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Copies of the Bulletin are archived at the Natural History Museum London.
Further information at http://www.bryozoa.net/iba/index.html

NEW MEMBERS

Nothando Duma - Fossils are studied to understand important geological events and palaeoenvironmental conditions. South Africa has a very rich geological and fossil heritage, however bryozoan fossils are understudied resulting in major gaps in the fossil record. The last published work from this area was done nearly 50 years ago by Brood (1977) entitled, "Upper Cretaceous Bryozoa from Needs Camp, South Africa". In 2022, I began my Masters project investigating bryozoan fossils dated from the Late Cretaceous (100.5–66 mya) collected from Needs Camp, Eastern Cape Province in South Africa. The fossil deposits from this study were collected and donated by Prof John Vernon Lockhart Rennie (1903-1994) to the Iziko Museums of South Africa as well as the Natural History Museum in London. The decades at which the samples remained unexamined highlights the possible lack of interest in bryozoology or a lack of specialised taxonomists in South Africa. These fossils were examined through traditional morphological methods and for imaging and measurements of diagnostic features a scanning electron microscope was used. From this study, supervised by Drs Melissa Boonzaaier-Davids (Iziko Museums, DFFE) and Paul Taylor (NHMUK), 14 species were identified with several genera being reported for the first time, *Supercytis, Onychocella, Aechmella, Ogiva, Gastropella, Chiplonkarina, Pithodella, Wilbertopora, Hoplocheilina, Tremogasterina* and *Bountyella*. Some species that were common between this study and Brood (1977), were not mentioned in any other publications which shows possible endemicity. These discoveries show how there needs to be a further investigation on these backlogged museum collections. In December 2023, I graduated and received my Masters in Applied Ocean Sciences from the University of Cape Town. I am currently volunteering my time collecting field data for projects, while looking for a job or opportunity to pursue a PhD degree.

NEWS FROM THE MEMBERSHIP

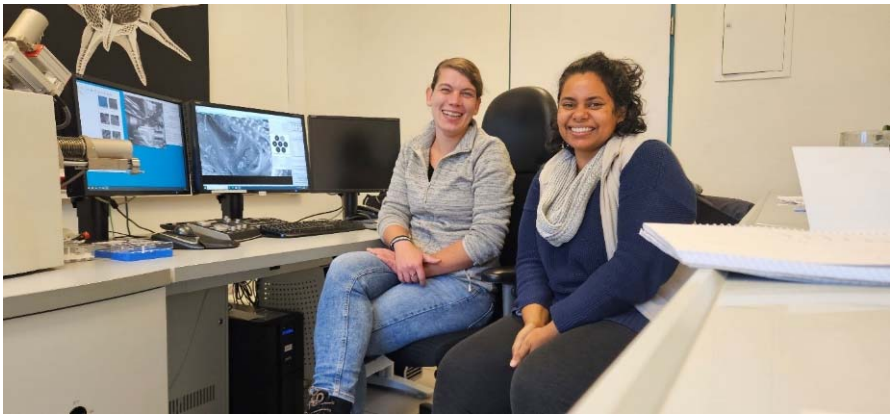
In recent months, there have been numerous developments in the field of bryozoology in the global south. I'm delighted to announce the graduation of IBA member, Ms Nothando Duma, in December 2023 at the University of Cape Town. She received her Masters working on a project investigating Cretaceous fossil Bryozoa from South Africa. Her remarkable dedication and enthusiasm propelled her through her studies, making her the first trained African specialised in bryozoan palaeontology! Ms Onika Mabalabala, another star student at Cape Peninsula University of Technology, is researching *Adeonella* systematics in False Bay, South Africa. She completed her postgraduate diploma and has commenced her Masters project investigating *Adeonella* phylogeny in False Bay.

(left) Nothando graduated with her Masters last year December.

For three months, I participated in the Global Senckenberg Fellowship program, funded by the Deutsches Zentrum für Marine Biodiversitätsforschung (DZMB) and Senckenberg Gesellschaft für Naturforschung, Germany. During the fellowship's initial phase, alongside Dr Carsten Lüter, we revisited Herman Kluge and Ernst Marcus's 100-year-old collections at the Museum für Naturkunde Berlin. These collections are crucial for validating cryptic species through taxonomic examination. Given the risk associated with loaning these collections, we opted to image the South African material using SEM technology, ensuring preservation while providing access to this historically significant African collection.

(right) Melissa in front of the Museum für Naturkunde in Berlin.

In the subsequent phase of the fellowship, alongside Professor Pedro Martinez Arbizu and his team at Senckenberg am Meer, we studied bryozoans from the North Sea, employing techniques like DNA barcoding, Scanning Electron Microscopy (SEM) imaging, and Matrix-assisted laser desorption/ionisation (MALDI) mass spectrometry. This latter approach enables faster and broader species identification, particularly beneficial for cosmopolitan and invasive species.



(left) With Franziska Iwan, technical assistant at Senckenberg am Meer, who assisted in the SEM imaging.

I felt fortunate when the Schwaha team (Dr Thomas Schwaha, Mildred Johnson, and Sebastian Decker) from the University of Vienna visited Senckenberg am Meer in February. It was a wonderful reunion!
As a marine scientist specialising in marine invertebrate taxonomy, systematics, and ecology at the Department of Forestry, Fisheries and the Environment (DFFE) in South Africa, this experience offered invaluable insights and collaborative opportunities.

I'm grateful for the support of my family—my husband, Dr Vernon Davids, our 2-year-old son, Leo, and my mother-in-law, Lilly—who accompanied me during this transformative journey (photo below). Special thanks to the staff and researchers at Senckenberg am Meer and Museum für Naturkunde for their warm welcome and ongoing engagement.

