

Bulletin

Volume 5, Number 4

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Judith Winston, President Eckart Håkansson, President-elect Timothy S. Wood, Secretary Abigail Smith, Treasurer

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Comments regarding this Bulletin should be addressed to the IBA Secretary: tim.wood@wright.edu

Further information at www.bryozoa.net/iba

News from the Membership

Andrej Ernst announces his photo gallery from the Larwood Meeting in Oslo. Please visit http://www.gpi.uni-kiel.de/~ae/fotos/oslo-larwood/oslo-larwood.html

Hans Arne Nakrem. At the 2009 Larwood meeting here in Oslo I promised to scan and send out a list of living bryozoans, recorded from Norwegian fjords. Now I have done that, and I have placed a rather huge PDF on my web site: http://folk.uio.no/hanakrem/bryozoans.htm

Beth Okamura. I was recently hosted in South Africa for 3 weeks in October and November by Cecile Reed (University of Capetown) and Wayne Florence (Iziko Museum) to undertake surveys for freshwater bryozoans (and their myxozoan parasites) to enhance our currently poor knowledge of their biogeography. The Natural History Museum in London includes type specimens from Rousselet's Transvaal and Tanganyika collections. Nevertheless, the material almost certainly under-represents the species present in Africa. South Africa is of special interest as it is characterised by particularly high biodiversity (it contains almost 10% of the world's bird, fish and plant species whilst representing 1% of the world's land surface area) and houses many endemic species, reflecting, in part, the wide range of climate and topography. However, a particularly important feature is the long isolation of the tip of Africa after breaking free from Gondwana many millions of years ago and subsequent separation from the rest of South Africa by the Cape Fold Mountains. As a result, the region is home to what many believe to be Gondwanan relicts. Only four phylactolaemates have been recorded in South Africa and very little is known of freshwater bryozoans from the Western Cape Province. Despite the unseasonally long, cold spring, various plumatellid and fredericellid species were encountered, but unfortunately we did not encounter Lophopodella capensis, a gelatinous species originally described from the Capetown area. An interesting finding, however, was a ctenostome that bored into wood which was collected from the Breede River. While boring ctenostomes are known in marine environments, we believe this may be the first boring ctenostome in freshwater habitats. The possession of eight tentacles suggests this may be a victorellid. Species identifications are pending SEM of statoblasts and hibernaculae.

Abby Smith has received a University of Otago Research Grant for a 2-year study of carbonate dissolution on the southern shelf of New Zealand. Her first cruise, aimed at collecting living bryozoans as well as sediments, is scheduled for 21-31 January 2010. Jo Porter (from Edinburgh) and Helen Jenkins (NHM) will be coming along.

Kamil Zágoršek. This year was a first year of the large 5-year project: "Shallow water ecosystems from the Middle Miocene of the Central Paratethys: Succession and interactions between inorganic and organic elements of the ecosystems." The main aim of the project is to map and compare Miocene bryozoans and other fauna among Carpathians region. We have visited sections in Slovenia, Poland and Romania this year (see photos below).

In the project budget, there are yearly about 1000 Euro for inviting scientists to help us with the project. Therefore, I would like to invite you (any IBA member) to come to Prague and help me with this study. Looking forward to see you here...





Romania – section Lopadea Vecce



Slovenia – section Plohov Breg



Poland – section Weglinek



Photo: Bryozoa (Poland, Zagrody)

Introducing New IBA Members

I am Dr. Karin Hoch Fehlauer-Ale, from CEBIMar-USP (Center of Marine Biology of University of Sao Paulo), Brazil. Recently, I began my post-doctoral research (October/2009) on the morphologic and molecular characterization of Bugula spp. with occurrence in Brazilian waters, as well as on the phylogeographic and invasion patterns of B. neritina. However, I have additional interests on taxonomic, phylogenetic and phylogeographic aspects of species of Amathia and Zoobotryon verticilattum. The picture shows Leandro Vieira and me relaxing a



little bit in Ilha do Mel (Parana State, Brazil), where we collected many species of bryozoans (November/2009). I wish my best to everyone!

