

ICELAND

PROGRESS REPORT ON MARINE MAMMALS IN 2021

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I INTRODUCTION

The following is a brief summary of research on marine mammals in Icelandic and adjacent waters in 2021. The studies were conducted by the following research institutes: Marine and Freshwater Research Institute (MRFI), Húsavík Research Centre (HRC), Húsavík Whale Museum (HWHM), Fosfoðil Cetacean Research project (FCR), Keldur, Institute for Experimental Pathology (IEP), The National University Hospital of Iceland, The Icelandic Institute of Natural History (IINH), University of Iceland (UI), University of British Columbia in Canada, University of Barcelona in Spain, University of St Andrews in Scotland, Icelandic Seal Center (ISC), BioPaL, Hólar University College, Stockholm University, National History Museum of Sweden, National History Museum of Denmark, Maine University, University of Aarhus, BI research center and University of Potsdam. Queries for information on research were sent to all offices, individuals and private commercial platforms such as whaling and whale watching companies known to have been involved in marine mammal research or data collection during the period.

II RESEARCH BY SPECIES 2021

Fin whale

Studies continued at the MRFI on the biology and ecology of fin whales based on data from commercial catches in recent years. Fin whale research conducted at the whaling station in Hvalþórur is wide ranging and includes La studies on age, reproduction, feeding ecology, energetics, pollutants, genetics, hybridization, anatomy and physiology and involves several research institutions including the National University Hospital of Iceland, University of British Columbia in Canada, University of Barcelona and Keldur, Institute for Experimental Pathology.

Researchers at the Shadwick lab at University of British Columbia continued their wide-ranging research on anatomy and physiology of fin whales based on experiments and sampling at the Hvalþórur whaling station. In 2021, the research focused i.a. on the arterial system. In particular, the anatomy of blood supply to the brain and hemodynamic modeling of stenosis in a vessel near of cerebral peduncle originating from swimming movements (Sjöte et al. submitted). Research on the functional anatomy of the fin whale respiratory and digestive tracts comprised a PhD thesis (K. Gí, PhD, Gí et al 2020, 2022).

In addition, this team also used MRFI facilities at the University Hospital in Reykjavík to examine anatomy in two fin whale fetuses in 2021 with assistance from Marine and Freshwater Research Institute of Iceland. Ongoing research modelling energetics of large feeding in narwhal with collaborators in several US institutions. Aspects of this are based on anatomical details obtained at Hvalþórur over many years (Povin et al. 2021).