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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 – Hello, my name is Nothando Duma, I am 23 years old, and I am from the Mpumalanga province of South Africa. I have completed my Bachelor of Science degree and BSc Honours degree both in Marine Biology at the University of KwaZulu-Natal in 2019 and 2020 respectively. Currently I am doing a 1-year coursework Masters in Applied Ocean Sciences at the University of Cape Town. For my project I am working at the Iziko South African Museum, under the supervision of Drs Melissa Boonzaaier-Davids (Assistant Curator for Marine Invertebrates) and Paul Taylor (Researcher, Natural History Museum, London), with bryozoan fossils that were collected from Needs Camp, Eastern Cape. These fossil deposits with various marine invertebrate taxa are dated from the Late Cretaceous (100.5–66 Ma) era. In South Africa, we have a rich fossil record, but there are very few studies that described fossil bryozoans from South Africa. In this study, I will be examining and identifying the fossil bryozoans from Needs Camp – these collections stored at the Museum have not been investigated before, except for separating ostracods decades ago. Along with identifying the bryozoans, we will compile existing knowledge or records of Needs Camp bryozoans. Our aim is to fill in some of the biodiversity and knowledge gaps in the South African fossil record and have a better understanding of the palaeoenvironment.



NEWS FROM THE MEMBERSHIP

Anatoli Vinogradov - Abstracts of publications are published in a NEW volume of the "Combined Illustrated catalog of materials of international and All-Russian exhibitions and presentations of scientific, educational and methodical publications and educational technologies". - Moscow: Publishing House of the Academy of Natural Sciences, 2022. Volume 13. ISBN978-5-91327-671-1 The catalog is an ongoing multi-volume publication. It is presented at the expositions of the largest Russian and international exhibitions, registered in the Library. The CATALOG has been assigned an international standard book number (ISBN978-5-91327-671-1). All materials of scientific abstracts will be presented in the Book Chamber and in the leading libraries of the Russian Federation (according to the law of the Russian Federation).



Jaap Eyzenga - In an erratic boulder of Öjlemyr chert I found a bryozo and would like to know which genus this is.



Length of specimen shown in the image with three zooecia (lower left) is 4mm. The flanks are striated in the length while the backside is striated across. There are 12 small openings in an oval which all have a channel leading to a ring in the center. Mostly zooecia of these types I find have large oval openings. Öjlemyr chert is a Late Ordovician limestone dated F1cy Pirgu - F2a Porkuni age (Regional stage), thus upper Katian Global standard. In the Netherlands we find these erratic boulders in sand pits.

(There is a line drawing by Jerzy Dzik of a *Heminematopora*; sp. n. B (Pl. 58 : 7- 8; Text-fig. 8h-k) which has also single row of zooecia on one side. 1994 . Bryozoa of the Mojca Limestone)

Please let me (sjapus@gmail.com) know if you have any idea. Happy New year and merry Christmas to all of you.




Emanuela Di Martino & Arturo Porto - *DEEPBRYO a web app for AI-assisted segmentation of cheilostome bryozoans*, on behalf of all co-authors.

We are pleased to inform the IBA community that the **DeepBryo** app is freely available to use at this address <https://deepbryo.ngrok.io/> (N.B. type the address into your browser if an error message appears clicking directly on the link). If you upload an SEM image of a cheilostome bryozoan, **DeepBryo** will recognize, classify, count and measure colony modules and structures for you. In the pre-print available here <https://biorxiv.org/content/10.1101/2022.11.17.516938v1> you can find the detailed instructions on how to use the web app.

You can also consult the GitHub repository <https://github.com/agporto/DeepBryo> if you want to initiate a local instance of **DeepBryo** (N.B. macOS is not supported yet but it will be soon) and batch-processing your images. We hope that **DeepBryo**, on top of increasing the scale and reproducibility of morphometric characterization of bryozoans, will also increase the use of cheilostome bryozoans as a model system in evolution, ecology and paleobiology.

