

## **Preface: Age estimation of marine mammals with a focus on monodontids**

The North Atlantic Marine Mammal Commission (NAMMCO) is proud to present *Age estimation of marine mammals with a focus on monodontids*, the 10<sup>th</sup> volume in the *NAMMCO Scientific Publications* series. This volume is edited by Christina Lockyer, Aleta A. Hohn, Roderick Hobbs, Robert E.A. Stewart and Mario Acquarone.

The *NAMMCO Scientific Publications* series was established to make available in published, peer-reviewed form, scientific papers that have contributed to the work carried out by the NAMMCO Scientific Committee. The NAMMCO Scientific Committee provides scientific advice on marine mammal species and stocks in the North Atlantic in response to requests forwarded to it by the Council of NAMMCO. Each volume therefore has a theme, reflecting the nature of the original request for advice. Further information on the series can be found on the NAMMCO website ([www.nammco.no](http://www.nammco.no)).

The NAMMCO Scientific Committee is for example requested to update the assessment of both narwhal and beluga stocks, when new data warrant such an exercise. The Canada and Greenland Joint Commission on Narwhal and Beluga and the NAMMCO Scientific Committee have a joint Scientific Working Group (JWG), which carries out these regular reviews and assessments. In 2009, the JWG reviewed the methods used for age estimation in belugas and narwhals and concluded there was a need to standardize age readings using growth layers and to standardize those with new methods involving Aspartic Acid Racemisation. The JWG recommended that a workshop with this task be convened by NAMMCO.

Age estimation is indeed important in a management perspective, as it helps determine catch composition and stock demography. Different techniques are used for this, with the counting of growth layer groups in hard structures; teeth, ear plugs and baleen being the most widely used for marine mammals. To address the need raised by the JWG of obtaining standardized and accurate age estimates, NAMMCO commissioned a review of ageing methods in mammals and convened two international workshops on the subject. This volume is the product of this.

The 10<sup>th</sup> volume has been a lengthy process, with the workshops on the subject in 2011, the first published paper in 2013, and the final,

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complete volume finished in 2018. Despite this, we believe that the papers contained in this volume are still, and will continue to be, both relevant and useful for readers interested in age estimation techniques.

This volume also marks NAMMCO's complete transition to purely digital publishing, as it is the first volume of the *NAMMCO Scientific Publications* to only be available in digital format. The University of Tromsø – The Arctic University of Norway's Department of Digital Resources and Services was instrumental in helping us finalize this volume, our thanks goes especially to Aysa Ekanger. The papers in this volume were first published as an "online early version", which allowed them to be available to the scientific community before the complete volume was finished. The complete 10<sup>th</sup> volume is now available, along with all the previous volumes, at the web address <https://doi.org/10.7557/3.10>.

We would like to thank the editors, contributing authors and reviewers for making this volume possible, and for their patience during the long process of finalizing this volume. Thanks also to Jill Prewitt who was Series Editor to April 2018 and to Solveig Enoksen who took over and finalized the edition and publication of the volume. Further information on this and other volumes in the *NAMMCO Scientific Publications* series is available from the NAMMCO Secretariat.

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