CALL FOR NOMINATIONS FOR THE IBA ELLIS MEDAL FOR 2016.

During the International Bryozoology Association Catania conference the Ellis Medal was established. Further details and an outline of the selection procedure was outlined in the IBA Bulletin 9(2) [2013], page 11. (repeated below – newsletter Ed.)

It is awarded by the out-going IBA President at each IBA International Conference. The President shall seek nominations in the year prior to the Conference, of persons who have provided exceptional service to the IBA or to the wider bryozoological community, and shall select one (or exceptionally a maximum of two recipients) drawn from the nominations. The President’s choice of recipient(s) shall be confirmed by a subgroup made up of three members of the IBA Council.

Patrick would be delighted to receive nominations (by email) by 1st July 2015. Please briefly outline in no more than 200 words the contribution made by your nominee to the IBA and or the wider bryozoological community. Please do not notify the nominee that you have forwarded their name to Patrick. The names of nominees will be kept strictly confidential.

Patrick Wyse Jackson

Reprinted from the IBA Bulletin 9(2) [2013], page 11.

International Bryozoology Association Ellis Medal

Many scientific organisations have a number of awards, and the IBA is always delighted to be able to make a student presentation and poster award at every international conference. During the recent Catania meeting Patrick Wyse Jackson asked the Council to approve the establishment of a new service award, to be called the Ellis Medal. This medal is to be awarded to a person deemed to have given outstanding service to the IBA and/or the bryozoological community at large. The Council whole-heartedly endorsed this proposal, and the delegates at the conference were later told about this new award during the Business Meeting. Patrick has arranged for a batch of 15 medals to be produced.

The medal is named for John Ellis (c. 1710—1776), Dublin-born author of an essay towards a natural history of the corallines (1755). It will be first awarded by the out-going IBA President at the 2016 IBA International Conference, and then thereafter by each out-going IBA President at successive Conferences.

The President shall seek nominations in the year prior to the Conference of persons who have provided exceptional service to the IBA or to the wider bryozoological community, and shall select one (or exceptionally a maximum of two recipients) drawn from the nominations. The President’s choice of recipient(s) shall be confirmed by a subgroup made up of three members of the IBA Council.
NEWS FROM THE MEMBERSHIP

Blanca Figuerola. In the framework of the project financed by the Shackleton scholarship, I spent six fabulous weeks in Falkland Islands (FI) last November-December. Dr Paul Brewin hosted me at Falkland Islands Government fisheries department (and at his home!). I examined the material collection from several cruises in the FI and South Georgia Is. and the samples collected by diving during my stage there (82 species from over 350 samples were found with possible new species). I would like to thank Drs Paul Brewin, Paul Brickle (from South Atlantic Environmental Research Institute-SAERI) and David Barnes and the members of the Shallow Marine Surveys Group (SMSG) for their hospitality, help and the valuable advice before and during my stage. Also, I took many good memories and good friends and I hope to come back soon!

During February, thanks to a grant obtained from the SYNTHESYS project, I also spent three weeks at the Natural History Museum of London, to evaluate depth-related changes in skeletal Mg in Antarctic bryozoans under the supervision of Drs Paul Taylor, Piotr Kuklinski and Mary Spencer. A total of 103 samples were analysed from East Antarctica (Terre Adelie and George V Land) collected during the CEAMARC cruise (2007-08). During these weeks, it was great to meet with some bryozoologists (Drs Consuelo Sendino, Andrea Waeschenbach, Jennifer Loxton and David Barnes). Also, I am very grateful to them for their reception and help.

We hope to publish the results of the two research stages as soon as possible!
Lais V. Ramalho - Taking advantage of the post-doctoral of my husband David in Málaga- Spain, I am studying the Bryozoan Fauna from mud vulcanoes of the Gulf of Cádiz (northeastern Atlantic), an area included recently in the Red Nature 2000 as a Marine Protected Area. This study is linked to the projects LIFE + INDEMARES/Chimeneas de Cádiz and SUBVENT, carried out by the Institute Español de Oceanografía, with the participation of several researchers, among others, Dr. Víctor Díaz del Río and Juan Tomás Vázquez (Main Researchers) and Dr. José L. Rueda (benthic studies coordinator). The professors Dr. Carmen Salas and Dr. Serge Gofas of the Universidad de Málaga are facilitating our work in the Scanning Electron Microscopy Center at the Universidad de Málaga, where the pictures are being made. The Spanish bryozoologists Dr. Oscar Reverter Gil (Universidad de Santiago) and Dr. Javier Souto-Derungs (University of Vienna/Universidad de Santiago) joined us for studying this diverse deep-sea fauna. Until now 48 species were found, mainly cheilostome ascophora, but some cyclostome and “anascan” are present among them. They were fixed on authigenic carbonates (chimneys, slabs) and several types of bioclastic material (shells, corals).