Emanuela Di Martino - I am delighted to share with the IBA community that as of March 1st, 2024 I have embarked on a new journey as a tenure-track researcher at the Department of Biological, Geological and Environmental Sciences of the University of Catania, Italy. It is a great satisfaction returning to the place where my career as a palaeontologist and bryozoologist began nearly 20 years ago with Antonietta Rosso as my mentor. I'm thrilled to reunite with familiar faces and esteemed colleagues such as Antonietta, Rossana Sanfilippo, Francesco Sciuto, as well as doctoral students Gemma Donato and Gianmarco Minniti, within the Paleontological Research Group. After 14 enriching years abroad, initially at the NHM London and later at the NHM Oslo, I feel privileged to come back where it all started. I am grateful to those who have supported me throughout this journey, particularly Paul Taylor and Lee Hsiang Liow, for their invaluable mentorship and the wealth of knowledge I have gained under their guidance.

From left to right: Rossana Sanfilippo, Gianmarco Minniti, Gemma Donato, Emanuela Di Martino, Antonietta Rosso e Francesco Sciuto.

Antonietta Rosso - Following the news about Emanuela Di Martino migrating south, I and the paleontological team at the Department of Biological, Geological and Environmental Sciences of the University of Catania are delighted to welcome Emanuela. I am proud for the results she achieved in the long years she spent abroad and I think that her return to our university represents a manifold success giving the opportunity to enrich our team and to ensure future continuation of bryozoan studies in Sicily.

Ksenia Serova - successfully defended her PhD Dissertation "Evolution of zooidal polymorphism in cheilostome bryozoans: avicularia as an example". Currently she's got a position of the researcher at the Zoological Institute, St Petersburg, Russia (sent by Andrej Ostrovsky).

Mary Spencer Jones - Mary recently retired after 40 years employed as a curator at the Natural History Museum in London. She began her time at the NHMUK working on parasites before sensibly switching to bryozoans. Countless bryozoologists from around the world have benefitted from Mary's help, friendship and hospitality over the years. She also served as Secretary and Treasurer of the IBA, and was awarded a well-deserved Ellis Medal at the Liberec conference in recognition of her service to bryozoology.

Mary's retirement party on 22nd March was attended by numerous museum staff as well as several visitors who made the journey up to London to celebrate her career. The good news is that Mary will not be lost entirely to bryozoology as she has become a Scientific Associate at the NHMUK allowing her to continue with her interests.

(Paul Taylor and Andrea Waschenbach)

Bryozoologists at Mary's party, from left to right: Abbie Herdman (Mary's successor), Kevin Tilbrook, Thomas Schwaha (visiting the museum on a quest to find the most boring bryozoans), Helen Jenkins, Paul Taylor, Mary Spencer Jones, Andrea Waeschenbach, Caroline Buttler and John Ryland. Beth Okamura was also at the party but, unfortunately, missed the photograph.

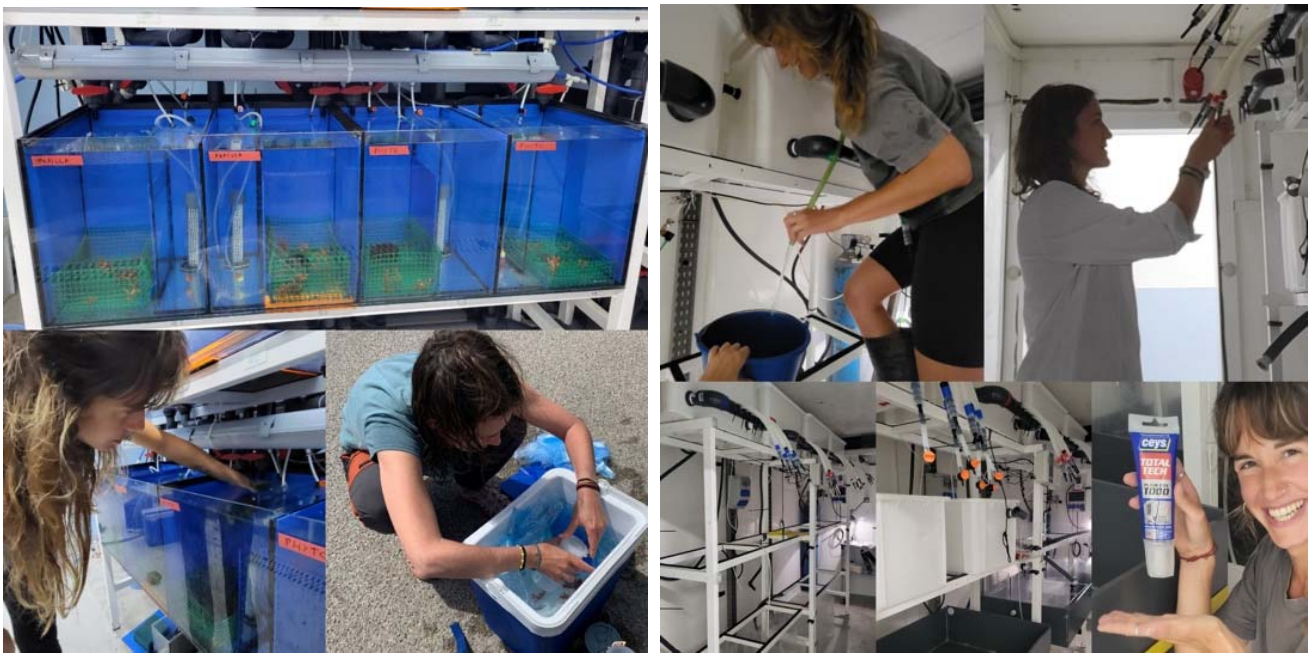
Left - Mary was presented with a magnificent Cupuladria *brooch as a leaving present. Right – Anatomically accurate, the* Cupuladria *brooch was made for Mary's retirement by a jeweller friend of Andrea's.*

Left - An amazing cake – worthy of the name Cellaria delectamenta *– was skilfully created by Andrea for the party. Note the characteristic avicularium helping to distinguish this species from others of the same genus. Regrettably, the holotype and only known specimen of* C. delectamenta *was totally consumed during the party. It's now up to Andrea to bake a neotype. Right - Mary cutting transverse sections through one of the internodes of the* Cellaria *cake.*

Blanca Figuerola and Javier Souto - They want to share with the bryozoan's community a great news from Spain. In a strange and difficult coincidence, both were recently awarded with a 5-year tenure track contract under the Ramón y Cajal (RyC) program of the Spanish government. This is a very competitive funding program that covers the salary and a few funds for research, but also opens the door to stabilization and to obtain more funds for research. So, they will continue doing research on bryozoans!

