# **OCEANS PAST NEWS No.5**

**JULY 2017** 



#### **THANK YOU**

This 5<sup>th</sup> issue marks a year since we launched Oceans Past News – our first birthday! We thank you for reading and contributing to OPN, with special thanks to the scientists who have provide information for our Oceans Past Spotlight and 10 Questions features; in this issue to **Dr. Dalal Al-Abdulrazzak** for her time. We hope we have served the community well thus far, and we are looking forward to improving over the next year. We are happy to hear to your questions and feedback, so please do not hesitate to be in touch. As always, our contact information is found on the final page of OPN.





**Emily S. Klein**, Southwest Fisheries Science Center & The Farallon Institute, USA **Cristina Brito**, CHAM, FCSH, NOVA University of Lisbon

OPN Editors



# 10 QUESTIONS: DALAL AL-ABDULRAZZAK

Each issue of Oceans Past News will include a feaure 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 <a href="maily.klein04@gmail.com">emily.klein04@gmail.com</a>.

**Dr. Al-Abdulrazzak** is the Seafood Specialist with the Ocean Wise Sustainable Seafood Programme at the Vancouver Aquarium. She was formerly an Ocean Policy Analyst at the United Nations Headquarters and a Postdoctoral Research Fellow at the University of British Columbia's Fisheries Centre, where she also did her PhD. Born and raised in Kuwait, she currently resides in Vancouver, BC. https://alabdulrazzak.com/

Q1. First – a brief introduction: can you describe your research as it pertains to the past in two sentences or less?

Broadly speaking, my research aims to understand and document the way that fisheries have impacted marine ecosystems over long time scales in order to implement effective policy.

#### Q2. Why do you find research on the past important?

From a practical standpoint, the contribution of many informal sectors such as artisanal, subsistence, or illegal fishing has historically been missing from officially reported statistics. Reconstructing the past contribution of these sectors results in drastically altered baselines, which has strong implications for fisheries management and food security.

Q3. Was there a person or event that influenced on your commitment to studying history and historical ecosystems? As an undergraduate student, I read **Jeremy Jackson**'s historical overfishing paper and it blew my mind. It influenced me so much that I took it upon myself to raise the funds to fly him out to my small liberal arts college to give a lecture.

Afterwards, I ended up working for him as research assistant at Scripps while I was applying to do my PhD with **Daniel Pauly** at UBC, so it was well worth the effort!

#### Q4. What advice would you give those who want to engage in historical work or collaborate with our community?

The hardest part is often the methodology. Don't be afraid to try something, sit on it for a while, and then return to it later many times over.

# Q5. Do you believe the past can help with solving contemporary environmental/social problems, and if so, what is one area we can provide insight on?

Studying the past is invaluable for understanding contemporary environmental problems because it places our current ecological states in context. But besides providing better baselines to inform management plans and conservation targets, I think historical ecology can help change the way people view and interact with the ocean. Perhaps the most important role of historical marine ecology is to create mythologies surrounding fish and marine species that will inspire an ethical shift to conserve marine species rather than commodify them.

#### Q6. When you do assess our current environmental and societal challenges, what gives you hope?

I think just the sheer resilience of nature and its ability to recover gives me hope. Also, my office happens to be at the **Vancouver Aquarium**, so I often stroll through the galleries and witness the wonder of children as they experience the underwater world. I think unlike previous generations, young people are more idealistic than ever before and fundamentally believe that humans do not have a right to destroy ecosystems.

# Q7. What knowledge would you like to pass on to the next generation, of the public or of scientists?

That understanding the interface of social and ecological dynamics over long time scales requires a very broad range of knowledge. You are often considering changing ecological states within the context of changing social customs which may or may not be changing at similar rates. True interdisciplinarity is very difficult to achieve and it's important to consider our work within these limitations.

# Q8. What field of research – besides the one you are working in – do you consider most exciting?

I've always been fascinated by behavioral economics and the role it can play in informing marine conservation. For example, what motivates people to adopt marine conservation measures such as MPAs or fishery closures, and conversely what drives people to resist them? What role does economic discounting play in marine conservation?

