

**NEWSLETTER**  
VOLUME 27 | Jan 2024



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**OCEANS PAST INITIATIVE**

### Much to look forward to in 2024

In preparing this issue of the Oceans Past News, it's become readily apparent that we have a lot of exciting conferences and opportunities to convene in person in the new year! I hope that through all of these opportunities many of us can cross paths either again or for first the time and we can continue to grow as a community. Additionally, this issue highlights captivating work on Indo-Pacific historical fisheries and museum collaborations.

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Picture of Nayeli G. Jiménez Cano.

### OCEANS PAST SPOTLIGHT\*

#### PRISTINE: PRehistoric fishRies assistIng marine baseliNEs

*Nayeli G. Jiménez Cano<sup>1</sup>  
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As Indo-Pacific seascapes come under severe threat due to climate change and industrial extractivism, a 'shifting baseline' pattern of fish productivity has been documented from the 1980s to the mid-2000s, with demersal and pelagic fishery resources nearly at or already exceeding critical carrying capacity. Conservation efforts in the region have usually been based on recent fisheries records from the last decades, which impedes a deep evaluation of long-term impacts of exploitation and responses to environmental change.

† Views expressed here are my own and do not necessarily reflect that of my employer

\*Each issue of Oceans Past News includes a feature article, either as an **Oceans Past Spotlight** or as **10 Questions**. If you would like to be considered for either, or to nominate a colleague or mentee, please contact Rachel Winter at [rachelwinter@palaeome.org](mailto:rachelwinter@palaeome.org).

Marine resource exploitation enhanced human settlement and dispersion in the Indo Pacific. Island ecosystems in Oceania were one of the last regions impacted by human activities as the earliest traces of human occupation date back the late Holocene (3500 BP). The best-known Neolithic culture in the region is the Lapita cultural complex by 3000 BP, where Vanuatu (Figure 1) holds a rich history of marine exploitation in early times. However, one of the main complications of including archaeological records as reliable reference criteria for marine baselines for the Indo Pacific islands, is the difficulties in species identification from traditional osteological analysis, a common challenge in ichthyoarchaeological research, especially for marine hotspots, due to skeletal similarity within speciose families. Identification gaps have led to a poor understanding of the nature of preindustrial fisheries, including species occurrences and specific size estimations, impeding the assessment of temporal trends of impacts in coral reef ecosystems.



Figure 1. Location of Teouma (Efate, Vanuatu).

Since December 2022, our Marie Sladowska-Curie Action’s postdoctoral project **PRISTINE (PRehistoric fISheries assISTing marIne baseliNEs)** has been implemented to deepen the understanding of healthy marine environments by widening ecological baselines dating back thousands of years through the species identification of ichthyoarchaeological remains using collagen type 1 (Figure 2).

With the **Muséum National d’Histoire Naturelle** as the host institution, PRISTINE aims to identify and quantify the range of exploited Indo-Pacific reef fish communities dating back 5,000 years to provide long-term baselines of healthy tropical fisheries to assess temporal trends of anthropogenic impacts. To this end, PRISTINE is developing a Reference Collagen Database of representative Indo-Pacific species based on securely identified specimens through DNA barcoding. Collagen is extracted from reference specimens and analyzed through MALDI-TOF for assessing peptide mass fingerprinting and through LC-MS/MS for collagen sequencing.

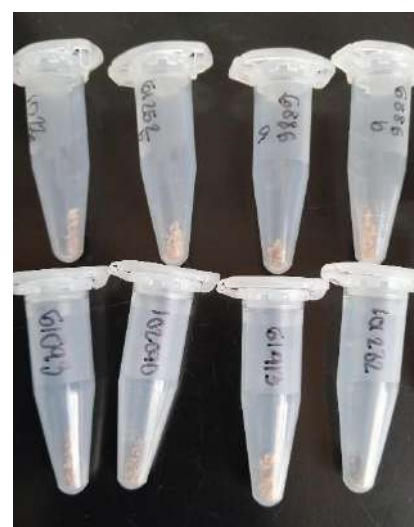


Figure 2. Ichthyoarchaeological samples for collagen extraction.

