



TWENTY EIGHTH MEETING OF THE COUNCIL

17 - 19 March 2020

Oslo, Norway

DOCUMENT 13	OUTREACH ACTIVITIES 2019, INCL. SOCIAL MEDIA
Submitted by	Secretariat
Action requested	Take note Make suggestions
Background	Outreach involves efforts to communicate the work of NAMMCO to a wide variety of audiences. This is important to ensure that the organisation is visible and accessible to a diverse range of groups, that it maintains strong international networks, and it fulfils its desire to be transparent. The outreach activities conducted by NAMMCO in 2019 included presentations and stands at international conferences/workshops/symposia, facilitation of organised events and training programs, publications in academic journals and edited books, engagement with social media platforms, and maintenance of an up to date and engaging website.

By engaging in outreach activities, NAMMCO enhances its national and international visibility, transparency and accessibility. It also enables the organisation to nurture existing relationships, create new contacts, and build strong networks.

This document provides an overview of the outreach activities conducted by the Secretariat and/or supported by NAMMCO in 2019. It is divided into four sections: 1) Overview of presentations made at different fora; 2) Overview of Publications; 3) Outreach to other Regional Fisheries Bodies, and 4) Summary of Activities on Social Media and the NAMMCO website. Extensive information on activities under each of these categories is provided below.

Through several of the outreach activities conducted in 2019, it became clear that there is currently an interesting opening for whaling and sealing to be presented and considered in a new light. With increasing emphasis on the blue economy and the need to find sustainable solutions to global problems, there is a new level of receptivity to the message that whaling and sealing can have lower environmental impacts and better animal welfare outcomes than other food and material systems. Furthermore, there is an important need to emphasise the role that NAMMCO plays in ensuring that these living marine resources are being managed sustainably. Several of the outreach efforts described below have shown that when presented with relevant information and an opportunity to reflect on a comparison of environmental impacts, many people come to recognise that the major concerns for the marine environment are not whaling and sealing at present rates, that the relative environmental cost of resources need to be considered in a global perspective, and that NAMMCO is doing important work towards ensuring sustainable management of living marine resources.

Engaging in outreach activities therefore not only helps to distribute and make visible the work NAMMCO does, it can also help explain why it is important that the organisation exists and the role it plays in the pursuit of a sustainable future.

1. OVERVIEW OF PRESENTATIONS MADE AT DIFFERENT FORA

The table below presents an overview of the different fora where NAMMCO made presentations during 2019. Each of the events is then described in more detail following the table.

Month	Conference or Meeting // Contribution	Venue	Staff
6 February	Student Symposium [organised by NAMMCO] Chairing of the day by NAMMCO/Wickson Facilitation of an interactive session by NAMMCO/Wickson Presentation by NAMMCO/Enoksen “Contaminants in North Atlantic marine mammals – a review” Presentation by NAMMCO/Smith “Reporting on hunting methods: a review of welfare assessment parameters in marine and terrestrial mammals”	Tromsø, NO	SE, SS, FW
12-14 March	2nd International Workshop on Beluga Whale Research and Conservation Presentation by NAMMCO/Reeves “Global Review of Monodontids”	Mystic, USA	[R. Reeves]
25-27 June	2nd International Science and Policy Conference on Implementation of Ecosystem Approach to Management in the Arctic Presentation by NAMMCO/Wickson “Integrating the Scales of Interest in Different Knowledge Systems for Ecosystem Management”	Bergen, NO	FW
3-5 July	International Symposium on the Politics of Uncertainty: Practical challenges for transformative action Presentation by NAMMCO/Wickson (invited)	Brighton, UK	FW

