

COST Action IS1403 Oceans Past Platform

Newsletter

Issue 2

December 2015

OPP had a fantastic period to report in this issue of Oceans Past Platform newsletter. Meetings took place in Lisbon, Dublin and Ispra. Seven STSMs took place up to December 2015 which OPP is very happy to report. We have our first OPP COST publication!

Meetings

WG2 18th FRWG 2015 conference Lisbon WG2 Meeting Archaeozoology Fish Remains 28th September 2015

WG1 ICES WGHIST Ispra 20th October 2015



Stakeholder interaction meeting (WG1 – ICES WGHIST)

Participants

Eight OPP-funded participants: Peter Jones (Ireland), Floris Bennema (The Netherlands), Adriaan Rijnsdorp (The Netherlands), Tomaso Fortibuoni (Italy),

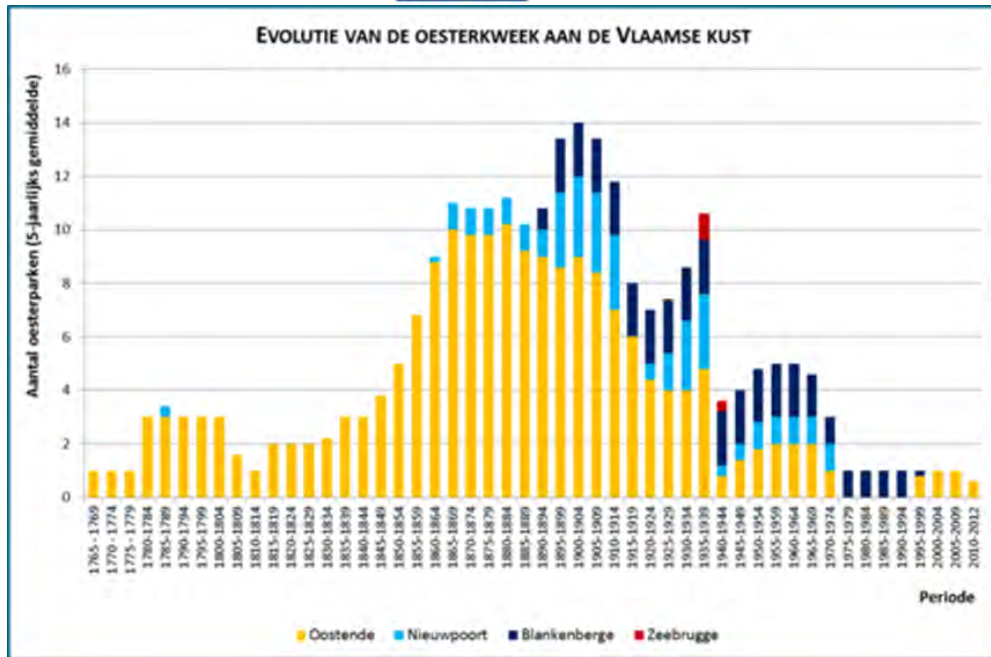
Ann-Katrien Lescrauwaet (Belgium), Georg Engelhard (UK), Bo Poulsen (Denmark) and Henn Ojaveer (Estonia)

WG1 topics addressed during the meeting

- i) Multi-centennial fishery and consumption of charismatic species: case study of the Mediterranean Sea
- ii) Historical ecology of commercial demersal species: case study in the North Sea, incl. spatial trajectories, fleet/gear dynamics, development and testing of indicators
- iii) Forage fish (such as herring, stickleback) in various marine ecosystems over different time-periods: centennial-scale exploitation and consumption trends, technology development, assessment of trajectories of fishing power.
- iv) Conspicuous marine consumption: case study of oysters in European Northern seas since the 15th century
- v) Development of methods to synthesize the quantitative and qualitative historical evidences to reconstruct changes in exploited populations and ecosystems over time
- vi) Facilitating the collection and inventory of open data sources. Standardization of protocols
- vii) Make explicit how Marine Historical Ecology can guide management

List of contributions (OPP-funded participants in bold):

1. Ruth Pirlet, Jan Haspeslagh, Daphnis Depooter and **Ann-Katrien Lescrauwaet**: History of Belgian oyster cultivation- Geschiedenis van de Belgische oesterkweek



Trends in oyster cultivation at the Flemish coast (Belgium): number of operation oyster parks (5 year average) between 1765-2012

2. **Adriaan Rijnsdorp**: The evolution of bottom trawling impact on the benthic ecosystem and demersal fish populations



