



Bulletin

Volume 15 Number 1

April 2019

COUNCIL NEWS	1
NEW MEMBERS	2
NEWS FROM THE MEMBERSHIP	3
ARTICLES	5
BRYOZOAN ART MEETS SCIENCE IN DUNEDIN	5
BRYOZOAN SUMMER SCHOOL EXPERIENCE:.....	6
BOOKS	11
BIOGEOGRAPHY OF THE CONTINENTAL WATER BODIES: INVENTORY AND CLASSIFICATION, 2019	11
MEETINGS AND CONFERENCES	12
18 TH IBA CONFERENCE IN LIBEREC AND PRELIMINARY PROGRAM	12
UPDATE ON PROCEEDINGS OF THE 17TH IBA CONFERENCE, MELBOURNE.....	15
RECENT PUBLICATIONS	16

Copyright © 2019 by the International Bryozoology Association.

Tim Wood, President

Catherine Reid, Secretary

Abigail Smith, Treasurer

ISSN 1941-7918

Comments regarding this Bulletin should be addressed to the IBA Secretary: catherine.reid@canterbury.ac.nz

Copies of the Bulletin are archived at the Natural History Museum London.

Further information at <http://www.bryozoa.net/iba/index.html>



NEW MEMBERS

Sudhanshi Jain - I have a Bachelors in Biotechnology and Molecular Biology from the University of Western Australia and currently pursuing Master's in Biological Science at the National University of Singapore under the supervision and very supportive guidance of Dr. Danwei Huang. After two years of working with Dr. Huang as a research assistant focusing on corals and Symbiodiniaceae, I had the great opportunity to have a conversation with Dr. Lee Hsiang Liow and since then I have been interested in learning more about bryozoans. Well, she got me hooked to the bryozoans!

I will be looking at the molecular aspect of bryozoans in Singapore. A detailed checklist of bryozoans in Singapore by Dr. Dennis Gordon and Dr. Kevin Tilbrook revealed over 100 species of them and this will be a very helpful guide to work along with. The aim of my research is to explore the bryozoan diversity around this region and to use genetics to look at population genetics, diversities and phylogenies. Also, I would like to explore multiple molecular techniques and apply them on the many species available in Singapore waters. Minimal research has been done looking at the genetics of bryozoans in South East Asia, I hope to bring attention to the amazing diversity here. If you have any questions or suggestions, please feel free (and I will be more than happy!) to contact me at jain.sudhanshi@gmail.com

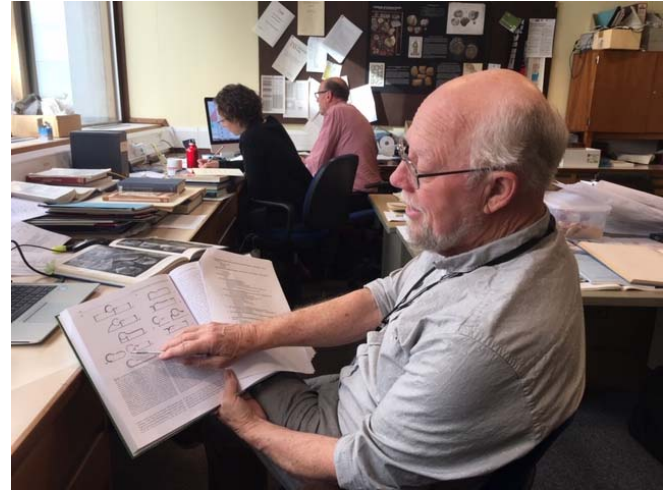


NEWS FROM THE MEMBERSHIP

Emanuela Di Martino – If IBA members have manuscripts on marine bryozoans to submit to *Zootaxa* they should use my new email address: e.d.martino@nhm.uio.no



