

OCEANS PAST NEWS No.33 JULY 2025



Scorching heat + summer reads

While many of us in the northern hemisphere are facing what feels like countless heatwaves (currently writing from the south of France), I'm delighted to share this edition of the OPN as you'll find a *plethora* of new reading material to get us through this! In particular, I am very excited about the 16 papers just published in the special issue of the *Philosophical Transactions of the Royal Society B,* "Shifting seas: understanding deep-time human impacts on marine ecosystems" and am sure that there is something there for everyone. I am also delighted to get to feature several projects (i.e. MERMAID and FisHistory), upcoming conferences, and additional recent publications.

Rachel M. Winter, OPN Editor+

OCEANS PAST SPOTLIGHT*

Project Spotlight: The ERC MERMAID Program

For our spotlight in this edition I am delighted to share the MERMAID project, PI: Tatiana Theodoropoulou, CNRS-CEPAM lab at the Université Côte d'Azur. ~RMW

The ERC-CoG MERMAID (Marine Ecosystems, Animal Resources and Human Strategies in Ancient Mediterranean: Integrated Studies on Natural and Societal Resilience),



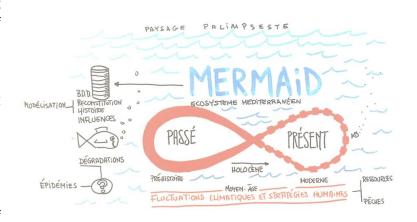
funded by the European Research Council (under the European Union's Horizon 2020 research and innovation program, Grant Agreement no. 101002721), explores the long-term dynamics of human interactions with marine ecosystems in ancient Mediterranean. The Mediterranean offers a unique archive of undisrupted sea-harvesting activities and a precious cultural and palaeoenvironmental indicator, i.e., the remains of marine organisms from archaeological excavations. MERMAID draws on this record to produce a groundbreaking synthesis of ancient Mediterranean fisheries, spanning several millennia and biogeographical zones. The goal is to assess the long-term status and condition of marine ecosystems, their fluctuations and resilience under major environmental changes of the past, as well as the ways in which ancient societies depended on these resources and adapted exploitation strategies in response to these changes. It also aspires to assesses the first impact of ancient fishing practices on biodiversity and ecosystem stability. Ultimately, the aim is to contribute to a comprehensive assessment of past interactions between climatic and human pressures on the Mediterranean marine ecosystem.

[†] 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 info@oceanspast.org.

The backbone of MERMAID is **M-ARCHives**, the first **comprehensive database of marine faunal remains** (fish and marine mammal bones, shells) from coastal archaeological sites around the Mediterranean, spanning from the Paleolithic to the end of the Roman Era. This database consolidates widely dispersed scientific and grey literature, standardizes taxonomic nomenclature and quantification, and allows multi-scalar syntheses of data, presence/absence, abundance, and diversity of catches across time. Alongside faunal data, it also includes fishing related artifacts and pictorial evidence of fishing, which providing insight into both the ecological and cultural dimensions of marine resource use.

A key objective is to trace the evolution of biodiversity and verify the concept of shifting baselines —the progressive redefinition of what is considered a "normal" state of marine ecosystems due to long-term environmental and anthropogenic pressures. Through an interdisciplinary approach combining zooarchaeology, marine biology, biogeochemistry, fisheries science, ecological modelling, statistics, geomorphology and palaeoclimatology, the program moves from archaeological data to ecological conditions. The biological traits and habitat preferences of species help reconstruct past biotopes. Isotopic analyses further determine the trophic



levels of key taxa, shedding light on food web dynamics and anthropogenic pressures on ecological niches. Additionally, ecological modeling techniques—commonly used to simulate current and future ecosystem changes—are applied for the first time to the past in order to predict historical species distributions based on paleoclimatic, paleoceanographic, and geomorphological data.

Beyond environmental reconstructions, MERMAID also investigates the **modes and intensity of marine exploitation by ancient Mediterranean societies**. Seasonality, regularity and scale of fishing activities are explored through various methods, such as sclerochronology, isotopes, and osteometry. Changes in species sizes, trophic structure, and catch frequencies help identify signs of overexploitation or sustainable use. Comparisons between marine and terrestrial faunal assemblages as well as estimation of marine isotopic signatures in human bone isotopes provide insights into the relative role of seafood in Mediterranean across various chrono-cultural contexts.