Blanca will continue doing research on marine calcifiers, especially focused on bryozoans, at the Institute of Marine Sciences in Barcelona (ICM-CSIC) in collaboration with the MedRecover team and other national and international researchers. In particular her main research aims to assess their diversity, (ii) investigate the effects of environmental changes (e.g., ocean warming, acidification and hypoxia) on them and their associated microbiome and 2) use their fossil record to reconstruct natural and human-driven changes in coastal ecosystems. On the other hand, she will also continue a research line that recently started with Anna Sánchez from the University of Barcelona on assessing plastic debris as a dispersal vector of marine invasive species in collaboration with Emanuela di Martino from the University of Catania.

She is often offering research job opportunities on these topics so stay tuned on her institutional website (https://www.icm.csic.es/en) or in her personal, project and institution twitter accounts (@BlancaFiguerola; @marcalcifiers; @ICMCSIC) for news!



Blanca and Claudia Aparicio (technician of the MedCalRes project) busy in an experiment where they were assessing the effect of low pH and high temperature on bryozoans and gorgonians and their microbiome at the ICM-CSIC.

Javier will move from the University of Vienna to the University of Coruña, where he will start to work after September 2024. During last part of this year and first part of the year 2025, he will continue working in the current project "Bryozoa connectivity along the Atlantic-Mediterranean region", so he will be between Spain and Austria during that time. Next five years, Javier will combine research with teaching.

In the University of Coruña, he will join to the BIOCOST research group (https://investigacion.udc.es/en/Research/Details/G000255), with whom he has been collaborating for years. He will have access to different marine research facilities as boat, marine labs and the Marine Biology Station of A Graña, in a coast with a high diversity of habitats where bryozoans are an important component.

So, new opportunities are open to continue with the works in biodiversity, ecology and biogeography of bryozoans, currently with a big interest in communities from mesophotic habitats and mearl bottoms. But, without leaving aside, the interest in the study of bryozoan communities associated with artificial habitats or habitats with high anthropogenic pressure, and the detection of non-indigenous species.

Habitats from the Galicia coast with a high diversity of bryozoans (up). Sampling during a dive in a marine cave system and sampling with students onboard of the Polybius, Marine Biology Station of A Graña (down).

Paul Taylor - At the beginning of the year I was awarded the degree of Doctor of Science (DSc) from the University of Durham for a thesis entitled 'Studies on fossil and living bryozoans' comprising a selection of my publications. I was honoured in April to receive the biennial Palaeontographical Society Medal in recognition of my contributions to taxonomic and systematic palaeontology, thanks to the support of several IBA colleagues.

It was a shock to learn of the death of Claus Nielsen. Although I never worked with Claus, I was massively influenced by his exquisite papers on cyclostome bryozoans. Claus was not only a great scientist but also a fine gentleman.

Photograph taken of Claus at Stevns Klint on a cold December day during the field excursion of the 2002 Larwood Symposium in Copenhagen

(Eds note -more memories of Claus appear later in the newsletter)

PALAEONTOGRAPHICAL SOCIETY MEDAL AWARD TO PAUL TAYLOR

In April 2024 Paul Taylor was awarded the Palaeontographical Society Medal. This biennial award from the world's the oldest extant palaeontology society is presented for a sustained and important series of contributions to taxonomic and systematic palaeontology. Paul was recognised for having published significant papers on fossil bryozoans from every geological period, as well as crucial studies of modern bryozoan ecology, systematics, phylogeny, and macroevolution. It was noted that although the award primarily recognizes significant achievements in the study of the fossil record, one of Paul's greatest career contributions is in his role in transcending the boundaries between scientific questions relating to both the past and the present of marine life. Finally, it was considered that research undertaken by Paul during his career has revolutionised the knowledge of Bryozoa.

The Palaeontological Society Medal, presented to Paul by the society president Caroline Buttler

FROM ROCKS TO "ROCKSTARS" (WABO IV EDITION)

Irene Zanandrea on behalf of the WABO team

Climbing steep cliffs, driving through bumpy off-roads, being chased by running cows… No, we are not talking about the newest Indiana Jones movie, but about WABO's (Wanganui Bryozoan project in Oslo) latest fossils-hunting adventure!

Landscapes of New Zealand

It has almost been two months since the end of the fourth WABO expedition in the extraordinary settings of Whanganui (North Island of New Zealand), and we have still not fully recovered from all the wonderful experiences we had— one for all, becoming local "rockstars", making it to the front page of the local newspaper, NZ Herald: International scientists look for two-million-year-old fossils in Whanganui!

The dream team: pictured left to right and back to front: Arthur Porto, Seabourne Rust, Diane Yanakopulos, Kjetil Lysne Voje, Patricia Taylor, Unni Vik, Paul Taylor, Marion Thaureau, Meghan Balk, Dennis Gordon, Lee Hsiang Liow, Grunde Vik Voje, and Irene Zanandrea.

This year`s unfortunate tidal regime did not stop our eager team that, in addition to the core members (Kjetil Lysne Voje and Lee Hsiang Liow from the Natural History Museum, University of Oslo, Paul Taylor from the Natural History Museum, London, Dennis Gordon from the National Institute of Water and Atmospheric Research, and Seabourne Rust), had new forces for the hunting (Meghan Balk, Trond Reitan, Marion Thaureau, Irene Zanandrea all from the Natural History Museum, University of Oslo, Arthur Porto from the University of Florida, Diane Yanakopulos, Patricia Taylor, and two guest stars: Unni Vik and the young enthusiastic paleontologist-to-be Grunde Vik Voje).

