

# Bulletin

Volume 2, Number 3

July 2006

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Comments regarding the *IBA Bulletin* should be addressed to the IBA Secretary: <u>tim.wood@wright.edu</u>

Further information at www.nhm.ac.uk/hosted sites/iba/

# News from the Membership

**Asit Guha.** A life-sketch of Late Prof. Ehrhard Voigt has been published by the Palaeontological Society of India, Lucknow, (vol. 50,2, 183-185) where besides his achievements on paleontological studies, his innovative work on "lackfilm" methods of studying sedimentary profiles by taking large-sized peels using lacquers has been highlighted and illustrated.

**Steve Hageman**, Department of Geology at Appalachian State University, Boone, North Carolina, has been awarded a Fulbright Fellowship to do research in Croatia at the Rudjer Boskovic Institute during the Fall 2006 academic term. He will be working at the Center for Marine Research in Rovinj, on the northern Adriatic and at the Laboratory for Molecular Genetics in Zagreb. He will be testing paleontological species concepts in a combined study of the morphology, ecology and genetics of modern populations of Bryozoa. Hageman is one of approximately 800 U.S. faculty and professionals who will travel abroad to some 150 countries for the 2006-2007 academic year through the Fulbright Scholar Program, administered by the United States Department of State.

**Aaron O'Dea.** The cupuladriid life history evolution project is making strides. We have developed a considerable amount of information - to date we have data on the reproductive life histories from over 50,000 fossil (dating back to the late Miocene) and 30,000 recent colonies from a stretch of around 400km of coast in the southwestern Caribbean. That's just the *Cupuladria*, we still have the *Discoporella* to do.

The taxonomy is also developing - now that the founding systematics of the Recent *Cupuladria* and *Discoporella* have been laid down, **Amalia Herrera** is using cladistics to understand the phylogeny of the family. Culturing living cupuladriids and maintaining them in aquaria also gave us the opportunity to collect information on ecology, life habits, reproduction and behaviour.

Preliminary results from the fossils are so far extremely interesting, showing that during the last 10 million years the dominant mode of reproduction in cupuladriids has switched from asexual to sexual. No doubt there will be much more interesting data to come including studies of asexual and sexual population structures through time and speciation and extinction in asexual and sexual lineages...

Here are two photos - one of *C gigante* from the Caribbean lit from inside. The other is a fossil *Discoporella* from Bocas del Toro on my finger (and taken by me too).





**Beth Okamura** has been honored with a Professorship in Aquatic Biology at the University of Reading. Beth's work has included collaborations with many IBA members on both marine and freshwater bryozoans. Her wide ranging research has most recently included pioneering studies on the phylogeny, life cycles, and systematics of myxozoan parasites of bryozoans and salmonid fish. One of her graduate students has written to the *IBA Bulletin* describing Beth's characteristic enthusiasm for her work, adding that "this, as well as her excellent scientific skills and knowledge, has made the appointment justly awarded!"

André Ostrovsky. A year ago I returned to Russia (after 2 years spent in Austria with Norbert Vávra). As a result of my post-docs, I defended my Doctor of Sciences dissertation last month. It is another scientific degree in Russia, similar with Habilitation in Germany and Austria. Title is "Evolution of the sexual reproduction in Cheilostomata (Bryozoa: Gymnolaemata)". Of course, it is in Russian, but I publish the results step by step in English. (*Ed note:* See citation listed among "Recent Publications" in this *Bulletin*).

**Oscar Reverter-Gil.** Dear All, I am now the associate editor for Bryozoans in the European Register of Marine Species (ERMS) database. This is an authoritative taxonomic list of known species occurring in the European marine environment (see the website at <a href="http://www.marbef.org/data/erms.php">http://www.marbef.org/data/erms.php</a>). Since I work mainly from home I have some problems getting access to all the recent literature. Therefore I would greatly appreciate receiving relevant reprints and other information sent to my address in the University of Santiago de Compostela. Thank you in advance.

**Abby Smith** will be visiting the UK in July, travelling almost 20,000 km in search of cyclostome expertise. She will be visiting Mary Spencer Jones and Paul Taylor at NHM, Caroline Buttler in Cardiff, and Jo Porter at Aberystwyth.

Anna Wood's MSc thesis entitled *Macrofaunal communities associated with bryozoan thickets, Otago shelf, southeastern New Zealand,* won the <u>Beryl Brewin Prize in Marine</u> <u>Science</u> at University of Otago for the best MSc thesis submitted in 2005. Her graduate advisor, Abby Smith, says "We are delighted that Anna has now started work on her PhD here at Otago."

**Patrick Wyse Jackson** has been elected a Fellow of Trinity College, Dublin. Scholarship or research achievement of a high order is the primary qualification for Fellowship, coupled with evidence of the candidate's contribution to the academic life of the College and an effective record in teaching. Patrick thanks the IBA membership for its support of what he does, and for the opportunity to develop collaborative research. This certainly helped his candidature for Fellowship.

### New IBA Members

**Tanya Knowles.** Hi! I am a first year PhD student at Reading University (with Professor Beth Okamura) and a new member of the IBA. I first came across bryozoans in a third year lecture (from Paul Taylor) during my undergraduate Geological Sciences degree at Imperial College, London....and I was hooked! After choosing to do my final year project on the palaeoecology of the Jurassic cyclostome *Collapora straminea*, and a brief interlude to obtain a PGCE to teach Geography, I am now studying the palaeoclimate of the Pliocene North

Atlantic inferred by investigations of cheilostome bryozoans. This will involve collecting bryozoans from locations such as Costa Rica, Florida, Virginia, North Carolina and East Anglia (UK) and use of the MART technique (O'Dea and Okamura, 2000) to assess seasonality through characterising changes in zooid size. I am also hoping to use the carbon and oxygen stable isotope signatures of the bryozoan skeleton as additional temperature proxies. I am very grateful to those who have supported me so far, e.g. with fieldwork, sending literature, etc., and if anyone is interested to know more about my PhD, please do contact me at <u>t.knowles@reading.ac.uk</u>. I look forward to putting many faces to names at the IBA meeting in Boone next year!

**Khaled Abdel Salam.** I am a senior researcher at the Marine Reference Collection Lab, National Institute of Oceanography & Fisheries, Alexandria, Egypt. Since one year ago, I had finished my Ph.D. entitled "*Taxonomical and ecological studies on marine fouling in Alexandria, A.R.E.*" My Thesis concerned the ecology and taxonomy of marine fouling organisms at three harbours along Alexandria city, Egypt and I have a special interest in the taxonomy of Bryozoa (the selected group) which I handled in detail.

Taxonomical studies on Bryozoa in the Egyptian Mediterranean waters have received little attention. Only the work of Audouin & Savigny (1826) concerned this subject. O`Donoghue and Dora de Watteville (1939) gave the distributional pattern of 62 species of Bryozoa in the fishery grounds near Alexandria and gave only a brief descriptions of two new species.

Now, I am trying to collect some references on taxonomy of Bryozoa in the Eastern Mediterranean to help me in the identification of the species of this neglected group in Egypt. I ask about the following references:

Prenant, M. and Bobin, G. (1956). Bryozoaires, <sup>1ère</sup> partie. Entoproctes, phylactolèmes, Ctenostomes. Faune de France, 60: 1-398.

Prenant, M. and Bobin, G. (1966). Bryozoaires, <sup>2ème</sup> partie. Chilostomes Anasca. Faune de France, 68: 1-647.

Although these two references are relatively old, I think that they are very important. I know that some scientists may retire and are not in need for these references or maybe there are spare copies available of bryozoological works. If the original copies are not available, the electronic form or photocopy form would be very enough.

Thank you in advance and I am sorry to trouble you by such a thing.