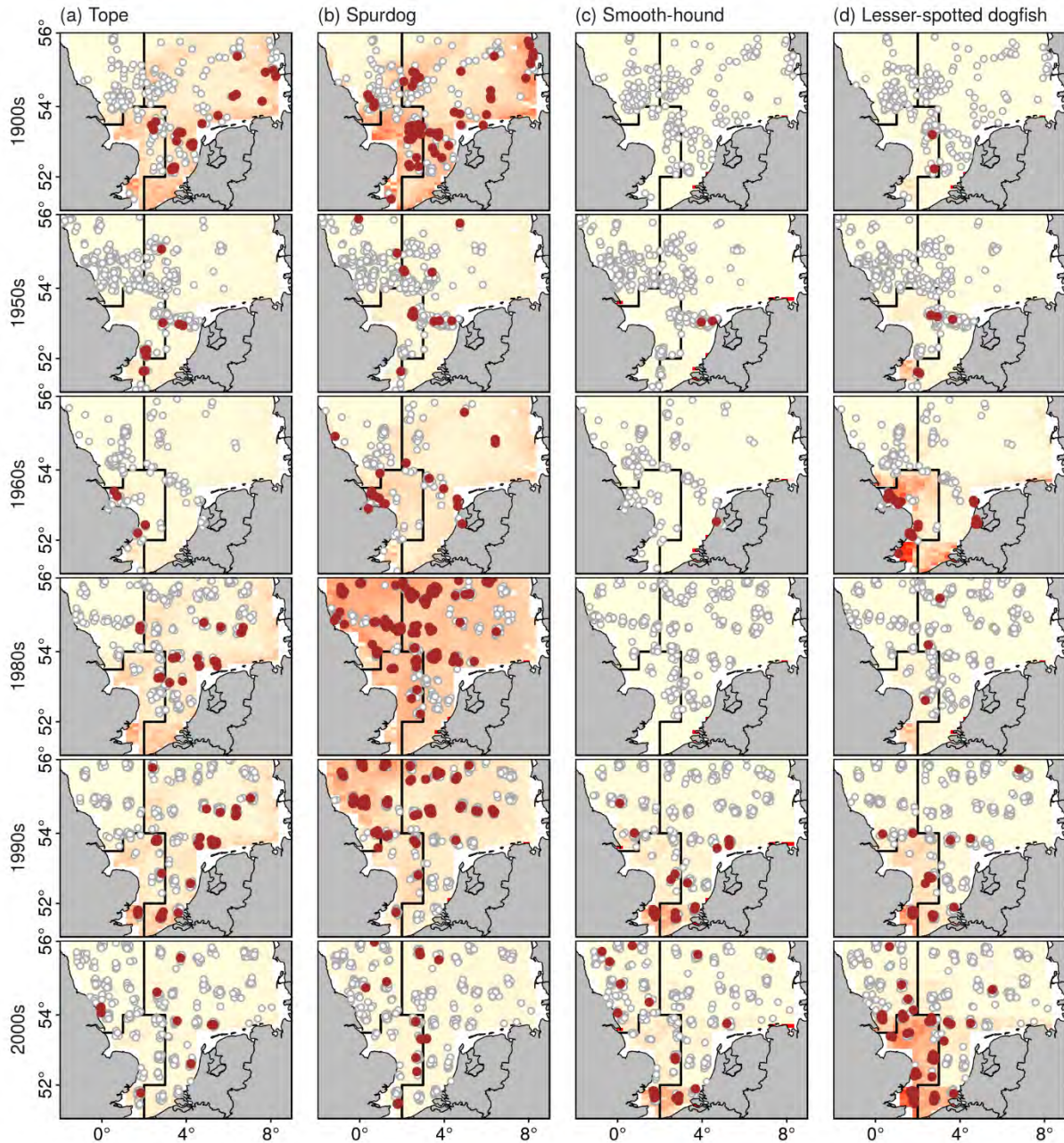
Plaice fishery by trawl nets off the coast of Holland and hook-and-line fishery further offshore. From Adriaen Coenen (1577–1581) *Visboek*, Koninklijke Bibliotheek.

3. Brian R. MacKenzie and Teresa Romeo: Variability in coastal abundance and distribution of swordfish, *Xiphias gladius*, as estimated from tuna trap bycatches



Former location of a bluefin tuna trap (tonnara) near Milazzo, Sicily, Italy (photo credit: Brian R. MacKenzie). Newly recovered data showed that the trap at this location also captured swordfish, *Xiphias gladius*, during nearly every year of its operation between 1896 and 1963.