Please, let us know about your experience with **DeepBryo**. Your feedback will help us to improve the app! E-mail us: Arthur Porto agporto@gmail.com; Emanuela Di Martino e.d.martino@nhm.uio.no



DeepBryo

Object Class

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all

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☒ Hide Bounding Box

☐ Add structure ID

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Confidence

0.00 0.50 1.00

Filter objects

☐ Distance from image border (in pixels)

☐ Automated filtering

Strictness

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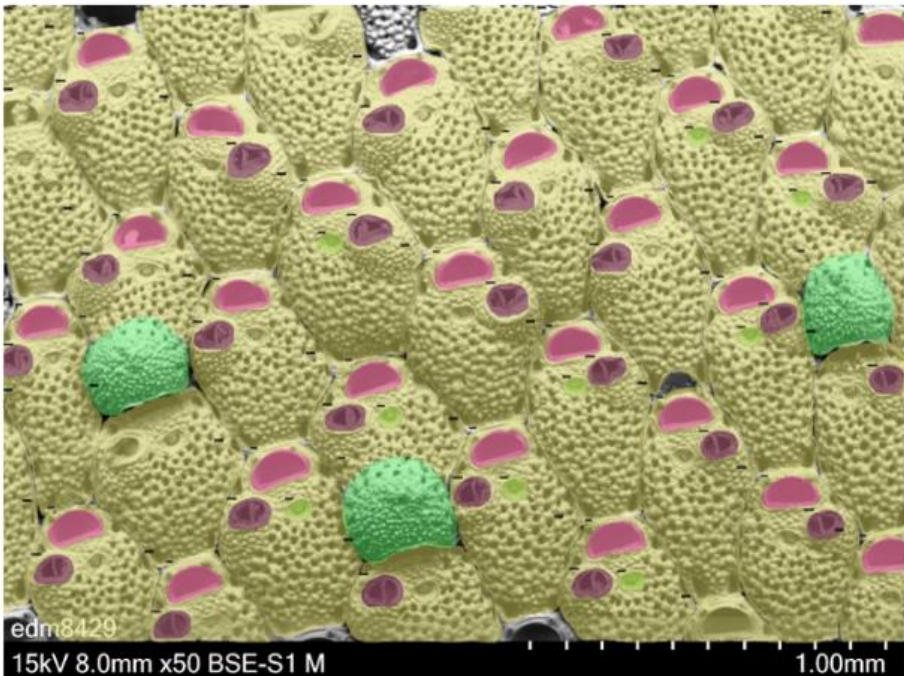
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edm8429_scaled.tif 1.2MB



edm8429
15kV 8.0mm x50 BSE-S1 M 1.00mm

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1	edm8429_scaled.tif	autozoid	185.4675	188.9209	24,771.0000	609.7300	0.9839	0.8373	0.9305	184.4557	171.6325
2	edm8429_scaled.tif	autozoid	186.1891	170.8253	23,173.0000	597.7300	0.9822	0.8150	0.9191	182.3572	167.5997
3	edm8429_scaled.tif	autozoid	192.5501	269.3466	36,894.0000	765.4112	0.9712	0.7911	0.7167	262.3732	188.0434
4	edm8429_scaled.tif	autozoid	172.4815	260.8711	30,064.0000	701.4701	0.9825	0.7678	0.6356	250.7686	159.3788
5	edm8429_scaled.tif	autozoid	157.8283	293.1787	31,129.5000	760.0559	0.9423	0.6772	0.5280	286.0000	151.0000
6	edm8429_scaled.tif	autozoid	213.5627	200.9612	23,292.0000	678.3229	0.8494	0.6361	0.8224	210.2038	172.8682
7	edm8429_scaled.tif	autozoid	211.3683	139.4419	21,343.0000	602.3330	0.9729	0.7393	0.6225	208.1503	129.5840
8	edm8429_scaled.tif	autozoid	203.8048	243.3835	33,184.0000	725.2102	0.9635	0.7929	0.8826	226.6000	200.0000

Deep-Bryo interface

Consuelo Sendino - As coordinator of the *Bryozoa Identification Tool for Quaternary and Recent Mediterranean and North Atlantic Bryozoans*, travelled to Israel to attend the 52nd Consortium of the European Taxonomic Facilities (CETAF) General Assembly, held on 23rd and 24th Nov 2022, where she met **Noga Sokolover**, collaborator of the project. At this stage most of countries have digitised all their bryozoans with the associated coordinates. Some of the species are still needing SEM images. In the case of specimens from Israel, some are unidentified, and Consuelo and Israel colleagues will ask you for help with the identification.