Best Wishes, Dr Khaled M. Abdel-Salam National Istitute of Oceanography & Fisheries Kayet-bey, Al-Anfoushy, Alexandria, Egypt. Tel. 203-4246703 (Home) 203-4807140 (Work) Fax 203-4801189 e-mail: kh\_abdelsalam@yahoo.com

## "How I Discovered Bryozoans...."

Editor's note: In a recent email message I asked IBA members to recall how they happened to discover bryozoology as a field of research. Was there a particular event, person, or circumstance that kindled their interest? Here is the first installment of responses. Additional responses will be printed in subsequent issues. New contributions are welcome.

**Patrick Wyse Jackson.** During my second year at Trinity College, Dublin the palaeontology course contained a one-hour lecture on bryozoans which was followed by an hour-long practical (I suspect this was 2 hours more instruction on the group than most undergraduates receive in their whole College career). As part of the practical we were asked to examine some specimens including silicified fragments of *Fenestella s.l.* from County Fermanagh, and some monticulate colonies. Alongside the specimens was a paper by Paul Taylor (1979, *Lethaia*) on extrazooidal feeding currents in fossil bryozoans and I think I was



Patrick with friends, beer, and cigarettes. London, Summer 1984 (Courtesy of Philip Owens (left)).

the only one in the class to read it. Something inside strirred. The following year I invited Paul to come to Dublin to speak to the student geological society and we were treated to a lecture that included great pictures of hermit crabs and bryozoans. Later that year I applied for a Summer studentship in the Natural History Museum to work with Paul, and was a bit surprised to be offered the position - perhaps plying Paul with Guinness after his Dublin lecture helped! I spent the Summer of 1984 in London sorting out the Carboniferous collections. Following graduation and a short spell training and working as a secondary school teacher, I returned to Trinity begin a Ph.D. on the Carboniferous bryozoans of Fermanagh, and I have remained there ever since. That was it ... I was in ... and the buggers had ensnared me!

André Ostrovsky. As a first year student, I spent two semesters working with shark collection at the Zoological Museum in St Petersburg. Having no supervisor, I was forced to switch to parasitic worms – Trematoda. Two more semesters were devoted to the life cycle of *Bunocotile progenetica*, but I was not very successful decoding it. Then I suddenly met a person who took part in five Soviet Antarctic expeditions – Alexander Pushkin, expert on sea spiders and professional diver. He gave me a jar with several small fragments of something, a book of Kluge and an article of Androsova on Antarctic cyclostomes. Pushkin said there are not many taxonomists on Bryozoa ("mshanki" in Russian), and if I wished to work with them, he could give me his collections. I had no idea how to deal with them, and there was no person who could be my supervisor again, but I exactly knew that I have some sort of crisis with flat worms. Important thing, the former Chief of my Department, Prof. Dobrovolsky (leading expert in Trematoda), supported my decision, saying that if it would be any other group, he won't permit me to leave trematodes.

**Marcus Key.** Growing up in Cincinnati, OH as the son of a gentleman/amateur paleontologist, an interest in fossils was inevitable. Exploring the diverse and beautifully preserved Upper Ordovician rock outcrops around my house led to the realization that in many facies the majority of the rock volume consisted of bryozoan colonies. Fossil identification keys from the local natural history museum were adequate for most invertebrate groups, but woefully lacking for the "miscellaneous bryozoans." This led to a lifelong passion to learn more about the paleobiology, paleoecology, and evolution of fossil bryozoans.

**Aaron O'Dea.** I was sure that I wanted to do my final year research project at university in palaeontology, having collected fossil shells for years, but I had no idea of what was available. I just knew that it couldn't be on any type of vertebrate.

I found myself wandering the aisles of the library with the aim of stumbling into some inspiration. I ran my fingers along the spines of endless journals coming eventually to the racks of Palaeo3. I stopped, pulled out the volume my finger had stopped upon, and flipped open the pages. The very first paper that I came to was Beth Okamura's paper with John Bishop in 1988: "Zooid size in cheilostome bryozoans as an indicator of relative palaeotemperature. (66: 145-152). This interested me even though I had no idea what a bryozoan was, I wrote to Beth, she told me to write to Paul Taylor, I worked at the Natural History Museum in London, finished my undergraduate thesis on Coralline and Red Crag zooid size changes, and eventually became Beth's PhD student... the rest sort of fell into place.

Rather lucky some may say, and I would have to admit that luck may have played a role in it.

**Tim Wood**. In the spring of 1968 I received a letter of acceptance to the Graduate School of the University of Colorado. The letter confirmed that Dr. Robert Pennak had agreed to be my graduate advisor for research in limnology. This was a dream come true! Professor Pennak was the preeminent freshwater ecologist in the US. My wife and I packed all our belongings into a rented truck and drove for two days out to Colorado. We settled into a small apartment and I went to introduce myself to Dr. Pennak. But there had been a mistake: Pennak had thought I already had my Masters degree. "Sorry, but I accept only PhD students," he said. "Maybe you should talk to Dr. Bushnell instead." John Bushnell, a new faculty member in the department, had recently conducted a statewide survey of freshwater bryozoans (whatever *they* were...). He took me into the field and introduced me to living bryozoan colonies, and from that moment I was hooked.

## Bryozoans acquire a new suborder Paul Taylor, IBA President

Even in these times of declining numbers of systematists, a reasonable number of new bryozoan genera, and usually a few new families, are introduced each year. New suborders, however, are much rarer. Hence the introduction of a new bryozoan suborder deserves attention, especially one published in a journal unlikely to be seen by most bryozoologists.

The new suborder - Eocheilostomata - was named by Ingelore Hinz-Schallreuter and Roger Schallreuter (2005) in a German journal specializing in derived fossils from the Pleistocene boulder clays of northern Europe. They introduce the monospecific family Schallreuterellidae in the same publication, with *Schallreuterella* Hillmer, 1987 as the only included genus. This peculiar Ordovician bryozoan is characterized by very slender branches from the two opposite sides of which protrude zooids with extensive oval apertures reminiscent of a membraniporimorph cheilostome. Adding to the cheilostome-like appearance of *Schallreuterella* is a transverse division spanning the aperture near its distal end. This has been interpreted as the proximal edge of an operculum.

While Gero Hillmer (1991) hypothesized that *Schallreuterella* was a missing link between corynotrypid cyclostomes and cheilostomes, Hinz-Schallreuter and Schallreuter (2005) disagree and instead regard the genus as homeomorphic with cheilostomes. Accordingly, they place their new suborder Eocheilostomata within the Cyclostomata, despite giving it a name suggesting that it is an early cheilostome.

Further research on *Schallreuterella* will be needed to establish the true affinities of the Eocheilostomata - the suborder does not fit comfortably among known Palaeozoic cyclostomes.

- Hillmer, G. 1991. A 300-million-year gap in the bryozoan fossil record. *Naturwissenschaften* 78: 123-125.
- Hillmer, G. 1987. *Schallreuterella syltensis* n.g.n.sp., eine cheilostomata-ähnliche Bryozoe aus Öjlemyrflint-Geschieben von Sylt (ob. Ordoviz.). *Fossilien von Sylt* II: 141-147.
- Hinz-Schallreuter, I. & Schallreuter, R. 2005. Geschiebe-Bryozoen. Teil A: Aus Geschieben beschriebene neue Arten. *Archiv für Geschiebekunde* **4**(9): 513-560.

## Fossil Bryozoa Taxa from Spain

Professor Salvador Reguant Serra, University of Barcelona

As is known in *The Bryozoa Home Page*, created by Philip Bock, there are lists of new taxa created from 1970 to 2004. I have received recently a work made by a student of the University of Barcelona (Facultat de Geologia), that describes all Bryozoa fossil taxa created in Spain until 2003. The title of this work is: Yael Díaz Acha (2003): Els Briozous: Nous taxons i icnotaxons de briozous fòssils creats a la Espanya peninsular. 83 pp.

I reproduce below all new fossil taxa created in Spain before 1970, according the information supplied for this study.