Andrea Waeschenbach.- We were absolutely delighted when Dennis Gordon and Paul Taylor agreed to spend one month with us lowly molecular creatures to help us construct a morphological matrix of fossil and Recent cheilostomes for our project *Molecules meet Fossils – an integrated approach to studying palaeodiversity*. The four of us spent all of February refining and populating the matrix which currently includes 136 fossil and 179 Recent species. Contrary to common belief, this matrix will not be used to construct a phylogeny of cheilostome bryozoans as such, but will be used to place fossil taxa into our molecular phylogenetic framework to produce a time-calibrated tree. This is the first time that this total-evidence time calibration approach has been applied to bryozoans and we are excited to present our preliminary results at the IBA conference in Liberec. It was immense fun and we felt very privileged to be working alongside Dennis and Paul. We are also pleased to report that Paul, recently retired, has now joined our project as a part-time postdoc 😊.



LEFT - The Masters at work. From left: Paul Taylor, Dennis Gordon. RIGHT - Dennis Gordon consulting the Sexual Reproduction 'Bible' by Andrey Ostrovsky.



LEFT - *Pasythea tulipifera* (collected in Brazil with Leandro Vieira, Ana Carolina Almeida and Joanne Porter), was one of the more unusual taxa that we coded. RIGHT - It must be coffee time! From left: Paul Taylor, Dennis Gordon, Helen Jenkins.



LEFT - German cake and French wine helped the team to survive the trials and tribulations of morphology coding. From left: Andrea Waeschenbach, Paul Taylor, Helen Jenkins, Dennis Gordon. RIGHT - A pub outing with the extended NHM bryozoan family. From left: Helen Jenkins, Beth Okamura, Dennis Gordon, Mary Spencer Jones, Andrea Waeschenbach.



Beth Okamura - The ctenostome cap: A recent pub visit demonstrates that one size appears to fit all bryozoologists present (from left to right: Jon Todd, Helen Jenkins, Mary Spencer Jones, Tim Wood, Andrea Waeschenbach, Beth Okamura). The cap was inspired by images of a peristome-less member of the family Arachnidiidae and was designed and made by the artist Ritva who specialises in felt. The bryozoologists in attendance believe that our IBA president, Tim Wood, certainly has the gravitas to wear it with great dignity. However, this will not become a presidential garment as it was meant to keep Jon's head warm during inclement British weather.



ARTICLES

BRYOZOAN ART MEETS SCIENCE IN DUNEDIN

Abby Smith

Scientists at University of Otago spent several months in 2017-2018 collaborating with artists from around Dunedin and the Otago Polytechnic on themes relating to the oceans and changing marine environment. The resulting artworks and reflections were showcased at the *Art+Oceans* exhibition in Dunedin, July/August 2018. There fabric, wool, metal, glass, paper, plastic paint, and stone were used to illustrate and amplify ideas developed by scientists and artists working together (Rock & McKinlay 2018). Artists and scientists subsequently wrote about the experience in a special issue of *Junctures: The Journal for Thematic Dialogue*.

Since I was involved, then so too were bryozoans! I showed three artists around the gorgeous variations of bryozoans and each responded in their own way. Viv Dwyer made fabulous fabric hangings in litmus-paper colours, stamped with bryozoans in various states of decay. Susan Nunn crocheted and knitted all different colony forms in bright colours, making a wool reef. And Brittany Sue Mason scanned and drew bryozoan colonies and 3D printed them, with the intention of casting them later. Our article "Addicted to Bryozoans" is profusely illustrated with these works (Smith et al., 2018). You can download the pdf from Junctures.org.



Rock, J. & McKinlay, P. 2018. Art-Science Collaboration: blending the boundaries of practice. *Junctures* 19: 8-11.

Smith, A.M., Dwyer, V., Nunn, S., Mason, B.S. 2018. Addicted to Bryozoans. *Junctures* 19: 37-46.

Bryozoans and Ocean Acidification fabric hanging by Viv Dwyer (located in Abby's office, you can't have this one). I hope to be bringing works by these artists to the IBA for sale at the Crafts Sale Table. Bring your money!