This is the first time that Quaternary and Recent bryozoan taxa are georeferenced on a world map and images of the different taxa will be displayed. The institutions that form part of this project are those below:

NHM, Natural History Museum, London.
MNHN, Museum National d'Histoire Naturelle, Paris.
MNCN, Museo Nacional de Ciencias Naturales, Madrid.
NHMW, Naturhistorisches Museum, Wien.
Naturkunde: Museum fur Naturkunde, Berlin.
NNHC-HUJI, The National Natural History Collections, The Hebrew University of Jerusalem.

Consuelo has left her position of Senior Curator at the Natural History Museum (NHM), London, to become Digitisation and Collection Coordination Manager at the Madrid Museum (National Museum of Natural Sciences), but still linked to the NHM as a Scientific Associate.

Andrej Ernst - Hamburg: I am expanding my research on Palaeozoic bryozoans with new projects. At the moment we study bryozoans from the Silurian reefs of South China, together with colleagues from Nanjing. Next year I will start a new DFG project aiming diversity dynamics and evolutionary patterns of Palaeostomata.



PHOTOS FROM PREVIOUS IBA AND LARWOOD MEETINGS

<https://folk.universitetetioslo.no/hanakrem/iba.html>

Hans Arne Nakrem, Natural History Museum, University of Oslo, Norway.

Instead of letting my photos reside on my hard drives / albums I have over the years scanned old ones, and added them to my bryozoan web page. It might be of interest for they “younger” bryozoologists to see that the “olders” actually were younger all those years ago. And the seniors might find joy in browsing though pictures of days long gone.

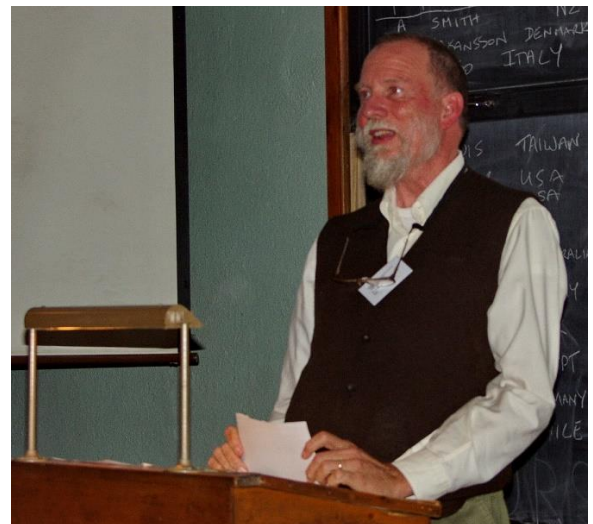
I attended my first IBA in 1986, in Bellingham, where I knew almost no other bryozoologists. Thanks to Paul Taylor I joined this meeting, and I immediately met friends of the IBA who during my career have turned out to be closer and closer friends. In Bellingham and at the post conference excursion I met e.g. Ernie, Eckart, Roger, Caroline – all of whom turned out to be colleagues to discuss Paleozoic bryozoans with. Paul supervised me through some exciting days in Svalbard the year before – perhaps an experience he looks back on with excitement and anxiety? Subsequent years we all had inspiring meetings and fun and exciting field excursions. I hope that the photos can be of interest for you. There is of course a certain bias in my photos. I was accompanied by my wife Eva and son Magnus on many conferences, and they are certainly present in many of those. There are possibilities to download sort of high-resolution versions of them all, and you are free to use them as you wish.



1986 Bellingham IBA - Field trip at Belmont



1992 IBA – Field trip at Hook's Head



2001 IBA

Top left, Alan Cheetham and Eckart Håkansson.

Top right – Fred McKinney

Bottom – unknown person, Mark Erickson, June Ross, Ernie Gilmour.



2004 IBA – Chile



2004 IBA Chile

Eds note, this is only some of the photos available, see the website for more.

