *Pectinatella magnifica* occurring in Lake Shoji, Japan. Proc. Jap. Soc. syst. Zool. 10: 31-39.

BUSK COLLECTION

Mary Spencer Jones

In 1899, the collection of bryozoologist, George Busk, was presented to the Department of Zoology, British Museum (Natural History) by his daughters. The material was accessioned under registration number, 1899.7.1.****. and numbered over six thousand specimens. The individual register reflects the large amount of material that Busk received from many eminent Victorian scientists, clergymen, naval officers, amateur lady naturalists and expeditions, such as Charles Darwin, Rev. David Landsborough, Robert MacAndrew, Miss Horatia Gatty and the voyage of HMS "Challenger".

This valuable resource has been data-based and the information can now be found on the NHM's online database.

See <http://www.nhm.ac.uk/research-curation/scientific-resources/collections/zoological-collections/zoology-specimen-database/>

Biodiversity Data Journal

Mary Spencer Jones

On the 16th September the new Biodiversity Data Journal (BDJ) was launched. This is a journal of Pensoft Publishing, the same group that publish PhytoKeys and ZooKeys, and is a major part of the EU funded ViBRANT project led by the NHM.

BDJ is a revolutionising publication platform that has been developed to speed up biodiversity publication and facilitate re-use of published data. You can publish data that wouldn't be publishable elsewhere (e.g. single taxon treatments, checklists to local flora or faunas, ecological and biological observations, keys to species, software) as well as any other type of biodiversity related article (revisions, taxonomic treatments, phylogenies, ecological studies etc). There are no upper or lower limits on words. Articles are peer reviewed.

BRYOZOOLOGISTS ON WIKIPEDIA continued

More:

http://en.wikipedia.org/wiki/George_Busk

http://en.wikipedia.org/wiki/Thomas_Hincks

http://en.wikipedia.org/wiki/Alcide_d%27Orbigny

http://en.wikipedia.org/wiki/Jean_Victoire_Audouin

http://en.wikipedia.org/wiki/Henri_Milne-Edwards

http://en.wikipedia.org/wiki/Marie_Jules_César_Savigny

http://en.wikipedia.org/wiki/Paul_MacGillivray

<http://en.wikipedia.org/wiki/Lamouroux>

<http://en.wikipedia.org/wiki/Lamarck>

http://en.wikipedia.org/wiki/Peter_Simon_Pallas

Cheers!

Phil Bock

philbock1@gmail.com

ONLY MAJOR FOSSIL PHYLUM WITHOUT A RECORD FROM CAMBRIAN ROCKS IS ... STILL MISSING

*Re-interpretation of a late Cambrian “bryozoan” as an octocoral.
The quest for the elusive Cambrian Bryozoa continues*

Steve Hageman

(Journal of Paleontology Press Release)