BRYOZOAN SUMMER SCHOOL EXPERIENCE:

Vanessa Yepes-Narvaez -

I was the luckiest visiting the White Sea for the second time and to attend the Bryozoan summer school “Bryozoa: Diversity and evolutionary trends in colonial animals” during August 2018 at the stunning White Sea Biological station of Saint-Petersburg State University (SPbSU).



Scenery around the research station is untouched, with rocky hills and trees. Photo credits: Piotr Kuklinski and Olga Kotenko

It was my first time in the Marine Biological station of SPbSU and the place is perfect, quiet and beautiful all covered in wild nature and the kindness people. The university is working towards improving the station and in providing the best experience to scientists and students to undertake research and summer courses. It currently counts with large classrooms, laboratories, kitchen, lounge rooms and comfortable accommodation for researchers or students not mentioning all the sampling equipment and platforms.



Picture from the sea of the house where scientists stay during their research visits. Photo credits: Piotr Kuklinski

It was for me a great time to catch up on some Russian bryo-friends, reinforce my understanding on bryozoans and meet new people interested in taking part of the bryo-world. We were eleven students from different parts of the world (US, Greece, Germany, Poland, Colombia, Australia and Russia) with different knowledge levels and career stages from undergraduate to postdoctoral and early career scientists.



Left some of the course participants, Vanessa Yepes (Colombia, studying in UK), Hannah Mello (US, studying in New Zealand), Valisis Gerovasileiou (Greece) and Laurel Hiebert (US, working in France). Right all students working on their identifications on a normal class day. Photo credits: PiortKuklinski

The course covered topics on taxonomy, biology, early development, evolution, ecology and coloniality in Gymnolaemata, Stenolaemata and Phylactolaemata and it was instructed by Andrey Ostrovsky, Natalia Shunatova, Piotr Kuklinski and Olga Kotenko, which delivered lecturers focused on their area of expertise and provided broad discussion sessions.



Left Natalia Shunatova teaching Valisis Gerovasileiou (Greece) Right all students attending to Andrey Ostrovsky lecture. Photo credits: Piotr Kuklinski and Olga Kotenko

One of the most exciting activities during this course was the field trips; I really appreciate the effort of the organizers in trying to find the right locations for sampling bryozoans from different habitats. Benthic, intertidal, attached to rocks, seaweed, in rivers, even larvae collection! The weather wasn't too bad, and the ocean was always very calmed which was ideal for all those boat trips and net samplings.



Left Olga Kotenko and Ania Piwoni-Piorewicz (Poland) cleaning a benthic sample. Right all students sorting the bryozoans found on benthic samples. Photo credits: Piotr Kuklinski



Left Boat and the students getting to the island to start sampling bryozoans. Right all students happy after collecting *Flustrellidra hispida* from intertidal seaweed. Photo credits: Piotr Kuklinski and Olga Kotenko

It was actually the first time I met the freshwater *Cristatella mucedo*, and I must admit it is one of the most beautiful bryozoans I have seen. e people who work in there. The ladies from the kitchen did their best to unsuccessfully teach us some Russian words;

Even though the course was very intense, there were some non-working days in which the students and lecturers got to know each other as well as the station and all eating hours were full of laughs and nice food, from which I am very thankful, there was a lot of effort put on it and we all went back home with some extra weight.



Left Piotr Kuklinski and Vanessa Yepes with their first freshwater bryozoans. Right students happy rowing a boat to the next sampling point. Photo credits: Andrey Ostrovsky and Olga Kotenko



Left All guests in the kitchen smiling with the ladies that made us tasty dishes and desserts. Right The day we left the station was bittersweet, both sad and happy.

One of the most rewarding days from this summer school was the assessment day, where students got into a drawing competition and an identification test. Surprisingly, the knowledge acquired by those, which had never worked with bryozoans, was impressive. This also shows that all the effort in making this course work was very appreciated by all the students.



Pictures taken on the assessment day: drawing competition, topic expositions, and White Sea bryozoan identifications.

Thank you so much to all organizers in the Saint Petersburg State University White Sea biological station for offering this opportunity and I hope you continue to do so.



Final picture of all the students and lecturers wearing their bryo-course t-shirt with the stunning White Sea scenery in the back.

