

### **OCEANS PAST NEWS No.11**

JANUARY 2019



#### A NEW WAY FORWARD FOR OPI

The Oceans Past Initiative is growing! As we move in to 2019, OPI is evolving, working to formalize its charter and organizational structure, as well as its status as a non-profit. We want to support the growth of our network and increase benefits for members. This, our first 2019 edition of Oceans Past News, focuses on the new OPI and the 2019 Oceans Past conference. We open with an introduction from the OPI chair of the OPI Board, Dr. Poul Holm.

What used to live in the sea? How did humans depend on marine life? What insights for the future may be derived from the past? These are the questions that broadly drive the Oceans Past Initiative (OPI). The world's seas and oceans are vital for the well-being of humanity but are under severe threat. By studying the past we can learn not only what has been lost but also what may be gained by good management

OPI is a collaborative cross-disciplinary grouping of marine archaeologists, historical ecologists, marine historians and fisheries scientists, united by a shared interest in the history of ocean/human interaction. OPI builds on scholarly networks that have been emerging in the last two decades. With the inauguration of a global OPI at the Oceans Past conference in 2018, we now have a formal structure. The constitution clarifies the nature of OPI and the election and role of the Governing Board. Importantly, we now also have a bank account (managed by the Trinity Foundation, a charitable body of Trinity College Dublin, Ireland). We are therefore also able to receive money and spend it in support of our aim.



By joining OPI, you promote research in and outreach of the history of human/marine environments. We organize biannual conferences, open to anyone with an interest in the marine past. OPI News helps keep you abreast of new developments around the globe. You may benefit from our support of scholarly publication such as special journal issues and the PLoS ONE HMAP collection. By joining, you show the importance of research in oceans past and help us raise funds to support our research community, especially early career researchers and postgraduate students.

OPI offers reduced membership fees for students, retired people, and people from non-OECD/nonBRICS countries.

Our website is currently under development, and we will announce updates here in the coming months. For more information on OPI and how to join, please email info@oceanspast.org.

#### **OCEANS PAST SPOTLIGHT\***

#### MEET THE NEW OPI EXECUTIVE BOARD

In this special edition of the Oceans Past News, our Spotlight is on the new Executive Board of OPI, elected during the general assembly at the Oceans Past VII Conference in 2018. The Board is composed of Drs. Poul Holm, Alison MacDiarmid, Gesche Krausse, Ben Fitzhugh, Ruth Thurstan and Cristina Brito.



OPI Executive Board at Oceans Past VII (L to R): Ben Fitzhugh, Gesche Krausse, Ruth Thurstan, Poul Holm, Cristina Brito.



**Poul Holm, Trinity College Dublin, Ireland**. As a professor of environmental history, my field is human-nature relations. My current research focusses on the North Atlantic marine environment, c. 1400-1700, especially the expansion of the fisheries around 1500 during a time of climate change and internationalisation of trade.

What is your position on the Board and what does this entail? I serve as the chair of the Board.

What is your interest in serving on the Board of OPI?

I am keen to secure the long-term sustainability of OPI. We are a small but growing community and it is vital we maintain a welcoming and well-functioning umbrella organisation.

What is one hope or goal you have for OPI moving forward?

I hope we can keep uncovering amazing stories. Marine environmental history and historical ecology was borne out of curiosity: Can we know what the seas used to look like 500 years ago? What was the role of the sea through human history? Caring about a marine world that we hardly ever see must build on a sense of connectedness. Our kind of history feeds that basic human need.

## Alison MacDiarmid, National Institute of Atmospheric and Water Research (NIWA), New Zealand.

What is your position on the Board and what does this entail?

Board Member. As well as contributing to regular monthly OPI business, I have coconvened the last three Oceans Past conferences in Estonia, Portugal, and Germany.

What is your interest in serving on the Board of OPI?

My interest in serving on the Board is to bring a southern hemisphere and Oceania perspective to OPI which continues to have primarily a European and North American makeup. It would be great to broaden OPI membership and participation in OP conferences to Asian, African and South American researchers.

What is one hope or goal you have for OPI moving forward?

