



Volume 4, Number 1

April, 2008

(Click "Bookmarks" on the left to navigate around this document)

News from the membership

New IBA members

Report from Australarwood 2008

Further Thoughts on the Stockholm Meeting in 1965

Appeal for information

Note from the Treasurer

New tropical freshwater lab in Thailand

Bryozoan Bookshelf

Techniques

Upcoming Meetings

Recent publications

Cartoon

ISSN 1941-7918

Copyright © 2008 by the International Bryozoology Association.

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

Comments regarding this Bulletin should be addressed to the IBA Secretary: tim.wood@wright.edu Further information at www.nhm.ac.uk/hosted_sites/iba/

News from the Membership

Björn Berning has recently bid farewell to the race (or rather battle) for a permanent job! From mid-April on I will be manager of the palaeontological collection of the Landesmuseum Oberösterreich in Linz (Austria). *Unfortunately*, Linz is one of the very few places where there has already been a bryozoan special exhibition, so, thanks to Emmy, I'm not quite sure what I'm supposed to do there, really? ;-)

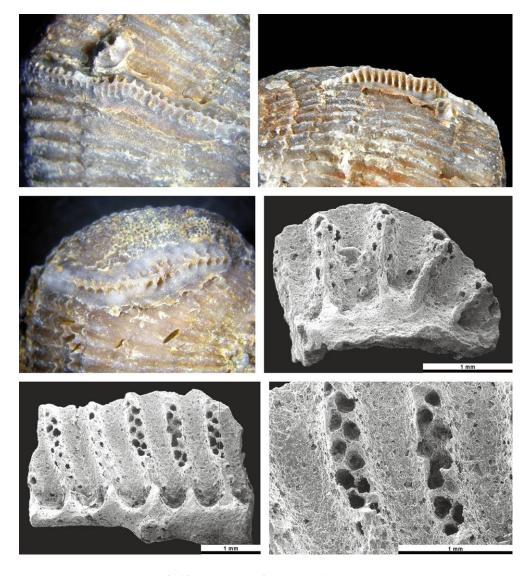
With the extended Year of Planet Earth still going, Linz will be Cultural Capital of Europe in 2009 (see http://www.linz09.at/en/index.html) and, among many other events and fancy things, an exhibition on amber is due by March that year. Now, as far as I know, there are no records of bryozoans being trapped in amber. However, I will do my very best to smuggle in some pieces infested with encrusting modern bryozoans, which I know do exist! The next bigger thing to be co-organised by me is the permanent exhibition on evolution in the newly built wing of the famous Schlossmuseum above the Danube. A special exhibition on evolution and genetics in the old part has just come to an end, which, thanks to many loans from museums all over the place (NHM Vienna, Senckenberg, etc.), has been extremely successful. The main attraction was a test of mitochondrial DNA to unveil your personal origin and biogeographic history (it turned out I'm a Hamburger). Some 1,800 people have taken the test and the results are published and constantly being updated at www.biologiezentrum.at/mpdh/.

One problem in Linz is that there is no Biology or Palaeontology Department at the University, which means that all the goodies that come with such an institution (big libraries, free online access to journals, etc.) are not available, so please keep me supplied with reprints or pdfs of your works! Another problem is that there is no microscope in town. Thus, should you have a spare SEM at hand, please do let me know!

Anyway, I invite all fans of, for instance, classical music, amber, bryozoans, good wine, beer and northern German food, to visit the Cultural Capital of 2009 and my new home, here in Linz!

Andrej Ernst. I have received a one year extension on my Devonian project, until May 2009. I will concentrate now on my research on Devonian bryozoans from Germany, Spain and Morocco now. Additionally I am working on some other themes: Ordovician bryofaunas of Argentina and Canada, Carboniferous of Spain.

I am going to visit some Devonian localities in the Eifel soon. They contain locally abundant and diverse bryozoans (see photos, next page). We plan to visit these localities during the IBA Meeting 2010. I get a tremendous help from local "hunters" for fossils, who provide me with interesting material and information about localities. I found in their collections an interesting bryozoan, which is a bifoliate fenestrate! It incrusted preferably brachiopods, but also pelmatozoans. Such a colony form is unique in fenestrate bryozoans. This bryozoan seems to be very abundant in the Middle Devonian of Eifel, however, was not discovered until now. First attempt brought us more than 50 colonies of it.



Photos of Eifel bryozoans from Andrej Ernst.

Andrei Grischenko. Since the beginning of September I am working in South Korea at Jieun Seo laboratory. Current study is almost fully devoted to intensive investigation of an intertidal bryozoans. Because Jieun is in USA for one year sabbatical (with Steve Hageman and Judy Winston), I am working with a student of her - Bum Sik Min. Last November we went to Baengnyeong Island (a small island in the Yellow Sea, close to boundary between two Koreas), where collected a very large amount of materials from six localities. At the moment I have completed the preliminary ID, resulting with 43 cheilostomes, many - new to the fauna of South Korea.