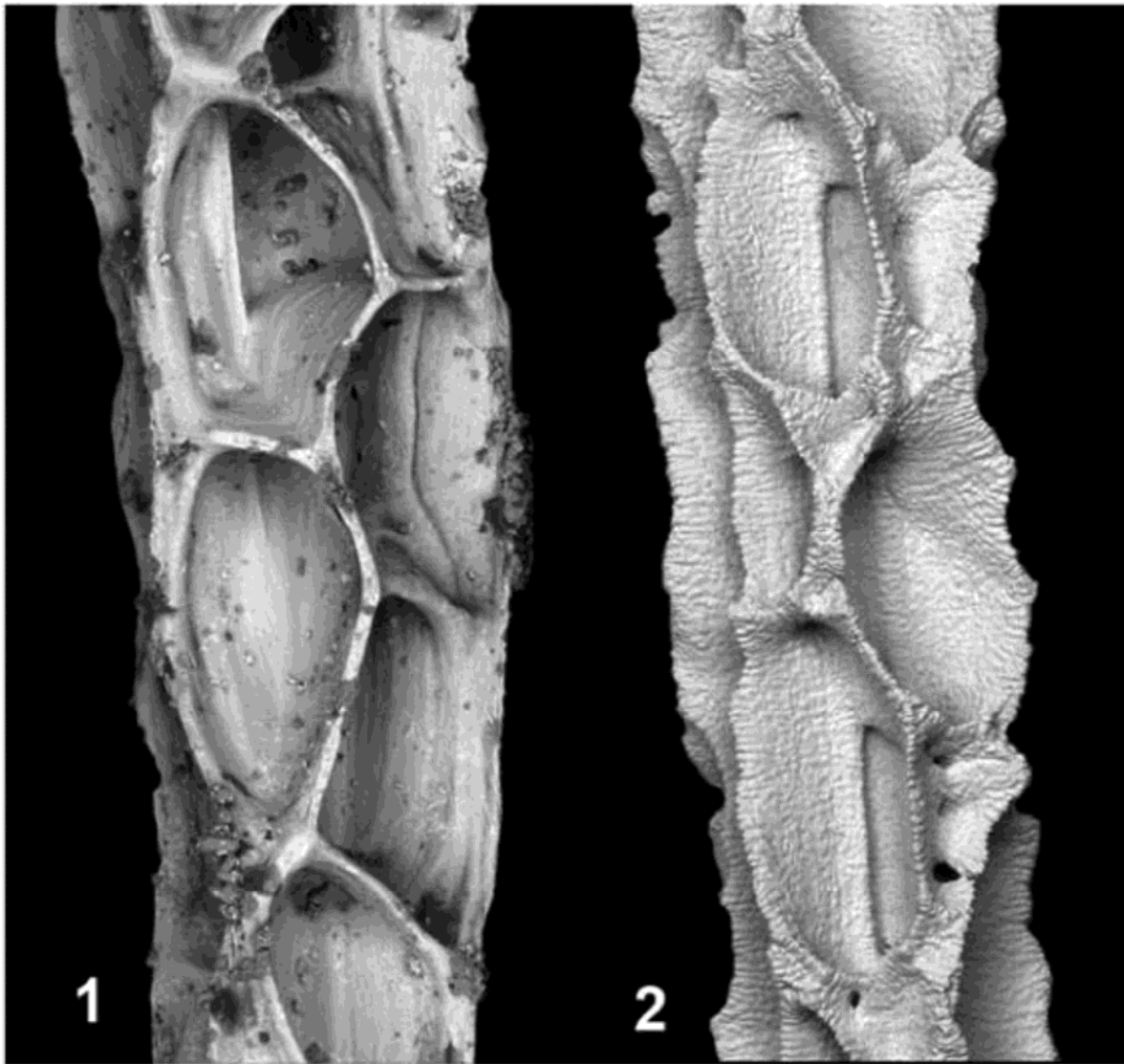
A new study shows that a Cambrian-aged fossil reported to be the oldest example of a bryozoan is instead an octocoral (Phylum Cnidaria). This finding has broad implications because almost all phyla of animals with skeletons make their first appearance in the fossil record in either the Cambrian or shortly before in the Neoproterozoic. The appearance of representatives of every major animal group during a relative narrow interval of Earth’s history (~540–510 million years ago) is known as the ‘Cambrian Explosion’. Only one major group of organisms is missing from the Cambrian fossil record: Bryozoa, a phylum of mostly marine colonial invertebrates, which make their debut as fossils toward the end of the Early Ordovician, some 35 million years later. Bryozoans are typically not recognized by the public because their small colonies, often coating the surface of rocks or shells, tend to be mistaken for algae or sponges. They are, however, common in modern seas and have an excellent fossil record.

In the past 50 years, multiple reports of supposed Cambrian bryozoans have been published but none have convinced specialists in these animals. The most recent assertion of a Cambrian bryozoan was published in 2010 in the journal *Geology* where Landing and others named a putative bryozoan *Pywackia*. A primary tenet of science is the ability to publish new ideas and observations that can then be tested by the community. Even though most bryozoologists were skeptical of *Pywackia* as a bryozoan, negative arguments are never as persuasive as positive ones, i.e., “if not a bryozoan what is it?”

An international group of paleontologists (Taylor –Natural History Museum, London, UK, Berning–Linz, Austria and Wilson–Wooster, OH) did just that and have proposed that the 2010 Cambrian “bryozoan” specimens are actually fossils of an octocoral in a paper slated for publication in the November issue of the *Journal of Paleontology*. Modern examples of octocorals include sea fans and sea whips (gorgonians), sea pens and soft corals popular in tropical marine aquaria.

The internet played a significant role in making the connection between the Cambrian fossils of the genus *Pywackia* and a modern sea pencil (a type of octocoral) called *Lituarina*. While browsing on the website Wild Singapore, Bjorn Berning of the Upper Austrian State Museums noted striking similarities between the two (see the figure below). The *Journal of Paleontology* article by Taylor et al. (Nov., 2013) provides a detailed study of specimens of the Cambrian *Pywackia* and modern *Lituarina* and makes the argument for octocoral affinities of *Pywackia*.

This reinterpretation of *Pywackia* leaves the Phylum Bryozoa as the only major phylum that is unrepresented in the Cambrian Explosion. Most paleontologists suspect that bryozoans were actually present in the Cambrian but were soft-bodied. Finding fossils of these animals remains elusive.



Scanning electron micrographs illustrating the resemblance between (1) the Cambrian *Pywackia baileyi* (0.4 mm wide from Oaxaca State, Mexico) and the axis of the Recent pennatulacean octocoral *Lituaria* sp. (2.3 mm wide from Changi, Singapore). Image file available from jpaleo@si.edu.