Helen Jenkins. I have recently started a NERC CASE funded PhD studentship supervised by Roger Hughes (Bangor University), Beth Okamura (The Natural History Museum (CASE partner)) and John Bishop (The Marine Biological Association UK), with additional support from Andrea Waeschenbach (NHM) and Paul Taylor (NHM). I will be investigating polyembryony, brood chamber initiation and sperm utilisation in cyclostomes. Polyembryony, first proposed from microscopy in the late 19th and early 20th century, has only recently been confirmed genetically in a single cyclostome species (*Crisia denticulata*). This project aims to provide further evidence for polyembryony by investigating the genetic composition of broods from species representing all extant cyclostome clades. In addition, laboratory culturing and mating experiments will be conducted to study whether the presence of waterborne allosperm induces brood chamber development and if inbreeding is regulated by differential acceptance of sperm.

I am fortunate enough to have a field trip to New Zealand planned for the beginning of 2010. I will be joining a research cruise to the Otago Shelf with Abby Smith and Jo Porter, to collect taxa from cyclostome suborders not readily available in the UK (Cerioporina and Cancellata) and from the endemic family Cinctiporidae, for which no brood-chambers have ever been recorded.





15th International Bryozoology Association Conference August 02nd - 06th 2010, Kiel



Time is short. Please note these important dates and deadlines!

January 31, 2010 Final registration.

March 31, 2010 Conference fees due

April 30, 2010 Submit abstract

July 25-31, 2010 Pre-Conference Trip Workshops

August 2-6 Conference August 7 Field Trips

August 8-14 Post-Conference Trip

Program, workshops, field trips, accommodations, and all other information is available here: http://www.ifg.uni-kiel.de/iba2010/

International Polar Year and New Technology Yield Rewards for Bryozoology

Dennis P. Gordon

In response to Tim Wood's request for news items for the *Bulletin*, I think I should share some images that I have already sent to Peter Hayward, Paul Taylor, and Andrei Ostrovsky, all of whom have worked on Antarctic bryozoans.

In 2008, New Zealand's National Institute of Water & Atmospheric Research (NIWA), where I work in Wellington, participated in the International Polar Year by sending our ice-worthy vessel RV Tangaroa on a research cruise to the Ross Sea. Among the many objectives achieved were bottom trawls, video and still photography, and retention of frozen samples for bar-coding. I was given the task of identifying the frozen bryozoans, selecting samples for bar-coding, and matching species with bottom photos, a task that was aided by retention of colony colour in the frozen samples. The samples for bar-coding (CO1) were sent to Canada through an agreement that NIWA has with an agency there via Sloan Foundation funding. We are expecting sequence results in January 2010.



These images show a number of the yellow-orange frondose colonies of Bostrychopora dentata; the pale pink frondose species is Pemmatoporella marginata and the white one may be Smittina antarctica. The branching pink sticklike species with growth bands is Cellarinella njegovanae and the flattened yellow dichotomous species Cellarinelloides crassus. The image is one of 155 stills taken at Station 25 of NIWA cruise TAN 0802. The coordinates are 74 degrees 34.36' S to 74 35.07 S, 170 degrees 11.94' E to 170 13.59' E and the depth was 287-284 m.

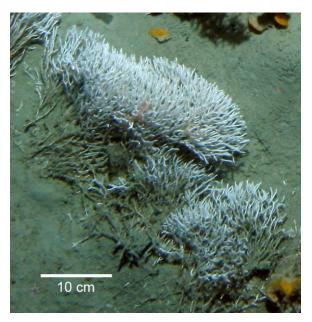


This image is a close-up of *B. dentata* cropped from another bottom photo in the same area. The scale shows the remarkable resolution that can be achieved with the NIWA camera system.

Most striking are the still photos, of which some are reproduced here. (I can send these images to IBA members if they wish to see them in all their glory; it is possible to zoom in and see some features in more detail.) I was not able to identify all of the bryozoan species in the photos but had reasonable success with the larger taxa. One of the commonest species is *Bostrychopora dentata*, which was easily identifiable from its growth form and orange colour.



This photo shows *Bostrychopora dentata* and the cyclostome *Idmidronea obtecta*. The latter looks white in the photo but is actually pale blue in life, the colour residing in the soft tissue and easily leached in alcohol. The image was taken at about 76 degrees 11.60` S, 176 degrees 17.00` E at a depth of 440 m. Scale bar is 20 cm.