#### Q9. What are you reading at the moment?

I am currently doing a literature review of impacts of ghost fishing. For pleasure reading, I'm a big fan of post-colonial literature. I've just finished *Homegoing* by **Yaa Gyasi**, and am looking forward to starting **Arundhati Roy**'s new book *The Ministry of Utmost Happiness*.

# Q10. What is a critical but perhaps under-acknowledged question we as a community should be asking?

I think the realization that many marine ecosystems will not return to their previous ecological states sets the stage for many important ethical questions. For example, how much of a marine resource should there be, and how should the rights to its exploitation be allocated? Can fisheries be productive enough to support growing populations and also be environmentally sustainable? What do we stand to gain by recovering coastal ecosystems? And conversely, what will be lost?



# **RESEARCH NEWS**

Aristotle the ichthyologist. Studying historical works illuminates the long history of our relationship with the sea, and research looking at Aristotle's works demonstrate that this father of modern science was fascinated with marine ecosystems. Kostas Ganias and his colleagues studied Aristotle's zoological works to develop a catalogue of his fishes, delving into over 20 of his books. They discovered Aristotle was enthusiastic about fish and their biology, describing body structure and function, reproduction, development of feeding habits, migrations, and disease. Interestingly, they found Aristotle's was not focused solely on fish that were of human interest at the time, but also fish that whose

Generally speaking, seaweedy places are beneficial: of those fish that forage in every kind of place, those caught in weedy places are fatter. For the weed-eaters are well supplied with food and the flesh eaters encounter more fish there (HA602a18); Coastal fishes are better than pelagic ones for their feeding is more abundant and better; for whenever the sun falls on plants, they grow more abundant and better and tenderer, as in gardens... Also, there exists a good blend of the hot and the cold in the coastal regions of the sea; this is in fact why the flesh of such fishes is more compact, while that of the pelagic fishes is watery and flaccid. (HA598a2)

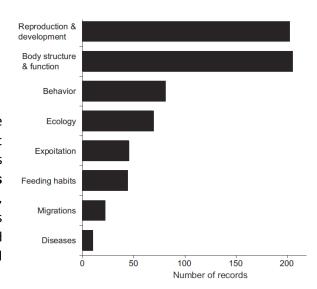


Fig 4 from the manuscript: Number of records per field of fish biology published in Aristotle's works.

Given their review of his scientific study of fish, Ganias and his coauthors believe Aristotle should be considered the first ichthyologist, with his work still proving relevant to current research today (an example of Aristotle's text from the publication at left). *Publication: Ganias, K. M. Charikleia, & E. Voultsiadou 2017. "Aristotle as an ichthyologist: Exploring Aegean fish diversity 2,400 years ago."* 

Oral histories and the subjectives of marine engagement. Oral histories are increasingly recognized as an important source of

McCann note that one of the ways oral histories are important are as providing insight into how they can be read as narratives about human relationships with marine environments and animals. In their work, they argue that listening closely to people who have long and intimate experience of the underwater world can illuminate the emotional and experiential dimensions of unsustainable fishing practices. Further, they contend such narratives also encourage us to acknowledge and take seriously the ongoing significance of anthropomorphism as a way of conceptualizing and relating to the nonhuman world. Oral histories have a significant role to play in fostering human capacity and, indeed, desire to live ethically in and with a more-than-human (marine) world. Publication: Gaynor, A. & J. McCann (2017). "'I've Had Dolphins...Looking for Abalone for Me': Oral History and the Subjectivities of Marine Engagement."

peculiar life history

captivated him.

Algae and the Spanish navigators (1492-1792). This paper addresses the knowledge about the Sargasso Sea from the perspective of the Spanish navigators in the early modern period. These navigators and explorers, during their Atlantic voyages, recorded in their diaries and logbooks information related to the occurrence of different algae amongst other elements. To these observations, other such as the currents influences, namely of the Gulf current, or the description of the medicinal properties of these algae, were added. Related publication: Juan Pérez-Rubín Feigl (2016). Las algas y los antiguos navegantes españoles (1492-1792). Revista del Instituto Español de Oceanografía, 24: 62-75.