All the visited locations belong to the Wanganui Basin, one of the most complete Quaternary stratigraphic records in the world. Thanks to the sediments rich in fossils, our team could collect fantastic bryozoan materials: exciting specimens were found and, possibly, a few new species as well! Needless to say, without the expertise and guidance of the ever-enthusiastic trio, Paul Taylor, Dennis Gordon, and Seabourne Rust, it would have been impossible for the newcomers to hunt these fantastic fossils!


Fossil hunters in action

This fourth WABO edition, led by Kjetil Voje, was tailored for Meghan Balk`s postdoctoral project –investigating whether phenotypic variation within colonies of bryozoan species can aid in predicting how lineages evolve across time. The main targets were *Steginoporella magnifica, Microporella discors, Microporella speculum,* and *Microporella agonistes*; however, additional samples were collected also for estimating relative abundance of different bryozoan species and for studies of ecological interaction led by Lee Hsiang Liow and additional material was collected for Arthur Porto`s new lab at the University of Florida using machine-learning techniques on specimens to accelerate the research process.

KAI IWI: BLACK SAND AND THE FANTASTIC MR. A.

The setting for the first day of fieldwork was Kai Iwi, an idyllic beach 14 km west of Whanganui. The sun was shining, the cold Norwegian weather was a distant memory for the Oslo crew and, partially because of that, everyone was in high spirits, ready for the beginning of the new season. What could have gone wrong, given these wonderful conditions? Nothing…if the sand had not been black and if New Zealand had not been super windy! However, despite the black sand all over the faces (legend has it that some have still black sand in their ears!) our hunters got the first "harvest" of the season. It was a learning day for the newcomers: the experts gave the first crash course for recognizing different genera of bryozoans and showed how to look for them. It was also on the first day that we met for the first time the fantastic Mr. A.; and, for those of you who are not familiar with this pseudonym, we are talking about the one and only *Antarctothoa tongima* (impossible to write and spell as well!).

Kai Iwi beach

CASTLECLIFF: OFF-ROAD ADVENTURE

In the following days, the team visited Castlecliff Beach, a suburb of Whanganui. To reach the shellbeds that the team wanted more adventure was required and, thanks to our SUVs, our drivers drove on sand! It goes without saying that they aced it!

Fossil inspection and collection

WAIINU BEACH: BUMPY ROAD TAKE ME HOME!

Waiinu Beach was the farthest location of the expedition (42 km north of Whanganui), so we *had to* have a break mid-drive with a well-deserved ice cream at the traditional stop: the Berry Farm!

Right - Three thrilled paleontologists-to-be in their well-deserved break.

But the adventure was just at the beginning! Indeed, Waiinu Beach is a secluded place, and, like any other hidden treasure, guardians are required! Our terrible guardian was a herd of curious cows that made our mission almost like *Mission Impossible*! However, after a polite dialogue with the cows, we could pass, and our fantastic drivers were finally able to drive on the famous "bumpy roads" and make us reach the fantastic formations. There, we found wonderful specimens, including amazing examples of *Steginoporella* bryoliths!

Steginoporella bryolith

EPILOGUE

It has been a great season, filled with black sand, wind, sunshine, and two fantastic evergreens: the ice-creams at the Berry Farm and Paul Taylor`s signature gin tonics!

Now that the tan (and sunburn) are gone, it`s time to see what our boxes full of bryozoans have to tell us. Until then, *Ka kite Aotearoa* (see you soon New Zealand)!

The team of the WABO IV
Pictures: Unni Vik, Diane Yanakopulos, and Irene Zanandrea.

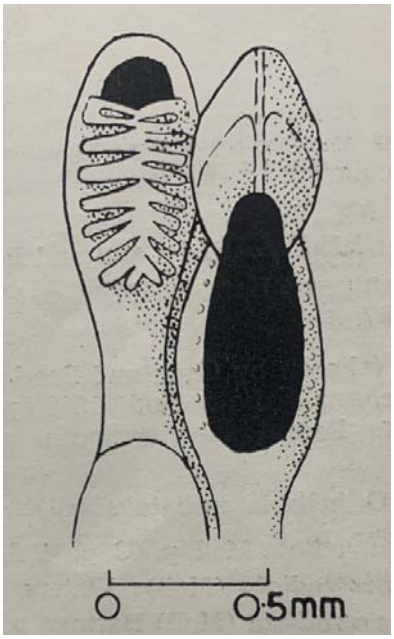
SCANNING ELECTRON MICROSCOPE AT MELBOURNE MUSEUM

Rolf Schmidt

In late 2023 Museums Victoria purchased its own benchtop SEM (a Hitachi TM4000 II with Bruker EDS, and also a sputter coater that does either gold or carbon), and it is such a fun toy (makes up for the public tender process nearly draining my soul)!

One of my (and the museum's) long term goals has been to photograph all our type specimens (Invertebrate Palaeo alone has primary types for about 3500 species, of which over 1000 are fossil Bryozoa), and now that we have an on-site SEM, I can tackle the microscopic types, including the Bryozoa.

Figularia kenleyi holotype



Figularia kenleyi Brown

I've done several species from Brown, 1958, partly because the figures are very stylised, but also because the specimens are easier to access (just a coverslip glued to the slide), compared to others like MacGillivray and Maplestone, where the coverslip is either underneath paper (sometimes with historic writing on it) or in a custom made enclosure on a glass slide using a black sealant (possibly melted on). If anyone has recommendations on how to access these sealed specimens with minimal risk and damage to historic slides, please let me know.