Idmonea villaltae Reguant, 1961. Early Pliocene. Vilacolum (Alt Empordà, Girona). Filisparsa vilacolomensis Reguant, 1961. Early Pliocene. Vilacolum (Alt Empordà, Girona). Membranipora almerai Canu, 1913. Late Lutetian. Sant Miquel Sesperxes (near Aiguafreda, Barcelona).

Alderina gurbensis Barroso, 1949. Middle Eocene. Gurb (nearVic, Barcelona).

Crassimarginatella crassimarginata var. elongata Barroso, 1949. Middle Eocene. Gurb (nearVic, Barcelona).

*Onychocella parvipora* Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

Lunulites bugei Reguant, 1967. Middle Ilerdian. Road Tremp to Pont de Montanyana, km 20 (Lleida).

Meniscopora magna Barroso, 1949. Middle Eocene. Gurb (nearVic, Barcelona).

Porella capitata Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

Porella eocena Neviani, 1905. Eocene. Sant Julià de Vilat orta (near Vic, Barcelona). Metrarabdotos tarraconensis Reguant, 1960. Burdigalian. Altafulla (Tarragona). Smittina De Angelisii Neviani, 1905. Eocene. Sant Julià de Vilatorta (near Vic, Barcelona). Hippodiplosia asaepta Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

Didymosella acutirostris Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

*Mamillopora inarmata* Barroso, 1949. Middle Eocene. Gurb (nearVic, Barcelona). *Anoteropora undartirostris* Barroso, 1949. Tertiary. Olazagutia (Navarra).

*Mucronella obesa* Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

Palmicellaria luteciana Canu, 1913. Late Lutetian. Sant Miquel Sesperxes (Aiguafreda, Barcelona)

*Filisparsa propinqua* Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

*Eschara nodulifera* var. *poroecia* Faura & Canu, 1916. Late Priabonian. La Soleya dels Condals (Manresa, Barcelona).

Lepralia almerai Neviani, 1905. Eocene. Sant Julià de Vilatorta (Barcelona).

#### References

Barroso, M. G. 1949. Briozoos terciarios de algunas localidades españolas. Boletin de la Real Sociedad Española de Historia Natural, 47, 171-193.

Canu, F. 1913. Bryozoaires fossiles des terrains éocéniques du Pla de la Gárgara, près Aiguafreda (Lutetien). Butlleti de la Institució Catalana d'Història Natural. 2. série, 102-105.

Faura Sans, M. & Canu, F. 1916. Sur les Bryozoaires des terrains tertiaires de la Catalogne. Treballs de la Institució Catalana d?Història Natural. 137, 21 pp.

Neviani, A. 1905. Di alcuni Briozoari eoceni de Villatorta (Spagne). Bolletino della Società Geologica Italiana, 24 (1c), 158-163.

Reguant, S. 1960. Notas sobre dos Briozoos de la provincia de Tarragona. Notas y Comunicaciones del Instituto Geológico y Minero de España. 57, 127-134.

Reguant, S. 1961. Los Briozoos del Neógeno español. Notas y Comunicaciones del Instituto Geológico y Minero de España. 62, 215-244.

Reguant, S. 1967. Lunulites bugei (Bryozoa Cheilostomata) nueva especie del Numulítico inferior de Tremp (Lérida). Acta Geologica Hispanica. II (3), 70-74.



## Bryozoan Exhibition in Croatia

The Bryozoa Exhibition that enjoyed much success last year in Linz, Austria opened April 7 at the Natural History Museum in Zagreb, Croatia, as "Izložba Neptunova čipka." Shown here on opening day are (left to right): Silvia Cocito, Andelko Novosel, Emmy Wöss, Maja Novosel, and Otto Girsch. Also on hand for this event were local politicians, the representative for cultural affairs of the Austrian embassy in Croatia (Robert Szcusich), and the director of the museum in Linz, Gerhard Aubrecht. (Find more details in the April 2006 *IBA Bulletin*)

# Bryozoan Bookstall



Taylor, P.D. & McKinney, F.K. 2006. Cretaceous Bryozoa from the Campanian and Maastrichtian of the Atlantic and Gulf Coastal Plains, United States. Scripta Geologica, 132: 1-346.

**Abstract.** The Late Cretaceous bryozoan fauna of North America has been severely neglected in the past. In this preliminary study based on museum material and a limited amount of fieldwork, we describe a total of 128 Campanian-Maastrichtian bryozoan species from Delaware, New Jersey, North Carolina, South Carolina, Tennessee, Georgia, Alabama,

Mississippi, Louisiana and Arkansas. Eighty-two of these species are new, as are five (Basslerinella, Pseudoallantopora, Kristerina, Turnerella and Peedeesella) of the 77 genera. One new family, Peedeesellidae, is proposed. Cheilostomes, with 94 species (73 per cent of the total), outnumber cyclostomes, with 34 species (27 percent), a pattern matching that seen elsewhere in the world in coeval deposits. There appear to be very few species (4) in common with the better known bryozoan faunas of the same age from Europe. Although both local and regional diversities are moderately high, most of the Atlantic and Gulf Coastal Plain bryozoans are encrusters; erect species are uncommon and are never present in sufficient density to form bryozoan limestones, in contrast to some Maastrichtian deposits from other regions

# Challenger Website



**Judy Winston writes:** I didn't know until the Harbor Branch Librarian told me today at lunch that all the *Challenger* Reports are available online including plates as well as summary report, station list, maps. I checked out the first Polyzoa report and it seemed to work -- sure beats lugging the hard copies around everywhere.

http://www.19thcenturyscience.org/HMSC/HMSC-INDEX/index-linked.htm



# 2007 Conference Update



The "Instructions to Authors" document has now been posted on the website for the 2007 IBA Conference in Boone, North Carolina, <u>http://www.iba.appstate.edu</u>. Prepared by Judy Winston, Marcus Key, and Steve Hageman, the document can be accessed directly at <u>http://www.iba.appstate.edu/instructions.html</u>.

Also, a reminder that the First Circular is posted at: <u>http://www.iba.appstate.edu/firstcircular.html</u>

## Larwood Meeting 2007 February 2-3, 2007, Naples - Italy *Organized by* University of Naples "Federico II" and International Bryozoology Association



#### **General** information

The Larwood meeting will take place in February 2-3 2007 at the Dipartimento di Scienze della Terra of the University of Naples «Federico II», Largo San Marcellino 10, starting at 9.00 a.m. This is in the old town centre, a short distance from the most important tourist attractions. You can reach Naples by **plane** to International Capodichino Airport, or by **train** to Napoli Centrale Station.

#### Accommodation

A list of recommended hotels having agreements with the University of Naples can be found by visiting the IBA web site www.nhm.ac.uk/hosted\_sites/iba/

#### **Abstracts**

Abstracts must be submitted by 31 December, 2006. They should be not longer than one page and written with the following format: Title: In capitals and bold. Font: Times New Roman. Size: 14 pt.

Authors and addresses: Font: Times New Roman. Size: 12 pt. Text: Font: Times New Roman. Size: 12 pt. Spacing 1.5.

#### **Posters**

Vertical size: max. 100 cm; horizontal size: max. 70 cm. It will be possible to exhibit Posters in digital format as well.

#### **Excursions**

It will be possible to arrange a visit to the "Centro Studi Gajola, Naples" to see the Roman archaeological site Villa di Pollione and the Gajola Marine Reserve for snorkeling. Diving on the Cavallara Bank can be organized if at least seven qualified divers book this option (the fee for boat and equipment is  $\notin$  25.00). An alternative excursion is to the paleontological park of Pietraroja (minimum 15 persons). These excursions will take place only if the minimum numbers of participants is reached.

Information concerning how to visit the most important tourist attractions in Naples and its surroundings will be provided to all registrants.

Francesco Toscano frantosc@unina.it



# Appeal from Andrei Grishenko

#### Dear all,

Recently I have been invited to occupy a position as Head of the Museum of Invertebrate Animals at the Biological Faculty of the Perm State University. The Museum of Invertebrates is pretty old and was established in 1916, based on various collections made by Dr D.M. Fedotov in the Sea of Japan. Although a number of taxa are well represented, the majority of marine specimens are not looking very good. Some of them are fragile or lost original coloration, etc. In case of my heading of this Museum, I wish to make a renewal of all main groups of invertebrates and to organize a more or less modern exhibition.

