



Volume 1, Number 2

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Paul D. Taylor, President Judith Winston, President-elect Timothy S. Wood, Secretary Abigail Smith, Treasurer

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

News from the Membership

Soja Louis. I am presently doing taxonomy of Bryozoans from the East and West coast of India. My guide Dr.N.R.Menon and myself have jointly published a paper on Genus *Steginoporella*: Soja Louis and N.R.Menon,(2005) Meristic features of two allied species of *Steginoporella* Smitt, 1873 (Bryozoa) from Indian and the Antarctic waters. Journal of the Marine Biological Association of India. (In Press).

I would like to get a copy of **Hayward**, **P.J.** (1995). *Antarctic Cheilostomatous Bryozoa*. Oxford University Press, for which I am trying for a long time. Please let me know where I can get it.

June Ross. I am the third author with Fumio Kobayshi and Charles Ross on a manuscript "Age and generic assignment of *Yabeina columbiana* (Guadalupian Fusulinacea) in southern British Columbia." This will appear in the Journal of Paleontology. Also, I am the first author with Charles Ross on manuscript for Annals of Bryozoology entitled "200 years of years of Australian Bryozoology."

Seabourne Rust is conducting his Ph.D. project on "Late Cenozoic Bryozoan faunas of the Wanganui Basin, New Zealand and their paleoecological implications" (Geology Department, University of Auckland, NewZealand). This study aims to give an overview of the bryozoan fossil record during the Pliocene-Pleistocene of the marine-deposited sedimentary rocks of the Wanganui Basin, western North Island, New Zealand. New Zealand's temperate seas are especially rich in bryozoa, with many living species recorded and a high degree of endemism. They also are important sediment contributors to local coolwater shelf carbonate deposits. In the Wanganui area is an exceptional marine sedimentary record of Pliocene to Pleistocene age, little deformed and richly fossiliferous. These strata have been subject to multi-disiplinary studies, most recently interpreted in terms of sequence stratigraphy. Abundant locally, fossil bryozoan colonies are found encrusting substrates in the near shore and shelf deposits. Many of the fossil molluses from particular facies at Wanganui are encrusted by bryozoa. The remains of erect branching bryozoan colonies are also common. Characteristics of the fauna seem to relate to paleoecology, with diversity and morphology/colony form varying through each of the cycles of sequence deposition. These faunas will be analysed taxonomically, described, and investigated as to how they can provide information for interpreting paleoenvironment and facies changes. The aim is to relate the bryozoan record with geological events including sea-level, climate change, and patterns in faunal turnover. Seaborne Rust can be reached at s.rust@auckland.ac.nz). His supervisors are Dr Kathy Campbell and Assoc. Prof. Jack Grant-Mackie.

John Ryland spent six weeks in the US this summer, his time divided between California (Scripps Institution of Oceanography, La Jolla) and Oregon (Oregon Institute of Marine Biology, Charleston). During the drive from La Jolla to Charleston, thanks to the initiative and interest of John Pearse (UC Santa Cruz) and time commitment of Jeff Goddard (UC Santa Barbara), and careful scheduling to coincide with the June week of good tides (with low water falling at dawn!), seven Californian localities (from Cayucos to Crescent City) were visited in a search for *Alcyonidium*. Five of these between them yielded no fewer than five species of encrusting *Alcyonidium*, one of them the species still known there as *A. parasiticum*, though it is almost certainly not the European species; the others are undescribed. Of these, one had pink embryos while two had inter-tentacular organs (and are