BOOKS

BIOGEOGRAPHY OF THE CONTINENTAL WATER BODIES: INVENTORY AND CLASSIFICATION, 2019

Vinogradov A.V.

Saarbrücken, Lambert Academic Publishing (LAP),

v.1. From Novaya Zemlya to Balkan: 648 p. v.2. From Danube to Baikal: 544 p. v.3. From Far East to Antarctic: 700 p.

ABSTRACT

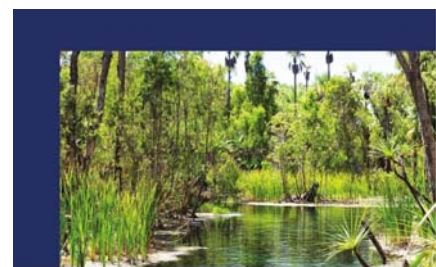
The continental water bodies of the world biogeography study is continue. In this work author especially did the regional biogeographical comparative analysis. Biogeography continental water bodies scheme consists of 10 regia, 35 subregia, 250 provinces; 153 subprovinces and 38 districts found. 5 subregia, 25 provinces, 77 subprovinces, 25 districts added. Changes and additions are possible. List of continental water bodies includes giant lakes Caspian, Aral, Baltic, Azov, Kara-Bogaz-Goal, largest swamps – floodplain of the Amazon river, Pantanal, Ibera, Florida Everglades, Vasugan, Pina (Pripyat, Polesye), highest lake Ojos-del-Salado (6887 m), longest underground river Son and river Chay in the cave Phong Nha (Vietnam), water bodies in the cave Furong Dong (South China), underground rivers of the Ankarana district (Madagascar). The Kama river, not the Volga river, flows into the Caspian lake. Sources, length, zoning of the greatest rivers are discussed (Irtysh, Amur, Nile, Congo, Amazon, Mississippi, Missouri and others). The first volume includes biogeographical information about continental water bodies of Euro-Siberian subregio of Palearctic regio, from Novaya Zemlya province to Bulgarian (East-Balkan) province. The second volume includes biogeographical information about continental water bodies of Euro-Siberian (Danube-Don province), Ochrid, North African, West Asian (Vorderasien), Aral, Highland Asian, Leno-Yenisei, Beringian subregia of Palearctic regio; Ponto-Caspian brackish-water regio, Baikal regio. The third volume includes biogeographical information about continental water bodies of Sino-Indian, Ethiopian, Tanganyik, Nearctic, Neotropical, Australian, Antarctic regio. The specific hydrobionts are shows, and Bryozoa and Phylactolaemata too. The continental water bodies toponymy, Phylactolaemata and Bryozoa zoogeography are considered. The author hopes that his monograph will be useful to limnologists, geographers, hydrobiologists and specialists, who study Russian language. The book is devoted to great zoologist and zoogeographer academician Ch.Darwin.



Анатолий Валентинович Виноградов
**Биогеография
континентальных
водоёмов:
инвентаризация и
классификация**
т.1. От Новой Земли до Балкан



Анатолий Валентинович Виноградов
**Биогеография
континентальных
водоёмов:
инвентаризация и
классификация**
т.2. От Дуная до Байкала



Анатолий Валентинович Виноградов
**Биогеография
континентальных
водоёмов:
инвентаризация и
классификация**
т.3. От Дальнего Востока до Антарктиды



On the cover of the volume 1: Plitvice lakes in Croatia; volume 2: Dead Sea coast (salt lake) in Jordan; volume 3: water bodies of national park Mataranka in the north of Australia.