For this reason, I will greatly appreciate any collaboration, donation or exchanging of any groups of invertebrates: marine, fresh-water or terrestrial. Any information and recommendations concerning organizations of exhibitions, sources for obtaining material (marine biological stations, institutions, museums, etc.) will be welcome. We also need to establish a sister-museum relationship with an inland museum in Europe and USA.

In exchange, the Museum can suggest different terrestrial and fresh-water invertebrates of Ural, Middle Asia and Siberia as well. Type material of some rare spiders described from these Regions are available. At the same time we also can provide a mass of materials of spiders inhabiting Ural and Western Siberia. Other groups, such as Trichoptera, Ephemeroptera, Plecoptera, Mollusca, and some Crustacea (for instance, Gammarid Amphipod *Crangonix chlebnikovi* Borutzky, 1928 endemic to the cave-lakes of Kungur Area of Ural) can be also donated.

Please contact us using the official institutional address or my private address. The Museum will be greatly thankful for any support.

Sincerely, Andrei (Grishenko)

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#### Nils Spjeldnæs January 3, 1926 – March 28, 2006

Professor Emeritus Nils Spjeldnæs died on March 28<sup>th</sup> 2006, at the age of 80. More than 60 years of research and university teaching has ended. He continued working at the Institute of Earth Sciences (formerly Geological Institute), University of Oslo, years after his official retirement and was seen at his office only a few weeks before his death.

During the war years Nils Spjeldnæs was in neutral Sweden where he joined the Norwegian police forces being trained in preparation for the freedom of their country. When this came in 1945, he returned to Oslo to take up studies in geology at the university. During this time he was assistant to the well known Professor Victor M. Goldschmidt. He also worked for the Uppsala University in Sweden. He completed his master's degree in geology in 1949, and was awarded a



Nils Spjeldnaes. (Photo: University of Oslo)

Ph.D. in 1957. In 1947 he worked part time for the Norwegian Geological Survey and later that year until early in 1950 he was employed at the Natural History Museum in Stockholm. He then returned to Oslo and held positions at the Paleontological Institute (part of the Geological Institute) and briefly the Paleontological Museum in Oslo before being appointed Professor at the University of Århus, Denmark in 1961. Here he established a department of ecology and genetics and was active in university administration. In 1969 he was called to a Chair in geology at the University of Bergen and lectured there for a brief interval before returning again to Århus. In 1984 he applied for the vacant Chair of historical geology at the University of Oslo a position held until his retirement in 1995.



Nils Spjeldnaes and Paul Taylor in Oslo, 1988. (Photo by Hans Arne Nakrem.)

Spjeldnæs took part in the Stockholm meeting in May 1965 where the International Bryozoology Association (IBA). At the first "official" IBA meeting in Milan in 1968 Spjeldnæs gave the talk "Ordovician Bryozoan Faunas from the Tethys (preliminary Report)". At that meeting Spjeldnæs was elected president of the IBA for the years 1968-1971, and he continued as Council member 1971-1974. Spjeldnæs also took international participation as a keynote of his 1968-1971 presidency, negotiating IBA membership in both the International Union of Biological Sciences and the International Union of Geological Sciences (the latter as a 'working group' of the International Palaeontological Association.

Although his geological interests were many, Nils Spjeldnæs was especially interested in the stratigraphy and palaeontology of the Palaeozoic rocks of the Oslo Region and published major works on brachiopods, graptolites, ostracods and bryozoans. Many will also remember

his stimulating paper on Ordovician climate zones published in 1961. He read widely, kept up with developments in both earth and life sciences and had a remarkable retentive memory which impressed everyone, whether students or colleagues, whenever he spoke.

During his academic career Nils Spjeldnæs held several administrative duties including Dean of the Faculty of Natural Sciences and Head of Department of ecology and genetics, University of Århus. He held membership of several scientific organizations among which were the Norwegian Geological Society, the Danish Geological Society, Palaeontological Association (UK), Geologische Vereinung (Germany), Paleontological Society (USA), Society of Systematic Zoology, American Association for the Advancement of Science, the Commission of the International Union of Geological Sciences (IUGS) (including several subcommissions), International Commission on the History of Geological Sciences (INHIGEO).

Nils Spjeldnæs was elected member of the Norwegian Academy of Science in 1975. Other awards include:

- The Norwegian King's Gold Medal (Oslo), 1955
- Norwegian Geological Society's Reusch Medal, 1964
- Knight of the Dannebrogsorden (Denmark), 1977
- Honory doctor of the University of Athens, 1996.

(Submitted by Hans Arne Nakrem)

# In Memorium: Galina B. Zevina (February 12, 1926 – September, 24, 2002) 80<sup>th</sup> anniversary

#### Anatoly V. Vinogradov

On September 24th, 2002 a tragedy cut abruptly the life of Dr. Galina Benizianovna Zevina – a leading Russian expert in sea fouling and taxonomy of Crustacea (Cirripedia), whose works are highly appreciated at home and by the international biology community. Dr. Galina B. Zevina is a famous Soviet and Russian bryozoologist, follower of Prof. G.G. Abricosov. Many specialists are her pupils: Dr. A.A. Kubanin (marine Bryozoa), Dr. E.M. Krylova (Entoprocta), Dr. A.V. Vinogradov (recent Phylactolaemata and Eurystomata of continental water-bodies), Dr. E.A. Iziumova (Zoological Museum of Moscow University, Bryozoa collections), many marine zoologists-invertebraters (Dr. S.V. Galkin – hydrothermal vent communities of the World Ocean; Vestimentifera), Dr. A.N. Goryn (marine fouling), Dr. O.M Korn and others. Dr. G.B. Zevina is a founder of Soviet and Russian fouling Scientific School. Dr. G.B. Zevina is an author of many interest publications about marine and brackish-water Bryozoa and Entoprocta from Caspian, Aral, Azov and Black Sea and others.

Galina Zevina was born on February 12, 1926 in Moscow and lived in this city all her life leaving it mostly for the participation in sea expeditions very often of long duration. Since early childhood she showed a great interest in biology. Crawling, swimming, flying, barking and mowing creatures crammed her room. The dimensions of this community were limited only by the tolerance of her parents.

In 1949 Galina Zevina graduated from the Moscow State University (the chair of invertebrates zoology of the Biology Faculty). She worked at the University's Zoology Museum, Institute of Oceanology (USSR Academy of Sciences) and chair of invertebrates of her University. In the first years of her research activities she was lucky to meet such teachers as Academician L.A. Zenkevich and Dr. N.I. Tarasov. Using their advice she concentrated on the two problems – sea fouling and Cirripedia. As a hydrobiologist Galina Zevina dealt with the ecology of sea fouling and as a zoologist-taxonomist she devoted her efforts to the systematics of Cirripedia collected in internal and external seas. More than 20 works describe sea fouling of the Caspian Sea, its impact on the navigation and the role of the new species transferred from other water areas in the quantitative and qualitative changes of the Caspian fauna.

In 1957 she published in co-authorship with her teacher – Dr. N.I. Tarasov the monograph "Cirripedia" in the series "Fauna of the USSR". In the 1960-s there appeared her works on Cirripedia of the Arctic and Antarctic Oceans and in the 1970-s – Cirripedia of the Far Eastern seas. Material collected in many sea expeditions, given by other researchers and literature sources constituted the basis of two-volume monograph "Cirripedia of the Suborder Lepadomorpha" (1981 - 1982). In 1982 there appeared one more monograph "Cirripedia of Vietnam's sea coasts" (with a co-author).