References

- Landing, E., English, A. and Keppie, J.D. 2010. Cambrian origin of all skeletalized metazoan phyla—Discovery of Earth's oldest bryozoans (Upper Cambrian, southern Mexico). *Geology*, v. 38, no. 6, p. 547–550.
- Taylor, P.D., Berning, B., Wilson, M. 2013. Reinterpretation of the Cambrian “bryozoan” *Pywackia* as an Octocoral. *Journal of Paleontology*, v. 88, n. 6, p. 984–990.

Wild Singapore Web Site

<http://www.wildsingapore.com/wildfacts/cnidaria/others/pennatulacea/pencil.htm>

In memory of IBA'83 Vienna – 30 years ago!

Norbert Vávra

Department of Palaeontology, University of Vienna

Photos by Charles Reichel (📷 Vienna)

Having had to retire already a number of years ago, I try nevertheless – like most university teachers do after their retirement – to continue my scientific studies, to work through lots of interesting samples and to sort papers, reprints etc. As one of the results of these activities I have in my study in my small house, situated in the southern outskirts of Vienna a number of boxes containing conference programs, field guides, lists of participants etc. of IBA conferences which I had attended in the time from 1974 – 2010; during this period I had only missed the conference in New Zealand in 1995.

In 1983 I had the great honour and pleasure to be conference host for the association and to welcome about 70 participants from 18 different countries here at Vienna. At this time Gilbert Larwood (Department of Geol. Sciences, University of Durham, England) had been president of the IBA, secretary-treasurer had been Dr. Claus Nielsen (Zoologisk Museum, København). The conference had been scheduled for July 18th (Monday) until July 23rd (Saturday). There had been offered a pre-conference field trip (Palaeontological Field Meeting, July 12th – July 15th), and as post-conference field trip a zoological trip to the Adriatic Sea (Piran and Rovinj, organized by G. Frank and R. Kikinger, then Vienna).

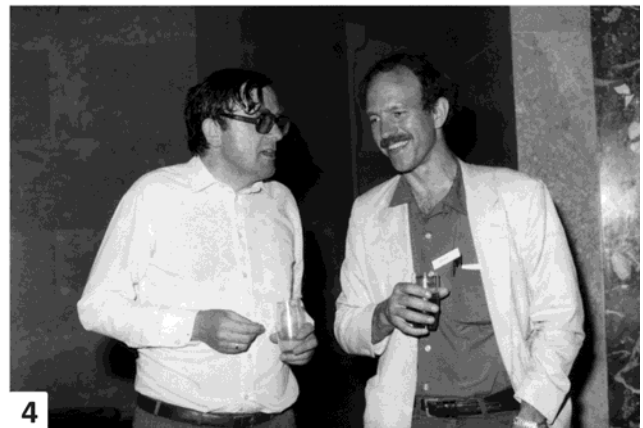
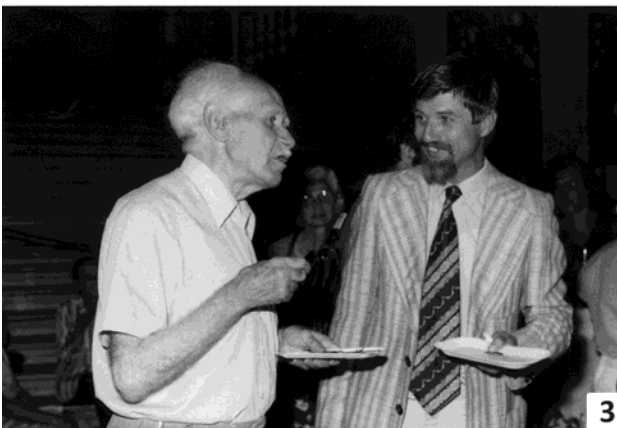
The palaeontological field trips offered an overview concerning fossiliferous sediments of the Miocene of the Vienna Basin, the basin of Eisenstadt, and the Early Miocene of the Eggenburg area. As a supplementary program a half day trip to Baden (clay-pit being the type locality of the “Badenian” [Middle Miocene] and sampling in the ‘bryozoan marls’) had been organized. Among the outcrops visited were some important type localities for bryozoan studies. Scenic stops in the city of Rust as well as a boat trip on Lake Neusiedl had been included. The participants of the post-conference trip to the Adriatic Sea had possibilities to collect recent marine bryozoa by dredging as well as by beach collecting.

During the conference itself more than 50 papers were presented, concerning an impressive variety of topics, the titles of the different sessions may give at least a rough idea of the presentations: “Studies on recent and fossil bryozoa”, “Biology, growth and environment”, “(Palaeo)zoogeography and Biostratigraphy”, “Freshwater bryozoa, entoprocta, laboratory techniques”, “Growth and reproduction”, “Recent faunas”, “Tertiary and Cretaceous bryozoa”, “Mesozoic bryozoa”, “Paleozoic bryozoa”, “Budding patterns, ecology”, and “Biochemistry of bryozoa”.