AWARDS

A.V.VINOGRADOV AND E.Y.VINOGRADOVA MEDALS FOR LOYALTY TO THE TRADITIONS OF NATIONAL EDUCATION

At the 49th International Exhibition-presentation of scientific, technical, educational, methodical and literary and artistic publications, held in Moscow in 2022, the participants of the exhibition A.V.Vinogradov and E.Y.Vinogradova became laureates of the exhibition and were awarded (each) the award of the Russian Academy of Natural Sciences – "Medal for loyalty to the traditions of National Education". The books presented by the authors were also awarded with this award – "Medal for loyalty to the traditions of national education".

English translation of book titles:

- Vinogradov A.V. Phylactolaemata and Bryozoa of the Eurasia continental water bodies. – Saarbrücken, Lambert Academic Publishing (LAP), 2011, т.1. Faunistics, ecology, zoogeography and evolution of the Eurasia continental water bodies Phylactolaemata and Bryozoa: 350 p. The book is dedicated to bryozoologist G.A.Kluge. In Russian.
- Vinogradov A.V. Phylactolaemata and Bryozoa. Bryozoology of the Eurasia continental water bodies: 350 p. Phylactolaemata and Bryozoa of the Eurasia continental water bodies. – Saarbrücken, Lambert Academic Publishing (LAP), 2011, т.2. Systematics of the Eurasia continental water bodies Phylactolaemata and Bryozoa: 404 p. The book is dedicated to bryozoologist G.A.Kluge. In Russian.
- Vinogradov A.V. Lost worlds and their inhabitants. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2011, Biological Research, Vol. 1. From legend to reality. Volga region: 692 p. The book is dedicated to the main teachers, biologists L.P.Molodova, G.B.Zevina, I.P.Morozova, Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Lost worlds and their inhabitants. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2011, vol. 2. Mysterious inhabitants of Eurasia: 593 p. The book is dedicated to the main teachers, biologists L.P.Molodova, G.B.Zevina, I.P.Morozova, Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Lost worlds and their inhabitants. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2011, vol. 3. On the way to discoveries in zoology, botany, anthropology: 616 p. The book is dedicated to the main teachers, biologists L.P.Molodova, G.B.Zevina, I.P.Morozova, Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Biogeography of the world continental water bodies, Phylactolaemata and Bryozoa. – Saarbrücken, Lambert Academic Publishing (LAP), 2017, т.1. Biogeography of the Phylactolaemata and Bryozoa: 700 p. The book is dedicated to bryozoologist G.G.Abricosov. In Russian.
- Vinogradov A.V. Biogeography of the world continental water bodies, Phylactolaemata and Bryozoa. – Saarbrücken, Lambert Academic Publishing (LAP), 2018, т.2. Biological diversity of the Phylactolaemata and Bryozoa: 508 p. The book is dedicated to bryozoologist G.G.Abricosov. In Russian.
- Vinogradov A.V. Biogeography of the continental water bodies: regional analysis. – Saarbrücken, Lambert Academic Publishing (LAP), 2018, т.1. Palearctic Region, Euro-Siberian Subregion: 700 p. The book is dedicated to zoologist and geographer Ph.D Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Biogeography of the continental water bodies: regional analysis. – Saarbrücken, Lambert Academic Publishing (LAP), 2018, т.2. Europe (Ochrid), Asia, Africa, America, Australia, Oceania, Antarctica: 700 p. The book is dedicated to zoologist and geographer Ph.D Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Biogeography of the continental water bodies: regional analysis. – Saarbrücken, Lambert Academic Publishing (LAP), 2018, т.3. Record continental water bodies: 700 p. The book is dedicated to zoologist and geographer Ph.D Ya.I.Starobogatov. In Russian.
- Vinogradov A.V. Biogeography of the continental water bodies: inventory and classification. – Saarbrücken, Lambert Academic Publishing (LAP), 2019, v.1. From Novaya Zemlya to Balkan: 648 p. The book is dedicated to great zoologist and zoogeographer academician Ch.Darwin. In Russian.