My hope is for OPI to help ensure that a historical perspective is included in marine

policy development so that, for example, goals for rebuilding ecosystems are not restricted to the recently observed past. This means that we need to ensure that implications for policy development are spelt out clearly in our reports and papers in language that policy makers can readily adopt. This could require us to invite marine policy analysts to be co-authors, or better still collaborators in our research from first conceptualisation. I know from first-hand experience in New Zealand that policy makers welcome such efforts.

\*Each issue of Oceans Past News includes a feature article to highlight research happening in our community, as either an **Oceans Past Spotlight** or as **10 Questions**, which will pose the same 10 questions to different leaders in our field. If you would like be considered for either, or to nominate a colleague or mentee, please contact Emily Klein at emily.klein04@qmail.com.



Cristina Brito, Assistant Professor, NOVA FCSH, CHAM - Centre for the Humanities (Portugal). I am based in Lisbon where I conduct my research on early modern marine environmental history, focusing on the study of manatees, sea turtles and many other large marine animals, and the relationships between humans and the non-human marine world.

What is your position on the Board and what does this entail?

I am the Treasurer in the OPI Board. So far, I have been the secretary and giving support to the OPI Newsletter, and I am currently running the finances alongside other members of the Board and an external auditor.

What is your interest in serving on the Board of OPI?

My main goal in this group is to make sure that the Portuguese and Spanish-

speaking scientific communities are represented, mostly by making an effort in the integration of colleagues and scholarship from the South Atlantic (African and Central and South American countries).

What is one hope or goal you have for OPI moving forward?

My hope is for OPI to become a global platform for the dissemination and outreach of matters related to the Past of the Oceans in the broad sense, particularly in places and communities where these themes are not known; to engage the academic communities in developing new disciplines and fields of research, such as marine environmental history and historical marine ecology; to expand the value of history in the understanding of current day issues/problems and in the proposal of sustainable management measures for endangered species, and for marine ecosystems and resources. And, on a more personal note, to keep on trying to save the whales!

**Dr. Gesche Krause, Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Bremerhaven (Germany).** As marine social scientist, I am working at the science-society interface, studying how and in what ways different realms of knowledge can be identified, connected, and analyzed to harness transdisciplinary research approaches.

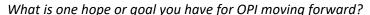
What is your position on the Board and what does this entail?

I am member of the board, "representing" the linkages to the different contemporary science realms discourses.

What is your interest in serving on the Board of OPI?

I want to support the highly interdisciplinary setting and nature of OPI, which appeals greatly to me, and thus strive to make OPI a point of entry for all people

that have interest in the broad, global, interrelated, interconnected and systemic perspectives of human-nature relationships through deep time.



Harnessing OPI as vehicle to break down common distinctions between people and their "environment" by embracing and highlighting the deep-time impacts of societal actions and political decisions vis à vis natural processes and their dynamics. By this, we improve our knowledge on how and in what ways to link current policies with what past generations have done and what future generations will be able to do.





**Dr.** Ruth Thurstan, Lecturer in Biosciences at the Centre for Ecology and Conservation, University of Exeter's Cornwall campus. My core area of research is marine historical ecology, with a particular focus upon understanding the scale of ecological and social changes in fisheries over the past 200 years.

What is your position on Board and what does this entail?

I am the Secretary of the Board, and will also be involved (with many others) in convening the 2020 Oceans Past conference.

What is your interest in serving on the Board of OPI?

I am interested in examining the magnitude and drivers of social-ecological change in marine systems, which requires interdisciplinary thinking and collaboration with researchers and stakeholders. By being on the Board I hope to be in a better

position to engage researchers, students, and the wider public in such research.

What is one hope or goal you have for OPI moving forward?

With Dr. Emily Klein, I co-chair the ICES Working Group on the History of Fish and Fisheries (WGHIST), which provides a link between historical ecology findings and fisheries scientists, managers and stakeholders. I hope that we can use this channel to better connect our findings to management and policy and communicate to as many people as possible the changes that have occurred to our oceans as a result of human impacts.