Until now, PRISTINE has been able to include 33 fish species, from both elasmobranchs and bony fishes, in the Reference Collagen Database. At the same time, and using the results of the collagen Reference Database, PRISTINE has successfully taxonomically identified archaeological Lapita fish remains from Teouma (Efate, Vanuatu). Exploited fishes from this period came from the first occupation of the island and thus provide a reference point for assessing exploited fish biodiversity in preindustrial times. Identifications have been performed in target fish families, including serranids, carangids, lutjanids, scarids, and carcharhinids (Figure 3). In the coming year, the project aims for the inclusion of more ichthyoarchaeological material from different Indo-Pacific Neolithic sites, and we are also planning a field mission to fish reference specimens necessary to expand the Reference Collagen Database to have broader prehistoric and reference coverage.

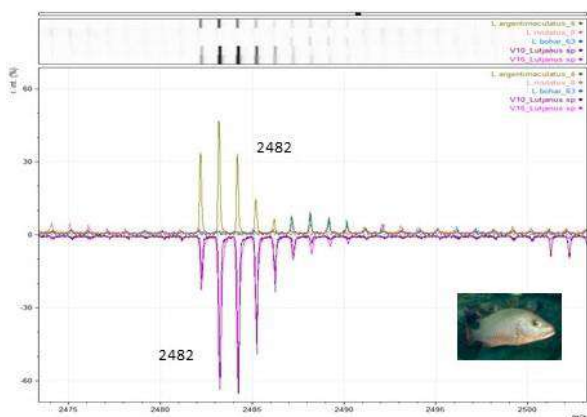


Figure 3. Species identification on Lapita fish remains from Teouma.

With our results, we aim for a long-term evaluation of ancient fish exploitation and anthropogenic impacts through a meticulous multi-proxy palaeoecological approach that will include ecological

measurements, habitat characterization to be compared with species occurrence in modern fishing records, and estimating specific size ranges of prehistoric fish to spot temporal trends in size distributions. As such, archaeological data can aid in spotting anthropogenic impacts on reef fisheries.

## RESEARCH & OTHER NEWS

### An inventory of Bramble sharks in natural history collections for conservation status assessment.

In Oceans Past News No. 10 and No. 17 (November 2018 and July 2020), we featured **Samuel Iglésias**'s and **Frederik Mollen**'s ongoing Bramble shark Cold Case in our spotlight. Their study in historical ecology was initiated to document the suspected decline of *Echinorhinus brucus* (Bonnaterre, 1788) by inventorying all possible records of this little-known shark species using different data sources. This data mining project resulted in a wealth of new historical information, too many to discuss in a single paper. Their second academic contribution is out now, solely focusing on Bramble sharks in natural history collections worldwide. This search resulted in 169 individuals, of which 64 records are reported for the first time. As such, museum collections have proven an important data source by supplying unique physical evidence of their past existence. All these new records will be included in an integrative paper to demonstrate the species' relative abundance and geographical distribution in time, and to implement appropriate conservation measures for this iconic and endangered shark species. ~ **Frederik Mollen**, *Elasmobranch Research, Bonheiden, Belgium* and **Samuel Iglésias**, *Institut de Systématique, Évolution, Biodiversité (ISYEB), Muséum national d'Histoire naturelle, CNRS, Sorbonne Université, EPHE, Université des Antilles, Station marine de Concarneau, Concarneau, France*



Examples of Bramble sharks *Echinorhinus brucus* (Bonnaterre, 1788) in the collections of the Muséum national d'Histoire naturelle (Paris). Photo credits: Samuel Iglésias (MNHN).