In 1984 Galina Zevina maintained the Ph D – thesis "Cirripedia of the Order Thoracica and their role in sea fouling", where she elaborated the original system of Thoracica, examined

history and main directions of Cirripedia's evolution as well as its vertical and horizontal dispersion. With the earlier published "Fouling in the USSR's seas" (1972) and "Biology of Sea Fouling" (1994) this fundamental research is an appreciable contribution to understanding the nature and regularities of sea fouling biology. G.B.Zevina was among the first biologists who paid attention to a very important characteristics of fouling and its role in sea life: its species structure turned out to be even richer than that of benthos. Various methods of preventing and removing sea fouling and controlling the efficiency of antifouling paints and covers, of using repellents to clean off the submerged parts of a ship, suggested by the author, are a product of more than 4 decade researches.

In her alma mater Galina Zevina combined research activities with lecturing, she worked much with post-graduate students. Many of her students are now teaching, working in institutes of the Russian Academy of Sciences, research organizations and centers in Russia and abroad. She published over 150 scientific works including 7 monographs.

After retirement in 1998 Galina Zevina continued to work with rich material collected from the Atlantic, Pacific and Indian oceans and many seas of the Arctic and the Antarctic. She published articles on Cirripedia of various sea regions and tried to revise the systematics of a poorly studied group Verrucomorpha.

Near relations and colleagues will forever remember G.B.Zevina as an outstanding researcher, a person of ready sympathy, a sweet charming woman, loyal comrade and friend.

#### Bibliography of Dr. G.B. Zevina's publications about Bryozoa, Entoprocta and fouling

- Zevina G.B. To study of Caspian ships fouling // The Trav. of All-Union Hydrobiol. Sci., 1957, t.8: 305 - 320 [in Russian]. Зевина Г.Б. К вопросу об обрастании судов Каспийского моря // Тр. Всесоюзн. гидробиол. общ. 1957, т.8: 305 - 320.
- Zevina G.B. Ships and hydrotechnical fouling at the Caspian Sea // Moscow, Oceanol. Inst. of the Acad. of Sci. of the USSR, 1958, reference of dissertation (Dr. of Biology) [in Russian]. Зевина Г.Б. Обрастание судов и гидротехнических сооружений на Каспийском море // Автореф. дисс... канд. биол. наук, Инст. океанол. АН СССР, 1958.
- Zevina G.B. New organisms at the Caspian Sea // Nature, 1959, № 7: 79 80 [in Russian]. Зевина Г.Б. Новые организмы в Каспийском море // Природа, 1959, № 7: 79 - 80.
- Zevina G.B. Hydrotechnical fouling at the Caspian Sea // The Trav. of Oceanol. Inst. of the Acad. of Sci. of the USSR, 1961, t.49: 65 - 96 [in Russian]. Зевина Г.Б. Обрастания гидротехнических сооружений на Каспийском море // Тр. Инст. океанол. АН СССР, 1961, т.49: 65 - 96.
- Zevina G.B. The Caspian Fauna became richer // Nature, 1962, № 4: 118 119 [in Russian]. Зевина Г.Б. Фауна Каспийского моря обогащается // Природа, 1962, № 4: 118 - 119.
- 6. Zevina G.B. The fouling of ships from the Kola Bay at the Barentz Sea // Oceanology, 1962, t.2, № 1: 126 133 [in Russian]. Зевина Г.Б. Обрастание судов, доковавшихся в Кольском заливе Баренцева моря // Океанология, 1962, т.2, № 1: 126 133.

- 7. Zevina G.B. The changes of Caspian fouling during 10 years (1951 1961) // Осеапоlogy, 1962, t.2, № 4: 715 - 726 [in Russian]. Зевина Г.Б. Изменения в обрастании Каспия за последние 10 лет (с 1951 по 1961 г.) // Океанология, 1962, т.2, в.4: 715 - 726.
- 8. Zevina G.B. The changes of ships fouling at the Caspian Sea after the Volga Don Channel opening // Sea Float, 1963, № 2: 34 [in Russian]. Зевина Г.Б. Изменение обрастания судов на Каспийском море после открытия Волго-Донского канала // Морской флот, 1963, № 2: 34.
- 9. Zevina G.B. The fouling at the White Sea (Beloje Sea) // The Trav. of Oceanol. Inst. of the Acad. of Sci. of the USSR, 1963, t.70: 52 71 [in Russian]. Зевина Г.Б. Обрастание на Белом море // Тр. Инст. океанол. ИОАН, 1963, т.70: 52 71.
- 10. Zevina G.B. The fouling biocenoses at the Caspian Sea and its changes with introduction new organisms // The biocenoses changes at the Caspian Sea during last decades [in Russian]. Зевина Г.Б. Биоценозы обрастания на Каспийском море и их изменения, связанные с вселением новых организмов // Измен. биоценозов на Касп. море за последние десятилетия. М., Наука, 1965: 200 212.
- Zevina G.B. The Bryozoa and Entoprocta distribution at the Azov Sea // Hydrobiol. J., 1967, t.3, № 1: 32 - 39 [in Russian]. Зевина Г.Б. Распространение мшанок (Bryozoa) и энтопрокта (Entoprocta) в Азовском море // Гидробиол. ж., 1967, т.3, № 1: 32 -39.
- Zevina G.B. The introducents role in the fouling at the Caspian Sea // The Fishes and Invertebrates introduction into the fouling at the Caspian Sea. Moscow, 1968: 86 - 94 [in Russian]. Зевина Г.Б. Роль вселенцев в обрастаниях на Каспийском море // Акклим. рыб и беспозв. в вод. СССР. М.: Наука, 1968: 86 - 94.
- Zevina G.B. Entoprocta // Atlas of Caspian Invertebrates. Moscow, 1968: 65 67 [in Russian] Зевина Г.Б. Тип Внутрипорошицовые Entoprocta // Атлас беспозв. Касп. моря. М., Пищевая пром., 1968: 65 - 67.
- Zevina G.B. The Dagestan sea districts benthos and possibility of its richening // Complexes Studying of ocean nature. Moscow, Moscow Univ. Ed., 1970 [in Russian].
   Зевина Г.Б. Бентос прибрежных районов Дагестана и возможность его обогащения // Компл. иссл. природы океана. М., изд. МГУ, 1970.
- 15. Zevina G.B. The USSR seas fouling // Moscow, Moscow Univ. Ed., 1972: 215 p. [in Russian] Зевина Г.Б. Обрастания в морях СССР // М., изд. М1У, 1972: 215 с.
- Zevina G.B. Bryozoa // Atlas of Aral Invertebrates. Moscow, 1974: 258 261 [in Russian]. Зевина Г.Б. Класс Мшанки Вгуоzoa // Атлас беспозв. Аральск. моря. М., Пищев. пром., 1974: 258 - 261.
- 17. Zevina G.B. The quantitative and qualitative fouling characteristics of the USSR seas // The distribution and ecology of seashore biocenoses. Soviet – Amer. Simpos., Leningrad, 1978: 9 - 10 [in Russian]. Зевина Г.Б. Качественная и количественная характеристика обрастания в морях СССР // Закономерн. распред. и экол. прибрежн. биоцен. Советско-амер. симпоз. Л., 1978: 9 - 10.
- Zevina G.B. The introducents and autintroducents into the Caspian Sea // Complex Studying of the Caspian Sea, 1979, v.6: 108 - 118 [in Russian]. Зевина Г.Б. Вселенцы и аутвселенцы в Каспийское море // Компл. иссл. Касп. моря, 1979, в.6: 108 - 118.
- Zevina G.B. Lepadomorpha (Cirripedia, Thoracica) at the World Ocean. Part 1: Scalpellidae // Leningrad, 1981: 407 p. [in Russian]. Зевина Г.Б. Усоногие раки подотряда Lepadomorpha (Cirripedia, Thoracica) Мирового океана, ч.1. Семейство Scalpellidae // Л., Наука, 1981: 407 с.