Aaron O'Dea. From the end of October I had the pleasure of having Andrei Ostrovsky visit STRI in Panama for six weeks. He led a course entitled "Advanced Course in the Histology of Marine Animals" which was a comprehensive guide to the collection, preparation, processing and analysis of small invertebrates for anatomical research. The course was aimed at students from the University of Panama and technicians at STRI. He gave several lectures and countless laboratory classes, and of course they spent most



of their time learning about bryozoans. Andrei also managed to find some time to collaborate with me on sexual reproduction of cupuladriids, and we were pleased to be able to collect a number of Tropical eastern Pacific species that were in the process of brooding in internal sacs. Preliminary data confirm the assumption that species that propagate asexually (by fragmentation) invest less in sexual reproduction. We also observed tantalising clues as to how species with different life histories brood embryos in different positions within the colony, and how embryo colour can help separate potentially cryptic species.

I would like to thank Andrei for his time, patience and hard work.

Beth Okamura and Mary Spencer Jones recently spent 16 days in Thailand studying freshwater bryozoans. Beth was searching mostly for myxozoan parasites, and Mary took the opportunity to add to the freshwater bryozoan collection of the Natural History Museum. For most of their field work they were accompanied by Tim Wood and a graduate student, Sudathip Seansupha. Also lending assistance were IBA members Patana Anurakpongsatorn and Jukkrit Mahujchariyawong. The visit was supported by the Natural History Museum (London) and hosted by the Department of Environmental Science, Kasetsart University, Bangkok.



Back row (L-R): Mary Spencer Jones, Beth Okamura, Saruntron Yimsri, Patana Anurakpongsatorn; *Front row(L-R):* Jukkrit Mahujchariyawong, Tim Wood, Sudathip Seansupha

Andrei Ostrovsky. I just returned from the Maldives (North Male atoll, Vabbinfaru and Angsana islands) where collected bryozoans for my current project by SCUBA, and also gave several lectures at the local biostation. I will present a talk and video about this trip during the Larwood's symposium in Vienna. The Marine Lab is on the Vabbinfaru island (North Male Atoll). Its leader is Mr Abdul Azeez Abdul Hakeem - local environmentalist, doing amazing conservation works on corals, sea turtles, sharks, etc. The Lab belongs to the local resort, and the only way to get there is a buy a trip. And it is VERY expensive. However, as soon as you are there, the help of the local team is just incredible. The staff is very interested to have scientists there, and it is a good place to collect and sort material.



Jo Porter visited Abby Smith (Marine Science) and Hamish Spencer (Zoology) at the University of Otago from mid-January to the end of February. During that time they went on a weeklong expedition to Stewart Island and The Snares Islands, in the south of New Zealand. They collected 28 dredges, over 30 species of living bryozoans, and more than 300 specimens. Also saw innumerable seabirds and ate fresh fish whenever possible. It was great!

Antonietta Rosso. I am at present working on a bryozoan collection from shallow water (less than 15 m depth), mostly soft bottoms from north to Phuket Island, western Thailand. In addition, I am tutoring a post-graduate student having a position within the CoNISMa (Italian National Consortium for Marine Science) for learning about bryozoan taxomony and distribution and biodiversity of bryozoans in some marine protected areas from the Mediterranean.

Jo Porter and Abby Smith sorting specimens.

Judy Winston. The IBA Proceedings are well underway with about 2/3 of the manuscript layout completed. I don't know for sure when it will come out, but hopefully before July. The citation will be:

Bryozoan Research 2007: Proceedings of the 14th International Bryozoology Association Conference, Boone, North Carolina, July 1-8, 2007. Virginia Museum of Natural History Special Publication no. 15.

I am still moving stuff from old to new building, am about half done with lab and office, but haven't even started on the specimens! If those people who want something from me (reviews, reprints, identifications) would come and help me move they would get it a lot more quickly!



New Members

Sudathip Seansupha ("Thip"). I am a graduate student in the Department of Environmental Science at Kasetsart University, Bangkok. For my Masters research I am investigating the use of freshwater bryozoans for treating industrial wastewater here in Thailand. The photo here shows me with an improvised petri plate holder which we use for raising specific bryozoans in a campus pond. My interest in freshwater bryozoans began while I was helping with a bryozoan survey in northern Thailand with other IBA members: Dr. Tim Wood, Dr. Jukkrit Mahuyichariyawong, and Dr. Patana Anurakpongsatorn. After I finish my degree I will teach at the Faculty of Natural Resources and Agro-industry at Kasetsart University in



Sakhon Nakhon. There I hope to continue studying freshwater bryozoans, especially since the campus is very close to one of the largest natural lakes in Thailand. I look forward to the possibility of attending my first IBA meeting in Germany if I can obtain sufficient funding.

Michał Zatoń. I completed my Ph.D. in 2007 at the Faculty of Earth Sciences, University of Silesia in Sosnowiec, Poland. It concerned completely different problem - Middle Jurassic ammonites. Meanwhile, I was also interested in Middle Jurassic hard substrate communities, encrusting and boring hiatus concretions. As the majority of them were encrusted by cyclostome bryozoans, a group completely neglected by previous researchers, I decided to work them out. I applied for the Synthesys grant at the Natural History Museum in London, and together with my fantastic host – Dr Paul D. Taylor, I thoroughly investigated them during my three week visit at the museum in February 2008, taking a lot of SEM photos and looking through a vast comparative collection and literature resources. I found the Jurassic bryozoans very interesting and as yet unexplored topic. Motivated by Paul Taylor, I decided to investigate them along with the associated hard substrate biota. Thanks to Paul, I've learned much more about them, than ever before!