An evening seminar about dormant bodies of freshwater ectoprocta had been offered by Rao (Vikram University, Ujjain, India). Following a well-established IBA tradition on Wednesday a touristic trip offered a chance for recreation. A drive through the scenic Wachau valley (now world heritage site), a visit to the monastery of Melk as well as a walk through the old city of Dürnstein had been parts of the program. In the evening we had the official conference dinner in a restaurant, situated close to the monastery of Göttweig, in a room overlooking the Danube valley. At the end of this dinner my wife and me received a generous gift from IBA: an antique glass which is still with us in our living room here at Vienna - a wonderful souvenir to remember this by-gone time.

References concerning IBA 1983:

- FRANK, G., KIKINGER, R. & VAVRA, N. (1983): Field Guide (Zoological Field Trip). Adriatic Sea: Piran – Rovinj. – 17 pp.
- NIELSEN, C. & LARWOOD, G. P. (eds.) (1985): Bryozoa: Ordovician to Recent. Papers Presented at the 6th International Conference on Bryozoa, Vienna, 1983. – 364 pp., Olsen & Olsen, Fredensborg.
- STEININGER, F. & VAVRA, N. (1983): Paleontological Field Meeting. 12 – 15 July 1983. Field Guide. – 49 pp.



Photos - 1: Gilbert P. Larwood, then president of IBA, giving his talk of welcome. **2:** Prof. E. Annoscia (Milano) and his wife; Annoscia had been conference host of the very first official IBA conference in 1968. **3:** Prof. E. Voigt (Hamburg, †2004) talking to Herbert Summesberger (curator) during the reception at the Museum of Natural History (Vienna). **4:** Thomas J.M. Schopf (University of Chicago, †) talking to the conference host (N. Vávra) during the reception at the museum. **5:** Richard S. Boardman (Washington, †) and his wife during one of the lectures. **6:** During one of the lectures, first row (from left to right): Roger J. Cuffey (Pennsylvania State University), Mrs. Schneemilch (Germany), G. Illies (Karlsruhe), Prof. E. Voigt (Hamburg).

Clever Scientific Publishing

Andrej Ernst

There are various methods to estimate the success of scientists. One of the objective measures of the scientific work are publications in which we bring our results and discuss scopes of our interest. For many, the one parameter defining the activity of a scientist, is still demanded: the number of publications. Therefore, some people try to increase the number of their publication at any way. They think that simply the number of papers would open doors for their career. Such people do not feel embarrassed even by plagiarism. Some years ago I was contacted by Hamed Yarahmadzahi, he was a PhD student from Tehran. He wanted to be a "big one" in bryozoology, I could never understand why he needed it. However, his capabilities in identification of Palaeozoic bryozoans proved to be near zero, despite my intensive assistance. So, I asked him to send the material to me, and this collaboration resulted in several publications on Devonian and Permian bryozoans of Iran, in Western journals, how Hamed wished it. In that way it was a fruitful collaboration.

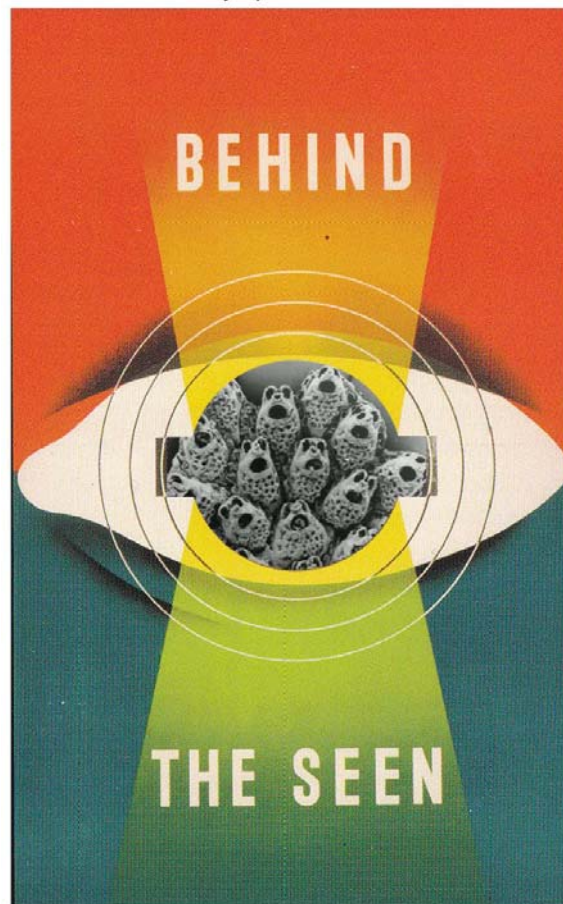
In August of this year (2013) Patrick Wyse Jackson has sent me a link, asking whether I know this paper. I followed this link and discovered, to my surprise and shock, a paper with my name on it: Yarahmadzahi, H., Ernst, A., Tolokonnikova, Z., Sahebzadeh, B. (2013): *Mackinneyella* (Morozova and Lisitsyn, 1996) fenestrate genus described for the first time from the Devonian deposits. Open Journal of Geology, 2013, 3, 294-299 (doi:10.4236/ojg.2013.34034 Published Online August 2013, <http://www.scirp.org/journal/ojg>). I didn't know that such publication did exist! As I opened the article, I was dismayed by the content of this "publication": it was a part of a paper published a year before (Ernst, A., Tolokonnikova, Z. & Yarahmadzahi, H. (2012): Upper Devonian (Frasnian) Bryozoa from the Shishtu Formation of Niaz area (northeast Iran). – Revue de Paléobiologie, 31 (1): 1-14.). Hamed had simply taken the general parts of our mutual paper, and the part regarding description and discussion of the species *Mackinneyella sibirica* (Yanishevsky, 1915). However, he avoided to use the species name, stressing the importance of the record of the genus *Mackinneyella*. Our original paper was not mentioned at all. He changed some details, for example, the place of the material deposition (which is situated at Senckenberg Museum in Frankfurt!), and produced numerous orthographic mistakes in few lines which he wrote by himself. He cut the part of the Plate 5 and represented it as his Plate 1 (p. 296). On my request he answered, that he didn't know, that it would be illegal.