- Zevina G.B. Lepadomorpha (Cirripedia) at the World Ocean. Part 2 // Leningrad, 1982:
  223 р. [in Russian]. Зевина Г.Б. Усоногие раки подотряда Lepadomorpha (Cirripedia) Мирового океана, ч.2 // Л., Наука, 1982: 223 с.
- 21. Zevina G.B. Thoracica and its role in the fouling // Reference of dissertation (Ph. Dr.), 1984 [in Russian]. Зевина Г.Б. Усоногие раки отряда Thoracica и их значение в ценозе обрастания // Автореф. дисс. ... докт. биол. наук, 1984.
- Zevina G.B. The water damage biocenoses // The Biodamages. Moscow, 1987: 187 -210 [in Russian]. Зевина Г.Б. Повреждающие биоценозы в водной среде // Биоповреждения. М., Высшая школа, 1987: 187 - 210.
- 23. Zevina G.B. About underwater ship cleaning from fouling at the tropic waters // Marine Biology, 1988, № 1: 45 51 [in Russian]. Зевина Г.Б. О подводной очистке судов при их обрастании в тропических водах // Биол. моря, 1988, № 1: 45 51.
- 24. Zevina G.B. Biology of marine fouling // Moscow, Moscow Univ. Ed., 1994: 135 p. [in Russian]. Зевина Г.Б. Биология морского обрастания // М., изд. МГУ, 1994: 135 с.
- 25. Zevina G.B. The simple and quickly control way for antifouling covers // Ecol. Probl. of technics and materials stablying. Moscow, Ecol. And Evol. Probl. Inst. of Russian Acad. of Sci., 1997: 123 126 [in Russian]. Зевина Г.Б. Простой и быстрый способ проверки эффективности противообрастающих покрытий // Экол. пробл. стойкости техники и матер. М., Инст. проблем экол. и эвол. РАН, 1997: 123 126.
- Zevina G.B., Kamenskaya O.E., Kubanin A.A. The introducents into fouling at the Japan Sea // Complex Studying of ocean nature. 1975, t.5: 240 - 249 [in Russian].
   Зевина Г.Б., Каменская О.Е., Кубанин А.А. Вселенцы в обрастаниях Японского моря // Компл. иссл. природы океана, 1975, т.5: 240 - 249.
- Zevina G.B., Kuznetsova I.A. The shiping role for Fauna change at the Caspian Sea // Oceanology, 1965, t.3: 518 - 526 [in Russian]. Зевина Г.Б., Кузнецова И.А. Роль судоходства в изменении фауны Каспийского моря // Океанология, 1965, т.3: 518 -526.
- 28. Zevina G.B., Kuznetsova I.A. The fouling at the high tide electric stations building district at the Barentz and White Seas // The Trav. of Oceanol. Inst. of the Acad. of Sci. of the USSR, 1967, t.80: 518 527 [in Russian]. Зевина Г.Б., Кузнецова И.А. Обрастание в районе строительства приливных электростанций в Баренцевом и Белом морях // Тр. Инст. океанол., 1967, т.80: 518 527.
- 29. Zevina G.B., Kuznetsova I.A., Starostin I.V. The fouling composition at the Caspian Sea // The Trav. of Oceanol. Inst. of the Acad. of Sci. of the USSR, 1963, t.70: 3 26 [in Russian]. Зевина Г.Б., Кузнецова И.А., Старостин И.В. Состав обрастания на Каспийском море // Тр. Инст. океанол. ИОАН, 1963, т.70: 3 26.
- Zevina G.B., Lebedev E.M. The marine fouling // The Biodamages of materials and industrial goods at the fresh and marine waters. Moscow, Moscow Univ. Ed., 1971: 88 -158 [in Russian]. Зевина Г.Б, Лебедев Е.М. Морское обрастание // Биоповрежд. матер. и издел. в пресн. и морск. водах. М.: МГУ, 1971: 88 - 158.
- Zevina G.B., Marakuev V.N., Goriachev V.N. The combine method for bottom invertebrates quantification // Marine Biology, Vladivostok, 1975: 56 - 57 [in Russian].
   Зевина Г.Б., Маракуев В.Н., Горячев В.Н. Применение комбинированного ФТД метода для количественного учета донных беспозвоночных // Биол. моря. Владивосток, 1975: 56 - 57.
- 32. Zevina G.B., Nikitina E.N., Goriachev V.N. The bank biocenoses at the Canars islands district // Shelf Biology, Vladivostok, 1975: 36 38 [in Russian]. Зевина Г.Б.,

Никитина Е.Н., Горячев В.Н. Биоценозы банок района Канарских островов // Биол. шельфа. Владивосток, 1975: 36 - 38.

- 33. Zevina G.B., Nikitina E.N., Goriachev V.N., Marakuev V.N. The banks benthos quantification at the Canars islands district // Complexes Studying of ocean nature, 1979, v.6: 195 - 218 [in Russian]. Зевина Г.Б, Никитина Е.Н., Горячев В.Н., Маракуев В.Н. Количественное изучение бентоса банок района Канарских островов // Компл. иссл. природы океана. 1979, в.6: 195 - 218.
- 34. Zevina G.B., Starostin I.V. The quantitative and qualitative changes of Caspian fouling connects with Volga Don Channel opening // The Trav. of Oceanol. Inst. of the Acad. of Sci. of the USSR, 1961, t.49: 97 107 [in Russian]. Зевина Г.Б., Старостин И.В. Качественные и количественные изменения в обрастаниях Каспия в связи с открытием Волго-Донского канала // Тр. Инст. океанол. АН СССР, 1961, т.49: 97 107.
- 35. Zevina G.B., Starostin I.V. About relations between new introducents and aboriginal fauna in fouling biocenoses at the Caspian Sea // The Ecology Problems, 1962, т.5 [in Russian]. Зевина Г.Б., Старостин И.В. О взаимоотношениях новых вселенцев и местной фауны в биоценозах обрастания на Каспийском море // Вопр. экол., 1962, т.5.
- 36. Zevina G.B., Zetlin A.B., Chesunov A.V. Some peculiarities of coralobionts biology // Shelf biology of World Ocean. 2<sup>nd</sup> All-Union conf. about sea biology. Vladivostok, 1982, part 2: 24 – 26 [in Russian]. Зевина Г.Б., Цетлин А.Б., Чесунов А.В. Некоторые особенности биологии кораллобионтов // Биол. шельф. зон Мирового океана. Тез. докл. 2-й Всесоюзн. конф. по морск. биол. Владивосток, 1982, ч.2: 24 - 26.
- Abricosov G.G., Zevina G.B. Bryozoa // Atlas of Caspian invertebrates. Moscow, 1968: 386 - 395 [in Russian]. Абрикосов Г.Г., Зевина Г.Б. Класс Мшанки Bryozoa // Атлас беспозв. Касп. моря. М., Пищевая пром, 1968: 386 - 395.
- 38. Kuznetsova I.A., Zevina G.B. The fouling composition at the northern part of Kola peninsula // The Biodamages of materials and defence from its. Moscow, 1978: 47 53 [in Russian]. Кузнецова И.А., Зевина Г.Б. Состав обрастания северной части Кольского полуострова // Биоповрежд. матер. и защита от них. М., Наука, 1978: 47 53.
- Zenkevich L.A., Zevina G.B. Caspian fauna reconstruction // Nature, 1968, № 1: 12 -22 [in Russian]. Зенкевич Л.А., Зевина Г.Б. Перестройка фауны Каспийского моря // Природа, 1968, № 1: 12 - 22.
- Zenkevich L.A., Zevina G.B. Fauna and Flora // Caspian Sea. Moscow, Moscow Univ. Ed., 1969: 229 - 255 [in Russian]. Зенкевич Л.А., Зевина Г.Б. Фауна и флора // Касп. море. М., изд. МГУ, 1969: 229 - 255.

#### About Dr. G.B. Zevina

- Когп О.М. Galina Benizianovna Zevina // Marine Biology, 2001, т.27, № 3 [in Russian]. Корн О.М. Галина Бенициановна Зевина // Биология моря, 2001, т.27, № 3.
- Railkin A.I., Seravin L.N. About G.B. Zevina's book «Biology of marine fouling» (1994) // Marine Biology, 1995, т.21, № 5: 348 – 349 [in Russian]. Раилкин А.И., Серавин Л.Н. О книге Г.Б.Зевиной «Биология морского обрастания» (1994) // Биология моря, 1995, т.21, № 5: 348 – 349.