In order to reduce risk of damage to specimens from traditional SEM stub adhesives, like double-sided carbon tabs, which are extremely sticky (I have been able to carefully remove the type specimens of my thesis from their stubs, using 90% ethanol), I have created several custom stubs by sticking thick paper to the stub surface, and soaking that with a water-soluble adhesive (2% Methylcellulose in deionised water, which our conservators confirm is more archival than the traditional gum tragacanth). This allows safe positioning of specimens in desired orientations, while also making it very easy to remove them again. Amazingly, I've had no issues with uncoated specimens charging up using this setup (I thought it would insulate the specimen too much from the conducting stub). I'm now looking for a better type of paper to stick to the stub, which doesn't fray as easily after numerous uses. I'd love feedback if anyone else has used similarly customised SEM stubs.

I'm also open to prioritising any particular species, for which MV holds the type specimens, that members of the IBA are keen for SEM imaging, so let me know.

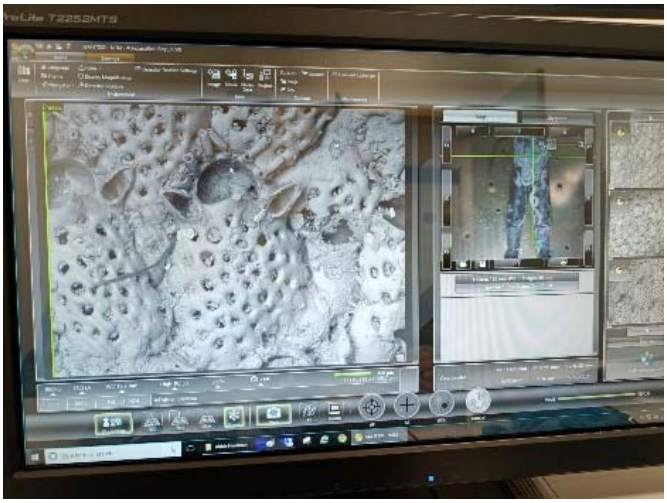
On a different note: having the SEM has finally pushed me to write up my PhD – only two decades late - with better images and revised taxonomy as a monograph. But now I am stuck on the (in)famous *Celleporaria gambierensis* (Tenison Woods), as I'm increasingly convinced that at best it covers several species, and at worst that it is not a valid species (largely due to confusion about authorship and the likely lack of any original material). It may need a dreaded neotype established. To resolve this I feel the need to revise the genus itself, which many people have previously indicated is necessary, but too complicated. If anyone has done some work on this, I'd love to know about it, maybe collaborate on it, as it looks like a major undertaking.

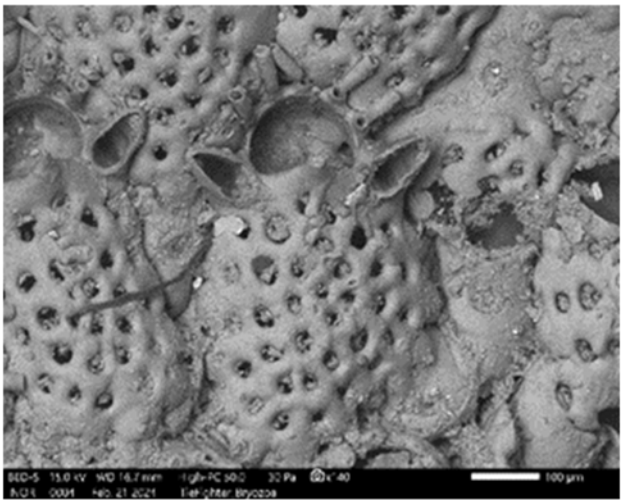
UNITING THE WORLDS OF BRYOZOA AND STAR WARS – MAY THE 4TH BE WITH YOU!

Abbie Herdman

In 1993 Mary Spencer Jones was on the boat FRV Scotia, ran by Marine Scotland, stern trawling for fish to study parasites. The boat cruised around the North Sea and Northeast Atlantic, between the Scottish mainland and Fair Isle. As she sorted the catch, she separated anything that looked interesting for Bryozoa, particularly *Flustra* as despite being a common species, the museum's collection was lacking. It was in one of these sorting sessions she found what she believed to be a toy figure of a diver.

It wasn't until 2023, when a colleague and I were working in the collection, we spotted what we identified as an Imperial Tie Fighter pilot, clearly far far away from the Galactic Empire. Perhaps discarded into the ocean by a disgruntled child due to the figure's lack of arms, it's certainly provided us with entertainment and curiosity!
The figure was taken to the SEM (Scanning Electron Microscope) to see exactly what species were growing on it. In the centre of the figure is a nice colony of *Cribrilina punctata*. Of which it's hard not to see it's rather large avicularia as resembling Yoda's ears.





LARWOOD 2024

Dear IBA friends,

We would like to inform you that the survey for the Larwood Symposium that will be held in the Marine Environmental Research Centre ENEA in Lerici (La Spezia) on 19th–20th September 2024 gave the following results:

25 people expressed their interest in attending the meeting
22 people would like to give a talk
3 people would like to present a poster
23 people are interested in the field trip (fossil 'hunting')

Thank you very much for your responses, and for those who will join the Italian Larwood, please see the next steps and deadlines below:

Registration- by 19th June 2024

Please, submit your registration to this link:
N.B. We've noticed that during the previous participation survey, some of you encountered difficulties accessing the link due to your institution's server blocking system. If you experience any issues with the link, please ensure to check this first.

https://docs.google.com/forms/d/e/1FAIpQLSd1_lIOgObxDehv1tGuvdeckuCLU0A2vRU6sFzaIfPu4FaHPw/viewform?usp=sf_link

Abstract submission-by 19th July 2024
Please submit your abstract (please, use the provided template, attached to the newsletter email) at:
larwoodsymposium2024@gmail.com

Registration fee will be communicated in July and it will include: 2 coffee break and 1 lunch (catering).
Social dinner and the field trip (coach) costs will be communicated in August and will be paid by each participant.