Certainly, I stopped any collaboration with Hamed, I don't want my name involved in such things. However, it was not the end! Recently, I was searching in the Web for some information for the final report of my last DFG project. Suddenly, I saw my name and name of Hamed in the line of the browser! Following the link, I found another paper, which was produced exact in the same manner as another one: Yarahmadzahi, H., Ernst, A., Gorgij, M.N. (2012): *Fistulipora microparallela* (Yang and Lu, 1962) from Lower Permian bryozoans of Lut Block, Central Iran. Iranian Journal of Earth Sciences 4 (2012) / 120-124. In this "clone" Hamed utilized parts from the paper: Ernst, A., Yarahmadzahi, H. & Gorgij, M. N. (2010): Sakmarian Bryozoa from the Dalgan area (Sarab section), southeastern Iran. – Paläontologie, Stratigraphie, Fazies (18), Freiburger Forschungshefte, C 536: 75-89. This "paper" is even worse than the previous one: again many mistakes and the plate, produced by mounting of images from the publication of 2010, and of images from other papers which have nothing to do with *Fistulipora microparallela*. One can see with blank eye that this plate consists of different images!

Unfortunately, these "publications" have appeared now, and it is impossible to remove them. I contacted both the journals and explained them the situation. However, apart from a short replay, that the case would be investigated, nothing happened. I have really few possibilities to act against this person. The only chance to distance myself from this is this statement, in which I confirm that I have nothing to do with the two cloned publications by Hamed Yarahmadzahi.

Andrej Ernst, Hamburg

International Minisymposium, November 21, 2013



Collections, Collection Management, and Bryozoology

Senckenberg Gesellschaft für Naturforschung, Senckenberganlage 25, D-60325 Frankfurt Sitzungszimmer.

Organisers - Joachim Scholz & Brigitte Lotz

joachim.scholz@senckenberg.de

brigitte.lotz@senckenberg.de

ABSTRACTS OF PRESENTATIONS

Collection Management at the NHM-London

Consuelo Sendino

Department of Earth Sciences, Natural History Museum, Cromwell Road, London SW7 5BD, UK

Abstract: The Collection Management System used at the Natural History Museum is KE EMu, a system for museum collection documentation and management that is capable of monitoring collections and exporting data to websites. Although KE EMu is a collections management system for all museums and collections, it has great potential for natural history collections, especially geological collections that have been relatively neglected. The software can manage collections of all sizes, from the world's largest electronic museum databases with many millions of records, to small, highly specialized collections with only a few thousand records. Furthermore, it can be used for cultural, art and natural history collections. It works with data relating to acquisition, registration, inventory, cataloguing, multimedia (such as images, videos and audio files), bibliography, storage, conservation, loans, movements, events, valuation, etc. There is a module for each process and all modules are related to each other with an active effort to standardize documentation, encompassing all kinds of information that are associated with the item and its management.

An unknown heritage from German Avgustovich Kluge: a bryozoan collection in the Museum of Invertebrate Zoology at Perm State National Research University.

Andrei V. Grischenko

Department of Invertebrate Zoology and Aquatic Ecology, Biological Faculty, Perm State National Research University, Bukirev Street 15, Perm 614990, Russia

Abstract: The scientific activity of the prominent Russian bryozoologist German Avgustovich Kluge (1871–1956), who described over a hundred new species of bryozoans from the Arctic and other regions, and who wrote the monumental volume “Bryozoa of the Northern Seas of USSR” (Kluge, 1962), appears to be so multifaceted that its impact will still be felt many decades from now and can be detected in rather unexpected places. Accordingly, the author recently found six old jars containing numerous bryozoan colonies fixed in ethanol, lying forgotten in a storeroom. A small sticker glued on each jar bore the inscription “Bryozoa. Identified by G. Kluge”. Some jars contained labels with species and locality names, hand-written by Kluge, mixed up with the colonies. Most of the specimens were collected in Kola Bay, in the Barents Sea. Sorting and subsequent taxonomic identification of the material revealed 33 bryozoan species. Literally nothing was known about Kluge’s material in the Urals, though this material arrived at the Museum of Invertebrate Zoology of Perm State University 94–97 years ago, between 1916 and 1919. After this discovery of his collection, an exhibit of the Arctic heritage of G.A. Kluge will occupy a prominent place in the Museum.