- Vinogradov A.V. Biogeography of the continental water bodies: inventory and classification. – Saarbrücken, Lambert Academic Publishing (LAP), 2019, v.2. From Danube to Baikal: 544 p. The book is dedicated to great zoologist and zoogeographer academician Ch.Darwin. In Russian.
- Vinogradov A.V. Biogeography of the continental water bodies: inventory and classification. – Saarbrücken, Lambert Academic Publishing (LAP), 2019, v.3. From Far East to Antarctic: 700 p. The book is dedicated to great zoologist and zoogeographer academician Ch.Darwin. In Russian.
- Vinogradov A.V. The biogeography of land water bodies. Global review. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2020. Vol.1 (688 p.); v.2 (600 p.); v.3 (610 p.); v.4 (688 p.). The book is devoted to biologist and philosopher Ekaterina Yu. Vinogradova. In Russian.
- Vinogradov A.V. Biogeography of underground water bodies. Catalogization and classification. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2020: 490 p. The book is dedicated to the zoologist and speleologist Ya.A.Birshtein. In Russian. ISBN: 978-620-3-19486-9.
- Vinogradov A.V., Rigina E.Yu. (Vinogradova E.Yu.). Sokolye Gory (Sokolye mountains, Cold mountains). A unique natural refugium on the Middle Volga. – Deutschland, Saarbrücken, Palmarium Academic Publishing, 2013: 180 p., 150 ill. The book is dedicated to the founders of the Samara Public Academy of Humanities and Aesthetics, philosopher E.F.Molevich and musicologist G.M.Nikitina in connection with the 15th anniversary of the Academy. In Russian.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). Modern social ecology. Academic and social activities. – Deutschland, Saarbrücken, Lambert Academic Publishing, 2017: 330 p. The book is dedicated to the philosopher T.N.Sosnina in connection with the 20th anniversary of the Samara branch of the Russian Ecological Academy.
- Vinogradov A.V., Krzhizhevsky M.V., Vinogradova E.Yu. (Rigina E.Yu.). Pagan culture of the Volga-Ural interfluvium. Elements of paganism of the indigenous peoples of the Samara region. – Deutschland, Saarbrücken, Lambert Academic Publishing, 2016: 388 p. The book is dedicated to the 25th anniversary of the Samara branch of the University of the Russian Academy of Education.
- Zueva O.V., Vinogradov A.V. The potential of ecological tourism in Russia. Ecological and tourism management in favor of the Russian natural and cultural heritage. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 536 p. The book is dedicated to academician P.S. Pallas.
- Vinogradova E.Yu. (Rigina E.Yu.). Ecological ethics in the light of philosophy. Analysis of the phenomenon of environmental ethics from the point of view of philosophy. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2011: 137 p. Drawings by the author.
- Vinogradova E.Yu. (Rigina E.Yu.). Concepts of modern natural science. Tests for the humanities of universities. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2013: 140 p.
- Vinogradova E.Yu. (Rigina E.Yu.). Concepts of modern natural science in tables and diagrams. Educational and methodical manual. – Samara, Samara State Technical University, 2015: 130 p.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). Social aspects of humanitarian and applied ecology. Proceedings of the Samara regional branch of the Russian Ecological Academy, v.2, part 1. Collective monograph, Saarbrücken - Samara - Moscow. Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 700 pp.; editors-compilers and authors Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). In Russian.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). Social aspects of humanitarian and applied ecology. Proceedings of the Samara regional branch of the Russian Ecological Academy, v.2, part 2, v.1. Collective monograph. Saarbrücken - Samara - Moscow. Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 368 pp.; editors-compilers and authors Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). In Russian.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). Social aspects of humanitarian and applied ecology. Proceedings of the Samara regional branch of the Russian Ecological Academy, v.2, part 2, v.2. Collective monograph. Saarbrücken - Samara - Moscow. Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 368 pp.; editors-compilers and authors Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). In Russian.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). The potential of ecological ethics and aesthetics. Proceedings of the Samara regional branch of the Russian Ecological Academy, v.3, part 1. Collective monograph dedicated to the 15th anniversary of the Samara regional branch of the Russian Ecological Academy. Saarbrücken - Samara - Moscow. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 700 pp.; editors-compilers and authors Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). In Russian.
- Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). The potential of ecological ethics and aesthetics. Proceedings of the Samara regional branch of the Russian Ecological Academy, v.3, part 2. Collective monograph dedicated to the 15th anniversary of the Samara regional branch of the Russian Ecological Academy. Saarbrücken - Samara - Moscow. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 700 pp.; editors-compilers and authors Vinogradov A.V., Vinogradova E.Yu. (Rigina E.Yu.). In Russian.