S. Teresa Marine Environment Research Centre

Address:
Via Santa Teresa, 1
Località Pozzuolo di Lerici
19032 Lerici (La Spezia)

For arrival/departure by plane:
Pisa Airport (40' minutes by train to La Spezia or Sarzana)
Genoa Airport (1.30 h by train to La Spezia or Sarzana)

Closest villages/city to look for an accommodation:
San Terenzo: 20' walking, 13' by bus
Lerici: 45' walking, 20' by bus
Sarzana: 30' by bus
La Spezia: 30' by bus

Buses: https://www.atcesercizio.it/en/

Focusing on research and development of methodologies and tools for the protection and sustainable management of the marine environment, including the use of bioindicators to detect environmental quality and effects of climate change. The ongoing research activity in the area began in the early 1960s and intensified starting in the 1970s. It produced a series of long-term ecological data, included in the Long Term Ecological Research Network (LTER: https://lternet.edu). Currently, historical data series of chemical-physical variables are available that contributed to developing a better understanding of the oceanographic circulation and anomalies in physical and biological processes in this area of the Eastern Ligurian Sea. For over 60 years, the Centre was involved in a large number of collaborations and national and international projects all addressing the marine environment. The Centre, part of EMBRC infrastructure (https://embrc.it/en/home-english/), has a strategic position due to its proximity to areas recognized as UNESCO world heritage sites for their environmental and landscape value (Porto Venere Regional Natural Park and Cinque Terre Marine Protected Area and National Park). It is also located next to areas with an industrial footprint and a strong environmental impact (port of La Spezia, ENEL power station, shipbuilding, sport/commercial fishing and shellfish farming) and constitutes an important natural laboratory for the studies of direct and indirect anthropic impacts on coastal marine ecosystems. In 2021, Smart Bay Santa Teresa (SBST) (https://smartbaysteresa.com/en/) – a cooperation platform involving three main research institutes cohabiting in the ENEA S. Teresa Research Centre, ENEA, CNR and INGV, Lerici Municipality, Scuola di Mare and Mollusc Farming Cooperatives - has been established. Through projects and monitoring programs, developed in cooperation with national and international institutes and SMEs, SBST aims to test sustainable strategies for marine coastal resources based on sustainability and blue economy, in agreement with the objectives of 2030 UNESCO Agenda and the Italian national programs for ecological transition, digitalization and economic resilience. SBST underwater observatory comprises 6 stations for physico chemical and biological monitoring that are included in EU research infrastructures and networks (EMBRC, eLter- Site of the Eastern Ligurian Sea - and Jerico) and SBST research projects are included in three Italian National Program for Research and Resilience (PNRR EMBRC-UP, RAISE, ITINERIS).

20TH IBA CONFERENCE JAPAN 2025 1ST NOTICE

DATE & SCHEDULE

We are planning our next IBA meeting around the end of August 2025. Currently, we are considering either from 18th to 22nd or from 25th to 29th. Mid-conference excursion is scheduled for Wednesday.

VENUE & LOCATION

The meeting will be held in Shirokane Campus of Kitasato Univeristy.

Kitasato University
Shirokane Campus
5-9-1, Shirokane, Minato-ku, Tokyo 108-8641, Japan
https://www.kitasato-u.ac.jp/en/campuses/shirokane.html

The campus is located in the centre of Tokyo and very close to the Haneda Airport. There are many hotels around the nearest stations.

There are also several tourist facilities such as botanical gardens, art museum, parasitological museum, aquarium, etc. around the campus.

ACCESS

The campus is accessible from the following nearest stations.

Shibuya Sta. (15 minutes by bus)
Hiro-o Sta. (10 minutes by walk)
Yebisu Sta. (15 minutes by walk)
Tamachi Sta. (15 minutes by bus)
Shirokane Takanawa Sta. (10 minutes by walk)

From Haneda Airport, it takes 40 mines by train or bus to the nearest stations.
From Narita Airport, it takes 1.5 hours by train or 1 hour and 50 minutes by bus to the nearest stations.
There are also airport limousine (shuttle bus) from both airports to Shinagawa Sta. or Shibuya Sta. You can take the JR or subway to the nearest stations from the either stations.

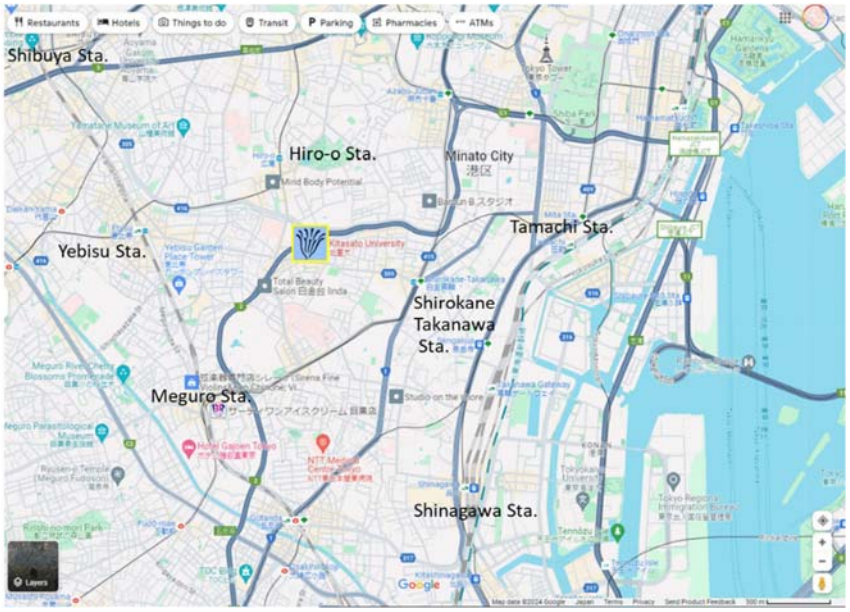
REGISTRATION FEE

The conference fee is yet to be determined, but it will change depend on the number of participants. Currently, the fee is estimated to be between ¥25,000 ($167USD or €156) and ¥35,000 ($233USD or €220) including conference volume, lunches and coffees, conference dinner and mid-conference excursion.