AustraLarwood '08 Bryozoan Symposium

What a fantastic meeting of southern bryozoologists we had! On Friday 15 February 2008, a group of 14 from New Zealand, the UK, and Chile met at the New Zealand Marine Studies Centre, Portobello, Dunedin, New Zealand, and spent the day discussing bryozoans.

We were welcomed by *Keith Probert*, Head of Marine Science at University of Otago. Then *Dennis Gordon* from NIWA in Wellington spoke about bryozoan diversity of the New Zealand Exclusive Economic Zone. He showed wonderful photos and maps of the 121 bryozoan families found in New Zealand, noting that 60% of NZ species are endemic. Much of the diverse and abundant bryofauna of New Zealand is undescribed.

Anna Wood spoke about frame-building bryozoans on the Otago shelf which provide substrate for a wide range of infaunal and epifaunal organisms, increasing biodiversity. It was particularly alarming to see the effect of trawling on bryozoan reefs in Foveaux Strait – decreasing species richness and loss of reef habitat has dire consequences on overall biodiversity and eventually fishing catches.

After morning tea we got to hear from the only freshwater bryozoologist in Chile! *Maria Cristina Orellana* spoke on phylactolaemate diversity around Concepcion, and noted how oxygen levels affect both morphology and growth in *Plumatella*. Then *Juan Cancino* reviewed 25 years of research into the ecology and reproductive biology of encrusting marine bryozoans from central Chile. He described experiments on larval biology, early colony development, and how light regimes affect reproduction in bryozoans.



Australarwood 2008 participants. Back row: Gearoid O'Sullivan, Seabourne Rust, Catherine Reid, Anna Wood, Michelle Carter, Daphne Lee and Juan Cancino. Front row: Peter Batson, Abby Smith, Jo Porter, Maria Cristina Orellana, Dennis Gordon

We continuted our lively discussions over lunch at the 1908 Café in Portobello. Then *Michelle Carter* showed a wonderful video and gave a talk on her research into the functional morphology and evolution of the bird's-head avicularium in *Bugula flabellata*. She showed excellent photomicrographs of the complex musculature and cellular organization of this under-studied part of cheilostome biology.

Time to look into the distant past, next, with two paleontological talks. *Catherine Reid* described Late Palaeozoic bryozoans from her work in Tasmania. Plastic morphology in some polar species may allow for palaeoenvironmental interpretation, especially when coupled with sedimentary data and compared with modern biogeography. Moving up the geologic column, we heard about fossil bryozoan faunas from the Plio-Pleistocene of the Wanganui Basin from *Seabourne Rust*. There are over 100 species of bryozoan in these cyclothems; they form three paleoenvironmental groups which migrate with sea-level fluctuations.



Time for a break and some real specimens for the rest of the afternoon! *Jo Porter* and *Abby Smith* talked about their recent cruise to the Snares Islands (south of NZ). They collected 28 dredges and well over 300 specimens of living bryozoans for their study of phylogenetics of New Zealand cyclostomes. Jo showed a grand video that captured the fun and hard work of the cruise. Then everyone was able to examine and pick through some of the dredged material.

We finished our day with a very fancy dinner at High Tide Restaurant in Dunedin, and headed home early because we had a big day planned for Saturday!

On Saturday 16 February 2008 a group of ten boarded a van and headed north to explore the North Otago coast. We collected on the shore platform at the famous Moeraki boulders, drank tea overlooking the sea, and explored limestones and fossils of the Kakanui Coast. We strolled the historic Oamaru waterfront & heritage precinct, ate lunch right on top of a colony of little blue penguins, and visited Parkside Limestone Quarry in Weston. In the late afternoon we marveled at the fossils and pillow lavas of Boatman's Harbour and then drove round to Bushey Beach to watch the yellow-eyed penguins come ashore. Fish and chips on the way home, and we arrived content but tired back in Dunedin.



It was great fun, and great science, and great to see everybody. Can't wait till the next one!

Abby Smith

Participants

Peter Batson Dunedin, NZ

Juan Cancino Universidad Católica de la Santisima Concepción, Concepción, Chile

Michelle Carter University of Victoria, Wellington, NZ

Dennis Gordon NIWA, Wellington, NZ Liz Harper Cambridge University, UK

Daphne Lee University of Otago, Dunedin, NZ

Maria Cristina Orellana Universidad Católica de la Santisima Concepción, Concepción, Chile

Gearoid O'Sullivan

Diane Paul

University of Otago, Dunedin, NZ

University of Massachusetts, USA

Jo Porter

Keith Probert

University of Otago, Dunedin, NZ

Aberystwyth University, Wales

University of Otago, Dunedin, NZ

Catherine Reid University of Canterbury, Christchurch, NZ

Seaborne Rust University of Auckland, NZ

Abby Smith University of Otago, Dunedin, NZ Anna Wood University of Otago, Dunedin, NZ