For more information about these books see below, and the reference list of this newsletter:

www.more-books
www.morebooks.shop
www.morebooks.de
www.more-books.ru
www.get-morebooks.com
www.ljubljuknigi.ru

MEETINGS AND CONFERENCES

18TH IBA CONFERENCE IN LIBEREC AND PRELIMINARY PROGRAM

Program of the 18th IBA Conference

Preparation of the 18th IBA Conference for you goes smoothly;-) Recently we finish with Tim Wood the first draft of the program and the pre-conference field trip. The preliminary program is here; I welcome any comments;-)

IBA PROGRAM - SECOND DRAFT		
MONDAY		
8h00	Registration, poster setup	
9h30	Welcome, etc	
9h40	Hakansson - The free-living Cheilostome bryozoans (KEYNOTE)	
10h30	Coffee break	
REPRODUCTION / DEVELOPMENT		
11h00	Ostrovsky - Placental nourishment in ctenostomes	
11h20	Nekliudova - Placental nourishment in cyclostome bryozoans	Student
11h40	Shevchenko - Comparative analysis of oogenesis in cheilostomes	Student
12h00	Kvach Life cycle and reproduction of ctenostome	Student
12h20	Bibermaier - The embryonic development of PCAS	Student
12h40	Lunch	
GROWTH/MORPHOLOGY		
13h30	Scholz - Architecture & biomineralization	
13h50	Wyse-Jackson - Bryo skeletalisation index	
14h10	Piwoni-Piorewicz - Global pattern in bryozoan skeletal mineralogy	Student
14h30	Achilleos - Biochemical pathways in calcification of marine inverts	Student
14h50	Tamberg - Skeletal and polypide characteristics of Cyclostomatids	Student
15h10	Belikova - Muscular systems of cyclostome bryozoans	Student
15h30	Coffee break	
SOUTHERN HEMISPHERE		
16h00	Almeida - Diversity of marine bryozoans Northeast Brazil	Student
16h20	Boonzaaij - Diversity and zoogeography of South African Bryozoa	Student
16h40	Nascimento - Re-evaluating the genus <i>Beania</i> in New Zealand	Student
19h00	Conference Dinner	
TUESDAY		
PHYLOGENY		
9h00	Waschenbach - Cheilostome evolution through time	
9h20	Sannum - Museomic diamonds in the rough	Student
9h40	Temereva - Lophopore neuroanatomy supports relationship	Student
10h00	Haugen - The first phylogeny of family Adeonidae	Student
10h20	Kutyumov - The mitochondrial genome of CMUC	Student
10h40	Coffee break	
ECOLOGY		
11h10	Schack - Depth gradients characterize polymorphism in New Zealand	Student
11h30	Baptista - Bryozoa in isolated volcanic oceanic islands	Student
11h50	Kotenko - First evidence of the association of symbiotic bacteria	
12h10	Karagodina - Bacteriophages as part of symbiotic system	Student
12h50	Lunch, Group photo	
14h00	Buttler - Review of symbioses between bryozoans and gastropod shells	
14h20	Mello - Does marine protection save bryozoan thickets?	Student
14h40	Sebastian - <i>Pherusella minima</i> , a new ctenostome from the Mediterranean	Student