# **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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down the left mouse button and drag it over the text to be copied. Once the text is blocked you can copy it to the clipboard and then to wherever you wish.

- Barnes, D. K. A. (2006). A most isolated benthos: coastal bryozoans of Bouvet Island. Polar Biology 29(2): 114-119.
- Boardman, R. S. and C. J. Buttler (2005). Zooids and extrazooidal skeleton in the order trepostomata (Bryozoa). Journal of Paleontology 79(6): 1088-1104.
- Bone, E. K. and M. J. Keough (2005). Responses to damage in an arborescent bryozoan: Effects of injury location. Journal of Experimental Marine Biology and Ecology 324(2): 127-140.
- Carter, R. and M. R. Gregory (2005). Bryozoan encrusted plastic from the continental slope: eastern South Island, New Zealand. New Zealand Natural Sciences 30: 49-55.
- Cocito, S., M. Novosel, et al. (2006). Growth of the bryozoan *Pentapora fascialis* (Cheilostomata, Ascophora) around submarine freshwater springs in the Adriatic Sea. Linzer Biologie Beitäge 38(1): 15-24.
- De Blauwe, H. (2005). A new species of Caulibugula (Bryozoa: Cheilostomatida) from France. Bulletin de l'Institut Royal des Sciences Naturelles de Belgique Biologie 75: 81-87.
- Dick, M. H. and S. F. Mawatari (2005). Morphological and molecular concordance of Rhynchozoon clades (Bryozoa, Cheilostomata) from Alaska. Invertebrate Biology 124(4): 344-354.
- Elia, A. C., G. Pieroni, et al. (2006). Heavy metal pollution and susceptibility to oxidative stress of the freshwater bryozoan *Cristatella mucedo* Cuvier, 1798 (Bryozoa, Phylactolaemata) of Lake Piediluco (Italy). Linzer Biologie Beitäge 38(1): 39-45.
- Fagerstrom, J. A. and O. Weidlich (2005). Biologic response to environmental stress in tropical reefs: Lessons from modern Polynesian coralgal atolls and Middle Permian sponge and *Shamovella*-microbe reefs (Capitan Limestone USA). Facies 51: 501-515.
- Gordon, D. P. and W. B. Dusman (2006). Integripelta acanthus n. sp. (Bryozoa: Eurystomellidae) - a tropical prey species of Okenia hiroi (Nudibranchia). Zootaxa 1229: 41-48.
- Gray, C. A., C. D. McQuaid, et al. (2005). A symbiotic shell-encrusting bryozoan provides subtidal whelks with chemical defence against rock lobsters. African Journal of Marine Science 27(3): 549-556.
- Guha, A. K. (2005). Prof. Dr. Ehrhard Voigt: the legendary palaeontologist. Palaeontological Society of India (Lucknow) 50(2): 183-185.
- Guha, A. K. and K. Gopikrishna (2005). Lunulitiform cheilostome bryozoans from the Miocene sequences of western Kachchh, Gujarat. Journal of the Palaeontological Society of India (Lucknow) 50(2): 13-24.
- Guha, A. K. and K. Gopikrishna (2005). Some fossil anascan bryozoan taxa from Tertiary sequences of western Kachchh, Gujarat. Journal of the Palaeontological Society

of India (Lucknow) 50(2): 135-151.

- Hepburn, C. D., C. L. Hurd, et al. (2006). Colony structure and seasonal differences in light and nitrogen modify the impact of sessile epifauna on the giant kelp *Macrocystis pyrifera* (L.) C Agardh. Hydrobiologia 560: 373-384.
- Hondt, J.-L. d. (2006). The Henri Milne Edwards (1800-1885) collections of recent and fossil Bryozoa. Linzer Biologie Beitäge 38(1): 25-38.
- Hondt, J.-L. d. and M. Fasse (2006). A new Arachnidium species, Arachnidium lacourti spec. nov. (Bryozoa : Ctenostomona) from the coast of The Netherlands. Zool. Med. Leiden 80: 87-90.
- James, D. W., M. S. Foster, et al. (2006). Bryoliths (Bryozoa) in the Gulf of California. Pacific Science 60(1): 117-124.
- Kittelmann, S. and T. Harder (2005). Species- and site-specific bacterial communities associated with four encrusting bryozoans from the North Sea, Germany. Journal of Experimental Marine Biology and Ecology 327(2): 201-209.
- Marchini, A., K. Gauzer, et al. (2004). Spatial and temporal variability of hard-bottom macrofauna in a disturbed costal lagoon (Sacca di Goro, Po Rive Delta, Northwestern Adriatic Sea). Marine Pollution Bulletin 48: 1084-1095.
- McGurk, C., D. J. Morris, et al. (2006). Development of *Tetracapsuloides bryosalmonae* (Myxozoa : Malacosporea) in bryozoan hosts (as examined by light microscopy) and quantitation of infective dose to rainbow trout (*Oncorhynchus mykiss*). Veterinary Parasitology 135(3-4): 249-257.
- Moissette, P., A. Dulai, et al. (2006). Bryozoan faunas in the middle Miocene of Hungary; biodiversity and biogeography. Palaeogeography, Palaeoclimatology, Palaeoecology 233(3-4): 300-314.
- Moyano, H. I. (2005). Scotia Arc bryozoans from the LAMPOS expedition: a narrow bridge between two different faunas. Scientia Marina 69 (Suppl. 2): 103-112.
- Nebelsick, J. H., M. W. Rasser, et al. (2005). Facies dynamics in Eocene to Oligocene circumalpine carbonates. Facies 51(1-4): 207-226.
- Okuyama, M., H. Wada, et al. (2006). Phylogenetic relationships of freshwater bryozoans (Ectoprocta, Phylatolaemata) inferred from mitochondrial ribosomal DNA sequences. Zoologica Scripta 35(3): 243-247.
- Ostrovsky, A. N., A. V. Grischenko, et al. (2006). Comparative anatomical study of internal brooding in three anascan bryozoans (Cheilostomata) and its taxonomical and evolutionary implications. Journal of Morphology 267(6): 739-749.
- Pachut, J. F. and R. L. Anstey (2006). Inferring evolutionary order and durations in a fossil lineage using both stratigraphy and cladistics. Geological Society of America, North-Central Section.
- Peck, L. S., P. Convey, et al. (2006). Environmental constraints on life histories in Antarctic ecosystems: tempos, timings and predictability. Biological Reviews (Cambridge) 81(1): 75-109.
- Piola, R. F. and E. L. Johnston (2006). Differential tolerance to metals among populations of the introduced bryozoan *Bugula neritina*. Marine Biology (Berlin) 148(5): 997-1010.
- Pratt, M. C. (2005). Will an opportunistic invasive bryozoan displace or coexist with other epiphytic bryozoans in the Gulf of Maine. Integrative and Comparative Biology 45(6): 1058.
- Pratt, M. C. (2005). Consequences of coloniality: influence of colony form and size on feeding success in the bryozoan *Membranipora membranacea*. Marine Ecology Progress Series 303: 153-165.