Further Thoughts on the Stockholm Meeting in 1965

Alan Cheetham

Sten Schager's reminiscences [Bulletin 3(4), December 2007] reminded me that I had given short shrift in my account of the IBA's founding (Annals of Bryzoology: 45-57, 2002) to the non-bryozoologists involved in the Stockholm meeting. Four of these individuals are in the group photograph (Figure 2 in my account, reproduced below) made at the end of the meeting in Stockholm in May 1965: Ivar Hessland, professor and head of the Geological Institute of Stockholm University, was our host, Harry Mutvei and Franciczek Adamczak were faculty members of the institute, and Kei Mori was a graduate student there, working on a dissertation on the Silurian stromatoporoids of the island of Gotland. As I recall, Adamczak's specialty was Ostracoda, as was Hessland's; as Sten pointed out in his letter, Mutvei's work is chiefly with mollusks. The photograph was made on a ridge (a subglacial esker) across the street (Kungstensgatan) from the Geological Institute building in which the sessions were held. The other 16 people in the photograph were the bryzoologists who voted to found the IBA at the end of the meeting, and they are all named in the caption to Figure 2 in my 2002 account.



Participants (bryozoologists' surnames in capital letters) in the meeting on post-Palaeozoic Bryozoa of the North Sea region, Stockhold, Sweden, 24th-27th May 1965. Left to right: Sten SCHAGER, Kei Mori, Alan MEDD, Giampietro BRAGA, Enrico ANNOSCIA, Robert LAGAAIJ, Patricia COOK, Yves GAUTIER, Ole BERTHELSEN, Richard BOARDMAN, Franciczek Adamczak, Monique LABRACHERIE, Harry Mutvei, Nils SPJELDNÆS, Janine PRUD'HOMME, Lars SILÉN, Gilbert LARWOOD, Alan CHEETHAM, Ehrhard VOIGT, Ivar Hessland. (Photo can be visually enlarged using "View – Zoom" on your Adobe toolbar).

If Hessland's role in the meeting was that of the foresighted impresario who provided the venue and the seed money to bring the group of bryozoologists to Stockholm to sing for their supper, so to speak, the other non-bryozoologists were the audience who sat patiently, but not uncritically, listening to our bryo-chatter. In addition to the four in the group photograph, I can remember two from Uppsala who attended one or more of our sessions, Valdar Jaanusson and Anders Martinsson, both distinguished students of Paleozoic invertebrate faunas and noted stratigraphers. Sadly, they, Hessland, and Adamczak (as well as half the members of our group) have all passed on.

Sten's recollections of his visits with Ehrhard Voigt also evoked the memory of the first meeting I had with this icon of bryozoology. It was in London in 1961—three years after Sten's first visit with him—when I was a post-doc at the Natural History Museum. (Coincidentally, that was when and where I first met Sten, but that's another story.) That fall I received a letter from Voigt saying he would be passing through London on a particular Sunday and would like to meet me if I could visit him at his hotel that evening. So, after an early supper, I left the Victorian semi-detached house my family and I rented in the southern suburb of Beckenham, Kent, and after two hours and three train rides arrived at the hotel in Golders Green in north London at about eight o'clock. There Voigt, the only person in the small reception room, met me dressed in pajamas, dressing gown, and carpet slippers. Clearly, this was to be his last activity for the day.

After introducing ourselves, we proceeded to his room, with some trepidation on my part about entering the professorial bedchamber. The room was small, not much larger than the two beds it contained. One was completely covered with photographs of Bryozoa; there were Montian bryozoans from Belgium, Danian ones from Denmark, Maastrichtian ones from the Netherlands, Coniacian ones from France, and, of course, bryozoans from Voigt's beloved glacial erratics in Germany. We sat on the other bed, discussing each of the photographs in turn. The professor told me what each represented and in turn asked my "opinion." Of course, it was always the same as his. (I had already become well acquainted, from the literature, with the differences between Voigt's use of morphological terms and that of Harmer to which I was trying to adhere.) At the end of two hours, he politely asked me what I was working on. Suffering from information overload and befuddled by the fact that everything I was working on at that time was younger by at least tens of millions of years, all I could do was blurt out a few words about my favorite genus, *Metrarabdotos*. It was clear that this was meant to be the evening's finale, and I embarked on my two-hour, three-train return to Beckenham hoping not to fall asleep and miss one of my stations.

A few weeks later, in my office in the "new spirit building" at the museum, a small package arrived from Voigt. In it was a slide with three specimens of *Metrarabdotos* that he had collected from one of Canu and Bassler's Miocene localities in the Vienna Basin. Thus did I become acquainted with this man's remarkable memory.



Tropical Freshwater Laboratory in Thailand



The Faculty of Fisheries at Kasetsart University in Bangkok, Thailand welcomes IBA members (and other biologists) to its new tropical freshwater laboratory. This an ideal place to study freshwater ctenostome (hislopiid) bryozoans, including their embryology, ecology, morphology, physiology, and more.

The facility consists of several small labs and office space adjoining the natural history museum. These are housed together in a one-story building extending into a 0.6 hectare rectangular pond. The pond maintains a thriving population of *Hislopia* bryozoans (Ctenostomata) year around, as well as a healthy mix of several plumatellid species. There is also a rich plankton community.

The space is fully air conditioned and includes phone and wireless internet service. Light microscopes are available, and an excellent electron microscopy facility is nearby. Standard glassware and supplies are also on hand, although investigators are encouraged to bring their own specialized equipment.