Reconstructing baselines of Persian/Arabian Gulf dugong. Understanding how human impacts have altered past abundances and distributions of marine organisms is especially important for vulnerable species like the dugong (Dugong dugon). The second largest population of dugong in the world reside in the Persian/Arabian Gulf, but little is known about its current or past abundance, distribution, or ecological role. Such information is critical for appropriate management and conservation plans for dugong, especially given large and wide-spread coastal development in the region. Dalal Al-Abdulrazzak and Daniel Pauly investigated change in dugong distribution and abundance over the past half century, and assessed current health of the Gulf populations. They found that, since 1950, the dugong range was larger than previously believed and may have contracted by a quarter, as well as evidence for resident populations not currently considered in management. Further, while the current population is large, densities have declined. These findings provide much needed information for management and conservation of dugongs in the Gulf, while also highlighting the need for further research. Publication: Al-Abdulrazzak, D. & D. Pauly, 2017. "Reconstructing historical baselines for the Persian/Arabian Gulf Dugong, Dugong dugon.

Example of the Prize Papers

# **COLLABORATIONS**

Prize papers a novel source of social, cultural, and economic insight. In maritime law, a prize is an enemy ship captured in war. Crews who participated in a prize ship's capture collected a share of the value of its sale or of its cargo, provided it could be demonstrated to be an enemy ship and not the ship of a neutral power. The archival materials that resulted are known as the 'Prize Papers', which consist of Court Papers, produced at the trial (interviews of the master and crew, lading bills etc.), and Ship's Papers, those seized at the ship's capture, but not used in court as evidence material. The ships were comparable

to floating post-offices, and therefore documents carried on board yield unique material for socio-cultural, economic and even language (dialects, vocabulary, grammar, etc.) studies of

the period from the 17th to the early 19th century. The

documents are predominantly French, Spanish and Dutch. The Prize papers were screened for relevant material to document the history of Flanders, in particular during the Spanish Succession War. Material obtained from the Prize Papers will shed new light on the maritime history of Flanders (including fisheries) and provide elements in microhistory that were in so far unexplored or insufficiently known. This preliminary research was possible thanks to support by Oceans Past Network (COST STSM-IS1403-37510) and the collaboration between the Flanders Marine Institute VLIZ and Museum aan de Stroom (MAS-Antwerp).



Prize Papers, Kew National Archives in London

Oceans Past attendees enjoy beautiful Sesimbra.

### **RECENT EVENTS**

Oceans Past convened in Sesimbra. The Oceans Past VI International Conference was held in Sesimbra, Portugal, May 16<sup>th</sup> and 18th under the theme "Historical Perspectives on the Elements and Dynamics of the Marine Socio-Ecological Systems". The conference drew around 70 participants from 23 countries, and was opened by Poul Holm (Oceans Past Platform and Trinity College, Dublin), Henrique Cabral (Universidade de Lisboa), João Paulo Oliveira e Costa (CHAM-FCSH, UNL) and a

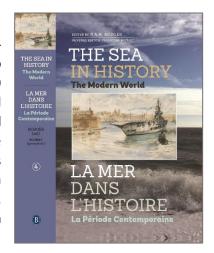
Representative of the Municipality of Sesimbra. The scientific programme was enriched by keynote speakers Amélia

Polónia (CITCEM, University of Porto) who spoke on 'Nurture and the Anthropocene: new perceptions of the Oceans' Past dynamics', Malcolm Tull (Murdoch University) on 'Fighting for fish: an historical perspective on fish wars', and Simone Libralato and Tomaso Fortibuoni (Istituto Nazionale di Oceanografia e di Geofisica Sperimental) with a lecture titled 'Ignore historical data and miss the boat: role of past information on quantitative analysis of marine resources'. This conference was part of the EU COST Action Oceans Past Platform (OPP), and meetings of the five Working Groups took place. In addition, a Training School was led by Alison MacDiarmid (NIWA, New Zealand), focusing on "Trans-disciplinary marine historical and ecological research – getting to grips with the big story of human interactions with the marine environment". Programme & Abstracts are available at http://www.escolademar.pt/oceanspastvi/.