Masato Hirose

mhirose64@gmail.com


Shirokane
Kitasato University
北里大学 白金キャンパス
4.1 (118)
Private university
Kitasato Univ.
Shirokane Campus
NARITA
Airport
HANEDA
Airport
≈10 km
HANEDA
Airport


Shibuya Sta.
Hiro-o Sta.
Minato City
Yebisu Sta.
Tamachi Sta.
Shirokane
Takanawa
Sta.
Meguro Sta.
Shinagawa Sta.

BRYOZOANS IN THE NEWS

Seabourne Rust - We had such a fabulous fourth trip (over ten years!) to the Whanganui Basin for fieldwork on Pleistocene bryozoans in February, even managed to get some media coverage. Possibly the first time a picture of *Microporella* has appeared on the front page of a New Zealand newspaper!
Thanks to Dennis Gordon, Paul Taylor, Lee Hsiang, Diane, Kjetil, Meghan and all the team from Oslo!

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Hiwa-i-te-Rangi

Whanganui Chronicle

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Cliffs tell time

Fossil hunters excited by window into past at unique location

Eva de Jong

A team of international scientists are in Whanganui this week to unearth unique fossils along the coastline.

Since 2014, the group has travelled to Whanganui four times to collect samples of bryozoa – tiny animals growing on shells – to send overseas for further examination in laboratories.

University of Oslo Natural History Museum evolutionary biologist/palaeontologist Lee Hsiang Liow said the cliffs between Castlecliff Beach and Kai Iwi contained a fantastic fossil record.

"An analogy is that if you're looking at records somewhere else, it's like you're reading the first page and last page then trying to work out what's happened in between – but here you've got the whole book."

Liow said the fossils revealed evolutionary processes.

"We have these little critters fighting each other for space, and we actually can see that as fossilised activity."

New Zealand palaeontologist Seabourne Rust said they had found new species of different animals in the cliffs, and some were known only from this area. "That's pretty exciting."

A lot of the shell fossils being collected can fit in the palm of a person's hand.

Rust said layers of ash from volcanoes in the central North Island, such as Taranaki and Taupō, covered this area at a number of key points in time, which made it easier to date the fossils.

National Institute of Water and Atmospheric Research (Niwa) bryozoologist Dennis Gordon said people most commonly encountered bryozoa fouling on the bottom of vessels, but some of these fossils were more than two million years old.

The fact they lived in a colony, like

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An example of bryozoa as seen under a microscope.

The team of international scientists at Castlecliff Beach.

Photo / Bevan Conley

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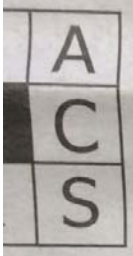

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The MG brand, which celebrates its centenary this year, was started by British car designer Cecil Kimber.

Since 2007, it has been owned by

The dealership will feature only new vehicles.

Baylis said new MGs started from $19,500, with a top-of-the-line electric car priced at $65,000. Despite having

look, there will just be cars instead," Baylis said.

"Who knows – maybe if it doesn't work out, we can start selling pizzas again."

Fossil hunters get window into past

continued from A1

coral, was very important, Gordon said.

"The fact that they're colonial and modular means you get combinations of different characters that can be measured more than you can in a single organism like a snail."

He said bryozoa could be found everywhere in New Zealand, in places such as the Waitomo Caves and the Chatham Islands.

Liow said because the cliffs were made up of fossils that would break off and fall into the ocean, the information would just disappear unless it was recorded.

"It's tiring to travel across the world to do this, but because it's so great, we just have to come back here all the time."

Rust said they had observed sea level changes that corresponded to glaciation throughout the past three million years.

Some of their research could be used to examine the impact of sea level changes over time and to explore what animals might disappear or move into areas as a result.

"The past is really key to the future, in a way."

Oslo Natural History Museum's Meghan Balk said people admiring the beach might not have realised they could see fossils when looking back at the cliffs.

"You're looking through time as you look at the cliffs."

To collect the fossils, the group uses brushes, pen knives and occasionally hammers and chisels to excavate the soft rock of the cliffs.

Rust said the cliffs were very steep and dangerous and members of the public should be careful when looking for fossils.

It was also important to record exactly where a fossil was found, by marking down its co-ordinates on a map or taking a photograph.

Kerbsid

Mike Tweed

Crates have been ordered and vehicles are being assembled for Whanganui's kerbside recycling service.

It will begin on July 1 but the contractor is yet to be revealed.

Aiding the rollout process is $1.25 million in funding from the Ministry for the Environment's contestable waste levy fund, which Whanganui District Council has used to purchase 53,100 50-litre crates for collections.

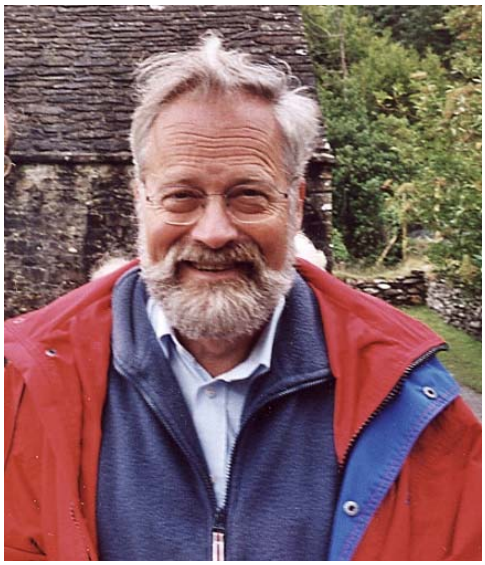
Urban households will receive three crates – for plastic and cans, paper and cardboard, and glass bottles and jars.

Council waste adviser Stuart Hylton told the operations and performance committee the ministry funding had meant an adjustment to the contract with the company providing the new service.

The contract would be signed within one to two weeks, he said.