Things we lost in the fire: Rediscoveries on our way to a comprehensive type catalogue of Professor Voigt’s Bryozoans.

Silviu Martha & Joachim Scholz

Sektion Marine Evertebraten 3 Senckenberganlage 25, 60325 Frankfurt, Germany

Abstract: The bryozoan collection of Professor Dr. Ehrhard Voigt (1905–2004) at the Senckenberg Research Institute in Frankfurt am Main, Germany, is a world-renowned collection of inestimate scientific value. It is the world’s largest collection of fossil bryozoans from the Upper Cretaceous and Paleocene in Central Europe. The collection represents a near-to complete documentation of the evolution of bryozoans on a carbonate platform extending from Central France to Southern Sweden and Central Poland, and lasting almost 50 million years from the Lower Cenomanian to the Paleocene. Since November 2012, a new project funded by the *Deutsche Forschungsgemeinschaft (German Research Foundation)* aims to digitalize the most important parts of the bryozoan collection of Professor E. Voigt. The types and originals (~5,000 specimens) have been given priority in our project. Within the scope of the DFG project, we are about to issue a type catalogue that shall report 247 holotypes, and also indicate those unfortunate type specimens that have been lost, and/or are currently untraceable in the legacy of Professor Voigt (about 10 % of the collection he was building up in the years and decades after 1945, and transferred to Frankfurt in 2005). Until now, we considered all 95 holotypes (not including varieties) and more than 500 originals of his 1930 Upper Cretaceous monography (the largest bryozoan publication Prof. Voigt ever wrote), to be destroyed in Hamburg during the bomb raids of 1943. It came as a pleasant surprise that the holotype of *Membranipora brandesi* Voigt, 1930, thought to be lost in the fire, has now been re-discovered.

Bryozoans: still missing from the Cambrian following reinterpretation of *Pywackia* as an octocoral.

Paul D. Taylor

Department of Earth Sciences, Natural History Museum, Cromwell Road, London SW7 5BD, UK

Abstract: In 2010 Ed Landing and others introduced *Pywackia baileyi* gen. et sp. nov. for a small phosphatized fossil from the Cambrian of Mexico, which they interpreted as the oldest known bryozoan and the first of Cambrian age. Published in the high profile journal *Geology*, this paper attracted particular interest because it seemed to show that, contrary to previous evidence, bryozoans did not break the rule that every phylum well represented in the fossil record appeared in the Cambrian. Although the bryozoan affinity of *Pywackia* was never universally accepted among bryozoologists who read the Landing et al. paper, it took the fortuitous discovery on a wildlife webpage of a modern analogue belonging to the Pennatulacea to suggest an alternative, cnidarian affinity for *Pywackia*. Despite the reassignment of *Pywackia*, it remains likely that bryozoans were present in the Cambrian but unmineralized.

Cold-water coral-associated bryozoans from the Eastern Atlantic.

Kei Matsuyama

Senckenberg am Meer Wilhelmshaven, Abteilung Meeresforschung, Südstrand 40, D-26382 Wilhelmshaven.

Abstract: The presence of azooxanthellate corals and their extent beyond shallow waters or lower latitudes has been known since the 18th century. However, detailed research only started with the advent of advanced hydro-acoustic settings and remotely operated vehicles in the 1970s, leading to the discovery of vast reefs in deeper waters. These reefs provide a diverse range of habitats for various organisms, resulting in biodiversity hot spots compared to off-reef sites, with over 4000 associated species reported so far. Especially for those animals needing a hard substrate to settle on, they are of large importance in an otherwise mostly soft-bottomed habitat. Single records of bryozoans settling on these corals have started around the beginning of the last century. However, these records did not address cold-water corals in particular, but were part of research cruises with a much broader focus. In recent years investigations regarding bryozoans on cold-water corals increased although not reaching the attention other phyla gained.

Long Term Monitoring Programme at the Dogger Bank (North Sea): Overview about the most prominent results, followed by a special digest about the Phylum Bryozoa.