Mud volcanoes are seafloor edifices that result from the release of mud and hydrocarbon fluids in areas with gas-rich over pressured sediments. The Gulf of Cádiz represents an extensive seepage area, with more than 50 mud volcanoes found so far, supporting a broad diversity of chemosymbiotic and heterotrophic organisms, and therefore conforming a biodiversity hotspot in the Atlantic Ocean. Nevertheless, the available information on biological components is still very scarce for some areas of the Gulf of Cádiz, such as those mud volcanoes of the Spanish margin and for some taxonomic groups, such as the Bryozoa.
Mary Spencer Jones (NHM) - Harmer’s Siboga bryozoan material -I would just like to remind IBA members that nearly all the bryozoans from the Siboga Expedition are split between two Institutes. Once Harmer had finished with the material, all the Holotype specimens were initially returned to the Zoological Museum in Amsterdam (ZMA). In 2011, however, the ZMA collection merged with Naturalis and the National Herbarium of the Netherlands to become the Naturalis Biodiversity Center, which is located in Leiden. For more information see http://www.naturalis.nl/en/about-us/our-work/collections/ and https://science.naturalis.nl/en/collection/naturalis-collections/invertebrates/

The current curator for sponges and bryozoans is Elly Beglinger elly.beglinger@naturalis.nl

The material which remained at the Natural History Museum in London was mainly Paratype. Most of this is now listed on the museum’s specimen catalogue, which can be access through the NHM data portal http://data.nhm.ac.uk/ or for more information contact Mary directly.

Jo Harmelin - "Just for the pleasure of eyes", as say the carpet merchants when you visit a souk, a picture of a bryozoan garden taken this morning at Marseille. This kind ‘bryo-garden’ is typical of the coralligenous bottoms of Provence (NW Mediterranean) below 30m depth when exposed to currents. The dominant species is Myriapora truncata (‘false red coral’). Also visible Schizomavella mamillata and Dentiporella sardonica. The true red coral (Corallium rubrum) is also present, with small colonies emerging from cavities.
NEW MEMBERS

Hannah Mello

I am in my second year of graduate studies at the University of Wisconsin-La Crosse. I completed my Bachelors in Aquatic Biology at the University of La Crosse-Wisconsin where I conducted research with the United States Geological Survey on management of invasive species, primarily Petromyzon marinus. My masters’ thesis research is investigating the distribution and relative abundance of freshwater bryozoans in the Upper Mississippi River watershed across three latitudes and five habitat types, with a focus on possible shifts in species assembles due to shifting latitudinal conditions and changes in water use. My research interests include freshwater invertebrate ecology and climate change, as well as plant ecology and invasive-native species interactions. I am also very interested in the role of art in the study of science as well as the use of art in teaching science and making it more accessible to everyone.

I am very excited to get involved with the IBA. Feel free to contact me at mello.hann@uwlax.edu

Apology to Dr. Andrej Ernst

Acquaintance with Dr. Andrej Ernst was a great honor for me. I had contacted him through an e-mail in 2008 for mutual collaboration on studying Palaeozoic bryozoans for which he replied positively.

I had already taken a research project from my university and in this regard I had to publish an article with the first name to liquidate with the university. In this connection, I mailed the matter to Dr. Ernst but he didn’t reply me by any means. I published the first article titled Fistulipora microparallela (Yang and Lu, 1962) from Lower Permian Bryozoans of Lut Block, Central Iran in 2012 unknowingly without knowing its gain giving nature. We published another article with the title of Upper Devonian (Frasnian) Bryozoa from the Shishtu 1 Formation of Niaz area (eastern Tabas, central Iran) in 2012 which was then defined as a research project (Deutsche Forschungsgemeinschaft for financial support (DFG project ER 278/4.1 and 2)) by Dr. Ernst but I didn’t feel any uneasiness. Later on, I published a part of this paper again with adding the name of Dr. Ernst without realizing it as an unscientific and illegal act.