In a statement to the *Chronicle*, the council said the three-crate system had been chosen to minimise con

IN MEMORIAM



Claus at the Dublin IBA 2001 (photo J-G Harmelin) (photo A Ostrovsky)

CLAUS NIELSEN

I first met Claus Nielsen in the early 1960's while we were both students at University of Copenhagen – he as an advanced student instructor in zoology and I as one of the instructed. Later in my studies in palaeontology, I was an eager attendant also in zoology seminars, where I got exposed to Claus life-long interest in phylogeny and the position of bryozoans in the greater schemes of things. Very educational discussions to listen to - and very entertaining, indeed, as Claus was a magnificent debater, a skill-set many older members of the IBA will remember well.

After I graduated in my studies of bryozoans, my encounters with Claus were mainly reduced to the regular IBA gatherings, even though we were both employed at University of Copenhagen. Notwithstanding, at these occasions we had many good discussions about bryozoans and the changes in teaching philosophies taking place in those years. At the IBA meeting in Woods Hole, 1977, I remember us in a deep discussion sitting in the back seat of a car during an excursion to up-state New York, where Rich Boardman suddenly turned in his driver seat and said "I never realized that you guys actually have another language!".

At the IBA meeting in Wellington, 1995, during the magnificent excursion around the South Island, we united in testing as many sea-food dishes as possible – while continuing our discussions in Danish of course – and at a very 'provincial' establishment somewhere in the deep south, we combined our skills in another area. As it turned out, when we ordered two expressos, the very young waitress told us that this was unfortunately not possible, since she did not know how to operate the big shining expresso machine prominently exposed just behind her. By our combined charm and persistence, we eventually convinced the young lady that we could just do it ourselves, which we did, while instructing her carefully.

Also scientifically this particular excursion had some rather unexpected outcome. The very narrow and very steep Southern Alps are absolutely stunning in their own rights, but while crossing them and following the lowlands west of the range we saw and discussed so many things in relation to geology – and plate movements in particular – that we ended up discussing phylogeny in relation to plate tectonics for several days. And as a result of these discussions, we ended up organizing a two-day symposium at the Geological Museum in Copenhagen – invited speakers only – bringing hard-core Hennig'ian biologists and hard-core plate-tectonic geophysicists head-to-head. Quite timely – and *very* interesting, indeed.

Eckart Håkansson

Frankly, death of Claus was shocking to me and my family….

We were close friends for many years, since 1996 when he became my scientific mentor during the post-doc Programme “Nordic Invitation” in Copenhagen. It didn’t work in 1995, by the way. I sent Claus a letter (starting it with Dear Mr President), asking to be my host, but he refused. He was a Director of the Zoological Institute (and President of the IBA) those times, and possibly was too busy to invite me.

Next was 1997-1998 when I managed to obtain the post-doctoral fellowship of the Danish Research Council for the 2nd time and was able to take my family to Denmark. Claus and people from his department made our stay unforgettable. We visited his house few times and he beautifully cooked for us and played with little Nikita, my son… I must admit, this post-doc was crucial for my family at the early stages of our life.

He visited Russia at least two times afterwards, being a winner of the Kowalevski Medal…
We shared rooms in the hotels during the IBA conferences and field trips, and he was always a very nice room-mate.

Claus was a great expert in paintings and classical music, he enjoyed his life often traveling to his favorite southern France…

As to the science, we mostly discussed things related to the bryozoan reproduction that he studied in his early days in the USA. He was happy that I follow the main lines of his studies And he was very helpful – searching for old specimens, rare literature, etc… Just 2 years ago he was an opponent during the PhD defense of my pre-doc Uliana Nekliudova….

Claus always smiled, and everyone knew this habit. Anytime when I visited his room, he met me with his smile. Always friendly, always busy…

Andrey Ostrovsky (photos below)

Photos from Hans Arne Nakrem at the 2004 IBA meeting in Chile

MIKE TOMA

I remember Mike Toma very well when he attended our post-conference trip to Maastricht, the Eifelian Mountains and - finally ending in Messel and Frankfurt. Mike indeed was very enthusiastic about bryozoans and our joined fields of interest. Unfortunately, however, he did not feel comfortable during the field trip because of his reduced physical condition. I felt very sorry about it, especially, since I could not take care of him as he would have been needed. But Helena Fortunate looked after him.

Priska Schaefer

Recent Publications

The following list includes bryozoan related works either published since the previous issue of the *IBA Bulletin* as sent in to the editor. As always, members are encouraged to support future compilations by continuing to send complete citations to the IBA secretary at any time. Accuracy of your citation is assured if sent in bibliographic format, if re-drafting is required by the editor accuracy is not guaranteed! Reprints will be gratefully received by the IBA archivist, Mary Spencer Jones.

Bogdanov E.A., Vishnyakov A.E., Kotenko O.N., Grischenko A.V., Letarov A.V. & Ostrovsky A.N. (2023) Seasonal dynamics of a complex cheilostome bryozoan symbiosis: vertical transfer challenged. Scientific Reports 13: 375. DOI: 10.1038/s41598-022-26251-6

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Hakansson E., O'Dea A., Rosso A. 2023. Lunulite bryozoan biogeography – a convergent global success with a distinct Western Australian twist. Journal of the Royal Society of Western Australia, 106: 25-44.

Kotenko O.N. & Ostrovsky A.N. (2023) Unravelling the evolution of bryozoan larvae. Paleontological Journal 57(11): 1306-1318. https://doi.org/10.1134/S0031030123110072

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Rosso A. & Di Martino E. 2023. Capturing the moment: a snapshot of Mediterranean bryozoan diversity in the early 2023. Mediterranean Marine Science. 24(2): 426–445. https://doi.org/10.12681/mms.34329

Wilson, M.A., Buttler, C.J. and Vinn, O. 2024. Traces of missing encrusters: borings reveal sclerobiont taphonomy in the Upper Ordovician (Katian) of the Cincinnati region, USA. Historical Biology (in press). https://doi.org/10.1080/08912963.2024.2312402