	“Ambiguity as a form of uncertainty in environmental governance”		
7-12 July	Conference of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB) Presentation by NAMMCO/Wickson (invited) “Lessons learned from waterfleas, whales and bees: A journey into environmental controversies in the search for sustainable food”	Oslo, NO	FW
13 September	UiT Masters Top Predator Course Lecture by NAMMCO/Desportes “Management bodies and science-based management advice in NAMMCO-IWV-ICES”	Tromsø, NO	GD, SH
22 November 11 December	Homeward Bound Global Leadership Initiative Lead Facilitation for all 3 weeks by NAMMCO/Wickson Lecture & Interactive Workshop by NAMMCO/Wickson “Science Meets Ethics and Politics”	Hebridean Sky, Antarctica	FW
5-6 December	Bi-annual meeting of the Norwegian Small Whalers Union Presentation by NAMMCO/Winsnes “Sjøpattedyr som matvareressurs”	Svolvær, NO	CW
7-11 December	World Marine Mammal Conference (WMMC) Presentation by NAMMCO/Desportes & Wickson “Outreach on the case of Arctic Sealing: opening up for a reframing of the sustainability discourse?” Booth operated by NAMMCO/Desportes & Hansen together with B. Porgilsson (Pi technology, IS) Exhibit with information on the geometer designed for NASS 2015 and posters on abundance of marine mammals versus removals in the NAMMCO core area. Participation at four workshops: * Harmonising global strandings response (GD) * The effects of climate change on marine mammals (SH) * Incentivising consistent data collection and transparent reporting of marine mammal by-catch in fisheries (GD) * Art as a tool for communication (SH)	Barcelona, SP	GD, SH

MARINE MAMMAL STUDENT SYMPOSIUM

There are several institutions in Tromsø involved in marine mammal research, which are dispersed throughout the city (e.g. the Department of Arctic Biology, Norwegian College for Fishery Science and K.G. Jebsen Centre for the Law of the Sea at UiT, the Institute of Marine Research, the Norwegian Polar Institute, and various Masters programs). Masters and PhD students conducting marine mammal related projects are typically spread across these different institutes and have very little contact with one another.

In 2019, NAMMCO therefore took the initiative to arrange a Marine Mammal Student Symposium, where postgraduate students and other early career scholars working on marine mammals (including the interns at the Secretariat) could learn more about NAMMCO and its work, share their research, discuss common issues, make connections and network for future collaborations. The Symposium was co-arranged with UiT the Arctic University of Norway.

This one-day Symposium was held on 6th February 2019 and attracted over 60 attendees. A total of 15 students presented their work, including two participants from Oslo and Bergen. The presentations were divided into sessions on: Threats, Welfare/Diet, Physiology and Movement/Abundance, and Law of the Sea. After the student presentations, a world café exercise was run to facilitate group discussions

and networking. The following topics were used to structure the exercise: “What are the biggest challenges connected to your work?”, “From all the talks given today, do you see any overlapping issues and/or potential for collaboration?” and “What do you imagine doing when you finish your current project/studies?”. The day closed with three invited guest lectures from experienced researchers. These were: “NAMMCO and International Law: What makes an organisation ‘appropriate’ for the conservation and management of marine mammals?” by Cardiff University’s Richard Caddell, “Responsible whale watching?” by UiT’s Anniken Førde, and “Ongoing research on walrus, beluga and bowhead whales” by the Norwegian Polar Institute’s Christian Lydersen.

The participating students were very satisfied with the Symposium (as indicated through a feedback survey), and thought that it should become an annual event. The student symposium was therefore run again (in a similar format with student presentations, facilitated interactive activities, and guest lectures) on 5th February 2020 with same success. A full report of the second symposium will be provided to Council next year as part of the overview of outreach activities taking place in 2020.

2ND INTERNATIONAL WORKSHOP ON BELUGA WHALE RESEARCH AND CONSERVATION

The [2nd International Workshop on Beluga Whale Research and Conservation](#) was a follow-up to the first beluga workshop held in Valencia, Spain 10 years ago. This conference brought together indigenous peoples, scientists, wildlife managers and policy makers to bridge the gap between traditional knowledge, scientific research, aquarium husbandry, and wildlife management with the ultimate goal of developing a cohesive plan to promote beluga research and conservation.