Clean and inexpensive campus lodging ranges from simple guest rooms to a western-style hotel. Food services are conveniently located both on and off campus. Private and public transportation is easily arranged to downtown Bangkok and to all other parts of Thailand. Typical costs are:

Lodging: 600-1800 Thai baht €12-36 per day (room for 2 persons)

Food: 100-500 Thai baht €2-10 per day per person

Currently there is no charge for short term bench space. Long term use of the facility can be negotiated.

To reserve space, contact: Dr. Suriyan Tunkijjanukij, Dean

Faculty of Fisheries Kasetsart University ffissrt@ku.ac.th

For any specific questions: Dr. Timothy Wood

tim.wood@wright.edu

Appeal for Information

Dear IBA members

PLEASE HELP!!! I'm a PhD student working in New Zealand, on the relationship between habitat complexity and biodiversity. Specifically I am interested in the relationship between large, calcified bryozoans ('frame-builders')....(*Cellaria* sp meadows, *Schizoporella errata* patches etc) and the associated richness of macroinvertebrates. New Zealand is lucky enough to have large (100s of square kilometeres) of seafloor dominated by frame-building bryozoans and I'd like to know of similar habitats elsewhere in the world. That's where you come in!

Please can you tell me about frame-building bryozoans in your area, or of your experience? Any (or all!) of the following information will be really useful to me....what species, what growth-form, at what depth, over what area, lat & long (or a general description)? What is the seafloor like (clean sand, muddy...?) Is the area particularly species rich? Is bottom-fishing a likely threat to these bryozoans?

If you have ANY information, published accounts, unpublished theses, anecdotal evidence or first-hand experience, I'd be really grateful.

Looking forward to hearing from you (this is a repeated call for help after only one reply to last year's request!)

Cheers

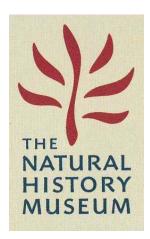
Anna Wood wooan929@student.otago.ac.nz

Note from the Treasurer

I have received 2007-2010 subscriptions from 53 members, all of whom should have received email receipts by now. If you wish to pay, or you think you have but don't have a receipt from me, please get in touch with me on abby.smith@otago.ac.nz. Next deposit will be in July.

-- Abby Smith, Treasurer

Bryozoan Bookshelf



Reprints for disposal

Mary Spencer Jones has one copy of:

David, L., Mongereau, Noël & Pouyet, S., 1970. Bryozoaires du Néogène du Bassin du Rhône. Gisements burdigaliens de Taulignan (Drôme).

Documents des Laboratoires de Géologie de la Faculté des Sciences de Lyon 40: 97-175.

David, L., Mongereau, Noël & Pouyet, S., 1972. Bryozoaires du Néogène du bassin du Rhône. Gisements burdigaliens de Mus (Gard). Documents des Laboratoires de Géologie de la Faculté des Sciences de Lyon 52: 1-118.

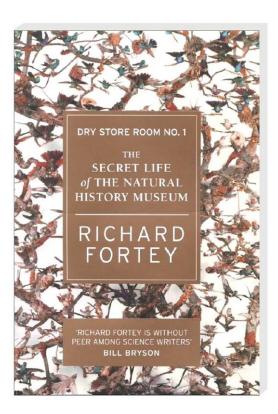
Pouyet, S., 1973. Revision systematique des Cellepores (Bryozoa, Cheilostomata) et des espèces europeenes. Analys de quelque populations a Cellepores dans le Neogene du Bassin Rhodanien. *Documents des Laboratoires de Géologie de la Faculté des Sciences de Lyon* 55: 1-266.

And two copies of:

Larwood, G. P., 1962. The morphology and systematics of some Cretaceous cribrimorph Polyzoa (Pelmatoporinae). *Bulletin of the British Museum (Natural History) (Geology)* 6: 1-285.

These are available free, as long as the recipient is prepared to pay the postage.

If you are interested in any of the above please contact Mary at m.spencer-jones@nhm.ac.uk



Also from Mary Spencer Jones: "Here is an amusing book that might interest any IBA members who have spent some time at the NHM."

Richard Fortey 2008. Dry Store Room No. 1: The Secret Life of the Natural History Museum (Hardcover)

HarperPress, 352 pp. ISBN-10: 0007209886 ISBN-13: 978-0007209880

Techniques

Here is a novel idea: a simple instrument to monitor the preservation quality of ethanol preserved specimens.

The company ClearCase has developed the so-called Alcomon Indicator System; an instrument in the form of two small indicator pills that monitor the ethanol concentration in fluid preserved specimens. When the pills are placed inside a specimen jar, the system continuously shows whether the ethanol concentration is above or below specified levels related to the minimal required antiseptic properties of the preservative.



The mechanism is based on specific gravity, and two pills are normally used together. The organge pill sinks or floats at an ethanol concentration of $60\pm3\%$, providing a warning signal. At $50\pm3\%$ the red pill sinks to indicate an immediate threat. The product life is estimated to exceed 20 years.

Following a demonstration at the Natural History Museum (London), Mary Spencer Jones reports that this system could be especially useful for display items that are not easily accessible. Mary says that the system inventer, Dr. Andreas J. van Dam, can also prepare customized orders for different concentrations of ethanol.