Through its interdisciplinary methods and long-term perspective, MERMAID bridges past and present, archaeology and ecology, helping to inform future sustainable marine practices based on lessons from history. The program's output will enhance the fields of historical marine ecology and environmental archaeology and will improve our understanding of both the ecosystem's vulnerability or resilience, and the alternative pathways societies followed to adapt to their environment

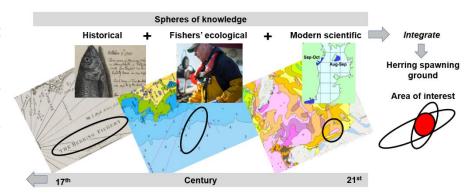
Ultimately, MERMAID seeks not only to generate high-quality academic data but also to contribute to public awareness and environmental memory. Outreach initiatives include educational materials for schools and a comic book on marine ecosystem fluctuations through history, as well as active engagement in the recent UNOC which was held in Nice in June 2025. MERMAID joins other efforts to normalize degraded ecosystems and to restore a collective understanding of what healthy marine environments once looked like. *"Tatiana Theodoropoulou*"

RESEARCH & OTHER NEWS



Project FisHistory is a two-year interdisciplinary project (**Jan 2025 – Dec 2026**) funded by UK Research and Innovation and based at Bangor University (Wales, UK). The project combines historical records, local ecological knowledge and modern surveys and data to identify critical **spawning grounds** for **Atlantic herring** (*Clupea harengus*) with a focus on the **Irish Sea**, and to understand aspects of **stock identity** (e.g., spawning condition and spawning period) and whether these have changed over time. We also want to gain a deeper understanding of the **social**, **cultural**, **economic and ecological value of herring**.

The project is in the data collection stage. As well as archive visits, we are speaking to people with knowledge on Irish sea herring fisheries in the past, or more recently. We have devised a semistructured questionnaire to understand things such as, where herring were caught locally, when in the year did herring arrive, where did herring spawn and how were herring used locally?



If you can offer any information or know someone who might, please contact fishistory@bangor.ac.uk

We'll be hosting a **webinar** in the coming months to introduce the project and share updates – all those interested are welcome! The date will be announced soon via our BlueSky: **@projectfishistory.bsky.social** (follow for project updates and fascinating historical finds!).



Image from Lewis Morris' De Historia Piscium. 1740-1747. Digitised copy. National Library of Wales,. NLW. MS. 24052E.

A new YouTube video has recently been published, "Investigating the historical ecology of Babitonga Bay, Brazil" from the European Research Council (ERC) Synergy Grant project, SEACHANGE, highlighting the work they're doing in Brazil, the video can be watch the video here!



RECENT PUBLICATIONS

Jiménez-Cano NG, Fabiola Guzmán A, Rodríguez-Galicia B. (2025) **An allometric model for size and weight estimation of the common snook (Centropomus undecimalis) for archaeological purposes based on isolated skeletal elements**. *Cybium*, *49*(2): 109-118. https://doi.org/10.26028/cybium/2025-012

Leurs G, Jabado RW, Camará A, Dos Santos L, Nonque DM, Zuidewind TJ, Barry I, Campredon P, Blaschke B, de Boer K, Hijner N, Olff H, Pontes SL, Regalla A, Walsh MB, Govers LL. (2025). **Reconstructing historical catch trends of threatened sharks and rays based on fisher ecological knowledge**. *Conservation Biology: The Journal of the Society for Conservation Biology*, e70059. https://doi.org/10.1111/cobi.70059

McGrath K, van der Sluis LG, Lefebvre A, Charpentier A, Rodrigues ASL, Álvarez-Fernández E, Baleux F, Berganza E, Chauvière F-X, Dachary M, Duarte Matías E, Houmard C, Marín-Arroyo AB, de la Rasilla Vives M, Tapia J, Thil F, Tombret O, Torres-Iglesias L, Speller C, ... Pétillon J-M. (2025). Late Paleolithic whale bone tools reveal human and whale ecology in the Bay of Biscay. *Nature Communications*, *16*(1), 4646. https://doi.org/10.1038/s41467-025-59486-8

McLaughlin TR, Robson HK, Maring R, Boethius A, Guiry E, Groß D, Koivisto S, Philippsen B, Milner N, Bailey G, Craig OE. (2025). Marine exploitation and the arrival of farming: resolving the paradox of the Mesolithic-Neolithic transition in Denmark. Quaternary Science Reviews, 363(109447), 109447. https://doi.org/10.1016/j.quascirev.2025.109447