therefore oviparous). On the July tides, a month later, accompanied by Richard Emlett (OIMB), I collected on two shores in Coos Bay, Oregon. Three of the previous five species were found here too, plus another, bringing the overall tally to six. Thanks to **Hank Chaney** (Santa Barbara Museum) I was also able to see John Soule's *A. enteromorpha*. The other species likely to occur sublittorally is *A. pedunculatum* Robertson, whose material might be expected to have been deposited in the California Academy of Sciences in San Francisco. If that was the case, it has been lost (*fide* Bob Van Syoc, curator). On previous visits by **Joanne Porter** and myself, both extending northwards to Friday Harbor (Washington) and Bamfield (Vancouver), some of these same species were obtained but with probably yet two more oviparous species from the northern localities. The reproductive mode in two of this year's species was not established but seems likely to be oviparity, making a balance between the two modes that is very different from European waters, where larviparous species dominate. Through the courtesy of Jim Carlton, it has been possible to update **John Soule's** short entry on *Alcyonidium* in the forthcoming revision of Light's Manual and, with all the material we now have, Jo and I should be able to write proper descriptions within the next few months.

Abby Smith. I went and worked with **Marcus Key** for two weeks in June/July after the conference in Calgary -- boy was it hot in central PA. But I did get to be there to observe his transition from Associate Professor to Full Professor (on 1 July) -- Congratulations Marcus! In two weeks we wrote and submitted two manuscripts on bryozoan mineralogy, which made it both productive and fun. We couldn't have done it, though, without the help and support of Hamish and Maria (long suffering spouses looking after the kids). Our collaboration continues remotely until, probably, 2007.

Margret Steinthorsdottir has moved to Dublin, Ireland and will be starting a Ph.D. at Trinity College, Dublin under the supervision of Patrick Wyse Jackson. The provisional title of her project is 'Ecological succession and evolution of a Carboniferous invertebrate fauna, Hook Head, County Wexford, Ireland'. Her new address is: Margret Steinthorsdottir, Department of Geology, Trinity College, Dublin 2, Ireland. Tel: 353-1-6081363; e-mail: not yet available.

Tim Wood. In recent work on freshwater bryozoans in Thailand we have stumbled across some really interesting things. One of these appears to be a true freshwater cyphonautes larva produced by the ctenostome, *Hislopia malayensis* (photo at right). However, although we can hatch these from fertilized eggs or collect them in plankton nets, we have been unable to keep them alive in the lab for more than 2 days. Does anyone have culturing suggestions? Also, several pieces of literature mention that marine cyphonautes live freely for up to two months, but I cannot discover who first made that claim or where and how it was determined. Does anyone know?



New IBA Members

Masato Hirose. I graduated University of Tsukuba this spring, and I'm studying freshwater bryozoa in the Mawatari laboratory at Hokkaido University. As an undergraduate at the University of Tsukuba I studied about morphology and developmental biology of freshwater bryozoans. Now, I'll study about taxonomy of freshwater bryozoa mainly, and try to find the new features of them and relationship between the species.

Andrea Jimenez-Sanchez. I belong to the University of Zaragoza (Spain), but I am also a PhD-student of Oslo University (Norway). My work is about the Upper Ordovician bryozoans in the Cystoid Limestone Formation, localized in the northeast of Spain. This formation is divided in four members, two of them consisting of mud-mound complexes and the other ones are an alternating of shales and marly limestones. I am doing the systematic and paleoecological work on the bryozoans. I stay in Oslo for three months this year and four months next year working with professor Spjeldnaes, who will supervise my work on systematic and palaeoecology. My main supervisor is Enrique Villas, he will supervise the stratigraphy part. If anybody wants to know more about my work this is my e-mail address: andreaj@unizar.es

My best wishes to the community of the friends of the bryozoans!!!!

Jasmine Sharp. Having studied Marine & Freshwater Biology at the University of Wales, Aberystwyth, I have continued my studies at Aberystwyth under the supervision of Dr. Joanne Porter and Dr. Mike Winson. As an undergraduate, I investigated the potential use of bacterial bioluminescent reporters to detect parasite infection in sticklebacks. I have also spent time investigating the effect of salinity on calorific output of marine microalgae. My PhD subject is the bioactive metabolites of British marine bryozoans and the associations of bryozoans with microbial fauna. I have a particular interest in the ability of marine organisms to inhibit bacterial communication and settlement. In keeping with the aquatic theme, my outside interests include SCUBA diving and sea-rowing in traditional Celtic longboats.