Prices vary by the size of the order, starting at 0,50€each for quantities less than 1000. For orders or information contact

Andreas J. van Dam Dr. M. vid Stoelstraat 39 2251 RK Voorschoten, Netherlands Tel. +31(0)615676299

Email: ajvandam@hotmail.com

(This article is for information only. No product endorsement by the IBA is implied!)

Upcoming Meetings and Conferences

Bryozoa

Larwood Meeting
May 23-24, 2008, Vienna, Austria
Contact Andrew Ostrovsky, oan_univer@yahoo.com

International Bryozoology Association 25-30 July 2010, Kiel, Germany Contact Priska Schäfer, ps@gpi.uni-kiel.de

Paleontology

North American Paleontological Convention 21-27 June, 2009 in Cincinnati, Ohio (USA) http://www.paleosoc.org/NAConv2005-2009.html

Biology

Ecological Society of America 3-8 August 2008 in Milwaukee, Wisconsin(USA) http://www.esa.org/milwaukee/

International Association for Ecology 16-21 August 2009, Brisbane (Australia) http://www.intecol.net/info-esk/X-INTECOL/10th_INTECOL_Congress-3.htm

International Congress on Invertebrate Morphology 17-21 August 2008, Copenhagen, Denmark http://www.icim-1.dk/ See information in the *IBA Bulletin* 3(4)

International Congress of Zoology 26-29 August 2008, Paris, France http://icz2008.snv.jussieu.fr (See information in the *IBA Bulletin 3(4)*

International Coral Reef Symposium 7-11 July 2008, Fort Lauderdale, Florida USA http://www.nova.edu/ncri/11icrs/

International Society of Limnology (next meeting not yet announced) http://www.limnology.org/news/sil2007sessions.html

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.

- Balduzzi, A., C. Chimenz Gusso and A. Rosso (2006). Checklist della fauna italiana a Kamptozoi. Aggiornamenti.
- Barnes, D. K. A., K. E. Webb and K. Linse (2007). Growth rate and its variability in erect Antarctic bryozoans. Polar Biology 30(8): 1069-1081.
- Barnes, D. K. A. and H. J. Griffiths (2008). Biodiversity and biogeography of southern temperate and polar bryozoans. Global Ecology and Biogeography 17(1): 84-99.
- Berning, B. and P. Kuklinski (2008). North-east Atlantic and Mediterranean species of the genus *Buffonellaria* (Bryozoa, Cheilostomata): implications for biodiversity and biogeography. Zoological Journal of the Linnean Society 152: 537-566.
- Branch, M. L. and P. J. Hayward (2007). The Bryozoa of subantarctic Marion and Prince Edward Islands: illustrated keys to the species and results of the 1982-1989 University of Cape Town surveys. African Journal of Marine Science 29(1): 1-24.
- Canning, E. U., A. Curry, S. L. L. Hill and B. Okamura (2007). Ultrastructure of *Buddenbrockia allmani* n sp (Myxozoa, Malacosporea), a parasite of *Lophopus crystallinus* (Bryozoa, Phylactolaemata). Journal of Eukaryotic Microbiology 54(3): 247-262.
- Chimenz Gusso, C., A. Rosso and A. Balduzzi (2006). Checklist delle specie della fauna italiana. Bryozoa.
- Dick, M. H. (2008). Unexpectedly high diversity of Monoporella (Bryozoa: Cheilostomata) in the Aleutian Islands, Alaska: taxonomy and distribution of six new species. Zoological Science 25(1): 36-52.
- Dick, M. H., R. Takashima, T. Komatsu, N. Kaneko and S. F. Mawatari (2008). Overview of Pleistocene bryozoans in Japan. In: H. Okada, S. F. Mawatari, N. Suzuki and P. Gautam (eds) Proceedings of International Symposium The Origin and Evolution of Natural Diversity, 1-5 October 2007. Hokkaido University, Sapporo: 83-91.
- Dick, M. H., M. Hirose, R. Takashima, T. Ishimura, H. Nishi and S. F. Mawatari (2008). Application of MART analysis to infer paleoseasonality in a Pleistocene shallow marine benthic environment. In: H. Okada, S. F. Mawatari, N. Suzuki and P. Gautam (eds) Proceedings of International Symposium The Origin and Evolution of Natural Diversity, 1-5 October 2007. Hokkaido University, Sapporo: 83-91.
- Ernst, A. and S. Schröder (2007). Devonian bryozoans of Rhenish Slate Massif. Neues Jahrbuch für Geologie und Paläontologie. 246(2): 205-233.
- Flórez, P., E. Montoya-Cadavid, J. Reyes and n. Santodomingo (2007). Briozoos cheilostomados del Caribe colombiano. Boletín de Investigaciones Marinas y Coteras 36: 229-250.
- Gluhak, T., J. E. Lewis and A. Popijac (2007). Bryozoan fauna of Green Island, Taiwan: First indications of biodiversity. Zoological Studies 46(4): 397-426.
- Gorjunova, R. V. (2007). New cryptostomide bryozoans from the upper Devonian of Transcaucasia and some aspects of the evolution of the order Cryptostomida. Paleontological Journal 41(6): 600-613.
- Grischenko, A. V., M. H. Dick and S. F. Mawatari (2007). Diversity and taxonomy of intertidal Bryozoa (Cheilostomata) at Akkeshi Bay, Hokkaido, Japan. Journal of Natural History 41(17-20): 1047-1161.