The close-up of *I. obtecta* is from the larger image and shows the resolution achieved. A pale blue fuzz (the long lophophores) may be observed on the edges of some branches.

The bottom photos were taken using a deep-towed imaging system (DTIS) developed at NIWA by electronics technician Peter Hill. It uses a digital SLR still camera and a high-resolution video camera capable of 6000 meter depths. A unique feature is an innovative data communications scheme that allows the use of a standard 10.5 mm diameter single core CTD cable for live video and system control functions. On any voyage both DTIS and CTD operations are possible from a single winch and cable. Real-time slow-scan video and depth and altimeter data are transmitted up the 9000-meter long tow cable while full-speed high resolution video (HDTV) is recorded onto tape underwater. An operator GUI provides controls for lights, video and still cameras. Peter currently has an article about DTIS in press in the journal Sea Technology. The system is highly portable and both Peter (p.hill@niwa.co.nz) and DTIS can be flown anywhere in the world to achieve images like those shown here.

I remarked to Peter Hayward, "Wouldn't Waters and Calvet and all the previous bryozoan workers be rapt if they could see stuff like this?" Peter replied, "Never mind Waters, we modern workers are pleased to see this!"



Maastricht Reloaded

Joachim Scholz

The Upper Maastrichtian Tuff Chalk of Maastricht, Netherlands, has been well known for more than 180 years for the occurrence of bryozoan beds and bryozoans associated with hardground facies, partly due to the spectacular preservation of bryozoans that have been collected e.g. from *Thalassinoides* burrows. Those who participate the post conference fieldtrip of the IBA meeting in Kiel, hosted by Priska Schaefer, will be able to see fresh profiles in the quarry of the ENCI (Eerste Nederlandse Cement Industrie) company.

The most extensive collection, recording more than 300 species, was made by Professor Ehrhard Voigt (1905-2004). The collection, described in his 1930 monograph, was destroyed in WW II. Nevertheless, Prof. Voigt's numerous studies after the war resulted in a considerable collection, now kept at the Senckenberg in Frankfurt.

Professor Voigt was not the first researcher dedicating himself to the bryozoan fauna of the uppermost layers of the Cretaceous in the Netherlands and Belgium. In the 19th century, the Maastricht bryozoan beds were taxonomically studied e.g. by Goldfuss, von Hagenow, and Ubaghs.

Despite these taxonomical achievements of the past, a modern ecological study, and microfacies analysis of both bryozoan beds and hardgrounds, is still lacking. Fortunately, two students of geology from the Goethe University in Frankfurt, Mrs. Susan Anderko and Mrs. Jennifer Zwanzger, have decided to conduct their M.Sc. (diploma) thesis work in the old "E. Voigt" quarry of the ENCI company at St. Pietersberg, Maastricht, Netherlands. While Susan is tackling a carboante microfacies analysis of the hardgrounds, Jennifer is concentrating on the bryozoan growth forms and other benthic organisms preserved on stable and unstable substrata.



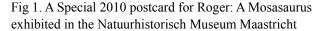




Fig 2. Soft bottom communities in the Maastricht Hard-ground Facies (ENCI quarry, July 2009)

The study is coordinated with Priska Schäfer, University of Kiel, Peter Prinz-Grimm, University of Frankfurt, John W. M. Jagt, Natuurhistorisch Museum Maastricht (SCZ),

Maastricht, and John J. G. Reijmer, Faculteit der Aard- en Levenswetenschappen, Vrije Universiteit Amsterdam, and Paul Taylor (NHM London).

Any further collaboration is welcome. We shall keep you updated on what we find out.

Selected References.

Goldfuss, G.A. (1826-1833): Petrefacta Germaniae, I, Bryozoa: 22-38, 94-100. 2nd Edition, Leipzig 1862.

von Hagenow, F. (1851): Die Bryozoen der Maastrichter Kreidebildung, pp. 1-111. Kassel.

Ubaghs, J.G. (1865): Die Bryozoen-Schichten der Maastrichter Kreidebildung nebst einigen neuen Bryozoen-Arten aus der Maastrichter Tuff-Kreide. - naturhistorischer Verein Preuss. Rheinl. u. Westfal. Bonn 22, 31-62.