Smithsonian Needs Entoprocts

Cheryl Bright, Collections Manager (Invertebrates) at National Museum of Natural History in Washington is requesting help from IBA members. In a letter to the IBA Secretary, she writes:

"...The museum has recently begun a new an Ocean Science Initiative. Included in this initiative is a permanent exhibition about the oceans in the Natural History Building in Washington DC, an ocean education program, and an inter-disciplinary center for marine research. Access to our specimen databases (currently http://www.mnh.si.edu/rc/db/colldb.html) and research, collection and education

information will be enhanced with the implementation of our new Ocean Science web portal.

"In conjunction with the Museum's Ocean Science Initiative, we are focusing on the refinement and development of our marine collections. Our ultimate collection development goal is to have at least one representative of each invertebrate family to support comparative morphological studies. At this time we are particularly interested in developing our collection of identified Entoprocta (marine and freshwater) which currently consists of only 2 specimen lots, both donations from Dr. Tim Wood. If you have any identified specimens of Entoprocta that you are interested in donating to the invertebrate collection at the National Museum of Natural History, please contact me at brightc@si.edu."



Advisory Council News: Open-Access Journal?

In June, IBA President Paul Taylor was approached by the editor of BioMed Central Acquisitions about whether the IBA would be interested in starting an Open Access, on-line journal. The issue was subsequently brought to the attention of the IBA Advisory Council for comment. The cost of publication would probably work out at £330 (490 Euros or \$605) per article, to judge from the BioMed Central website, plus any local taxes (e.g. V.A.T.). Apparently cost waivers could be considered on a case-by-case basis. Currently, it appears that taxonomic names published in such on-line journals would not be valid, but this is something that the ICZN are in the throes of investigating. Paul asked the Council, "Do we actually need an IBA journal? Would it make redundant our valued conference volumes? Is the Open Access, on-line publication model appropriate to our science?"

Council members generally disliked down the idea. Typical responses were these:

- "In my opinion an on-line journal, whilst giving good exposure to the IBA, is rather redundant if one can not publish new species. It would also give the conference volumes less of an impact. The cost, I feel, is also prohibitive."
- "Our society is too specialised to merit this because we will all be aiming to publish our work in more general journals. With institutional and promotional emphases on aiming for publications with high impact factors a specialised on-line journal is unlikely to receive many submissions. For those papers that are submitted editorial duties could be non-trivial."
- "Although there are several advantages in having an on-line, free-access IBA journal, it seems too early to initiate it right now, the main objections being the invalidity of new names published therein, and (for me) a lack of understanding how the costs will be dealt with, compared to the status quo of print publishing."

However, one Council member pointed out some advantages of an on-line journal:

- 1) I like the idea of free access to a specialized journal by anyone, from anywhere in the world...at no cost.
- 2) ...In principle at least, I think it would help improve access to bryozoological literature. If bryozoologists really began to publish quality articles in the on-line journal, it would concentrate a large amount of relevant literature in one place, helping bryozoologists without ready access to a big library.
- 3) The articles published in the on-line journal would be indexed in the most widely used indexing services, whereas at least some of the more obscure, regional or local, natural-history journals in which bryozoologists currently publish are not.
- 4) I think on-line publishing is going to become the predominant mode of publishing in the future. And, in fact, not-so-glossy printouts of articles are quite usable.
- 5) I see no problem with publishing our conference volumes on-line as supplements to a journal. We have had a long, sad history of trying to get quality volumes published; they are prohibitively expensive; and, because of differences in currencies, they can be difficult to order for people who have not actually attended the conference. Also, I find I directly use maybe 1 in 10 articles per volume anyway. With on-line publishing, researchers anywhere in the world would have free access to whichever articles they needed, and not have to lug around or pay for the rest.