15h40	Coffee break
	Poster Session
17h20	<i>IBA Council Meeting</i>
WEDNESDAY - FIELD TRIP	
THURSDAY	
	HISTORICAL COLLECTIONS
9h00	Hakansson - A newly discovered bryozoan fauna from the Maastrichtian
9h20	Spencer-Jones - Challenger reteporids
9h40	Cuffey - Rare lichenoporids
10h00	Denisenko - Diversity and biogeographic patterns in Greenland
10h20	Novosel – Bryo-diversity along the Croatian coast
10h40	Coffee break
	PALEOZOIC
11h00	Nakrem - Ordovician bryos from Oslo region
11h20	Ernst - Early Permian bryo faunas of east Gondwana Rift
	CLIMATE CHANGE
11h40	Porter - Working towards a blue carbon audit
12h00	Lombardi - Antarctic biomineralizers as proxies of climate change
12h20	Kuklinsky - Current diversity of bryos Arctic
12h40	Lunch
	MESOZOIC
14h10	Hara - Early Valanginian
14h30	Taylor - Bryos from lake Jurassic
14h50	Wilson - Paleoecology of a bryozoan-rich sclerobiont fauna Middle Jurassic
15h10	Villier - Changes in bryozoan diversity in shallow water deposits
	CENOZOIC
15h30	Vavra - Celleporidae in Austria
15h50	Coffee break
	GROWTH / MORPHOLOGY
16h50	Hirose - Growth of Celleporina
17h10	Key - Estimating colony age from colony size
17h30	Smith - Geometry of bryo colonial growth
FRIDAY	
	EVOLUTION
9h00	Hageman - Occupation(radiation of bryos in Ordovician)
9h20	Lidgard - Fossil bryozoan diversity dynamics
	ECOLOGY
9h40	Suarez - Coral-Bryo associations in fossil record
10h00	Ma - Sclerobionts associated with early trepostomes
10h20	Schwaha - Boring world of bryozoans
10h40	Coffee break
	BUFFET MENU
11h00	Orellana - PCAS in Thailand
11h20	Cancino - Energy budget
11h40	Reid - Order level trophic structures
12h00	Sovaramasamy - Investigation on intercolony variation
12h20	DiMartino - Somatic vs reproductive investment
12h40	Lunch
14h30	Okamura -How freshwater bryoz and influence biodiversity
14h50	Zagorsek - Cyclostome bryos from South Yellow Sea
15h10	Ramalho - Bryos from Amazon river mouth
15h30	Vieira - Marine bryos from Brazil

15h50	Coffee break
16h10	Orr - Cheilostome phylogeny
16h30	Winston - Zoological nomenclature
16h50	Gordon - Is lunulitiform <i>Schizorthosecos radiartum</i>
17h10	Wood - Phylactolaemate digestion
17h30	IBA BUSINESS MEETING
19h00	Leaving party

I turn to all participants of the IBA Conference in Liberec with two questions.

- 1) Please let me know the time of your arrival to airport in Prague. We plan to provide a transport from Prague airport to Liberec on Sunday 16th June.
- 2) Please let me know, if you plan to publish the paper in the Conference volume. We (Patrick N. Wyse Jackson and me) need to know the title of the paper (if possible) as we can start to think about who might be good reviewers. At the meeting we can try to get papers reviewed.

Please answer these questions until the end of the month (30th April)!!!! Thanks.:-)

PRE-CONFERENCE FIELD TRIP

Up to now, these participant registered for the pre-conference trip: Steven J Hageman, Joachim Scholz, Karin Scholz, Hans Arne Nakrem, Mary Spencer Jones, Mark A. Wilson, Marcus Key, Judith E. Winston, Patrick Wyse Jackson, Roger J. Cuffey, Ma Junye and Sergio González Mora. If anybody else willing to take part, let me know as soon as possible... The meeting point is the hotel Ibis Styles Budapest City at Soroksari ut 12, Budapest on 9th June morning (9:00 am). We will stay full day in Budapest (visiting museum and two bryozoan localities) and stay the night of the 9th June in this hotel (this night will be paid by your pre-conference fee). On 10th June we will be moving to Slovakia. The complete itinerary of the pre-conference trip is here <https://mapy.cz/s/3pW9r>. We will travel by bus.

If you would like to stay one or two days more, please book the same hotel via www.booking.com or www.hotel.com. The first night, which will be paid by the preconference field trip fee is the night from 9th to 10th June. We will be arriving in Liberec on the afternoon of the 15th June. You will have time to rest, the icebreaker party (welcome party) starts on 16th of June evening☺



UPDATE ON PROCEEDINGS OF THE 17TH IBA CONFERENCE, MELBOURNE.

The IBA conference volume has been with the AAP publishers since 2017 and in the “queue” for printing. Delays with the editors and earlier volumes have meant that the IBA volume is not yet bound, but it is now assigned a volume number and with the printers. It will be out in 2019. We sincerely apologise for this delay. The Editorial Team and IBA President Tim Wood recently formally contacted the AAP volume Editor Ian Percival to express again our concerns, and demand an update.

A shortened version of the response from Ian Percival follows below.