NAMMCO was asked if they would be interested in sponsoring the event and chose to do so at the ‘Arctic Tern’ level, requesting in exchange that the results of the Global Review of Monodontids (GROM) (assembled by NAMMCO in March 2017) be circulated to all participants. In the end, the presentation of the GROM findings and conclusions on the conservation status of all beluga whales and narwhals throughout the Arctic became the [opening talk of the conference](#). The presentation was prepared in cooperation between the GROM Chair, R. Hodds, R. Reeves (participant to the GROM and also to the conference), and Desportes. The talk was given by R. Reeves as the Secretariat was not attending the conference.

2ND INTERNATIONAL SCIENCE AND POLICY CONFERENCE ON IMPLEMENTATION OF AN ECOSYSTEM APPROACH TO MANAGEMENT IN THE ARCTIC

The second International Science and Policy Conference on the Implementation of an Ecosystem Approach to Management in the Arctic had a specific focus on the integration of information at different scales in the ecosystem approach (EA). The co-convenors of the meeting were the [IMR](#), [ICES](#), [PICES](#), [NOAA](#), [PAME](#), [CAFF](#), [AMAP](#) and the [Arctic Council](#). The conference contained presentations addressing [all stages of EA](#) including ecosystem identification, description, monitoring, assessment, valuation and management. There were dedicated sessions on the implementation of the EA on national levels as well as within the large marine ecosystems of the Arctic; the development of marine protected areas in different parts of the Arctic, and; the integration of western science and indigenous, traditional and local knowledge in EA. Monitoring and addressing growing anthropogenic impacts from climate change, shipping, noise, and oil and gas exploration were also topics of discussion.

In NAMMCO’s presentation on “Integrating the Scales of Interest in Different Knowledge Systems for Ecosystem Management” emphasis was placed on how to achieve effective integration of the diverse knowledge systems of scientists, local communities, and policy-makers in EA. One of the key challenges associated with this was highlighted as being that these different stakeholders often operate not only with different worldviews, terminologies, cultures and positions, but that their knowledge systems can also be focused on very different scales of interest (geographical as well as temporal).

A breakout session was held during the conference to specifically discuss how to advance the integration of different knowledge systems in EA and following this session, it was agreed that it was important to engage indigenous/local knowledge early and often in the process and not leave this until the final management phase. It was also noted that there was a need to invest in relationship building

and capacity building, as well as to work to build trust & respect over time, and legitimately share decision-making responsibilities. This included not only management decisions but also decisions about the research questions, priorities and processes for science. It was noted that [best practice recommendations](#) for Arctic environmental impact assessment and meaningful engagement with local communities were available from the sustainable development working group of the Arctic Council.

The lessons learned from the event for NAMMCO to effectively implement EA included: Adopt a clear definition & framework for implementing ecosystem-based management; Develop clearly stated ecosystem management objectives; Enhance the use of research on social, economic and cultural factors; Improve efforts to integrate science and user knowledge early and often; Articulate the key elements of a precautionary approach within NAMMCO; Decide on level of priority given to participating in working groups of the Arctic Council.

INTERNATIONAL SYMPOSIUM ON THE POLITICS OF UNCERTAINTY: PRACTICAL CHALLENGES FOR TRANSFORMATIVE ACTION

The aim of this international symposium was to bring together people working in diverse domains (including finance, environmental management, migration, disease, innovation, infrastructure, and security) to explore the diverse ways uncertainty is understood and responded to in their respective fields. This was to develop richer and more nuanced understandings of uncertainty and to help enable more robust actions, strategies and governance in times of instability and change.

Wickson was invited to participate in the symposium and gave a short talk on ambiguity as a form of uncertainty in environmental management. She spoke specifically about the important ways ambiguity manifests in the science, philosophy and politics of environmental harm. This includes the way diverse values can shape understandings of what constitutes environmental harm, how diverse frames and assumptions can shape the scientific research done to understand environmental harm, and the way various interests and available options can shape management decisions to minimise environmental harm. She also emphasised that environmental management cannot hope to eliminate ambiguity as a form of uncertainty, but rather has to find ways to navigate it with transparency and sensitivity.