Sizes of Bryozoans: an Update

In response to the article on bryozoan zooid sizes (*IBA Bulletin*, *June 2005*) Antonietta Rosso writes:

"Among the large bryozoans (although not the largest one) I would like to report one species of *Metrarabdotos* from the Pliocene of Southern Italy:

Metrarabdotos elegantissimus Rosso, 2005

Type locality: Milazzo (Sicily, Southern Italy), Late Pliocene

Measurements (µm) -

	Number	mean	range	standard deviation
Zooidal length	26	1652	1340-1910	171.29
Zooidal width	13	513	450-600	53.60
Fertile zooidal length	4	1775	1680-1880	85.44
Fertile zooidal width	5	802	720-900	79.50

Reference:

Rosso A. (2005) - Metrarabdotos (Bryozoa, Cheilostomatida) from Plio-Pleistocene of southern Italy, with description of new species. Bollettino della Società Paleontologica Italiana, 44 (1): 11-24.

Bryozoan Workshop in Linz, September 8-10, 2005

In the June issue of the *IBA Bulletin*, Emmy Wöss invited all IBA members to a special Bryozoa exhibition entitled "Neptunschleier & Co" at the Biology Centre of the Upper Austria Museums in Linz, Austria (http://www.biologiezentrum.at). The displays will run through September 25. Exhibition activities include a Bryozoan Workshop to be held September 8-10. The itinerary includes a reception, excursions, and formal presentations at the Biology Centre. Emmy has provided the *IBA Bulletin* with the following list of presentation titles and authors:

- 1. Heavy metal pollution and susceptibility to oxidative stress of the freshwater bryozoan *Cristatella mucedo* Cuvier, 1798 (Bryozoa, Phylactolaemata) of Lake Piediluco (Italy). Concetta A. Elia, Giorgia Pieroni and M. Illuminata Taticchi
- 2. The Henri Milne Edwards (1800-1885) collections of recent and fossil Bryozoa Jean-Loup d'Hondt
- 3. **Permian Bryozoans in Iran.** Andrej Ernst, Baba Senowbari-Daryan, and Al Hamedani
- 4. **Determining growth rates in** *Pentapora fascialis* **from the Adriatic Sea, Croatia**Marcus M. Key, Jr., Kristen E. Miller, Timothy M. Samson, Maja Novosel, William P. Patterson and Silvia Cocito
- 5. Bryozoans in Carinthian lakes (Austria). Johanna Troyer-Mildner
- 6. Bryozoans of the Adriatic Sea. Maja Novosel
- 7. Doederlein, Doflein, Haberer, and the first collections of bryozoans in Japan in the 19th and early 20th century. Joachim Scholz, Shunsuke F. Mawatari and Bernhard Ruthensteiner
- 8. Cheilostome Bryozoans from the Lower Oligocene of the Mainz Teritary Basin Joachim Scholz and Norbert Vavra
- The Italian Plumatella similirepens Wood, 2001 (Bryozoa Phylactolaemata) from a hatchery of northern Italy. M. Illuminata Taticchi, Giorgia Pieroni and Concetta A. Elia
- 10. Unusual early development in a bryozoan from the Ukrainian Miocene: a planktonic cyclostome? Paul D. Taylor and Urszula Hara
- 11. Zoogeographical pecularities of Eurasian north continental water-bodies Phylactolaemata and Eurystomata. Anatoly V. Vinogradov
- 12. **Swimming zooids: a new dispersal strategy in the ctenostome bryozoan,** *Hislopia.* Timothy S. Wood, Patana Anurakpongsatorn, and Jukkrit Mahujchariyawong
- 13. Freshwater bryozoans in the backwaters of the Danube and Traun River around Linz, Upper Austria. Emmy R. Wöss
- 14. Sarmatian Bryozoa from Slovak part of Danube Basin. Kamil Zagorsek



Recent Publications

The following list includes works published since the June issue of the *IBA Bulletin*. 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.