Winter RM, Desiderá E, Guidetti P, Von Tersch M, Dee M, Alexander M, Çakirlar C. (2025). **Pre-Lessepsian isotopic** niche spaces: using paleoecological proxies to assess the impact of ongoing bioinvasions on fishes in the eastern **Mediterranean Sea**. *Mediterranean Marine Science*, 26(3). https://doi.org/10.12681/mms.40039

Yong L, Lu X, Zeng Q, Zhao L, Zhang Y, Wang X. (2025). **Decoding anthropogenic risk through historical baselines: a conservation prioritization framework for Chinese white dolphin in anthropogenic seascapes**. *Frontiers in Marine Science*, 12. https://doi.org/10.3389/fmars.2025.1607234

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A special issue of the Philosophical Transactions of the Royal Society B with a theme of "Shifting seas: understanding deep-time human impacts on marine ecosystems" has just been published this month (10 July 2025, specifically). This special issue was compiled and edited by Luke E. Holman, Kristine Bohmann, Oliver E. Craig, David Orton, Mikkel Winther Pedersen, Morten Tange Olsen, Ruth H. Thurstan and James Scourse. This issue consists of 16 papers divided across three parts: Part I: Marine biogenic archives, Part II: Human chronicles of the changing sea, and Part III: Sediment records and ocean futures. The full list of papers can be further explored here.

Here is an abstract of the issue from the editorial team: Humans have depended on the ocean for travel, food and inspiration for thousands of years - but we have also damaged ocean ecosystems. This theme issue explores how humans have impacted the seas over millennia, from early fishing to modern industrial-scale exploitation. Using clues from bones, historical reports, sediment cores and shells, research in this issue shows how marine biodiversity Illustration by Madeline Dall (CC BY). has changed in response to natural climate change and



human impacts. Understanding how oceans changed in the past will help us restore them today, allowing us to be better ocean stewards in the future.

#### ANNOUNCEMENTS: CONFERENCES and WORKSHOPS

#### **ANNOUNCING THE NEXT OCEANS PAST CONFERENCE!**



**OCEAN-CONNECTED COMMUNITIES** 

University of Victoria British Columbia, Canada

Here we are with the much awaited and anticipated details for the next Oceans Past Initiative's bi-annual conference! Save the dates for 15-19 June 2026 for OPXI (Oceans Past XI) and a pin for the University of Victoria in British Columbia, Canada. The theme for this edition of the conference is Ocean-connected communities: Historical perspectives inform modern relationships and our local hosting team is led by Professors Jason Colby, Loren McClenachan and Iain McKechnie.

We anticipate opening **abstract submission** in early **Autumn 2025** with decisions expected in **January 2026**. In the meantime, you can stay up to date with news about the conference on our <u>website</u> and social media channels. Due to generous financial support from the **International Council for the Exploration of the Seas** (ICES) we will be able partially subsidise travel costs for a select number of early career researchers. Awardees will be chosen on a competitive basis and demonstrated need. Applications for support will open alongside abstract submissions in September.

We are currently searching for additional funders to support early career and Indigenous participation, please get in touch at <a href="mailto:info@oceanspast.org">info@oceanspast.org</a> if you know of funding opportunities or if you can support us in this endeavour.

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Upcoming conference(s). The 4th **Crossing the Paleontological-Ecological Gap** (CPEG) meeting and 3rd **Conservation Paleobiology Symposium** will be held jointly, from **July 27th to August 1st 2025**, at the **University of Zurich**. The CPEG meeting aims to bring palaeontologists and ecologists together to share ideas, data and methods in research areas that are studied by both, but typically independently (e.g., community and population ecology, food web dynamics, extinction mechanisms and conservation). On this occasion, the meeting will be merged with the 3rd Conservation Paleobiology Symposium to promote the application of palaeobiological and ecological records to the conservation, management, and restoration of biodiversity. Additional details can be found on the joint **event's website**.

Upcoming conference. The International Society for Biomolecular Archaeology will have their 11th biannual meeting in Turin, Italy this coming summer from the 26th – 29th August 2025. There will be a session exploring biomolecular archaeology in the context of "Environmental change, sustainability, and ancient ecosystems", where showcases from coastal archaeology are welcomed. Additional details and the conference programme can be found on the conference website.

