

# **ATLANTIC MANATEES (RE)DISCOVERED: EARLY MODERN EXPLOITATION AND THE EMERGENCE OF CONSERVATION CONCERNS**

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## **Resumo/Abstract**

The relation between indigenous tribes and manatees dates back to prehistoric times and is still subject on interdisciplinary disciplines as marine environmental history, ethnozoology and anthropology, among others. Manatees' species are part of local culture and traditions of their subtropical and tropical distribution regions at the entire estuaries, rivers basins and lakes, and within its Atlantic range. Species' populations were estimated in the tens of thousands when the Europeans first arrived but the slow swimming and the several uses of this novel and strange New World's creature, not only placed it on earlier in literature, folklore and mythology, but had also led to the dwindling of its populations. We collected information from travel literature books, letters from missionaries and Portuguese explorers, chronicles, scientific treatises, illustrated broadsheets, leaflets and images in naturalist records, sailors' reports, folklore sources, poetry and literature books that may have references to the species. The research was conducted using Portuguese sources for the 16<sup>th</sup> to 19<sup>th</sup> centuries. Our main goal was to frame and discuss the first historical references and the early modern human exploitation, uses and perceptions towards Brazilian manatees. This allows a discussion about the abundance of the perceptions and uses of manatees that took place since the 16<sup>th</sup> century to the present-day as well as some conservation issues starting to emerge by the middle 18<sup>th</sup> century towards overexploited resources, specifically in Angola and Brazil.

## **CV**

**Cristina Brito** has a Bachelor's degree in Biology Applied to Animal Resources – Marine Resources, Faculty of Sciences of the University of Lisbon (1993/1998), a Masters in Ethology from the Institute of Applied Psychology (1998/2000) and a PhD in History – History of the Portuguese Discoveries and Expansion, Faculty of Social and Human Sciences of New University of Lisbon (2005/2010).

Dr. Brito holds a post-doc scholarship from the Portuguese FCT (2010-2015), in History of Sciences, with the project “Trading, transportation and dealing in exotic animals and their products: Their impact on European science and culture”. She is an integrated researcher at the Portuguese Centre for Global History (CHAM, FCSH/NOVA-UAc), founding member of the School of Sea and president of the board of the Association for Sea Sciences.

Dr. Brito current research interests are: Worldwide marine mammals and whaling history; Marine environmental history; History of science; Atlantic history; History of the Portuguese discoveries; Marine conservation. She has completed hundreds of hours of bibliographic and historical research in national and international archives and

libraries and thousands of hours of cetaceans observation at sea while applying a wide range of scientific data collecting techniques on whales, dolphins and their ecosystem (Portugal mainland and islands; Spain; S. Tomé and Príncipe; Canada). She has been invited as visiting teacher by renowned institutions such as ISPA, FCUL, FCSH-UNL, ESTM of Peniche, Universidad Complutense de Madrid. Dr. Brito has articles published in several national and international specialty journals.

- Participation in OPP – Oceans Past Platform, COST Action. Management Committee Member and Coordination of the Working Group “Changing values (economic and cultural) of marine life to society” (2014-2018).
- Part of the Executive Committee of OPI – Oceans Past Initiative (2014-2015).
- Coordination of the research project “On the historical and scientific route of whales and whaling in Portugal and the Portuguese Atlantic in the early modern period” (CHAM and School of Sea) (2013-2015).
- Participation on project MORSE: “Management of ocean resources under shifting expectations: Bringing the historical perspective into marine mammal conservation” (ANR – Agence Nationale de la Recherche - France) (2013-2015).

**Nina Vieira** has a Bachelor’s degree in Biology, University of Évora (2003/20088) and a Masters in Marine Ecology from the Faculty of Sciences of the Lisbon University (2008/2010).

She is presently conducting her PhD research with the project “The taxonomy of Portuguese whaling from the 13th to the 19th century: An Atlantic history of the sea, whales and people” and is a research assistant at the Centre for Overseas History (CHAM, FCSH-UNL) and a founding member of the Association for Sea Sciences.

She has been involved in Portuguese scientific projects about cetaceans, conducting her research in history and ecology, as also in international projects namely the project *MORSE - Management of ocean resources under shifting expectations: Bringing the historical perspective into marine mammal conservation* of ANR-Agence Nationale de la Recherche (France) and the project *Action COST - OPP (Oceans Past Platform)* included in the Working Group “Changing values (economic and cultural) of marine life to society”.

Her primary research interests are in the ecology and conservation of cetaceans, understood through the history of the relation between humans and those animals, their exploitation, their economic interest and the social and cultural impact of that relationship over time. In 2009, she won a project financed by the Project AWARE Foundation.

In addition, has participated in several conferences, such as the Oceans Past Conference, the Conference of the European Cetacean Society, Conference on the Biology of Marine Mammals, Congresso Nacional de Etologia and International Meeting on Marine Research.

Besides the publications of 2 book chapters and several scientific reports, she had published in international specialty journals the following papers: Brito, C. & **Vieira**, N. (2010) Using historical accounts to access the occurrence and distribution of cetaceans in poorly known areas. *Journal of the Marine Biological Association of the United Kingdom*, 90 (8): 1583-1588. **Vieira**, N. & Brito, C. (2009). Past and recent

sperm whale sightings in the Azores based on catches and whale watching information. *Journal of the Marine Biological Association of the United Kingdom*, 89 (5): 1067-1070. Brito, C., **Vieira**, N., Sá, E. & Carvalho, I. (2009). Cetaceans' occurrence off the west central Portugal coast: a compilation of data from whaling, observations of opportunity and boat-based surveys. *Journal of Marine Animals and Their Ecology*, 2 (1): 4 pp.