- Brunton, M. (2005). Environmental tolerances of resting stages of plumatellid bryozoans at Southern Reservoir, Dunedin, New Zealand. Department of Marine Science. Dunedin, University of Otago.
- Cuffey, R. J. and Fine, R. L. (2005). The largest known fossil bryozoan reassembled from near Cincinnati. Ohio Geology 2005(1): 1-4.
- Di Geronimo, I.; Messina, C.; Rosso, A.; Sanfilippo, R.; Sciuto, F.; Vertino, A. (2005). Enhanced biodiversity in the deep: Early Pleistocene coral communities from southern Italy. Deep-water Coral Ecosystems. F. A. R. J.M. Berlin, Springer: 61-86.
- Gorjunova, R. V. (2005). Ralfimartitidae, a new family of paleozoic bryozoans of the Order Trepostomida. Palontological Journal 39(2): 158-172.
- Gorjunova R.V. (2005). Ralfimartitidae, a new family of Paleozoic bryozoans of the order Trepostomida (Ralfimartitidae novoe semejstvo paleozojskich mshanok otrjada Trepostovida)// Paleontologicheskij Zhurnal. 2005(2): 51-63.
- Hughes, R. N., D'Amato, M. E., Bishop, J. D.D., Carvalho, G. R., Craig, S. F., Hanssen, L. J., Harley, M. A. & Pemberton, A. J. (2005). Paradoxical polyembryony? Embryonic cloning in an ancient order of marine bryozoans. Biology Letters 1: 178-180.
- Hughes, R. N. (2005). Lessons in modularity: the evolutionary ecology of colonial invertebrates. Promoting Marine Science: Contributions to Celebrate the 50th Anniversary of Scientia Marina. C. A. C. Marassé, P., Scientia Marina. (Suppl. 1): 169-179.
- McGurk, C., D. J. Morris, et al. (2005). The morphology of *Tetracapsuloides bryosalmonae* (Myxozoa: Malacosporea) spores released from Fredericella sultana (Bryozoa: Phylactolaemata). Journal of Fish Diseases 28(5): 307-312.
- Morris, D. J., Terry, R. S., Adams, A. (2005). Development and molecular characterisation of the microsporidian *Schroedera airthreyi* n. sp in a freshwater bryozoan *Plumatella* sp (Bryozoa: Phylactolaemata). Journal of Eukaryotic Microbiology 52(1): 31-37.
- O'Dea, A. (2005). Zooid size parallels contemporaneous oxygen isotopes in a large colony of *Pentapora foliacea* (Bryozoa). Marine Biology (Berlin) 146(6): 1075-1081.
- Ostrovsky, A., & Taylor, P.D. (2005). Brood chambers constructed from spines in fossil and Recent cheilostome bryozoans. Zoological Journal of the Linnean Society 144: 317-361.
- Robinson, J. (2005). The Brachiopod and Molluscan Faunas of Everett's Quarry, Kakanui. Department of Geology. Dunedin, University of Otago.
- Rosso, A. (2005). Metrarabdotos (Bryozoa, Cheilostomatida) from Plio-Pleistocene of southern Italy, with description of new species. Bollettino della Società Paleontologica Italiana 44(1): 11-24.
- Rosso, A. & Sanfilippo, R. (2005). Bryozoan and serpuloidean skeletobiont communities from Pleistocene of Sicily: spatial utilisation and competitive