Upcoming conference and call for papers. The Built Ocean is the theme for the EAHN (European Architectural History Network) 2025 Thematic Conference taking place in Porto, Portugal on September 10-13, 2025. EAHN Porto 2025 will be hosted by the research project Fishing Architecture at the Faculty of Architecture of the University of Porto. Architects require solid ground on which to base their practice, yet oceans have always been a key element shaping the history of architecture and the built environment. This themed conference aims to shift the focus of architectural history from the land to the sea. It will address the planet's bodies of salt water either as areas of increasing urbanization (through the building of structures such as underwater cables, oil rigs, windmills, etc.), as connectors between space and cultures (navigation routes for people and resources, transported in the form of knowledge, labour, and materials), or as an ecosystem functioning, in connection with the land, as an essential lifesupport system (defining climatic patterns, providing resources from food to raw materials, and securing services from carbon sequestration to large-scale habitats). The conference aims to bring together scholars representing a wide range of interdisciplinary knowledge and sets out to cover a broad chronological scope, from deep history and archaeological sources to more recent accounts of ecological decline and potential futures. Where is the architecture of the sea? To what extent does the built environment impact saltwater landscapes? What reciprocal impacts do seascapes have on the built environment?

For further details, please see the conference website: www.thebuiltocean.com or email: fish@arq.up.pt

Upcoming conference. The 11th World Conference on Ecological Restoration (SER2025) will take place 30th September – 04th October 2025 in Denver, Colorado, United States. SER's World Conference is an exciting and inspiring biennial gathering of global experts in ecological restoration, making the 11th World Conference on Ecological Restoration (SER2025) the premier venue for those interested in being active members of the global restoration community. More information can be located on the conference website.

Upcoming conference. Representatives of the UNESCO Oceans decade project "Indigenous People, Traditional Ecological Knowledge, and Climate Change: The Iconic Underwater Cultural Heritage of Stone Tidal Weirs" will be hosting a session at the **8**th **International Congress for Underwater Archaeology** (IKUWA 8) being hosted in **Oostende, Belgium** from **October 13**th **– 17**th **2025**. More information can be found on the <u>conference website</u>.

Upcoming conference. The International Council for ArchaeoZoology (ICAZ)'s Ancient Genomics, Proteomics, Morphometrics Working Group will have their next meeting in **Copenhagen, Denmark** between the **14**th – **17**th **of October 2025**. The conference theme is: "Exploring the Past, Informing the Future: Two Decades of Interdisciplinary Approaches in Archaeozoology". Find additional details on the <u>conference website</u>.

Upcoming conference. The 45th International History and Archaeology Meetings of Nice Côte d'Azur will take place in 14th-17th October 2025, and will be on "Oceans, coasts, islands and societies: Environmental fluctuations, human activities, and socio-environmental entanglements over time". Further details can be found on the conference website.



Call for papers and upcoming conference. Nayeli Jiménez Cano and Mariela Declet Pérez are co-chairing a symposium entitled "Marine Resource Exploitation in the Preindustrial Americas: Interdisciplinary Approaches to Fisheries Baselines" at the Society for American Archaeology's Annual Meeting taking place between 29 April – 03 May 2026 in San Francisco, California, United States. The deadline for abstract submissions in 04 September 2025 at 15:00 EDT. Anyone interested in presenting a paper in this session should be in touch with the organisiers at njimenezcano@ucsd.edu and mdecletp@ucsd.edu. The session abstract is included below.

Marine resources have always been central to the subsistence, economy, and cultural traditions of societies throughout the Americas. Harvesting these resources shaped pre industrial ways of life and fostered lasting, adaptive connections with coastal and estuarine ecosystems, as reflected in the zooarchaeological record. This symposium invites contributions that explore the diverse ways marine animals — both vertebrate and invertebrate — were exploited in the preindustrial Americas, with an emphasis on building historical baselines for understanding long-term human—marine interactions. We aim to showcase research that integrates zooarchaeology, historical ecology, and ethnohistory to reconstruct past fisheries, assess their ecological and social impacts, and examine their cultural and ecological legacies for present and future marine management. We also welcome contributions that combine traditional zooarchaeological approaches with methodologies such as geochemistry, geometric morphometrics, ZooMS, palaeoproteomics, ancient DNA, and related techniques. This session brings together scholars from diverse temporal, geographic, and disciplinary perspectives to deepen our understanding of how past human use of marine resources can inform sustainable practices and conservation today, through the lens of fisheries, historical baselines, and zooarchaeological evidence in the preindustrial Americas.



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 (info@oceanspast.org).

If you have **news or an event to share with the wider OPI community,** please get in touch with us (info@oceanspast.org) and we would be happy to share your content on our social media platforms.

The next Oceans Past News will be out in October 2025. We warmly welcome submissions through September 2025.

RESOURCES