**Related publication:** Mollen F.H. & Iglésias S.P. 2023. — An inventory of Bramble sharks *Echinorhinus brucus* (Bonnaterre, 1788) (Elasmobranchii, Echinorhinidae) in natural history collections worldwide for conservation status assessment. *Zoosystema* 45 (22): 653-748. <https://doi.org/10.5252/zoosystema2023v45a22>

### Ongoing exhibition on Hanseatic North Atlantic trade.

The research project „Looking in from the Edge“ (LIFTE) has prepared an exhibition, in which Shetland fish trade features a prominent role. It is visible until April 2024 at the German Maritime Museum in Bremerhaven and at the Stromness Museum, Orkney (and hopefully soon at the Shetland Museum & Archives in Lerwick). ~ *Hans Christian Küchelmann*



*The new exhibition at the Stromness Museum. Photo credits: Sigurd Towrie.*

The exhibition is accompanied by an exhibition booklet, which is available in English and German:

- Holterman, Bart & Grassel, Philipp (2023): Looking in from the Edge. Orkney Shetland. Early Modern Trade in the Northern Isles, Bremerhaven. [Download here](#).
- Holterman, Bart & Grassel, Philipp (2023): Looking in from the Edge. Immer Weiter. Frühneuzeitlicher Handel in Orkney und Shetland, Bremerhaven. [Download here](#).

Exhibition links: [German Maritime Museum in Bremerhaven](#), [Stromness Museum in Orkney](#), [Archaeology in Orkney](#).



*Hans van Essen, Vismarkt. Oil on canvas, around 1620. Stockfish in the basket on the left in the background.*

### Historic and archaeozoological perspectives on stockfish trade in Europe.

As part of the Research project "Between the North Sea and the Norwegian Sea" an article of mine about stockfish production, trade and provisioning of European towns has been published in the proceedings of a conference, which was held at the German Archaeological institute in Berlin in November 2019. The paper is concerned with the production of and trade with stockfish, from its beginning in Northern Norway to its development towards a Europe wide trade network and the provision of large population groups with protein. The focus lies on the Hanseatic trade, which is analysed using historical documents and archaeozoological fish bones. ~ *Hans Christian Küchelmann*

**Related publication:** Küchelmann, Hans Christian (2023): „Men schall ock berger, yslander, und hidlander vysch, elcken under synen namen unde vor syne werde, vorkopen“. Zur hansischen Versorgung mittelalterlicher und frühneuzeitlicher Städte mit Stockfisch. in: Benecke, Norbert (Hrsg.): *Leben in der mittelalterlichen Stadt. Neue archäobiologische Forschungen, Archäometrische Studien 2*, 111-158, Berlin. <https://doi.org/10.34780/4tr6-rtn9>. [Download available here](#).

## [ RESOURCES ]

**Upcoming palaeoproteomics courses.** As can be seen with our spotlight in this issue and one of the recent publications, palaeoproteomics is proving to be an invaluable tool for marine historical ecology. **Alberto John Taurozzi** and **Enrico Cappellini** of the **Globe Institute at the University of Copenhagen** have two upcoming courses that may be of interest to those of you keen to learn more!

The **Practical Palaeoproteomics Summer School** remains the flagship and this year has been extended by one day and is now worth **6 ECTS**. The course starts with a series of lectures and is followed by laboratory work (wet) and then data analysis. The first 3 days can be attended either in person or remotely. **Enrollment deadline** is the **4th April 2024** and runs from **14-23 August 2024**. Additional details can be found here: <https://phdcourses.ku.dk/DetailKursus.aspx?id=111424&sitepath=SUND>

A new course, **Lectures on Ancient Proteins**, is as the name implies a lecture series on the palaeoproteomics field, principles, technology and applications. This course is aimed at being an introduction and consists of 3 days of lectures (**2.1 ECTS**) which can be attended either in person or remotely. **Enrollment deadline** is the **15th of July 2024** and the course runs **14-16 August 2024**. A more detailed description and the signup can be found here: <https://phdcourses.ku.dk/DetailKursus.aspx?id=111416&sitepath=SUND>