**Dr. Ben Fitzhugh, Professor of Anthropology (specializing in Archaeology), University of Washington (USA).** I also serve as the current director of the Quaternary Research Center at the University of Washington, and my scholarship focuses on human-environmental dynamics in maritime, Subarctic regions around the North Pacific over the past several thousand years, with particular emphasis on the indigenous cultures of the Kodiak and Kuril Archipelagos.

What is your position on the Board and what does this entail?

I am a new member on the OPI and of the OPI Board. I will be co-convening the 2020 OPI meeting along with Ruth Thurstan and others.

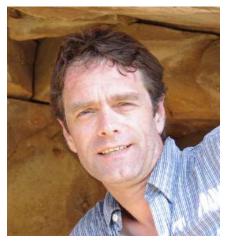
What is your interest in serving on the Board of OPI?

I agreed to serve out of a deep interest in the dynamic interplay between the ocean

systems and the histories of maritime cultures, not to mention the opportunity to become acquainted with an exciting community of scholars with interests closely connected to my own. In 2014, I co-founded the Paleoecology of Subarctic Seas (PESAS) working group, a science-heavy, interdisciplinary community within the fisheries ecology research group known as the Ecosystem Studies of Subarctic Seas, and PESAS has always wanted to have more robust connections with the environmental humanities and maritime history. OPI has been doing this well and joining forces seems like productive fun!

What is one hope or goal you have for OPI moving forward?

I see OPI as the perfect venue to build richer connections between the histories of human maritime interactions and the temporal dynamics of climate and ocean ecosystems. I am looking forward to learning more about the great work being done in OPI to connect these themes, especially in the European North Atlantic area, and to promote similar engagement in other regions of the world. One area for expanding is in the North Pacific, where my own research is focused and where we have networks connecting North American and East Asian scholars. I believe historical ecology of the maritime system has vital lessons to share with the world about long-term trends in human-ecological relationships that are obscured in much contemporary the science and policy, driven by less than 100 years of environmental data and a lack of focus on connected human histories. We can do better, and our stories are important for future planning.





#### **OCEANS PAST VII**

Tracing human interactions with marine ecosystems through deep time: Implications for policy & management

Bremerhaven, Germany – 22-26 October 2018

Unsolicited feedback from participants indicates that this latest Oceans Past conference was a great success; one experienced conference goer reported "this has been, without, any doubt, one of the best meetings I have ever attended".

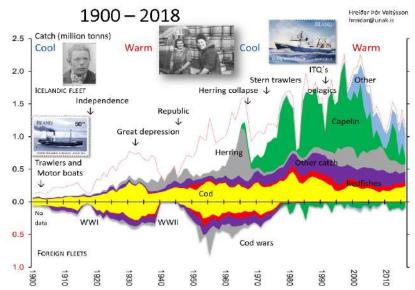
The Oceans Past conferences are a platform for dissemination and discussion of new research findings in the fields of historical marine ecology, and fisheries and maritime history. The latest conference was held at the **Alfred Wegener Institute Helmholtz Centre for Polar & Marine Research** (AWI) and the **German Maritime Museum** (DSM), and was the seventh event since 2005. It was co-convened by **Alison MacDiarmid** (New Zealand) and **Poul Holm** (Ireland), superbly organized locally by **Gesche Krause** (Germany) and her hard-working team, and supported by **Henn Ojaveer** (Estonia), who chaired the Science Steering Group, and **Joanne D'Arcy** (Ireland). OPVII was financially supported by the **EU COST Action Oceans Past Platform** (OPP), coordinated by Dr. Holm.