After receiving an e-mail from Dr. Ernst, I realized my mistake by which I harmed the scientific career of Dr. Ernst unknowingly and unintentionally. This matter made me very sad and to this I made profuse apologies through mail for what I did unknowingly but he didn’t reply me at all. I hadn’t any impetus for research works in last two years owing to that unintentional mistake. To this, I again repeat my request for forgiveness and hope that Dr. Ernst will accept my apologies for those unintentional mistakes.

Hamed Yarahmadzahi
Pumice is a volcanic rock, produced by the rapid cooling of gas rich lava from submarine eruptions, or high-pressure eruptions on land, creating a very light glassy material that will often float on water. Submarine volcanic eruptions can produce large amounts of pumice, floating rafts of which cover square kilometres of ocean and persist for years, dispersing and travelling vast distances. At least 20 major events are known to have occurred in the last 200 years, suggesting that pumice rafts could provide a major dispersal mechanism for marine organisms.

As an example, in 2012 Bryan et al. reported the results of a study of a pumice raft produced by Home Reef Volcano in Tonga. In August 2006 the submarine volcanic eruption produced a pumice raft covering over 440 km², which then drifted through the islands of Tonga and Fiji before reaching the Australian coast in March 2007, by which time it had spread out to cover about 1600 km²; roughly ⅔ of the original material is thought to have reached Australian waters. Estimates by Bryan and others (2012) of the number of pumice clasts from the Home Reef raft exceed 2.5 trillion pieces of pumice.

More significantly, in 2012 an even larger undersea volcanic eruption was produced by the previously little-known Havre Seamount near the L’Esperance and L’Havre Rocks in the Kermadec Islands, approximately 1000 km to the north of Auckland, New Zealand. The huge volume of low density pumice produced by the eruption accumulated as a large area of floating pumice that was variously estimated to be between 7,500 and 10,000 square miles (19,000 and 26,000 km²). According to reports and studies summarised by Jutezler et al. (2014) the enormous Havre raft remained mostly coherent during the first week and spread north-west over the next months; it then separated into many domains that spilled in divergent directions, some domains being quickly streamed into >100-km-long tongues of floating debris. Incredibly the Havre raft affected >550,000 km² of ocean in 3 months of drifting and dispersal! Pumice eventually started reaching New Zealand some six months or so after the eruption.

As a result, the amount of pumice washing up on the beaches of Northland, New Zealand near where we live has increased dramatically during the last several years. Most ‘recent’ pieces floated in from the Havre raft are angular to sub-rounded, and vary widely in size usually 1 – 10 cm across. They tend to be light pale grey shade in colour (older pieces eroded out from the Taupo Volcanic Zone source in the North Island sometimes found locally tend to be rounder, reach larger sizes, are often yellowish in colour and lack epibionts).

Of the hundreds of pumice pieces we have examined, approximately 20 % are encrusted by some epibiont fauna, predominantly chelostome bryozoans, namely members of the Membraniporidae. These very widespread taxa (Membranipora, Jellyella spp.) with cyphonautes larvae were also found to be the most common bryozoans fouling drifting plastic in the northern New Zealand area by Stevens et al. (1996). Other attached organisms we found hitching a ride to Northland include rare serpulids, corals, occasional goose barnacles and juvenile oysters. Colonies usually encrust one (ie. submerged, ventral) surface of a floating piece of pumice, or are found in concave or cryptic areas, which may reflect larval settlement/habitat preference and/or preservational bias. On the pumice we collected - having been washed ashore, probably reworked, and finally left high and dry by the surf and tides, none of the epibionts were still living. We now hope to obtain some ‘freshier’ material on pumice pieces ‘fished up’ from offshore for comparison. It will be interesting to see what arrives here in New Zealand on pieces of rafted pumice in the coming months, as time since the eruption increases.

My thanks to my partner Diane Yanakopulos, who collected the bulk of the pumice pieces!

References:
Carey, R. J., Wysoczanski, R., Wunderman, R., Jutezler, M. 2014 Discovery of the Largest Historic Silicic Submarine Eruption. EOS vol.95, No. 19, 13 May 2014, p 157-159
In 2011 the non-native bryozoan, *Schizoporella japonica*, was detected in UK waters for the first time. Since its discovery, this bryozoan has established itself in a number of marinas and harbours, particularly in Scotland, and has recently been found fouling both wave and tidal renewable energy devices. Although it has started to become more widespread in Scotland, and cause a nuisance to industry, until recently little was known about the breeding cycle or larval behaviour of this species. In late 2014 Dr Jen Loxton and collaborators were successful in their application to the Marine Alliance for Science and Technology in Scotland (MASTS) to conduct a project to learn more about the life history of *S. japonica*.