- Guha, A. and K. Gopikrishna (2007). Some fossil ascophoran bryozoan taxa from Tertiary sequences of Western Kachchh, Gujarat. Journal of the Paleontological Society of India 52(2): 195-222.
- Harzhauser, M., A. Kroh, O. Mandic, W. E. Piller, U. Göhlich, M. Peuter and B. Berning (2007). Biogeographic responses to geodynamics: a key study all around the Oligo-Miocene Tethyan Seaway. Zoologischer Anzeiger 246: 241-256.
- Hausdorf, B., M. Helmkampf, A. Meyer, A. Witek, H. Herlyn, I. Bruchhaus, T. Hankeln, T. H. Struck and B. Lieb (2007). Spiralian phylogenomics supports the resurrection of Bryozoa comprising Ectoprocta and Entoprocta. Molecular Biology and Evolution 24(12): 2723-2729.
- Hirose, M. and S. F. Mawatari (2007). Freshwater Bryozoa of Tonle Sap, Cambodia. Zoological Science (Tokyo) 24(6): 630-641.
- Hondt, J.-L. d. and A. S. Horowitz (2007). Matériaux pour une revision systématique des Bryozoaires Cténostomes fossiles. . Bulletin de la Société Linéenne de Bordeaux 35(3): 265-280.
- Jackson, P. N. W. and M. M. Key, Jr. (2007). Borings in trepostome bryozoans from the Ordovician of Estonia: two ichnogenera produced by a single maker, a case of host morphology control. Lethaia 40(3): 237-252.
- Komatsu, T., K. Yoshihara, M. H. Dick, R. Takashima, A. N. Ostrovsky and H. Nishi (2008).
 Habitats of bivalves in the Lower-Cretaceous Aptian Tanohata and Aptian to Albian
 Hiraiga Formations, Iwate Prefecture, Northeastern Japan. In: H. Okada, S. F. Mawatari,
 N. Suzuki and P. Gautam (eds) Proceedings of International Symposium The Origin and
 Evolution of Natural Diversity, 1-5 October 2007. Hokkaido University, Sapporo: 163-170
- Kuklinski, P. and B. Bader (2007). Comparison of bryozoan assemblages from two contrasting Arctic shelf regions. Estuarine Coastal and Shelf Science 73(3-4): 835-843.
- Marchini, A., M. R. Cunha and A. Occhipinti-Ambrogi (2007). First observations on bryozoans and entoprocts in the Ria de Aveiro (NW Portugal) including the first record of the Pacific invasive cheilostome *Tricellaria inopinata*. Marine Ecology 28(Suppl. 1): 154-160.
- Massard, J. A. and G. Geimer (2008). Global diversity of bryozoans (Bryozoa or Ectoprocta) in freshwater. Freshwater animal diversity assessment. E. V. Balian, C. Lévèque, H. Segers and K. Martens, Hydrobiologia. 595: 93-99.
- Messina, C., A. Rosso, F. Sciuto, I. Di Geronimo, W. Nemec, T. Di Dio, R. Di Geronimo, R. Maniscalco and R. Sanfilippo (2007). Anatomy of a transgressive system tract revealed by integrated sedimentological and palaeoecological study: the Barcellona P.G. Basin, northeastern Sicily, Italy. Sedimentary Processes Environments and Basins: a Tribute to Peter Friend. G. Nichols, E. A. Williams and C. Paola, International Association of Sedimentologists. Special Publications. 38: 367-400.
- Metcalfe, K., D. P. Gordon and E. Hayward (2007). An amphibious Bryozoan from living mangrove leaves *Amphibiobeania* new genus (Beaniidae). Zoological Science (Tokyo) 24(6): 563-570.
- Montoya-Cadavid, E., P. Flórez and J. E. Winston (2007). 2007. Checklist of the marine Bryozoa of the Colombian Caribbean. Biota Colombiana 8(2): 159-184.
- Ostrovsky, A. N., P. D. Taylor, M. H. Dick and S. F. Mawatari (2008). Pre-Cenomanian Cheilostome Bryozoa: Current State of Knowledge. In: H. Okada, S. F. Mawatari, N. Suzuki and P. Gautam (eds) Proceedings of International Symposium The Origin and Evolution of Natural Diversity, 1-5 October 2007. Hokkaido University, Sapporo: 69-74.