4. Camilla Sguotti, Christopher P. Lynam, Bernardo García-Carreras, Jim R. Ellis and **Georg H. Engelhard**: Distribution of North Sea skates and sharks: 112 years of change

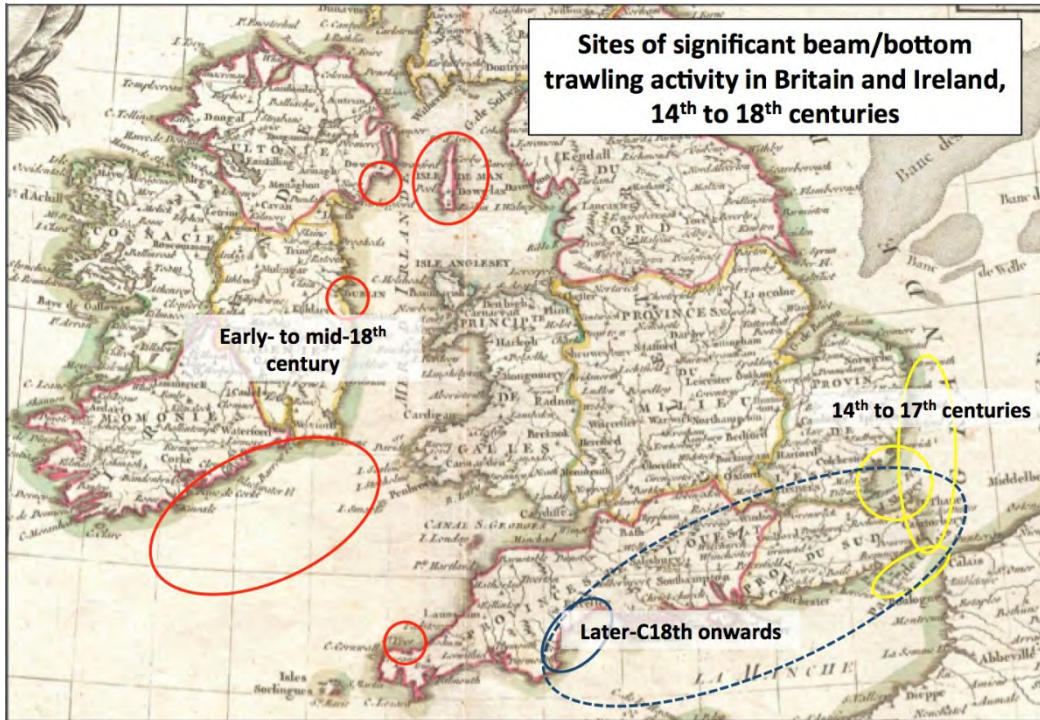


Changing distributions, early 1900s through early 2000s, of four shark species in the North Sea, sorted from left to right in decreasing size order. Note declines in tope (large, warm-associated) and spurdog (fairly large, cold-associated), but increases in smooth-hounds (medium, warm-associated) and lesser-spotted dogfish (small, warm-associated). *Legend:* Symbols represent survey hauls (filled red if at least 1 individual was observed, otherwise unfilled). Graded background colours indicate the predicted distribution (dark to light colours indicating high to low likelihood of a species to be caught at a given location).

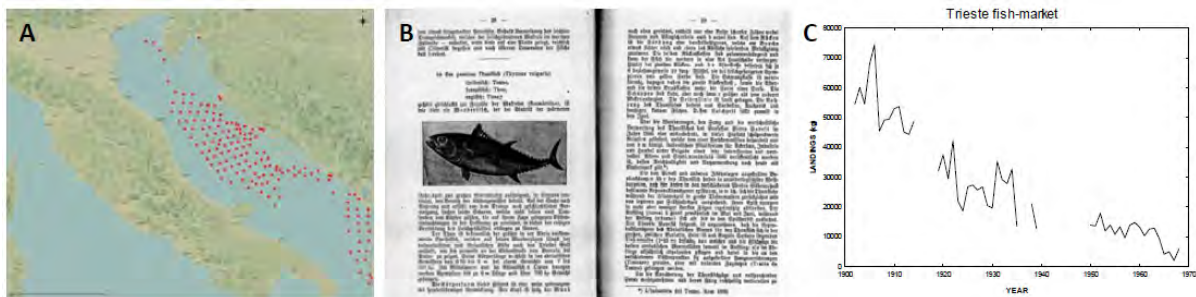
From: Sguotti C, Lynam CP, Garcia-Carreras B, Ellis JR, Engelhard GH (2016)

Distribution of skates and sharks in the North Sea: 112 years of change. *Global Change Biology* 22: 2729–2743. doi:10.1111/gcb.13316.