In November 2014 Dr Jen Loxton (University of the Highlands and Islands, Scotland) travelled to St Petersburg to spend a month working with Associate Professor Andrey Ostrovsky at St Petersbursk State University (SPSU). During this time they investigated the internal reproductive structures of *S. japonica* and took measures of the fecundity of the species at different times of year. During her visit Jen gave 3 guest lectures for staff and students and also spent many enjoyable evenings and weekends learning about Russian art, ballet and whisky.

After Christmas it was time for the second part of the exchange where two students from St Petersburg travelled to Scotland to spend 5 weeks working with Jen at the Environmental Research Institute in Thurso. Uliana Nekliudova and Ekaterina Shevchenko arrived in Scotland the day after a tremendous freak storm which led to an eventful first week navigating fallen trees, blocked roads, power-cuts and the closure of the main campus and laboratories. Despite these challenges the research soon got underway in order to find out when *Schizoporella japonica* was breeding, how fast it could grow and all about the larval swimming behaviour. To investigate this Jen, Uliana and Ekaterina spent many hours in the microscope laboratory at ERI examining settlement panels as well as conducting tiny swimming trials at the Heriot-Watt campus in Orkney hosted by Associate Professor Jo Porter. During their time in Scotland the students fell in love with many aspects of Scottish culture - especially Burns Night, folk music and whisky!

The exchange culminated in an action-packed week at the Natural History Museum in London, hosted by bryozoan curator Mary Spencer Jones. The team were privileged to be granted access to over five hundred historical specimens of *Schizoporella*, dating as far back as the 18th century, which they analysed to see whether the unusual multi-ovicells found in *Schizoporella japonica* occur in any other related species. There was just about time to squeeze in some visits to famous London sights before we all boarded our flights to return to our home institutes.

We would like to thank all of our hosts as well as the MASTS Postdoctoral and Early Career Researcher Exchange (PECRE) scheme who funded this project. We hope that this will be the first of many fruitful and fun scientific collaborations between Scotland and Russia.

For more information contact Dr Jen Loxton (jennifer.loxton@uhi.ac.uk)
BRYOZOANS IN THE MILITARY

The following article was originally published by "Navy Times," an independent newspaper for members of the U.S. Navy. It was slightly edited and submitted to the IBA Bulletin by Tim Wood.

Tiny creatures delay carrier TR departure
By Lance M. Bacon, Staff writer 4:14 p.m. EDT March 9, 2015

NORFOLK, VA. – Moss animals strike again. Another flattop departure from the pier has been pushed back by a tiny aquatic invertebrate called Bryozoa.

The aircraft carrier Theodore Roosevelt was scheduled to leave Norfolk by 8 a.m. on Monday, but was delayed for hours while the crew cleaned out the intakes of sea water condensers. That Bryozoa was the culprit is a "reasonable assumption," said Lt. Cmdr. Reann Mommsen, the ship's spokeswoman. "We will know definitively as we go through the clean-up process."

Mommsen did not know how long the delay would last. Bryozoa delayed the deployment of the aircraft carrier George H.W. Bush on Feb. 15, 2014, by about four hours.

Bryozoa, also known as "moss animals," are inhabitants in the James River during winter months. In the case of Bush, Bryozoa were sucked up by large intakes under the ship that take in sea water to cool various pieces of equipment. This fouled condensers which, in turn, affected the ships propulsion and electrical power generation. Crew members took off the large condenser covers — some measuring more than 6 feet — and pulled gallons of moss from condenser tubes. The aircraft carrier Enterprise had the same problem in March 2012. Bryozoa fouled three of Big E's four main engines and five of her eight service turbine generators.

The Theodore Roosevelt cruise is set for eight-months — once it gets its uptakes clean.
“Dear president of IBA Patrick Wyse Jackson, We cannot find any expert in Lithuania on Bryozoa, therefore we’d like to ask for your help.”

Thus began a series of events starting last September that included intensive correspondence, the production of new YouTube videos, and the eventual discovery of one of the first nationwide surveys of freshwater bryozoans.

After Patrick contacted me I replied immediately to Vida Mildažienė, Professor of Biochemistry at Vytautas Magnus University and Director of the Kaunas Botanical Garden. She and two other biology professors had collected waterlilies for the Botanical Garden on which they had found some plumatellid bryozoans. Unfortunately their photos were not informative for species identification.