Moritz Sonnewald

Senckenberg Forschungsinstitut und Naturmuseum, Crustaceen Sektion, Senckenberganlage 25 60325 Frankfurt am Main

Abstract: In 1991, Prof. Dr. Michael Türkay, head of the Department for Marine Zoology and of the Section Crustacea in Frankfurt am Main started a long term survey at the Dogger Bank, a sandbank at the central North Sea. At an area of approximately 17.000 km² on the main corpus of the Dogger Bank, a grid of 37 fixed sampling locations was established. Here, annual sampling in the summers of every year except 1998, 2000, 2007 and 2013 was performed with RV Senckenberg. A 2 m beam trawl was used to sample the epibenthos. Furthermore, a ring dredge was used to sample endobenthic or semi-endobenthic animals. Additionally, temperature and salinity was measured at each station with a CTD probe. In more recent years, we also used a RCM9 probe to record current strength and direction at each station. Hence, changes in the epibenthic animal communities were correlated with the environmental conditions respectively. In this talk, the results of this programme, together with an overview about the bryozoan fauna (specially the organisms growing on *Flustra foliacea*) at the Dogger Bank are presented.

Bryozoans from the transitional beds of Devonian and Carboniferous in Belgium and Germany.

Andrej Ernst¹ & Zoya Tolokonnikova^{2,1}

¹*Institut für Geologie, Universität Hamburg, Bundesstr. 55, 20146 Hamburg*

²*654059 Novokuznetsk City P.O.box 94, Russia*

Abstract: During the field company 2013 various localities of the Upper Devonian and Lower Carboniferous in Belgium and Germany were visited and investigated in order to find bryozoans. The bryozoan fauna of this age in Europe is poorly studied. Some localities yielded macroscopically visible bryozoans (mainly rhabdomesine cryptostomes and fenestrates). Material from other localities needed an intensive treatment to see imbedded bryozoans, however. The first results showed a remarkable diversity of delicate rhabdomesines, but also presence of encrusting and even thickbranched trepostomes as well as fairly diverse fenestrates. Cystoporate bryozoans are quite rare represented mainly by cosmopolite genera *Fistulipora* and *Eridopora*. The aim of the ongoing study is to document taxonomic changes in bryozoan assemblages during the transition between Devonian and Carboniferous.

Responses and Correspondences

Joachim Scholz & Brigitte Lotz

Senckenberg Forschungsinstitute und Naturmuseen Sektion Marine Evertibraten 3 (Bryozoologie) SGN-
Archiv Senckenberganlage 25 D 60325 Frankfurt am Main Germany

joachim.scholz@senckenberg.de

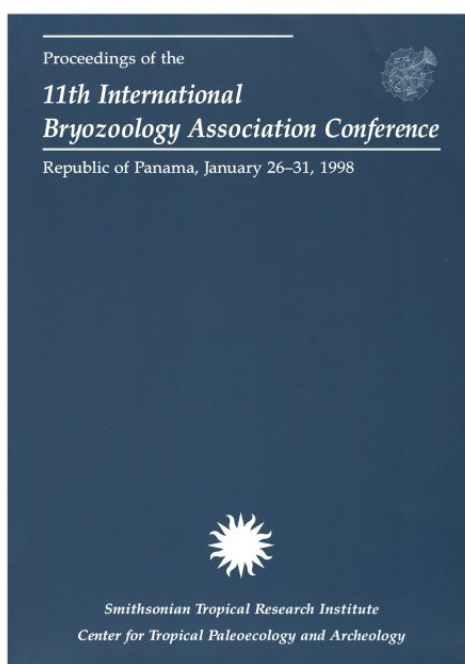
brigitte.lotz@senckenberg.de

BRYOZOANS in NATIONAL GEOGRAPHIC

Andrei Ostrovsky sent in this link to "Gabon Expedition: Dive Under a Super Tanker — Part 2" Enric Sala of National Geographic in Explorers Journal on October 16, 2012, which includes bryozoan images. The full article can be accessed via the link below.

<http://newswatch.nationalgeographic.com/2012/10/16/64633/>

Bryozoan Bookstall



The Smithsonian Tropical Research Institute has copies of the 11th IBA Proceedings, available for FREE, including postage. Any IBA member who is interested should contact Amalia Herrera-Cubilla at herreraa@si.edu. Requests should be accompanied by your name, institutional affiliation, and mailing address.

This is a part of the STRI book exchange programme and professors and researcher are encouraged donate a book to the STRI Library in exchange. Please send it to the address below, adding a note that tells it is a donation to the STRI Library.

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Previous journal covers featuring bryozoans:

The "Previous Journal Covers" is currently being updated – a new version will appear in a newsletter soon.

Meetings and Conferences

Bryozoology

"Dear Bryozoologist. Larwood Symposium in the year 2014 will take place in Poland, Sopot at the Institute of Oceanology of Polish Academy of Sciences (www.iopan.gda.pl). It will be held for two days (12-13.06.2014) with optional one day extra for historical trip. All of you are very warmly welcomed. More details to come. Piotr Kuklinski"

Paleontology

Tenth North American Paleontological Convention
February 15-18, 2014. Gainesville, FL
<http://www.flmnh.ufl.edu/napc/>

Recent Publications

The following list includes works either published since the previous issue of the *IBA Bulletin* or else missed by previous issues, or sometimes repeated due to inattention by the Editor. As always, members are encouraged to support future compilations by continuing to send complete citations to the IBA secretary at any time. Reprints will be gratefully received by the IBA archivist, Mary Spencer Jones.