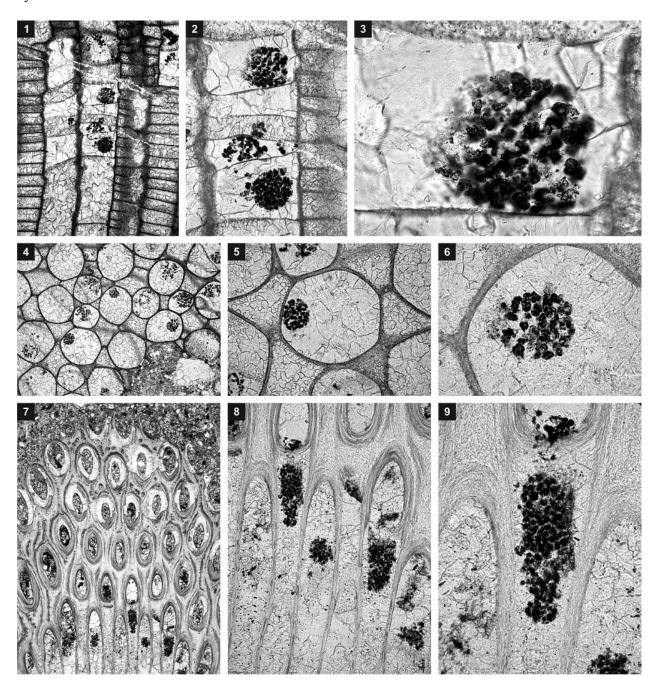
Voigt, E. (1930): Morphologische und stratigraphische Untersuchungen über die Bryozoenfauna der oberen Kreide. I. Teil. Die cheilostomen Bryozoen der jüngeren Oberkreide in Nordwestdeutschland, im Baltikum und in Holland. Leopoldina. Berichte der kaiserlich leopoldinischen deutschen Akademie der Naturforscher zu Halle. Walther-Festschrift: 380-579. Leipzig.



Brown Bodies in Ordovician Bryozoans

Andrej Ernst

News from Northern Europe: Andrej and Hans Arne are working on some Ordovician bryozoan faunas from Norway (Furuberget Fm., Caradoc, Upper Ordovician). The fauna is quite diverse and very interesting. We have found exceptionally well preserved remnants of brown bodies in a trepostome (*Mesotrypa* sp., 1-6) and in a cryptostome (*? Graptodictya* sp., 7-9) bryozoans. These fossilised brown bodies are very similar to those in Recent cyclostomes.



Exhibition on the legacy of Professor Ludwig Doederlein (1855-1936) in Kaiserslautern, Germany, 2009, and the roots of Bryozoology in Japan

Joachim Scholz

The Sagami Bay south of Tokyo is a world-famous area for rich marine fauna and discovery of rare and unique marine animals. Ludwig Doederlein (1855-1936) initiated the tradition of Sagami Bay research when he stayed in Japan for about two years as a "yatoi" (= foreign

employee) professor of natural history in the preparatory course of the Medical Department, University of Tokyo. Most of his collections from Japan, thought to be destroyed during Second World War, have been re-discovered in good condition in the Musée Zoologique in Strasbourg by Shunsuke Mawatari, on the grounds of the recommendation of the late Erhard Voigt in 1993 to go to Strasbourg. By that time, E. Voigt was the last surviving student of Ludwig Doederlein, who taught him zoology in Munich in the 1920's.



Shun Mawatari and

Ehrhard Voigt in 1993 (Hamburg, Parkallee 7)

Doederlein is the first researcher. who undertook fieldwork in Sagami Bay and discovered its zoological value due to the presence of deep sea benthos in rather shallow waters. He discovered appr. 370 new species, described by him or by his colleagues and friends who shared the taxonomical work. Furthermore. Doederlein recommended the foundation of a marine biological station situated at the shores of the Sagami Bay, that was to become the "Misaki Marine Biological Station of the University of Tokyo" established as early as 1886, only 5 years after Doederlein had left Japan. This was the third Marine Biological Station in the world after



Two monographs on Hydrozoans of the Sagami Bay written by the Showa Emperor Hirohito. Photo courtesy of the NSM Tokyo.

those in Naples and Roskov. As Doederlein suggested, many Japanese researchers actively

conducted research in this station, thus playing a fundamental role in establishing marine zoology in Japan. The faunal survey was e.g. continued with the Showa Emperor Hirohito (1928-88) and is nowadays conducted by the National Science Museum Tokyo.