A.V. Vinogradov, E.Yu. Vinogradova (Samara, Russia)

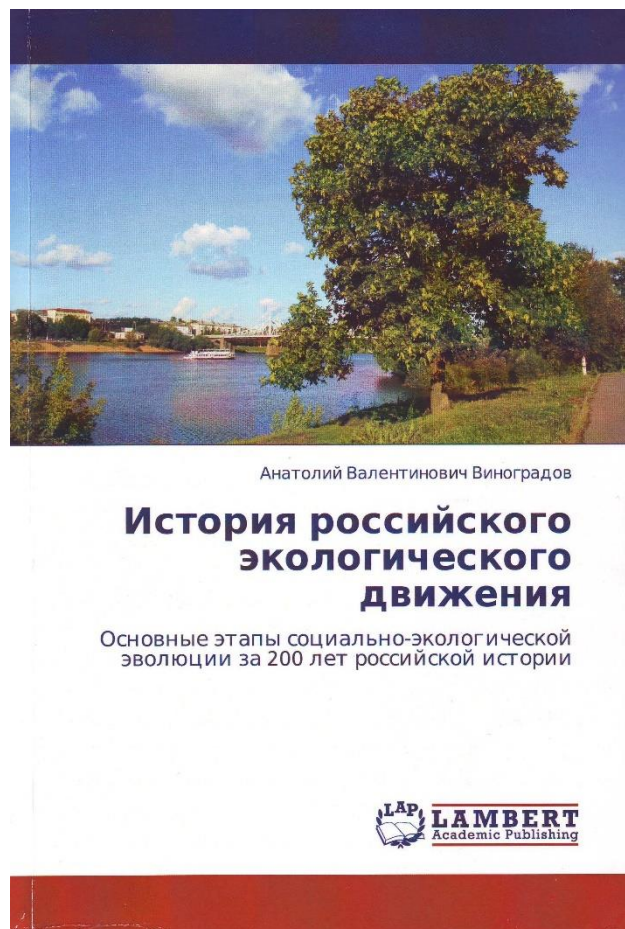
It is also the tenth anniversary of the monograph by A.V. Vinogradov "History of the Russian ecological movement. The main stages of socio-ecological evolution over 200 years of Russian history"

Vinogradov A.V. History of the Russian ecological movement. The main stages of socio-ecological evolution over 200 years of Russian history. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 672 p. The book is dedicated to the biologist F.R.Shtilmark. In Russian [Виноградов А.В. История российского экологического движения. Основные этапы социально-экологической эволюции за 200 лет российской истории. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2012: 672 с. Книга посвящена биологу Ф.Р.Штильмарку].

On the first page of the cover: Russia, Upper Volga.

Ekaterina Yu. Vinogradova, biologist, philosopher (Samara, Russia)

The book offered to readers, which turned 10 years old in 2022, is not the only work of A.V.Vinogradov. He has a record number of publications – more than 1,5 thousand, including many journalistic and popular science articles and notes, dozens of monographs. This monograph is devoted to the public ecological movement, a social phenomenon with which the author has associated his whole life. It is the logical outcome of his social, scientific and pedagogical activities.



UPCOMING MEETINGS

PROPOSAL FOR LARWOOD MEETING 2023 BARCELONA

We would like to offer Barcelona as the venue for the next Larwood meeting in 2023. The meeting would be held at Institut de Ciències del Mar, in Barcelona, with a large assembly hall and plenty of facilities, and by the sea.

We know that Larwood meetings typically include a field trip to look up for fossils, but it is logistically complicated for our institution to organize one, plus we have no much fossil knowledge ourselves.....that's why we thought we could include instead a thematic city tour especially designed for bryozoologists ;) We could also organize a geological fieldtrip if there is enough interest by the attendants and an expert who could help us to define the locations.