**Function of Oceans Past News (OPN) emailing list.** It has been brought to my attention that occasionally folks from our community may wish to share something time sensitive with everyone (e.g. job adverts) that would close prior to the next OPN. Previously, we have not used your email addresses to distribute such information and have strictly sent the OPN calls for content and News. In one of the recent Oceans Past Initiative Board meetings we discussed expanding what we send to include calls for abstracts, jobs, funding, etc. However, this is of course something we would like to check how those in our community feel about this proposition before proceeding. It would be extremely helpful if you could please take this **short (2 questions!) survey** (please before the **19 February 2024**). The poll, which is anonymous, can be found here: <https://forms.gle/S5CNYNhBzJCoeaRC7>

## [ RECENT PUBLICATIONS ]

Colonese AC, Brugere C, Ramires M, Clauzet M, Brandi R, Bandeira AM, Guedes L, Wiedemann M, Reyes-García V, & Begossi A. 2023. **The Legacy of Pre-Columbian Fisheries to Food Security and Poverty Alleviation in the Modern Amazon**. In AC Colonese & RG Milheira (eds), *Historical Ecology and Landscape Archaeology in Lowland South America* (pp. 3–19). Springer International Publishing.

Herbst DF, Rampon J, Baleeiro B, Silva LG, Fossile T, & Colonese AC. 2023. **180 years of marine animal diversity as perceived by public media in southern Brazil**. *PLoS One*, 18(6), e0284024. <https://doi.org/10.1371/journal.pone.0284024>

Moutopoulos DK, Lazari E, Katselis G, Giovos I. 2022. **From extermination to conservation: Unpublished Historical records of shark presence during the early and development phase of the Greek fishery**. *Animals*, 12(4),3575. <https://doi.org/10.3390/ani12243575>

Sokou VK, Gonzalvo J, Giovos I, Brito C, Moutopoulos DK. 2022. **Annals: Annals for Istrian and Mediterranean Studies**, *Historia Naturalis Journal Series*, 32, 2: 443-450. [https://zdjp.si/wp-content/uploads/2022/12/ASHN\\_32-2022-2\\_SOKOU.pdf](https://zdjp.si/wp-content/uploads/2022/12/ASHN_32-2022-2_SOKOU.pdf)

Winter RM, de Kock W, Mackie M, Ramsøe M, Desiderà E, Collins MJ, Guidetti P, Presslee S, Alegre MM, Oueslati T, Muniz AM, Michailidis D, van den Hurk Y, Taurozzi AJ, & Çakırlar C. (2023). **Grouping groupers in the Mediterranean: Ecological baselines revealed by ancient proteins.** *Ecology and Evolution*, 13(10), e10625. <https://doi.org/10.1002/ece3.10625>

## ANNOUNCEMENTS: CONFERENCES and WORKSHOPS

**Call for papers** and **upcoming conference.** Reminder to save the date for **Oceans Past X: Historical perspectives on human-ocean interactions: Deep understandings for informing ocean futures.** This conference will take place between **25-28 June 2024** and be hosted by the **University of Exeter** on their Penryn campus in **Cornwall, United Kingdom.** Abstract submission opened in September and has been extended to **Friday 02<sup>nd</sup> February 2024.**

Oceans Past brings together scholars and practitioners interested in documenting and understanding changes in marine systems and human maritime interactions in past decades, centuries and millennia. The 10th Oceans Past Conference will enable continued scholarly networking and international exchange towards a fuller understanding of the past, the present, and potential future trajectories of our marine ecosystems and the human communities that interact with these. Please see the conference abstract submission and additional details: <https://oceanspast.org/opx.php>

**Upcoming conference.** 5<sup>th</sup> **Nordic Zooarchaeology Meeting** in Helsinki from the 1st to the 3rd of February 2024. Conference details can be found [here](#).

**Upcoming conference.** **Congreso Internacional de Lengua, Literatura e Historia del mar y la navegación. Europa, América y Filipinas** will take place between 07<sup>th</sup> – 10<sup>th</sup> of May 2024 at the Casa de América in Madrid, Spain. [Conference website](#).