Concerning byrozoans, the Doederlein specimens and new species were described by Ortmann (1890), and a redescription of these samples is underway (PhD thesis of Masato Hirose, Sapporo).

(The following information was compiled from: Mawatari, S.F. 2009, Namikawa, H., 2009).

Part of the family of Ludwig Doederlein came from the "Pfalz" (Palatinate), the border region of Germany and France. One of the larger banks situated today in the Palatinate, the "Kreissparkasse Kaiserslautern" (the mutual savings bank of the district of Kaiserslautern), decided to highlight the 130th anniversary of Ludwig Doederlein's arrival in Japan (1879-2009), and financed an exhibition on the respective zoological legacy. From November 20 to December 18, 2009, numerous zoological samples collected by Doederlein where on display, samples that were kindly provided by Madame Wandhammer, director, and Madame Meister, curator of the Musée Zoologique of the City of Strasbourg in France, with some additional Doederlein samples provided by the Senckenberg Natural History Museum in Frankfurt.

The exhibition was situated in the loobby of the bank itself, and around 8,000 customers that were passing by had the opportunity to see the whole diversity of organisms collected by Doederleins, including several reteporid bryozoans.

Among the visitors were Shun Mawatari and Hiroshi
Namikawa, the curator of the collections of the Showa
Emperor kept in the Showa
Memorial Institute of the
National Science Museum in

Tsukua near Tokyo. Namikawasensei also gave a public lecture on the Showa Emperor as a



Shun Mawatari and Karin Afsar (publisher of the "Seesteme von Ensohima" in front of a bryozoan cabinet.

biologist, and contributed to a Japanese-German symposium on Marine Biodiversity in Japan, hosted by the Senckenberg Nature Research Society, and the JSPS, the Japan Society for the Promotion of Science; both events were scheduled in December 2009.

The title of the Exhibition was "Ludwig Doederlein und die Seesterne von Enoshima" (L:D: and the Starfish of Enoshima), but the poster does not show starfish, but a Japanese bryozoan (*Retepora victoriensis* var. *japonica BUSK*)

Research on the bryozoan legacy of Doederlein and his successors continues: An application "Taxonomic studies on the Owston/Mitsukuri collection of Japanese bryozoans deposited at the NHM" (GB-TAF-517) for SYNTHESYS turned out to be successful and, together with Mary Spencer Jones, research on the 95 slides with specimens that arrived the NHM London between 1896 and 1903 will start in april 2010. Mary has re-discovered the importance of the Owston/Mitsukuri Bryozoa collection in the biological archives of the NHM.

Professor Mitsukuri was the first director of the Misakai Marine Biological Station, and initiated the Japanese tradition of collecting biological samples in the Sagami Bay in the 20.11.2009 - 18.12.2009

130 Jahre Kaiserslautern und Japan
Schnee im Jahr des Drachen:
LUDWIG DÖDERLEIN
und die Seesterne von Enoshima

Ausstellung in der
Kreissparkasse Kaiserslautern Am Altenhof 12/14 | 67655 Kaiserslautern

Chromogogotium Montag, Dienstag und Freitag von 8:00 bis 16:00 Uhr, Mittwoch von 8:00 bis 15:30 Uhr,

Dönnerstag von 8:00 bis 18:00 Uhr

decades and centuries after Doederlein. The collection fills an important gap in long-term monitoring of Sagami Bay and its faunal changes documenting growing urbanization in 20st century.

More information in German and Japanese languages can be found in the book that accompanies the Exhibition (see "Bryozoan Bookstall" in this issue of the *IBA Bulletin*):



Freshwater Ctenostomes vs Nuclear Power Industry

Bulletin readers may recall my report of freshwater bryozoans plaguing the cooling system of a nuclear power plant ("Truckloads of Bryozoans," *IBA Bulletin* 4(3)). Following that incident in September 2008 the water intake structures at the plant were thoroughly cleaned, and government regulators insisted on a new inspection in April 2009.