We suggest two dates, 21st-23rd June 2023, or 27th-29th June 2023, but we are flexible if these dates are not convenient.

Please let us know if you would fancy coming to Barcelona next year,

Please contact Blanca at bfiguerola@gmail.com

AUSTRALARWOOD XI: ADVENTURES IN SOUTHERN HEMISPHERE BRYOZOLOGY

Our somewhat-annual southern bryozoology meeting -- in person this year!

In which we talk, eat, laugh and chatter with each other about bryozoans, science, and life, while we visit, collect, examine, and discuss local bryozoans, wine, and scenery.

12-14 February 2023

Portobello, Otago, Aotearoa New Zealand

Bryozoans abound! Living bryozoans of all shapes and sizes thrive on the Otago shelf, while long-dead bryozoans dominate our Tertiary North Otago limestones. We'll be centred on the Otago Peninsula, outside Dunedin, a small likeable city on South Island, Aotearoa New Zealand.

Programme

Day	Daytime activity	Dining
Sunday 12 Feb	Arrival Afternoon walking tour	Welcoming wine-tasting Dinner at St Clair
Monday 13 Feb	Bus to Portobello Marine Lab: talks and posters Examine local living bryozoans. View collections	Packed lunches at PML Conference dinner
Tuesday 14 Feb	Low-key road trip to view North Otago bryozoan fossil localities with sightseeing	Lunch on the road Back in Dunedin for dinner

Fees: Participants will organise their own travel, and find their own accommodation in the city.

Waged adults	\$180 NZD	wine-tasting, buses/transport, full meeting day with teas, lunch & conference dinner, field trip guide and transport
Retired adults or unwaged students	\$130 NZD	wine-tasting, buses/transport, full meeting day with teas, lunch & conference dinner, field trip guide and transport
Accompanying person	\$120 NZD	winetasting, conference dinner, field trip

Can be paid on invoice, by direct deposit, or with credit card.

Stay a while:

We would love for researchers to add value to their trip to southern New Zealand by staying a little longer – we have plenty of material to examine, and a fully-equipped marine research lab. Let us know what you would like!

For further information please contact organiser Abby Smith: abby.smith@otago.ac.nz

11TH INTERNATIONAL CONFERENCE ON MARINE BIOINVASIONS

The Marine Invasions Research Lab at the Smithsonian Environmental Research Center is hosting the 11th International Conference on Marine Bioinvasions at the Columbus Center (home to University of Maryland's Institute of Marine and Environmental Technology) on the beautiful Inner Harbor of Baltimore, Maryland, USA from May 15-19, 2023. After multiple postponements of this conference, we are excited to host this in person gathering of international scientists, stakeholders, and policy makers. Please visit our website for more information at <https://marinebioinvasions.info/> and please share with your colleagues and students the flier below which can also be found here <https://marinebioinvasions.info/outreach>

Thank you, Natasha Gray Hitchcock and Linda McCann, members of the Local Organizing Committee for ICMBXI.

**11th INTERNATIONAL
CONFERENCE ON
MARINE BIOINVASIONS**

Baltimore, Maryland, United States
May 15 – 19, 2023

JOIN US!

The International Conference on Marine Bioinvasions (ICMB) is an international forum where scientists and policy makers from around the world meet to review current challenges in the global management of invasive marine organisms and to facilitate the exchange of ideas and research results among scientists and policy makers from around the world about marine invasive species. Themes include:

- 🦀 Biofouling dynamics: ships, plastics, and management strategies
- 🦀 Climate-driven invasion effects and responses
- 🦀 Socio-ecology and multiple perspectives on invasions
- 🦀 Invasion impacts: ecological interactions, ecosystem services, and economics
- 🦀 Methods for non-native species detection and assessment
- 🦀 Principles, patterns, and contrasts of invasions across ecosystems

Please visit marinebioinvasions.info to submit an abstract or register for the conference.