The highly interdisciplinary conference had over 100 registered participants comprising both natural and social scientists (ecologists, oceanographers, economists, historians, archaeologists) from more than 25 countries. During the conference, 75 talks, 8 posters and four key-note addresses were presented, with talks arranged in the following back-to-back sessions, allowing every participant to enjoy each of the papers:

- Session I Oceans prior to contemporary exploitation
- Sessions II & III Drivers of environmental use and change across historical time frames
- Sessions IV-VI The significance of marine resources for human societies over time
- Sessions VII-IX Paleoecology of the Subarctic Seas: High Latitude Climates, Oceans, Ecosystems, and Human Histories
- Sessions X-XII Implications of past and present human ocean activities for coastal and marine policy development
- Session XIII Development of indictors
- Sessions XIV & XV Factors that have encouraged societies to exploit or leave the oceans

In addition, topical breakout groups engaged all conference participants on a diverse range of questions, including: How do we connect historical data sources to contemporary management and policy needs ("Connections")?; Are

historical sources and study as well as its relevant and potential applicability known to decision makers for current policy and management? ("Barriers"); How does uncertainty in historical studies or sources differ from or overlap with current sources and studies used for management advice? ("Uncertainty"); In what ways can we interact with other disciplines to elevate the importance of approaches in marine historical ecology, etc. for current data-poor fisheries? ("Cross-scales and Interdisciplinarity"); What are the new and developing approaches in historical marine ecology, such as the use of ancient DNA, stable isotopes, etc? ("Emerging Trends"). A Rapporteur Session on the fifth day shared insight from breakout groups with all conference participants.



Slide from paper by Hreiðar Þór Valtýsson (hreidar@unak.is) on "The fishing effort by the Icelandic fleet since 1900"



The conference had strong participation and collaboration with members of International Council for the Exploration of the Seas (ICES) Working Group on the History of Fish and Fisheries (WGHIST) and Working Group of Social and Economic Dimensions of Aquaculture (WGSEDA), the Paleoecology of Subarctic Seas (PESAS) Working Group (member of Ecosystem Studies of Subarctic and Arctic Seas/Integrated Marine Biosphere Research), and members of the EU-COST Action Oceans Past Platform (OPP). The next Oceans Past will be held in Belgium in 2020.

#### **RESEARCH NEWS**

Research demonstrates decades of organic enrichment and deoxygenation can have significant impacts on seafloor animals: Climate change and anthropogenic nutrient enrichment are driving rapid increases in ocean deoxygenation (declines in ocean oxygen levels) that are predicted to increase. These changes have profound effects upon marine organisms and ecosystems. Although we have some knowledge of the impacts of these changes over the short-term, we know very little about the effects over longer timescales. The biodiversity loss associated with ocean deoxygenation will have severe consequences for seafloor functioning (e.g. the benthic cycling of nutrients and changes in food web dynamics), and in turn the delivery of ecosystem services such as fisheries. Using one of the classic datasets employed to develop a definitive disturbance model (Pearson and Rosenberg 1978), we explore changes in seafloor functioning using biological traits analysis. Over 26 years of monitoring at a sewage-sludge disposal site in the Firth of Clyde, U.K., we

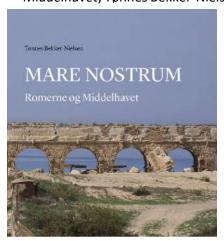


Atlantic mackerel, Scomber scombrus, original artwork by Bryony Caswell (https://www.facebook.com/CBrysArt/)

show substantial declines in macrobenthic nutrient cycling and the provision of food for predators along an organic enrichment/deoxygenation gradient. Whereas, on the margins of the disposal site 1–2 km from the centre, functioning was enhanced. Thus, over decadal timescales changes in food-web dynamics are likely, which could weaken benthic-pelagic coupling and lower secondary production overall (i.e. fisheries). Similar to other severely deoxygenated systems today, the recovery of the benthos in the Firth of Clyde was hysteretic and remained impacted for at least 7 years after sewage sludge disposal ceased. *Caswell, B. A., Paine, M., Frid, C. L. J. (2018). Impacts of two decades of organic enrichment and deoxygenation on seafloor animals.* Marine Pollution Bulletin *136, 212-229.* 