- Ostrovsky, A. N., M. H. Dick and S. F. Mawatari (2008). The internal-brooding apparatus in the bryozoan genus *Cauloramphus* (Cheilostomata: Calloporidae) and its inferred homology to ovicells. Zoological Science 25(1): 36-52.
- Pachut, J. F. and R. L. Anstey (2007). Inferring evolutionary order and durations using both stratigraphy and cladistics in a fossil lineage (Bryozoa: *Peronopora*). Palaios 22: 476-488.
- Powers, C. M. and J. F. Pachut (2008). The fate of Triassic bryozoans in the wake of the Permo-Triassic extinction. Journal of Paleontology 82: 393-402.
- Pratt, M. C. and E. W. Grason (2007). Invasive species as a new food source: does a nudibranch predator prefer eating an invasive bryozoan? Biological Invasions 9(6): 645-655.
- Puce, S., G. Bavestrello, C. G. Di Camillo and F. Boero (2007). Symbiotic relationships between hydroids and bryozoans. Symbiosis 44(1-3): 137-143.
- Reverter-Gil, O. and E. Fernandez-Pulpeiro (2007). Species of genus *Schizotheca* Hincks (Bryozoa, Cheilostomata) described in the Atlantic-Mediterranean region, with notes on some species of *Parasmittina* Osburn. Journal of Natural History 41(29-32): 1929-1953.
- Reverter-Gil, O. and E. Fernandez-Pulpeiro (2007). A new name for *Puellina parva* Reverter & Samp; Fernandez, 1996 (Bryozoa, Cheilostomatida). Journal of Natural History 41(9-12): 729-730.
- Ross, J. R. P. and C. A. Ross (2007). Ordovician bryozoans and sequence stratigraphy in Tasmania. Memoirs of the Association of Australasian Palaeontologists. 34: 197-226.
- Rosso, A. (2004). Bryozoan diversity in the Mediterranean Sea. Biogeographia 24: 219-238.
- Rosso, A. (2005). First fossil record of Neolagenipora (Bryozoa Cheilostomatida) from Mediterranean Pleistocene sediments.. Boll. Acc. Gioenia Sci. Nat. Catania. 38(365): 137-150.
- Saunders, M. and A. Metaxas (2007). Temperature explains settlement patterns of the introduced bryozoan *Membranipora membranacea* in Nova Scotia, Canada. Marine Ecology Progress Series 344: 95-106.
- Sciuto, F. and A. Rosso (2008). Distribution pattern of deep-water Ostracod Assemblages within Lower Pleistocene sediments from Furnari (Sicily). Bollettino Società Paleontologica Italiana 47(1): 33-43.
- Sharp, K. H., S. K. Davidson and M. G. Haygood (2007). Localization of *Candidatus Endobugula sertula* and the bryostatins throughout the life cycle of the bryozoan *Bugula neritina*. ISME Journal 1(8): 693-702.
- Smith, A. M. (2007). Age, growth and carbonate production by erect rigid bryozoans in Antarctica. Palaeogeography, Palaeoclimatology. Palaeoecology 256: 86-98.
- Taylor, P. D., P. Kuklinski and D. P. Gordon (2007). Branch diameter and depositional depth in cyclostome bryozoans: Testing a potential paleobathymetric tool. Palaios 22(2): 220-224.
- Taylor, P. D. (2008). Seawater Chemistry, Biomineralization and the Fossil Record of Calcareous Organisms. In: H. Okada, S. F. Mawatari, N. Suzuki and P. Gautam (eds)
 Proceedings of International Symposium The Origin and Evolution of Natural Diversity,
 1-5 October 2007. Hokkaido University, Sapporo: 21-29.
- Tolokonnikova, Z. A. (2007). New bryozoans (Bryozoa) from the upper devonian (Lower famennian) of the Kuznetsk basin. Paleontological Journal 41(5): 537-541.
- Winston, J. E. (2007). Archives of a small planet: The significance of museum collections and museum-based research in invertebrate taxonomy. Zootaxa 1668: 47-54.
- Xia, F.-S., Z.Z. Wang and S.-G. Zhang. (2007). The oldest bryozoans; new evidence from the late Tremadocian (Early Ordovician) of east Yangtze Gorges in China. Journal of Paleontology 81(6): 1308-1326.

- Xiu-Juan, Y., Y. Yan and G. Ji-Dong (2007). Attachment of bryozoan (*Bugula neritina*) larvae affected by ions and neuroactive compounds. Journal of Tropical Oceanoraphy 26(4): 43-50.
- Yu, X., Y. Yan and J.-D. Gu (2007). Attachment of the biofouling bryozoan *Bugula neritina* larvae affected by inorganic and organic chemical cues. International Biodeterioration & Biodegradation 60(2): 81-89.

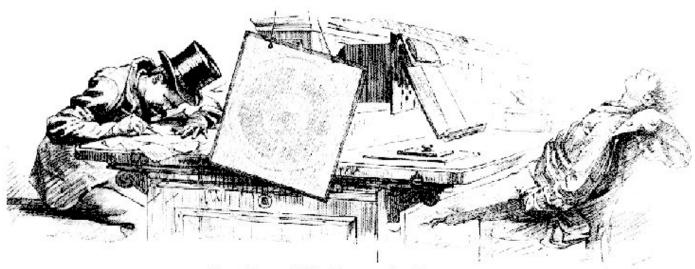
Correction

Please note the following correction from a reference listed incorrectly in *IBA Bulletin* 3(4) as:

Feng-Sheng, X., W. Zong-Zhe and Z. Sen-Gui (2007). The oldest bryozoans; new evidence from the late Tremadocian (Early Ordovician) of east Yangtze Gorges in China. Journal of Paleontology 81(6): 1308-1326.

The authors should be listed as: Xia, F.-S., Z.Z. Wang and S.-G. Zhang, as cited correctly in this current issue.

Cartoon from Mary Spencer Jones



Two Ways of Working at the Museum