Then came this note a few weeks later: “Unexpectedly, we were lucky to find 2 colonies of the same bryozoa (as found on the leave) developed on the glass wall of aquarium where samples from the lake were kept from the summer!”

This news was accompanied by several photos (Figure 1) and the links to two remarkable videos posted on YouTube: www.youtube.com/watch?v=0PckITzdIFw&list=UUKN4vnZvilU7c2toLSWKnA
d www.youtube.com/watch?v=4YDokWeFoYE&list=UUKN4vnZvilU7c2toLSWKnA&index=5

There seemed to be some initial disappointment that their new bryozoan species turned out to be the well-known Plumatella repens, but nevertheless this group forged ahead. I sent them a copy of the guide to freshwater bryozoans that Beth Okamura and I had co-authored in 2005. They recorded the development of free and sessile statoblasts. At their request, I explained how to prepare statoblasts for scanning electron microscopy, and soon they were producing publishable quality micrographs. I described a method for collecting statoblasts in the field using white plastic, and in no time they reported finding statoblasts of Plumatella repens, P. fruticosa, and Cristatella.
Recently I received another email from Professor Mildžienė:

“Our story on freshwater bryozoans received an interesting turn, and I would like to discuss it with you. We were lucky to find the file of master thesis defended by student of our university in 1933. The name of student was Bronė Pajedaitė, and her supervisor was prof. Tadas Ivanauskas, the most prominent zoologist in Lithuania at that time. She performed numerous expeditions around country in 1932-33 and described 9 species (while only 4 are registered by now). She even described two varieties of Plumatella repens and one is very similar to what we found in Snaigynas lake (she was working in this lake as well) - var. appressa Krpln. The work is illustrated by hand drawings of microscopic images. If this work is of some interest to you and your colleagues?”

The news was astounding. This would be among the first known systematic, nationwide surveys of freshwater bryozoans. Previously, Adriana Vorstman had reported on phylactolaemates from Java (1928a, 1928b), but Pajedaitė may not have been aware of this work. In 1933 Mary Rogick was still working on her bryozoan survey of western Lake Erie (Rogick 1935) and Folke Borg’s survey of Sweden had not yet been assembled (Borg, 1941). The primary source of information for Bronė Pajedaitė seems to have been Kraepelin (1887).

Bronė Pajedaitė was later involved in resistance to Nazi occupation. When the Soviets took over she was among those signing a petition that advocated independence for Lithuania. For this she was imprisoned by the KGB where she died a year later. Her bryozoan specimens apparently did not survive the war.

However, the thesis discovery has stimulated further interest in phylactolaemate bryozoans in Lithuania. At Vytautas Magnus University they are planning a program for “young explorers and naturalists” to retrace the steps of Bronė Pajedaitė and re-collect bryozoans at each of her sites. In addition, they are now preparing a manuscript about the bryozoan work of Bronė Pajedaitė to be submitted soon for publication in Annals of Bryozoology.

References:

MEETINGS AND CONFERENCES

17th Conference of the International Bryozoology Association

Melbourne Museum
Melbourne 2016
Sunday 10th – Friday 15th April

PRE and POST-CONFERENCE EXCURSION UPDATE

Pre-Conference Excursion (2-9 April 2016), Tasmania, led by Catherine Reid. This trip starts on the morning of the 3rd April in Hobart and participants need to be in Hobart on the 2nd, however, accommodation for the night of the 2nd is included in the trip fee. The trip will visit Permian localities, including some visited by Charles Darwin on the Beagle voyage, Maria Island giant bryozoans (a full day), along with Tertiary bryozoans in Wynyard and an opportunity to snorkel in search of modern bryozoans, and selected tourist destinations (a wildlife park, Port Arthur and Cradle Mountain). Recognising that this may be the only time many northern hemisphere bryozoologists visit Tasmania significant local tourist destinations are included where feasible (with bryozoans taking priority!).

COST - estimated at $1200 AUD.

Post-Conference Excursion (17-24 April 2016) led by Rolf Schmidt. The post-conference field trip is turning into a whirlwind 8 day marathon of Cenozoic bryozoal limestones, volcanoes, kangaroos, lakes, outback bush, wine, stromatolites, caves, megafauna, indigenous cultures, and more! The main route will take in the Great Ocean Road from Melbourne; passing through volcanic plains that were active only a few thousand years ago; taking in many classic bryozoans fossil sites, like Torquay, Muddy Creek, Castle Cove, Mount Gambier, Murray Cliffs, Aldinga Beach. At this point we are on track to keep the cost below AU$1200 (about US$900 if the current exchange rate remains).