5. Peter Jones: The ‘Lost’ History of Bottom Trawling in England, ca.1400-1850

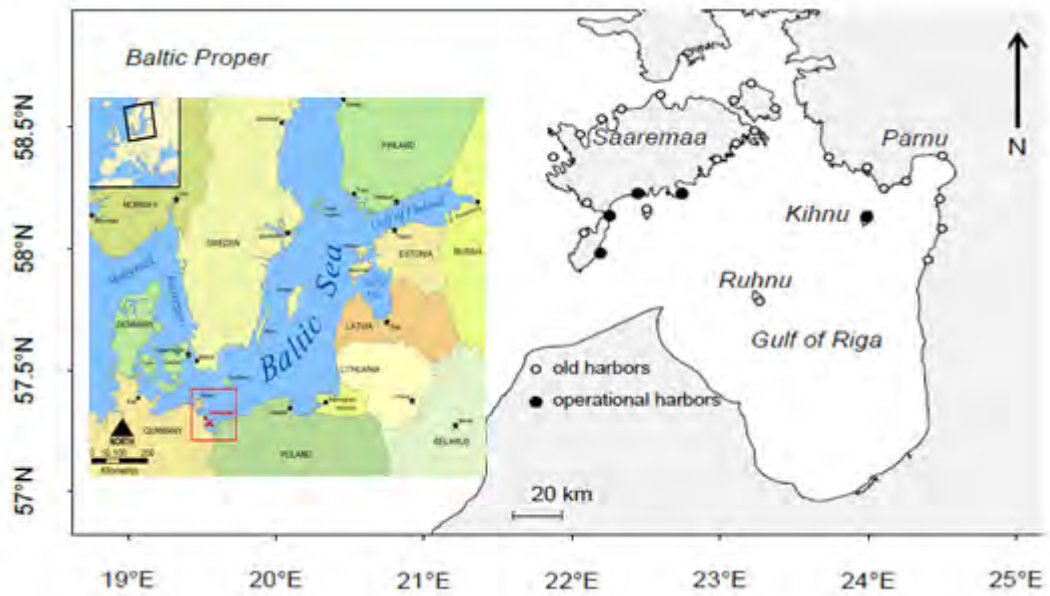


6. Tomaso Fortibuoni, Simone Libralato, Cosimo Solidoro, Otello Giovanardi, Saša Raicevich: Historical data on fish and fisheries in the Adriatic Sea (Mediterranean)



Historical trawl-survey HVAR; b) Krisch A. “Speisefische des Adriatischen meres” (Wien, 1908); c) Landings for European eel (*Anguilla Anguilla*).

7. Brian R. MacKenzie and Henn Ojaveer: Uncovering the past dynamics of a collapsed fish stock: Gulf of Riga autumn-spawning herring



Location of autumn herring fishing harbours 'then' (1958-1978) and 'now'.

8. Floris Bennema: Long-term occurrence of bluefin tuna in the North Sea



The three tunas the 16th century Dutch fish trader Adriaen Coenen saw during his life

9. Sasa Raicevich, **Tomaso Fortibuoni**, Emily Klein, Ruth Thurstan, Jake Rice: Shifting the baseline syndrome in global marine ecosystem management

The following first ten ‘Comparative studies on past and current trajectories of marine resource use’ have been produced by WG1:

1. Lessons from history on the conservation of sharks and skates in the Adriatic Sea
Alberto Barausse, Environmental Systems Analysis Lab, University of Padova, Italy
Carlotta Mazzoldi, Department of Biology, University of Padova, Italy
2. Common, rare or extirpated? Shifting baselines for common angelshark in the Northern Adriatic Sea (Mediterranean Sea)
Tomaso Fortibuoni, Italian National Institute of Environmental Protection and Research (ISPRA) / National Institute of Oceanography and Experimental Geophysics (OGS), Italy
3. «Jewels of the Royal Crown». The development of mussel farming in Taranto under the Bourbon dynasty (Kingdom of Naples, cent. XVIII-XIX)
Andrea Giordano, Università degli Studi “Federico II” di Napoli, Italy
4. Preindustrial Fishing Effort and Stock Declines in 19th Century Scotland
Peter Jones, Trinity College Dublin, Ireland
5. Seafood of Imperial importance: oysters in St. Petersburg consumption and the governmental transformation of Baltic environment in the 18th and 19th centuries.
Alexei Kraikovski, European University at St. Petersburg, Russia
6. Variability in coastal abundance and distribution of swordfish, *Xiphias gladius*, as estimated from tuna trap bycatches
Brian R. MacKenzie, National Institute for Aquatic Resources, Technical University of Denmark
Teresa Romeo, Institute for Environmental Protection and Research (ISPRA), Italy
7. Dutch Fishermen the best in Europe for 300 years
Bo Poulsen, Department of Culture and Global Studies, Aalborg University, Denmark.
8. Two centuries of bottom trawling footprint
Adriaan D Rijnsdorp, Wageningen Marine Research, the Netherlands

9. Distribution of North Sea skates and sharks: 112 years of change
Camilla Sguotti, Institute for Hydrobiology and Fisheries Science, University of Hamburg, Germany; CEFAS, Lowestoft, UK.
Christopher Lynam, Bernardo García-Carreras, Jim Ellis and Georg Engelhard, CEFAS, Lowestoft, UK.
10. Discovering the secrets of schnapper
Ruth Thurstan, Deakin University, Australia

STSMs



Nina Vieira, The British Museum, UK 10th September 2015 – 25th September 2015

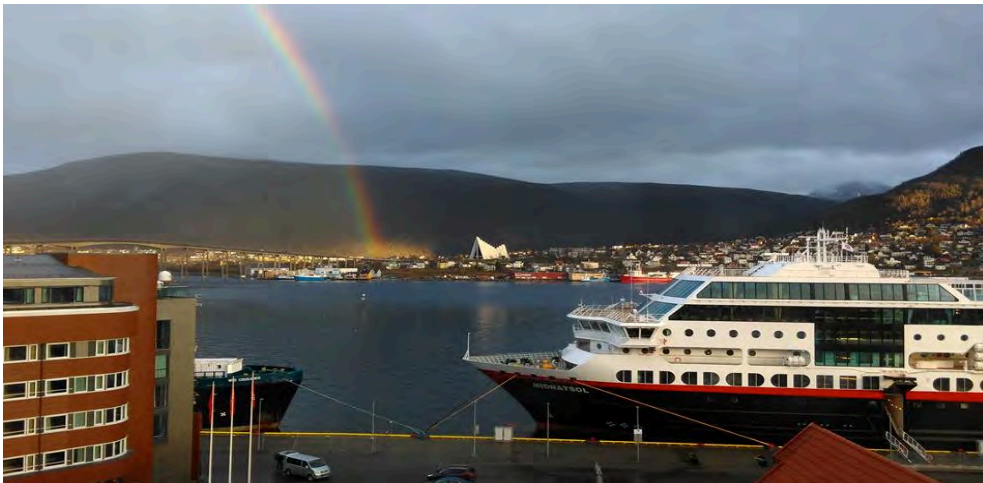
The first STSM of the OPP Working Group 4 on Changing Values of Marine Life to Society was conducted by Nina Vieira, PhD student in History in CHAM (Portugal) developing the project on “Historical whaling and the exploitation of marine animals in the Early Modern Portuguese Atlantic”. The purpose was to search for early modern Portuguese sources related to the Portuguese establishment in Brazil and Africa and the use of local resources from the 16th to the 19th century. The main work was conducted at the Anthropology Library & Research Centre of the British Museum, and a brief visit to the Library and Archives of the Natural History Museum was also conducted

Marisa Ronan, Tromso, 12 December 2015 – 22 December 2015

Dr Marisa Ronan undertook an STSM to the Northern Research Institute (Norut), Tromsø in Oct 2015. The 10 day trip served to gain a greater insight into polar marine heritage as part of Dr Ronan's interest in Marine Heritage for Sustainability Growth.

I was warmly welcomed by Eirik Mikkelsen as the onsite STSM contact point/host and was introduced to other COST action members and researchers in the area. The trip provided the opportunity to explore if the spatial arrangement of different human activities influence human services provided by marine habitats and the role of cultural and natural capital in this process.

Tromsø emerged as an interesting case study for the role of marine natural and cultural capital as well as best practice for managing marine heritage.