The situation in regard to the delay in publishing the Australasian Palaeontological Memoir containing papers presented at the 17th Bryozoology Conference is appalling and unprecedented, as pointed out by Professor Wood in his letter as Head of the IBA. Authors are rightly upset and wanting to withdraw their manuscripts. You have demanded, and I intend to provide, an update on the present status of the Memoir, in order for you to make an informed decision.

Since I took over the editing duties of the APM series in mid-2016, I became aware that there were two conference proceedings volumes that were in train, one being the IBA volume. The other, smaller, conference volume moved ahead and that volume has been published in December last year. Unfortunately the combination of my work position (from which I am now retired) and several volunteer roles that I had been doing for many years previously, together with the added responsibility of editing the Memoirs, came at a time when my father's health started to markedly deteriorate over the past year, culminating in his death in February. This factor above all others is the reason that you have not heard from me since December.

The Australasian Palaeontological Memoir series is non-commercial and run entirely by volunteers. Its great advantage is that the IBA can get its proceedings published at virtually no cost compared to going to a commercial publishing house. The trade-off is that we don't have any support staff to fall back on to make certain of keeping on track and meeting deadlines. However, prior to publishing the previous Memoir (number 51), a considerable amount of time was taken to explore the latest advances in printing technologies so that we found a new printing company who can produce a top-quality publication (including colour images) at a considerable cost reduction compared with previous Memoirs. Charges of \$400 per colour page have been eliminated as a result. This is significant in relation to the Bryozoology Memoir.

When I give a commitment I honour it. So you will get a very nice high quality publication. The question is, when. I will have all the edited and formatted manuscripts to my production editor, Sarah, in time for her return from overseas in early May. She will have most (if not all) placed into InDesign templates by my return from overseas in late May. Then the proofs can be distributed and checked, and the volume sent to the printers. I am not going to put a final date on this, only to say that June is a likely probability.

I hope I have honestly provided you with a picture of the current state of the Memoir, without belabouring the difficulties involved. Your responses and comments are welcome. I appreciate that your previous correspondence has been courteous but heartfelt.

Regards, Ian

All papers are accepted and in press and your manuscripts can be referred to as

Author, 2019, title. IN *Bryozoan Studies 2016*. Proceedings of the Seventeenth International Bryozoology Association Conference, 10-15 April 2016, Melbourne, Australia. EDS Schmidt, R., Reid, C.M., Gordon, D.P., Walker-Smith, G., Martin, S. & Percival, I. Memoirs of the Australasian Association of Palaeontologists vol 52, pp. xx-xx. ISSN XXXX.

Rolf Schmidt, Catherine Reid, Dennis Gordon

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.

CASAMAJOR, M.-N. de & HONDT, J.-L. d' (2018).- Biodiversité des substrats durs du lac marin d'Hossegor. Etat des connaissances et nouvelles données (Biodiversity of the hard substrates of the Hossegor marine lake: State of the knowledges and new data). Bull. Soc. Linn. Bordeaux, 153, N. S., 46 (2-4): 323-340.

Di Martino, Emanuela, Taylor, Paul D., and Portell, Roger W. 2019. Anomia-associated bryozoans from the upper Pliocene (Piacenzian) lower Tamiami Formation of Florida, USA. *Palaeontologia Electronica* 22.1.11A 1-65. <https://doi.org/10.26879/920> palaeo-electronica.org/content/2019/2404-tamiami-formation-bryozoans

Hyun Sook Chae, Hyun Jong Kil, Kamil Zágoršek and Ji Eun Seo (2018): Four Korean Cyclostomatous Bryozoans - new additions to the Korean fauna. *Journal of Species Research* 7(4):348-353.

HARA, U, Thomas MÖRS, Jonas HAGSTRÖM and Marcelo A. REGUERO, 2018. Eocene bryozoan assemblages from the La Meseta Formation of Seymour Island, Antarctica. *Geological Quarterly*, 2018, 62 (3): 705–728. DOI:<http://dx.doi.org/10.7306/gq.1432>

HONDT, J.-L. d' (2018).- Réflexions sur le polyphylétisme plausible des Bryozoaires Cheilostomes (Considerations on the potential polyphyletism of the Cheilostomatous Bryozoa). Bull. Soc. zool. Fr., 143 (4) : 227-244.