- interactions. Annali della Università di Ferrara. Sezione di Museologia Scientifica e Naturalistica. Volume speciale 2005.
- Smith, A. M., Key, M.M., Jr., Nelson, C.A., and Patterson, W. P. (2005). Stable isotope values in modern bryozoan carbonate: Potential for paleoenvironmental interpretation. American Association of Petroleum Geologists Annual Conference, Calgary, Canada.
- Steger, K. K. and A. M. Smith (2005). Carbonate mineralogy of free-living bryozoans (Bryozoa: Otionellidae), Otago shelf, southern New Zealand. Palaeogeography Palaeoclimatology Palaeoecology 218(3-4): 195-203.
- Vávra, N. (2003): Carbonate Buildups in the Sarmatian (M. Miocene) of the Paratethys: Serpulid-Bryozoan Biostromes. Coral Reef Workshop, Wien).
- Viskova L.A. (2005) The middle Jurassic bryozoans of the central part of Russia (Srednejurskie mshanki tsentralnoj chasti Rossii) //Moscow Assotiation of Naturalists, section of paleontologists, annual conference. Moscow. 2005. Paleostrat-2005:13.
- Viskova L.A. (2005). New bryozoans (Tubuliporina, Stenolaemata) from the Upper Cretaceous of the Middle Volga river region (Russia)(Novye mshanki (Tubuliporina, Stenolaemata) iz verchnego mela Srednego Povolzhiya, Rossia) // Paleontologicheskij Zhurnal. 2005(4):1-7.
- Wood, A. (2005). Structural ecology of Otago shelf bryozoan thickets. Department of Marine Science. Dunedin, University of Otago.



Brief Announcements

There are a few changes to the IBA Membership list sent out August 26 as an email attachment. Please note:

Jean-Loup d'Hondt: phone number is: O1 40 79 31 10

Elena Nikulina is at the Geologisch-Paläontogisches Institut, Christian Albrechts Universität zu Kiel, Olshausenstrasse 40, 24118 Kiel, GERMANY

Andrew Ostrovsky: email address is oan univer@yahoo.com

Antonietta Rosso: fax number is 39.095.7195.737

Joachim Scholz: phone number is +49 69 7542 358

These corrections will also appear in the Membership file you receive in December.

Hans Hass would like to know if his 1948 thesis on bryozoans was ever cited or discussed in later works by anyone. This information would be useful for a decision of whether to translate this work into English. Hans Hass (1948): "Beitrag zur Kenntnis der Reteporidae" - Zoologica (Stuttgart) 37/101:1-138.

Please respond to Emmy Wöss: emmy.woess@univie.ac.at

Photos from the 5th Larwood Symposium University of Wales at Aberystwyth, 6-8 April 2005





Above left: Jo Porter, Symposium Organizer; Above right: Mary Spencer Jones;

Right: David Barnes.

Paul Taylor's review of papers presented at the Symposium appeared in the June issue of the *IBA Bulletin*. Rolf Schmidt has now posted complete abstracts in the "Documents" section of the IBA website:



Bryoverse

Submitted by Paul D. Taylor

A recent edition of *Stonechat* (June 2005, Volume 16), the magazine of the Horsham Geological Field Club, reported a talk I gave on bryozoans, followed by a couple of poems written by Gordon Judge after hearing the talk. Gordon has very kindly allowed these poems to be reproduced. Further examples of Gordon's Geoverse can be found on his website http://www.gwjudge.eurobell.co.uk/

Home and colonial

In a pretty bryozoan
I live quietly on my own;
But there's safety in big numbers; so you'll find
Our colonial empires
Filled with owner-occupiers
Of the tentacled, suspension-feeding kind.

We don't have to find a mate;
We just bud to propagate,
Though occasionally we have a go at sex.
(It's well worth the extra labours
To escape from all the neighbours,
Who can sometimes feel like millstones round your necks.)

Not many folk collect us And geologists reject us, Yet sometimes it's a job to stay alive. We get 'drilled', and sucked, and grazed, But we zooids are not fazed: "The colony is all – it will survive".

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The sincerest form of flattery

Archimedes, without knowin',
Copied what a bryozoan
Had invented many years ago.
It would have thought, "That Greek
Has got a bloomin' cheek –
Bryozoans did it first, I'll have you know."

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