Denisenko, N.V., Thomsen, E. & Tendal, O.S. 2013. Bryozoan epifauna on brachiopods from the Faroe Islands (NE Atlantic). *Fróðskaparrit* 60: 96-113.

Fehlauer-Ale, K.H.; Mackie, J.A.; Lim-Fong, G.E.; Ale, E.; Pie, M.R.; Waeschenbach, A. Cryptic species in the cosmopolitan *Bugula neritina* complex (Bryozoa, Cheilostomata). *Zoologica Scripta* doi:10.1111/zsc.12042 (EarlyView). ([http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1463-6409/earlyview](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1463-6409/earlyview))

Figuerola, B., Núñez-Pons, L., Moles, J., Avila, C. (in press) Feeding repellence in Antarctic bryozoans. *Naturwissenschaften*. DOI: 10.1007/s00114-013-1112-8.

Figuerola, B., Taboada, S., Monleón, A., Vázquez, J., Avila, C. Cytotoxicity activity of Antarctic benthic organisms against the common urchin *Sterechinus neumayeri*. *Oceanography*: open access 1:107.

Figuerola B., Gordon D.P., Polonio V., Cristobo J., Avila C. 2014. Cheilostome bryozoan diversity from the southwest Atlantic region: is Antarctica really isolated? *Journal of Sea Research* 85: 1-17. <http://www.sciencedirect.com/science/article/pii/S1385110113001810>

Gordon DP 2013. New Zealand's genetic diversity. In Dymond JR ed. *Ecosystem services in New Zealand – conditions and trends*. Manaaki Whenua Press, Lincoln, New Zealand. P162-191.

Guha, A.K. 2013. Tertiary Bryozoa from Western Kachchh, Gujarat – A Review. *Journal of the Palaeontological Society of India* 58: 3-15.

Hara U. & Jasionowski, M. 2012. The Early Sarmatian bryozoan *Celleporina medoborensis* sp. nov. from the Medobory reefs of western Ukraine (Central Paratethys). *Geological Quarterly*, 56: 895-906.

Hara, U. Słowakiewicz, M. & Raczyński. P. 2013. Bryozoans (trepostomes and fenestellids) in the Zechstein Limestone (Wuchiapingian) of the North Sudetic Basin (SW Poland): palaeoecological implications. *Geological Quarterly*, 57: 417-432.

Hartikainen, H. & Okamura, B. 2013. Parasitism and phenotypic change in colonial hosts. *Parasitology* 140:1403–1412.

Key, M.M.Jr, Hollenbeck, P.M., O'Dea, A. & Patterson, W.P. (2013) Stable Isotope Profiling in Modern Marine Bryozoan Colonies Across the Isthmus of Panama. *Bulletin of Marine Science* 89(4):837–856.

Leigh, E.G., O'Dea, A. & Vermeij, G.J. (2013) Historical biogeography of the Isthmus of Panama. *Biol. Rev.* (2013), pp. 000–000. 1 doi: 10.1111/brv.12048

Okamura, B., O'Dea, A., Taylor, P. & Taylor, A. (2013) Evidence of El Nino/La Nina-Southern Oscillation variability in the Neogene-Pleistocene of Panama revealed by a new bryozoan assemblage-based proxy. *Bulletin of Marine Science* 89(4):000–000. 2013. <http://dx.doi.org/10.5343/bms.2012.1041>

- Rouse, S., Spencer Jones, M.E. & Porter, J.S. (2013) Spatial and temporal patterns of bryozoan distribution and diversity in the Scottish sea regions. *Marine Ecology* (2013): 1–18.
- Taylor, P.D., Berning, B., Wilson, M. 2013. Reinterpretation of the Cambrian “bryozoan” *Pywackia* as an Octocoral. *Journal of Paleontology*, v. 88, n. 6, p. 984–990.
- Tolokonnikova Z.A. Early Carboniferous bryozoans from the Kodinka Section, Middle Urals // *Paleontological Journal*, 2013. Vol. 47 (2). P. 147-153.
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- Wood A, C,L, Rowden AA, Compton TJ, Gordon DP, Probert KP (2013) Habitat-forming bryozoans in New Zealand: their known and predicted distribution in relation to broad-scale environmental variables and fishing effort. *PLoS ONE* 8: e75160
- Wood ACL, Probert PK (2013) Bryozoan-dominated benthos of Otago shelf, New Zealand: its associated fauna, environmental setting and anthropogenic threats. *Journal of the Royal Society of New Zealand*.



ALL THE BEST FOR 2014!