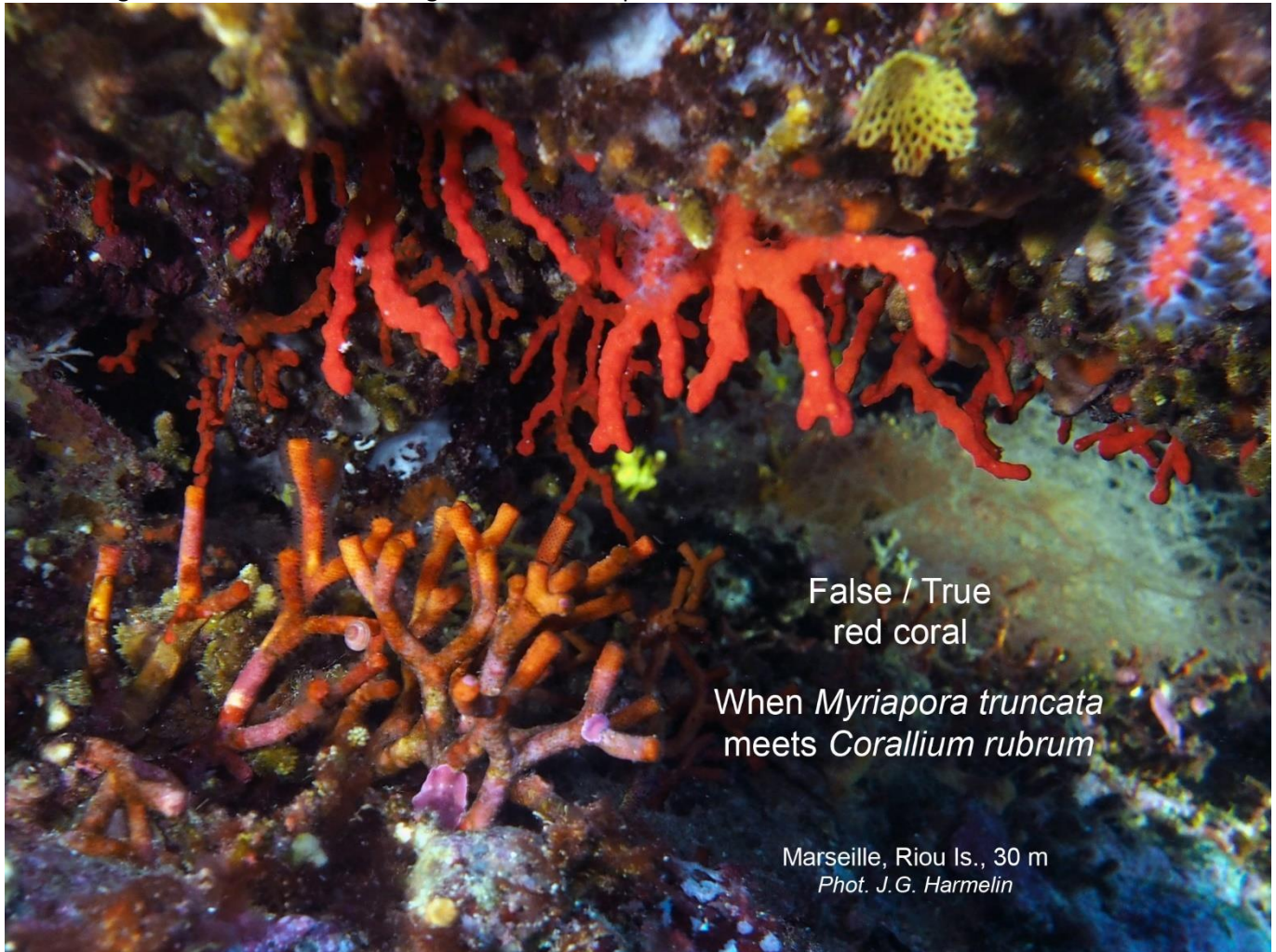
Hosted by:

 **Smithsonian**
Environmental Research Center



PHOTO CORNER

Jean-Georges Harmelin sent in this bright and beautiful photo...



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.

- Ayari R., Taylor P.D., Rosso A. 2022. Preliminary inventory of bryozoans from Coralligenous dark habitats of Cape Negro (Northern Tunisia). Proceedings of the 4th Mediterranean Symposium on the Conservation of the Coralligenous and other calcareous bio-concretions. UNEP SPA/RAC, Genova, 20-21 September 2022, 17-22.
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