Oceans Past VII will be held in Bremerhaven, Germany in October 2018!

# **NEW PUBLICATIONS**

The Sea in History / La Mer dans L'Histoire. Edited by Christian Buchet. This four-volume series, produced by Océanides, brings together leading maritime historians to address the impact that sea has had in various aspects of human history over 5,000 years. Looking globally, these aspects include migration, trade, economic and political state development, war, and the dissemination of ideas, culture, and religion, as well as specifically maritime subjects like shipbuilding, navigation, harvesting of marine resources, maritime communities, piracy, among others. The books engaged experts from 40 countries and across disciplines to "compile the history of the sea through a geographical, political, and economic lens... [documenting] how the ocean has been, and will continue to be, a key driving force of human development - and that human activity, and how it is managed, will determine the future of the ocean."



Al-Abdulrazzak, D. & D. Pauly (2017). Reconstructing historical baselines for the Persian/Arabian Gulf Dugong, *Dugong dugon* (Mammalia: Sirena). *Zoology in the Middle East*. 63:2. doi.org/10.1080/09397140.2017.1315853.

Ganias, K. & M. Charikleia Mezarli, E. Voultsiadou (2017). **Aristotle as an ichthyologist: Exploring Aegean fish diversity 2,400 years ago.** *Fish and Fisheries*. doi: 10.1111/faf.12223.

Gaynor, A. & J. McCann (2017). "I've Had Dolphins...Looking for Abalone for Me": Oral History and the Subjectivities of Marine Engagement. *The Oral History Review*. https://doi.org/10.1093/ohr/ohx023.

Wasmund, N. (2017). The Diatom/Dinoflagellate Index as an Indicator of Ecosystem Changes in the Baltic Sea. 2. Historical Data for Use in Determination of Good Environmental Status. Frontiers in Marine Science. doi.org/10.3389/fmars.2017.00153.

# **ANNOUNCEMENTS: CONFERENCES**

**The Bountiful Sea: Fish processing and consumption in Mediterranean antiquity**. The Ioannou Centre, University of Oxford, 6-8 September 2017. <a href="http://oxrep.classics.ox.ac.uk/pages/thebountifulsea/">http://oxrep.classics.ox.ac.uk/pages/thebountifulsea/</a>

XIIth North Sea History Conference, Museum aan de Stroom (MAS), Antwerp. 6-8 September 2017. http://www.mas.be/en/page/xiith-north-sea-history-conference

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Science delivery for sustainable use of the Baltic Sea living resources. Tallinn, Estonia. 17-19 October 2017. http://www.bonus-inspire.org/symposium.

**Sustaining the Seas: Fish, Oceanic Space and the Politics of Caring**. University of Sydney, Australia. 11-13 December 2017. *Conveners are particularly interested on historical perspectives; marine historical ecologists and environmental historians are encouraged to attend.* <a href="http://www.sustainablefishlab.org/sustaining-the-seas-conference/">http://www.sustainablefishlab.org/sustaining-the-seas-conference/</a>

**Oceans Past VII** will take place in Bremerhaven, Germany, in October 2018, hosted by the Alfred Wegener institute for Polar & Marine Research and the German Ship Museum. *More information to come!* 

Call for Expressions of Interest to Host the ESEH 2019 Conference: http://bit.ly/292kNhU.

# **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 wideranging 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-October 2017. We warmly welcome submissions through September.

#### **RESOURCES**

The Oceans Past News Archive is now online at: http://www.tcd.ie/history/opi/news.php Oceans Past Initiative: http://www.tcd.ie/history/opi/