**Call for papers** and **upcoming conference.** The 2024 **International Council for Archaeozoology (ICAZ) Fish Remains Working Group (FRWG) Conference** Organizing Committee invites abstract submissions for paper and poster presentations at the upcoming conference, deadline of midnight (EST) on 15 April 2024. This will be the **22<sup>nd</sup> FRWG meeting** and it will take place between the 12<sup>th</sup> and 18<sup>th</sup> of August in Toronto, Canada. [Conference website](#).

**Upcoming conference.** 9<sup>th</sup> **International Maritime History Association International Congress of Maritime History** will be held in Busan, Korea between 19<sup>th</sup> – 24<sup>th</sup> of August 2024. The main theme will be “Oceans: Local Mobility, Global Connectivity”, and the aim is to investigate the many aspects of the relationship between humans and the oceans. [Conference website](#).

**Conference call: Oceans Past 2024**  
 Historical perspectives on human-ocean interactions:  
 Deep understandings for informing ocean futures  
 25-28 June 2024, Cornwall, UK

**Conference themes**

- Physical and biological drivers in marine ecosystems and populations - historical 'baselines' to long-term dynamics
- Scales of (un)sustainable marine harvesting through time
- Multidisciplinary perspectives on social and ecological consequences of change
- Trajectories and repercussions of management interventions on marine social-ecological systems through time
- Lessons from the past for management of coastal zones and high seas
- How the sea has changed us / how we have changed the sea: human maritime experience in literature, story, song, and art

LOCATION: University of Exeter's Cornwall campus, Penryn

ABSTRACTS OPEN FROM SEPTEMBER 2023

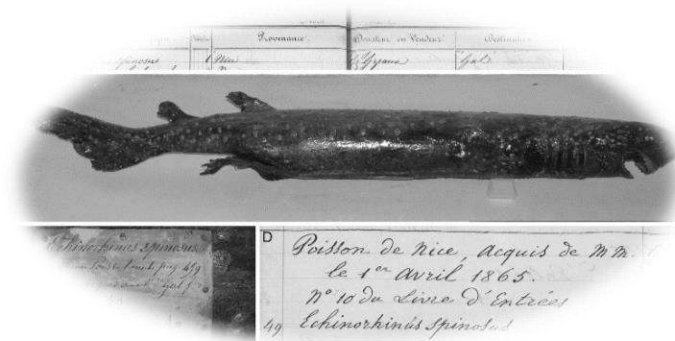
Registration discounts available for GPI members, researchers from LDCs and early career researchers; A limited number of early career travel awards available courtesy of ICES sponsorship!

Oceans Past Initiative: A global network for marine historical research

For information & membership options see [www.oceanspast.org](http://www.oceanspast.org) or E: [info@oceanspast.org](mailto:info@oceanspast.org)  
 Find us online at: [@oceans\\_past](#) [oceanspast](#) [Oceans Past Initiative](#)

**Upcoming workshop.** COST Action MAF-WORLD has provided funding for a training school on '**Detecting, describing and disentangling pre-industrial climate and human impacts on marine ecosystems**' in collaboration with PAGES Q-MARE group. This will take place 02-06 September 2024, on Crete, Greece. Applications will open on the COST website soon. Additional details [here](#).

**Call for papers** and **upcoming conference.** International conference '**Commodities and Environments in Early Modern Global Asia, 1400–1800**', organised in the framework of the ERC-funded project CAPASIA The Asian Origins of Global Capitalism and hosted by the European University Institute in Florence from the 13<sup>th</sup> – 15<sup>th</sup> November 2024. The deadline for abstract submission is 20 February 2024. [Conference website](#).



## 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 **Rachel Winter** ([rachelwinter@palaeome.org](mailto:rachelwinter@palaeome.org)).

The next *Oceans Past News* will be out in April 2024. We **warmly welcome submissions** through March 2024.

## RESOURCES

The *Oceans Past News* Archive is available online: <https://oceanspast.org/newsletter.php>

More on the Oceans Past Initiative: <http://oceanspast.org>

OPI on Facebook: <https://www.facebook.com/groups/122288493384/> and Twitter: @oceans\_past