I was on site April 22 when the diving team began its work. The water temperature was only 14° C, so there seemed little chance of finding bryozoans of any significance. It therefore came as a surprise when divers reported the concrete walls "100% covered with bryozoans 2 inches thick!"

"That's impossible!" I protested. What was going on down there?

I asked for a sample, and about an hour later it arrived, a plastic 1-liter jar completely filled with what appeared to be fine mud. It certainly did not look very bryozoan-y. Back in the lab I carefully washed the material through a screen until all the sediment was gone, leaving behind a mass of tiny, silvery threads.

It was astonishing! This was pure *Sineportella forbesi*, the miniature freshwater victorellid described in 1994 by Terry Marsh and myself from a single site in Illinois. In the field this species is practically invisible and had not been reported before or since. Now I had masses of it! Growing densely on concrete walls of the power plant forebays, the colonies had produced a three-dimensional network of branching filaments that had trapped a thick layer of sediment.



The freshwater victorellid, Sineportella forbesi, from the water cooling system of a nuclear generating station.

The nuclear engineers phoned to inquire anxiously what I had found. In my excitement I told them that the occurrence of this species in the forebays was completely unexpected. Of course, this was a big mistake. *Nothing* in a nuclear facility is ever supposed to be "unexpected." A wave of panic quickly spread all the way up to corporate headquarters. Fortunately the news never made it to the press or to government regulators. I was lightly reprimanded and asked to re-word my findings, including an emphatic statement that this bryozoan species posed *no* threat to plant operations.

But that is just a footnote. The big story is re-discovering *Sineportella* in such abundance. The colonies did not survive their rough treatment, but later in the lab many hibernaculae germinated. Unfortunately this came at a busy time and I could not provide the attentive care they required. A new site inspection is scheduled for the spring of 2010, and at that time I hope to be more prepared.

Reference: Wood, T. S. and T. G. Marsh. 1996. *Sineportella forbesi*, a new species of freshwater ctenostome bryozoan from Illinois. Journal of the North American Benthological Society 15(4): 610-614).



First Freshwater Bryozoans from Borneo

Kamil Zágoršek

By chance I had the opportunity to visit the Indonesian part of Borneo (Kalimantan). The expedition was aimed at studying *Pandanus* in rain forest, but my part was to find any traces of fresh water bryozoans. I was searching more than week almost everywhere. I checked the empty plastic bottle, used as buoy for the net, any under water hard substrata (part of wood, plants), any floating objects (foams, leaves)..., but without any success.













On the very last day, being very sad at finding nothing, we were returning from the last spot to the campsite. In the way we were going to buy a fish for the dinner, in one fisherman village. Automatically, but without interest, I was turning again all the bottles threw away. And inside one bottle, was a trace of the colony, perhaps a plumatellid! Big success!

But, the day did not end yet... On the way back to the campsite, we had to stop at a petrol station. During refuelling, I again look to everything around (garbage...). On a piece of plastic foam, many black dots appeared – statoblasts! After the SEM study, it turns, that they belong to *Plumatella*(?) Great (last) Day!

So all's well that ends well....

In Memoriam: David Brown (1916 - 2009)

David Brown died 3 November 2009 in Sydney after a brief illness. He had been a long-time member of the IBA.

David earned his Ph.D. in London at Imperial College and the Natural History Museum. Shortly afterwards he served as Lecturer at the Geology Department of Otago University in New Zealand through the 1950's. Brown mapped in North Otago, about 100 km north of Dunedin and produced a substantial geological report which still exists only as an unpublished manuscript. Included in the mapped area is the Ototara Limestone (latest Eocene-early Oligocene), a significant bryozoan limestone.

In 1959 Dr,. Brown became the first Professor of Geology at The Australian National University. After retirement in 1983, he continued his scholarly work as Professor Emeritus. His bryozoan publications included these:

- 1952. The Tertiary Cheilostomatous Polyzoa of New Zealand. British Museum (Natural History), London, pp. i-xii, 1-405.
- 1954. Polyzoa from a Submerged limestone off the Three Kings Islands, New Zealand. Ann. Mag Nat. Hist. London 12(7): 415-437.
- 1956. Some Pliocene Polyzoa from Soputh Australia. Ann Mag. Nat. Hist. London, 593-611.
- 1958. Fossil cheilostomatous Polyzoa from South-West Victoria. Memoirs of the Geological Survey of Victoria. No. 20. Mines Department, Melbourne.