HONDT, J.-L. d' (2018).- Bryozoaires des îles Glorieuses (Océan Indien) (Bryozoa of the Glorieuses Islands (Indian Ocean)). Bull. Soc. Linn. Bordeaux, 153, N. S., 46 (2-4) : 149-166.

HONDT, J.-L. d' (2019).- Phylogénie actualisée des Bryozoaires sur la base des caractères biologiques et ontogénétiques (Phylogeny of the Bryozoa actualized on biological and ontogenetical characters). Bull. mens. Soc. Linn. Lyon, 88 (3-4) : 71-88.

Key, M. M., Jr., R. K. Rossi, A. M. Smith, S. K. Hageman, and W. P. Patterson. 2018. Stable isotope profiles of skeletal carbonate validate annually-produced growth checks in the bryozoan *Melicerita chathamensis* from Snares Platform, New Zealand. *Bulletin of Marine Science*. 94 (4): 1447-1464. <https://doi.org/10.5343/bms.2017.1166>.

Kovecsi SA; Zagorsek K.; Filipescu S.; Silye L. (2018): First report of *Kylonisa triangularis* KEIJ, 1972 (Bryozoa) from the middle Eocene (Bartonian) - NEUES JAHRBUCH FÜR GEOLOGIE UND PALAONTOLOGIE-ABHANDLUNGEN Volume: 289 Issue: 3 Pages: 325-330 DOI: 10.1127/njgpa/2018/0764

Seo, JE; Chae, HS; Winston, JE; Zagorsek, K; Gordon, DP (2018): Korean ctenostome bryozoans-observations on living colonies, new records, five new species, and an updated checklist. – ZOOTAXA; Volume: 4486 Issue: 3 Pages: 251-283; DOI: 10.11646/zootaxa.4486.3.3

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 academician Ch.Darwin. – In Russian. Виноградов А.В. Биogeография континентальных водоёмов: инвентаризация и классификация. – Deutschland, Saarbrücken, Lambert Academic Publishing (LAP), 2019, т.1. От Новой Земли до Балкан: 648 с. Книга посвящена натуралисту, путешественнику, эволюционисту академику Чарлзу Дарвину.

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 academician

Ch.Darwin. – In Russian. Виноградов А.В. Биogeография континентальных водоёмов: инвентаризация и классификация. – Deutschland, Saarbrucken, Lambert Academic Publishing (LAP), 2019, т.2. От Дуная до Байкала: 544 с. Книга посвящена натуралисту, путешественнику, эволюционисту академику Чарлзу Дарвину.

Vinogradov A.V. Biogeography of the continental water bodies: inventory and classification. – Saarbrucken, Lambert Academic Publishing (LAP), 2019, v.3. From Far East to Antarctic: 700 p. The book is dedicated to academician Ch.Darwin. – In Russian. Виноградов А.В. Биogeография континентальных водоёмов: инвентаризация и классификация. – Deutschland, Saarbrucken, Lambert Academic Publishing (LAP), 2019, т.3. От Дальнего Востока до Антарктиды: 700 с. Книга посвящена натуралисту, путешественнику, эволюционисту академику Чарлзу Дарвину.

Williams RB – 2018 Thomas Hincks's A History of the British Marine Polyzoa: 1879 or 1880? Confirmation of publication date. Zoological Bibliography 2018 6(4) 41-47.

Worsaae K, Frykman T, Nielsen C. 2018. The neuromuscular system of the cyclostome bryozoan *Crisia eburnea* (Linnaeus, 1758). Acta Zool. 2018;00:1-14. <https://doi.org/10.1111/azo.12280>

Zágoršek Kamil, Hyun Sook Chae, Bum Sik Min, Ho Jin Yang, Ji Eun Seo (2017): New species of *Hornera* (Bryozoa, Cyclostomata) from Jeju Island (Korea). Journal of Species Research 6(3): 232-236.