- Riguina E.Yu. Anatoly V. Vinogradov, to 50<sup>th</sup> anniversary. Ригина Е.Ю. Анатолий Валентинович Виноградов (к 50 летию со дня рождения) // Самара, 2006: 108 с. [in Russian].
- Rosso, A. (2005). *Metrarabdotos* (Bryozoa, Cheilostomatida) from Plio-Pleistocene of southern Italy, with description of new species. Bollettino della Societa Paleontologica Italiana 44(1): 11-24.
- Smith, A.M., McGourty, C.R., Kregting, L., and Elliot, A. 2005. Subtidal Galeolaria hystrix (Polychaeta: Serpulidae) reefs in Paterson Inlet, Stewart Island, New Zealand. New Zealand Journal of Marine and Freshwater Research 39(6): 1297-1304.
- Soja, C. M., A. Antoshkina, et al. (2005). Silurian stromatolite reefs as indicators of environmental change along the Uralian seaway. Abstracts with Programs -Geological Society of America 37(4): 76.
- Strathmann, R. R. (2006). Versatile ciliary behaviour in capture of particles by the bryozoan cyphonautes larva. Acta Zoologica (Copenhagen) 87(1): 83-89.
- Strathmann, R. R., A. Hysert, et al. (2005). Food limited growth, plasticity in loss and gain of metamorphic competence and recruitment of the cyphonautes of a bryozoan. Integrative and Comparative Biology 45(6): 1079.
- Taticchi, M. I., G. Pieroni, et al. (2006). The Italian *Plumatella similirepens* Wood, 2001 (Bryozoa - Phylactolaemata) from a hatchery of northern Italy. Linzer Biologie Beitäge 38(1): 47-54.
- Taylor, P. D., U. Hara, et al. (2006). Unusual early development in a cyclostome bryozoan from the Ukrainian Miocene. Linzer Biologie Beitäge 38(1): 55-64.
- Tohru, Iseto. (2006). Two new non-commensal loxosomatids (Entoprocta: Loxosomatidae) from Okinawa and Sesoko Islands, Ryukyu Archipelago,. Japan.Species Diversity 11: 33-43.
- Vinogradov A.V. Taxonomical structure of Phylactolaemata. Виноградов А.В. Таксономическая структура Покрыторотых мшанок Phylactolaemata // Вестник зоологии, Киев, 2004, т.38, в.6: 3 – 14. [in Russian].
- Vinogradov A.V. Russian continental water bodies bryozoology: 30 years studies. Виноградов А.В. Достижения отечественной бриозоологии континентальных водоемов за 30 лет исследований // Краеведч. зап., Самара. Самарский край в истории России. Матер. 2-й Межрегион. научн. конф. к 180-летию со дня рожд. П.В.Алабина, 2004, в.13: 64 – 76. [in Russian].
- Vinogradov A.V. Zoogeographycal analysis of Euro-Asia continental waterbodies Eurystomata and Phylactolaemata // Иссл. в обл. естеств. наук и образ. Самара, изд. Гос. Пед. Унив., 2005: 198 - 203. [in English].
- Vinogradov A.V. The Phylactolaemata is original group with high taxonomic rank. Виноградов А.В. Покрыторотые Phylactolaemata своеобразная группа высокого таксономического ранга // Иссл. в обл. естеств. наук и образ. Самара, изд. Гос. Пед. Унив., 2005: 132 139. [in Russian].
- Vinogradov A.V. Continental water-bodies Phylactolaemata and Eurystomata of Ural Subprovince (Volga – Ural Province). Виноградов А.В. Мшанки (Phylactolaemata и Eurystomata) континентальных водоемов Уральской подпровинции Волго-Уральской провинции // Биоресурсы и биоразнообразие экосистем Поволжья: прошлое, настоящее, будущее. Междунар. совещ., Саратов, 2005: 213 – 214. [in Russian].
- Vinogradov A.V. Continental water-bodies Bryozoa of Lapland Province. Виноградов А.В. Мшанки Bryozoa континентальных водоемов

Лапландской провинции // Изв. Сам. научн. центра РАН, Самара, 2005, т.7, № 1: 230 - 241. [in Russian].

- Vinogradov A.V. Bryozoa of continental water-bodies of West Siberia. Виноградов А.В. Мшанки (Bryozoa) континентальных водоемов Западной Сибири // Вестник Тюменск. гос. унив., 2005, № 5: 37 – 43. Перифитон контин. вод: соврем. сост. изученности и перспект. дальнейш. исслед. Междунар. Симпозиум. [in Russian].
- Vinogradov A.V. Bryozoa in peryphyton of Nothern Euro-Asian steppe and forest-steppe reservoirs. Виноградов А.В. Мшанки (Bryozoa) в перифитоне степных и лесостепных водоемов Северной Евразии // Вестник Тюменск. гос. унив., 2005, № 5: 43 61. Перифитон контин. вод: соврем. сост. изученности и перспект. дальнейш. исслед. Междунар. Симпозиум. [in Russian].
- Vinogradov A.V. Acarina with Phylactolaemata Symbiosis Виноградов А.В. Сожительство водных клещей Acarina с пресноводными мшанками Phylactolaemata // Вестник Сам. гос. Пед. унив. Естеств.-геогр. фак. Иссл. в обл. естеств. наук и образ., в.5. Самара, 2006: 221 223. [in Russian].
- Vinogradov A.V. In Memorium: Galina B. Zevina (February 12, 1926 September, 24, 2002), to 80<sup>th</sup> anniversary. Виноградов А.В. Слово о Галине Бенициановне Зевиной (к 80-летию со дня рождения) // Вестник Сам. гос. Пед. унив. Естеств.-геогр. фак. Иссл. в обл. естеств. наук и образ., в.5. Самара, 2006: 466 - 481. [in Russian].
- Vinogradov, A. V. (2006). Zoogeographical pecularities of Eurasian north continental waterbodies Phylactolaemata and Eurystomata. Linzer Biologie Beitäge 38(1): 65-70.
- Viskova, L. A. (2005). New bryozoans (Tubuliporina, Stenolaemata) from the Upper Cretaceous of the middle Volga River region (Russia). Paleontological Journal 39(4): 395-403.
- Von Dassow, M. (2005). Influences of flow and feeding on colony organization in a bryozoan. Integrative and Comparative Biology 45(6): 1090.
- Von Dassow, Y. J. (2005). Abundance, diversity and paleciecology of Pleistocene encrusting organisms. Integrative and Comparative Biology 45(6): 1207.
- Waugh, D.A., J.M. Erickson, and R. Crawford. 2004. Two growth forms of *Heterotrypa* Nicholson, 1879, (Bryozoa: Trepostomata) from the type-Cincinnatian: Putting the pieces back together. The Compass, 78(3):95-110.
- Wendt, D. E. and C. H. Johnson (2005). Availability of dissolved organic matter (DOM) reduces carryover performance consequences for the marine bryozoan Bugula neritina. Integrative and Comparative Biology 45(6): 1095.
- Wood, T. S., P. Anurakpongsatorn, et al. (2006). Swimming zooids: an unusual dispersal strategy in the ctenostome bryozoan, *Hislopia*. Linzer Biologie Beitäge 38(1): 71-75.
- Wöss, E. R. (2006). Freshwater bryozoans in the backwaters of the Danube and Traun Rivers southeast of Linz, Upper Austria. Linzer Biologie Beitäge 38(1): 77-91.
- Zágoršek, K. and R. Darga (2004). Eocene Bryozoa from the Eisenrichterstein beds, Hallthurm, Bavaria. Zitteliana Reihe A 44: 17-40.
- Zágoršek, K. and K. Fordinál (2006). Lower Sarmatian Bryozoa from brackish sediment in the northern part of the Danube Basin (Dubová, Slovakia). Linzer Biologie Beitäge 38(1): 93-99. 38(1): 93-99.

## Messages from the IBA Secretary

Missing persons. I have lost contact with the following members:

Peter E. J. Dyrynda Yasser El Safori Joanna Freeland Anna Occhipinti Ambrogi

Email messages bounce back as "undeliverable," and postal messages elicit no response. If you are in touch with any of these people, please ask them to contact me if they wish to receive the *IBA Bulletin*. (tim.wood@wright.edu).

**Grateful acknowledgement.** This issue of the *IBA Bulletin* was assembled and mailed from Thailand. The IBA Secretary is pleased to acknowledge generous support and use of computer facilities from Kasetsart University and its Department of Environmental Science, with special thanks to two IBA members: Dr. Jukkrit Mahujchariyawong and Dr. Patana Anurakpongsatorn.