Registration payment options: We are making payment by credit card, personal cheque, and international transfer available (PayPal will not be available at this time).

Important Dates
1 September 2014: Online expression of interest (helpful but not required for attendance)
1 December 2014: 1st Circular (see the last newsletter)
24 August 2015: 2nd Circular
6 November 2015: Final Registration
4 December 2015: End of Early-Bird Registration Payment
5 February 2016: Final submission of abstracts
3-9 April 2016: Pre-Conference Excursion
10 April: Workshops
11-15 April: Conference
16-23 April: Post Conference Excursion
24 June 2016: Final deadline for revised manuscript submission to proceedings volume

More details will be included in future newsletters otherwise please refer back to the November 2014 issue 10(3).

Conference email info@iba2016.org
Website: www.iba2016.org
The annual Larwood Symposium, provides a forum where bryozoologists from across Europe (and wider) meet to discuss key research topics in the field. This meeting is used to encourage young bryozoologists to present the findings of their research studies in a relaxed yet scientifically rigorous gathering.

More information will be available soon at [www.larwood2015.co.uk](http://www.larwood2015.co.uk) If you have any questions in the meantime please contact Jen Loxton (Jennifer.loxton@uhi.ac.uk) or Jo Porter (j.s.porter@hw.ac.uk).

We hope to see many of you in Scotland next year.

Kind regards

Jen Loxton and Jo Porter

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**INTERNATIONAL SCIENTIFIC CONGRESS**

Cave environments: present and past  
Custonaci 25-26 April 2015  
City Hall  
organised by Antonietta Rosso and Rossana Sanfilippo  
In conjunction to “On and inside the mountain”  
Study and dissemination days on Geology, Karst & Palaeontology  
Custonaci 23 - 26 April 2015

An international scientific congress on “Cave environments: present and past”, organised by Rossana Sanfilippo and myself, will be held in Custonaci (Trapani, NW Sicily) during the days 25-26 April 2015. The meeting will focus on all aspects of cave environments, either subaerial or submarine, on their present-day and past colonisation, special organism’s morphologies, adaptations and behaviours, community distribution and geological record.

The aim is twofold: to favour the sharing of information and to provide the opportunity for discussions about new insights and research achievements, but also to extend knowledge on cave environments to non academic people. The topic will be introduced by a lecture given by J.G. Harmelin on: Submarine caves in the coastal zone: ecological refuges and very special biodiversity hotspots.

**REGISTRATION FEES**

The following registration fees were applicable for the congress: 35 euro Professional 25 euro Students 20 euro Accompanying persons. The fee can be paid directly during the meeting.

**Organizing and scientific committee:**

Antonietta Rosso and Rossana Sanfilippo  
Department of Biological, Geological and Environmental Sciences, Corso Italia 57, Catania  
University of Catania, 95129 – Catania, Italy  
For any further information, please contact: rosso@unict.it, + 39 0957195761
BRYOZAN EMBROIDERY
Mary Spencer Jones

As part of the NHM V-factor project looking at bryozoans on scallop shells, volunteer leader, Renee Miller, introduced members of the Blackheath branch of the UK Embroiderers Guild to the wonderful world of bryozoans. The group produced eleven A5 panels which are now on display in the NHM Specimen Preparation Area in the Darwin Centre.

The panels are done using different embroidery and crochet techniques giving very different types of patterns and 3D effects.

For more on the V-factor project see http://britishbryozoans.myspecies.info/content/project

BOOKS

Treatise on Invertebrate Paleontology parts published

In 1953 R.S. Bassler published the volume on Bryozoa in the series Treatise on Invertebrate Paleontology. Thirty years later the first volume in a planned series of revisions was published; this included an Introduction, and systematic accounts of the orders Cystoporata by John Utgaard and Cryptostomata by Dan Blake and Olgert Karklins. For many years Richard Boardman and Ken McKinney were working towards a revision of the orders Trepistemata and Fenestrata and were joined in 2001 by Caroline Buttler and Patrick Wyse Jackson respectively. Sadly both Rich and Ken passed away recently, but significant progress had been made and several chapters were close to submission for volume 2 of this revision.

With the development of online publication, the Treatise will be initially published in parts in this format in the series Treatise Online [www.paleo.ku.edu/treatiseonline] and once all sections for a particular volume are complete it shall be published in hard copy. Members may be interested, and hopefully pleased to know, that the first two parts are now available online or from Patrick or Caroline

Recent Publications

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