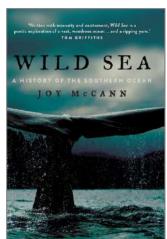
#### RECENT PUBLICATIONS

New book: the history of the Rome is a story of the Mediterranean. In his new book, *Mare Nostrum: Romerne og Middelhavet*, Tønnes Bekker-Nielsen shows that, to ancient Romans, the Mediterranean was a bountiful sea, a source



of riches, power and prosperity, but it was also a cruel and unforgiving sea where human lives and vast fortunes might be lost in the blink of an eye. This study, the first of its kind in Danish, traces the role of the Mediterranean in the lives of the Romans over a period of 800 years. Topics covered include the technological evolution of shipbuilding, naval warfare and merchant ships; the social history of seafaring; fishing, fish-breeding and fish processing; salt extraction and purple production; the harbours of Rome; fear of the sea, superstition, pagan gods and Christian saints. It is also copiously illustrated with photographs and maps. <a href="http://www.universitypress.dk/shop/mare-nostrum-3699p.html">http://www.universitypress.dk/shop/mare-nostrum-3699p.html</a>. Mare Nostrum is also one of five books nominated for "Best history book of 2018" by the Danish Historical Association (<a href="https://www.historie-online.dk/aarets-bog-2018-4">www.historie-online.dk/aarets-bog-2018-4</a>).

The Southern Ocean finds its place in history. In Wild Sea: A History of the Southern Ocean. Joy McCann tells the remarkable story of the remote and tempestuous Southern Ocean. This book takes readers beyond the familiar heroic narratives of southern polar exploration to explore the natural and cultural histories of this stormy circumpolar ocean and its place in Western and Indigenous histories, revealing its distinctive physical and biological processes as well as the people, species, events and ideas that have shaped human knowledge and perceptions of it over time. Ultimately, it seeks to raise awareness and appreciation of the natural and cultural histories of this little-known ocean and its emerging importance as a barometer of planetary climate change. https://press.uchicago.edu/ucp/ books/book/chicago/W/bo39710658.html.



Caswell, B. A., and M. Paine, C. L. J. Frid (2018). Impacts of two decades of organic enrichment and deoxygenation on seafloor animals. Marine Pollution Bulletin 136, 212-229. doi: 10.1016/j.marpolbul.2018.08.041.

Howard, I., and E. Davis, G. Lippert, T. P. Quinn, C. L. Wood (2018). Abundance of an economically important nematode parasite increased in Puget Sound between 1930 and 2016: Evidence from museum specimens confirms historical data. Journal of Applied Ecology. https://doi.org/10.1111/1365-2664.13264.

Isendahl, C., and D. Stump, eds. (2019) The Oxford Handbook of Historical Ecology and Applied Archaeology. Oxford University Press. 576 pages. Available for pre-order. https://global.oup.com/academic/product/the-oxfordhandbook-of-historical-ecology-and-applied-archaeology-9780199672691?cc=us&lang=en&.

Konstam, A. (2019). The Pirate World: A history of the most notorious sea robbers. Bloomsbury Publishing, 288pp. Available in ebook, hardcover mid-February. https://www.bloomsbury.com/in/the-pirate-world-9781472830968/.

Maggio, T., and A. Allegra, F. Andaloro, J. P. Barreiros, P. Battaglia, C. M. Butler, A. Cuttitta, M. R. J. Fontes, R. Freitas, M. Gatt, F Saadet Karakulak, D. Macias, A. Nicosia, H. A. Oxenford, S. Saber, N. V. Rodrigues, T. Yildiz, M. Sinopoli (2019). Historical separation and present-day structure of common dolphinfish (Coryphaena hippurus) populations in the Atlantic Ocean and Mediterranean Sea. ICES Journal of Marine Science 76 (1), doi.org/10.1093/icesjms/fsy174.

Pogoda, B. (2019). Current status of European oyster decline and restoration in Germany. Humanities 8(1), 9. https://doi.org/10.3390/h8010009.

Pouzet, P., and M. Maanana, S. Sabine, A. Emmanuelle, M. Robin (2019). Correlating three centuries of historical and geological data for the marine deposit reconstruction of two depositional environments of the French Atlantic coast. Marine Geology 407: 181-191. https://doi.org/10.1016/j.margeo.2018.10.014.