Rolf Schmidt writes, "I am glad that I was able to contact (David Brown) earlier this year to invite him to the AustraLarwood Symposium here in Melbourne. Although he was not able to attend, he was very pleased and flattered that we were still thinking of him. He said he'd always hoped to get back to researching Bryozoa, but his duties running the Geosciences Department at Australian National University prevented him."

Using Skype

Recently the IBA Secretary sent out a request for Skype usernames to be included in the IBA Membership Directory. The response was underwhelming, although current Skype users expressed great enthusiasm for the idea.

Skype is a free program that offers the opportunity to use your computer as an "internet phone." If you have never used Skype, here are the basics:

First, you need a computer with microphone and speakers. Or you can get a hands-free headset with built-in microphone. Skype does not require your computer to have a video camera, but you can use one if you wish.

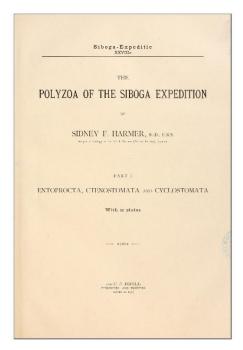
In order to talk to another person, both people must have Skype installed on their computers and have created a Skype account and username. To participate in a conversation, both people must be online at the same time. If the person you're calling isn't available, you can leave a voice mail. And if you're away from the computer you can forward Skype calls to your normal phone.

Andrei Grishenko is an enthusiastic user of Skype. He writes, "Skype includes possibility for (1) audio contact; (2) simultaneously video contact; (3) chat; (4) rapid direct file exchange incorporated into the program and (4) group talk – this making communication multifunctional, easy and pleasant. Considering progressive increase of the global information circulation, the Skype seems to be a very timely program for ordinary use nowadays, and I am (as a grand son of prominent Russian telephonist, who always paid attention to development of progressive communications in Ural Region) is happy to support the idea of usage the Skype by the IBA colleagues. Skype me!!! Skype name: Andrei, Grischenko."

SO: If you already use Skype and would like to list your username in the IBA Directory, please send your username to the IBA Secretary, tim.wood@wright.edu. If you have never used it and would like to try, just go to www.skype.com and set up the program on your computer.



Bryozoan Bookstall



Polyzoa of the Siboga Expedition.

The first of four bryozoan volumes, 28A, from the Siboga Expedition is now available from the Biodiversity Heritage Library at http://www.biodiversitylibrary.org/item/18869.

The Siboga Expedition was a Dutch initiative led by Max Weber to study marine plants and animals in the various seas of the Indo-Australian Archipelago. Extending from March 1899 to February 1900, the project collected large amount of material from beaches, reefs, and benthos from shallow waters to a depth of more than 4,000 meters deep. Although Sidney Harmer did not participate personally in the expedition, he described all the bryozoans recovered. His bryozoan work was published in four volumes, the final one assisted by Anna B. Hastings.



Seesterne aus Enoshima. Ludwig Döderleins Forschung in Japan.

100 pages with several illustrations. Contributions by Marion Grein, Marie-Dominique Wandhammer, Shunsuke Mawatari, Hiroshi Namikawa, Joachim Scholz.

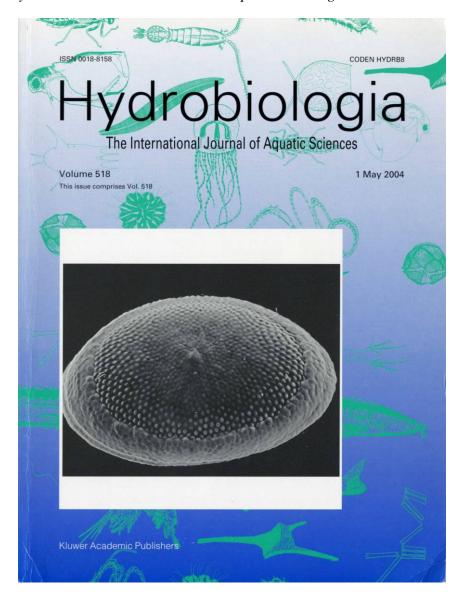
ISBN 978-3-937194-38-7

Price: $16,50 \in (+8 \in \text{shipping overseas}, +3 \in \text{for countries associated to the EU - internal postal market})$. Further information and/or orders: www.postmaster@khorshid-verlag.de

(See also "Exhibition on the Legacy of Professor Ludwig Doederlein" in this issue of *IBA Bulletin*).