Tromso December 2015



Gesche Krause visited NIWA (Wellington, New Zealand) “Exploring different historically-rooted knowledge realms of aquaculture” 19th October 2015 – 21st December 2015



Bela Buck conducted a STSM to Cawthron Institute/NIWA (Nelson, New Zealand) “Biological and technical development of shellfish aquaculture over time” 19th October 2015 – 21st December 2015

STSM WG 3: “Biological and technical development of shellfish aquaculture over time” (Prof. Dr. Bela Buck) in Oct-Dec 2015 to the Cawthron Institute (Nelson, New Zealand) and NIWA (Nelson and Wellington, New Zealand):

An emerging aquaculture species in New Zealand is the native geoduck (*Panopea zelandica*), which plays a very distinct role in Maori culture and food culture. In former times, it would be served at very distinct occasions and during visits from other Iwi tribes. Because research into the aquaculture potential of the New Zealand geoduck is still in its early stages, much is still in the experimental trial phase. Together with colleagues, it was discussed whether there is scope for international methods to be adapted to New Zealand conditions and regulations. One such potential method (the geoduck tube) has been specifically designed for use in New Zealand conditions and is currently in test trial stage. As one major output of this STSM an successful application of a joint research plan was developed and approved by the NZ funding bodies, in which Maori tribes, in collaboration with various research institutions throughout NZ work on and offshore aquaculture development research project.

STSM WG 3: “Biological issues of oyster cultivation and restoration over time” (Dr. Bernadette Pogoda) in March 2016 to the School of Life Sciences, Heriot-Watt University, Edinburgh & School of Ocean Sciences, Bangor University, Bangor (UK):

The central aim of the STSM was to gain knowledge on different local reasons for the decline of the native oyster, to understand these differences and connect them to on-going and future restoration strategies. To put this knowledge into effect, a supportive network of oyster experts was initiated successfully during the STSM. Stirling was an excellent position to set off on historical and practical research. Ten meetings were held with different participants in ten different locations. Discussions with a total of colleagues from all over the United Kingdom were very successful and resulted in the definite agreement for (1) setting up a trans-European oyster network and (2) intensifying the exchange of knowledge by arranging a workshop.

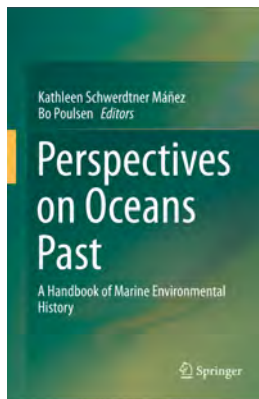
Other STSMs

Henn Ojaveer, DTU - Aqua Denmark 15th November 2015 – 21st November 2015

Cristina Pita, UMR AMURE IUEM France 22nd November 2015 – 28th November 2015

Kathleen Schwerdtner Manez 12th October 2015 – 19th October 2015

NEW BOOK!



Schwerdtner Máñez, K., & Poulsen, B. (eds) (2016). *Perspectives on Oceans Past: A Handbook of Marine Environmental History*. Dordrecht: Springer Science+Business Media B.V.

DOI: 10.1007/978-94-017-7496-3

<http://www.springer.com/gp/book/9789401774956>

- First book dealing with theoretical backgrounds of marine environmental history
- Equips readers with broad understanding of the major concepts and methods from science and history used in and applied to marine environmental history
- Written by some of the leading scholars in the field of marine environmental history
- Includes and summarizes topics on modelling approaches, gendered perspectives, and more
- Looks at possible future developments in marine environmental history

Marine environmental history analyses the changing relationships between

human societies and marine natural resources over time. This is the first book which deals in a systematic way with the theoretical backgrounds of this discipline. Major theories and methods are introduced by leading scholars of the field. The book seeks to encapsulate some of the major novelties of this fascinating new discipline and its contribution to the management, conservation and restoration of marine and coastal ecosystems as well as the cultural heritages of coastal communities in different parts of the world.

Contributions from: Kathleen Schwerdtner Manez, Emily Klein, Ruth Thurstan, Poul Holm, David Orton, Bo Poulsen, Georg Engelhard, Marta Coll, Heike K. Lotze, Joseph Christensen, Sarah Buckley, John Pandolfi, Cristina Brito, Nina Vieira and Anett Pauwelussen.

Thanks to EU-COST, Oceans Past Platform for supporting this publication.

Thanks for reading Oceans Past Platform!