#### **ANNOUNCEMENTS: CONFERENCES**

2019 People & the Sea X: Learning from the past, imagining the future. The Conference will take place from the 24th until the 28th of June 2019. Location: University of Amsterdam, the Netherlands. Deadline for panel, paper proposals and other conference formats: January 31st, 2019. http://www.marecentre.nl/2019-people-the-seaconference/.

The Centre for Research in Political Science (CICP) and the Interdisciplinary Center for History, Culture and Societies (CIDEHUS) of the University of Évora are pleased to be hosting the III Meeting of the Portuguese Network of Environmental History, "Dynamics and Resilience in Socio-Environmental Systems", to be held in Évora, Portugal, between 28 and 30 March 2019. More information at https://encontroreportha2019.weebly.com/.

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Honoring the 150-year anniversary, a symposium, "Challenging the scientific legacy of Johan Hjort: Time for a new paradigm in marine research?" will convene in Bergen, Norway 12–14 June 2019. Contributions will be published in *ICES Journal of Marine Science* (manuscripts can be submitted at any time until 3 months after the conference, i.e. 14 September 2019). Final registration and abstract submission is 1 May 2019 at <a href="https://www.hi.no/conferences/JohanHjort/">https://www.hi.no/conferences/JohanHjort/</a>, and manuscripts can be submitted to ICES Journal of Marine Science at <a href="https://academic.oup.com/icesjms/pages/General\_Instructions">https://academic.oup.com/icesjms/pages/General\_Instructions</a>.

**5th International Sclerochronology Conference** in Split, Croatia, June 16th-20th 2019. Early bird registration rates until 15th March. <a href="http://jadran.izor.hr/isc2019/">http://jadran.izor.hr/isc2019/</a>.

The CONCHA 1st International Conference, "Peoples, Seaports and Frontiers: Living the Ocean", will take place in Barranquilla (Colombia) 10-12 July 2019, and the CFP is open until 15 February. Session topics include "Animals and the Sea" and "Currents and Climates of the Sea", among others. <a href="http://www.cham.fcsh.unl.pt/ext/concha/concha\_int\_conference.html">http://www.cham.fcsh.unl.pt/ext/concha/concha\_int\_conference.html</a>.

The 3<sup>rd</sup> World Congress of Environmental History, "Convergences: The Global South and the Global North in the Era of Great Acceleration", will take place from 22 – 26 July, 2019, in Florianopolis, Brazil, at the Universidade Federal de Santa Catarina. More information on the webpage, <a href="http://www.3wceh2019.floripa.br/">http://www.3wceh2019.floripa.br/</a>.

The **20th Meeting of the Fish Remains Working Group (FRWG)** is set for August 26-30, 2019 in Portland Oregon, USA, and will be preceded by a weekend field trip to the Oregon Coast. FRWG is an outstanding way to meet with scholars from around the world in a small supportive atmosphere. The local organizer and host is Virginia Butler (Portland State University (U.S.A.), with help from a planning committee: Madonna Moss (University of Oregon, U.S.A.), Iain McKechnie (University of Victoria, Canada), Elizabeth Reitz (University of Georgia, U.S.A.) and Jen Harland (University of the Highlands, Scotland). More at <a href="https://www.2019frwg.com/welcome">https://www.2019frwg.com/welcome</a>.



#### **CONTACT**

**Oceans Past News** is a quarterly newsletter that aspires to both unite and inform the worldwide community interested in historical perspectives of marine social-ecological systems by providing insight into the wide-ranging and excellent work being done and the resources available. If you would like to propose work for OPN in the future, please contact our editors, **Emily Klein** (emily.klein04@gmail.com) or **Cristina Brito** (escolademar@gmail.com).

The next Oceans Past News will be mid-April 2019. We warmly welcome submissions through mid-March.

#### **RESOURCES**

The Oceans Past News Archive is available online: <a href="http://oceanspast.org/newsletter.html">http://oceanspast.org/newsletter.html</a>
More on the Oceans Past Initiative: <a href="http://oceanspast.org/index.html">http://oceanspast.org/index.html</a>
We are on Twitter (@oceans\_past) and Facebook: <a href="https://www.facebook.com/groups/12228849384/">https://www.facebook.com/groups/12228849384/</a>