Featured Journal Cover

Editor's Note: This page continues a series highlighting the covers of journals or magazines featuring bryozoans. Currently we have enough suggestions for journal covers to last 3 more years, and by then more will have arrived. Keep them coming!!



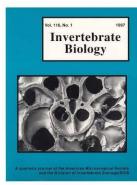
COVER PHOTO DESCRIPTION

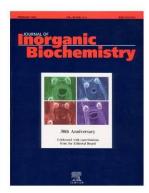
This photo represents the first time a statoblast – or any other anatomical part or representation of a phylactolaemate bryozoan – has ever appeared on the cover of a scientific journal! The caption simply refers to the article inside by Tim Wood and Beth Okamura: "*Plumatella geimermassardi*, a newly recognized freshwater bryozoan from Britain, Ireland, and continental Europe."

Next page: Previous covers in this series:

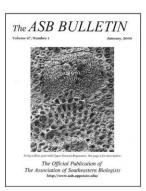












IBA Scholarship Applications – Final Call

This is a final call for applications for the IBA Scholarship fund supporting travel to the IBA Conference in Kiel. Each email application must contain

- a brief CV and short abstract of the research to be presented (1 page)
- a description of the project/travel including a budget and information as to whether they have obtained or may obtain support towards the costs from other sources (along with amounts) (1 page)
- a letter of support (from employers, supervisor, or associate) (1 page)

Elements of the application are to be presented in the above order as a single .pdf document, if possible, and sent by email to the IBA Secretary (tim.wood@wright.edu).

The application deadline is midnight GMT 15 January, 2010.

Upcoming Meetings and Conferences

Bryozoa

International Bryozoology Association 2-6 August 2010, Kiel, Germany www.ifg.uni-kiel.de/iba2010/

Paleontology

American Geophysical Union 2010 Fall Meeting 13-17 December, 2010, San Francisco, CA. (Website not yet released)

American Geophysical Union Ocean Sciences Meeting 22-26 February 2010, Portland, Oregon http://www.agu.org/meetings/os10/

American Geophysical Union 2010 Meetings of the America 8-13 August, 2010, Iguassu Falls, Brazil http://www.agu.org/meetings/ja10/

Antarctic Conference of Gondwanan Palaeontology Mid-2010, Australia (details forthcoming) http://www.uq.edu.au/dinosaurs/index.html?page=91899

French Geological Society, Special meeting: Jurassic environments and faunas 22-24 April 2010, Lyon, France. http://SGF-elmi.univ-lyon1.fr.

International Conference of Geobiology: 2010 Meeting and Field Workshop 4-6 June 2010, Wuhan, China. http://geobiology.org.cn/2010meeting and http://www.igcp572.org/.

International Palaeontological Congress 28 June – 3 July 2010, London, UK http://www.ipc3.org/index.html

The Palaeontological Association 54th Annual Meeting 2010 (Details not yet announced)

Tenth North American Paleontological Convention Summer, 2013, (Venue not yet announced) Geological Society of America Annual Meeting 31 October – 3 November 2010, Denver, Colorado USA http://www.geosociety.org/meetings/2010/

Biology

Aquatic Invasive Species, 17th International Conference, 29 August – 2 September 2010, San Diego, CA USA http://www.icais.org/pdf/1st annc 17th.pdf

12th International Coral Reef Symposium June or July, 2012, Australia. http://coral.aoml.noaa.gov/pipermail/coral-list/2009-May/038801.html

Ecological Society of America 1-6 August 2010, Pittsburgh, Pennsylvania http://www.esa.org/albuquerque/

International Council for the Exploration of the Sea 2010 Annual Science Conference 20-24 September, Nantes, France http://www.ices.dk/indexnofla.asp

International Society of Limnology August, 2010, Capetown, South Africa http://www.limnology.org/news/circular2008.pdf

Recent Publications

The following list includes works either published since the previous issue of the *IBA Bulletin* or else missed by previous issues. 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.

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