After several rounds of exchanging information, theoretical frameworks and practical experiences across the range of diverse domains present, the following emerged as key take home messages: 1) There are many different types of uncertainty (only some of which can be reduced or quantified); 2) It is useful to try and specify the types of uncertainties in play in certain cases and contexts; 3) In the face of deep uncertainties, important coping mechanisms can include humility regarding the state of the knowledge, diversity in the policy options pursued (to enhance flexibility), and a focus on supporting capacities for reversibility and responsiveness in policy choices; 4) Policy advice under conditions of scientific uncertainty should be plural and conditional – i.e. offering a range of decision options available according to different values and assumptions; and 5) Since certain choices can become ‘sticky’, i.e. create path dependencies and lock in certain developmental trajectories, it is important to open up policy debates to a range of options before closing down into particular decisions.

CONFERENCE OF THE INTERNATIONAL SOCIETY FOR THE HISTORY, PHILOSOPHY AND SOCIAL STUDIES OF BIOLOGY (ISHPSSB)

In 2019, Wickson was invited to be a plenary keynote speaker at the biennial conference of the International Society for the History, Philosophy and Social Studies of Science (ISHPSSB). The conference was held in Oslo 7-12 July. Her talk was held on the first night of the conference at the Aula building of the University of Oslo (opposite the National Theatre) and was open to all members of the public as well as conference participants.

The title of the talk was “Lessons Learned from Waterfleas, Whales and Bees: A journey into environmental controversies in the search for sustainable food”. The talk presented lessons learned about how ethics and politics are entangled in the science of environmental harm and debates about what constitutes sustainability in our food systems. It explored these lessons through analysing two socio-political controversies around sustainable food: genetically modified organisms (GMOs) in agriculture and the hunting of whales and seals in the North Atlantic.

As part of the talk, Wickson used a framework of care ethics and politics (developed in her previous work), to illustrate the wide range of relevant issues to consider in the debate about whether marine mammals can be part of sustainable food systems. This included asking questions about: 1) The networks of *relationships* between whales and humans, including all of the anthropogenic activities that impact them; 2) The difference between the historical *context* when the commercial moratorium on whaling was decided by the International Whaling Commission and the current situation today; 3) The distribution of *power* in terms of who gets to decide what is permissible and whose knowledge and experience counts in decision-making; 4) The *dependence* that some coastal and indigenous communities have on whaling for their cultural identity and livelihood; 5) The role that *emotion* currently plays in this debate; and 6) The cultural *narratives* that frame environmental value and the impact of different human activities.

Giving a public talk in the centre of Oslo as a plenary for a conference focused on social science and humanities perspectives on biology provided an excellent opportunity to present the work of NAMMCO to new audiences and several attendees said afterwards that through the talk, they had been encouraged to think about whaling and sealing in new ways.

UIT MASTERS TOP PREDATOR COURSE

Desportes was asked by the organiser of the Top Predator Master Course (Bio3506) at UiT the Arctic University of Norway, U. Lindstrøm, to give a 2-hour lecture on "Management bodies and science-based management in NAMMCO-IWC-ICES". The lecture, attended by ca. 30 students (DK, DR, FR, MO, NO, SE, US, UK) presented the regulatory landscape framing the management of marine resources and top predators, described the role of NAMMCO in this framework, and explained the role and specificity of the three organisations. It also addressed the issue of whaling and sealing from an ecosystem and global sustainability perspective, for inspiring the students in considering these two activities from an untraditional standpoint. The lecture was followed by a longer exchange on the last topic presented.

HOMEWARD BOUND GLOBAL LEADERSHIP INITIATIVE

In 2019, Wickson was offered the role of Lead Facilitator for the 4th cohort of Homeward Bound (HB). NAMMCO agreed that she could accept this role and supported her involvement by continuing to pay her salary for 3 of the 4 weeks she was required to be away from the office (NB: all HB faculty work on a volunteer basis and are dependent on support from their home institutions or organisations).

[Homeward Bound](#) is a global leadership initiative for women with a background in STEMM (science, technology, engineering, mathematics and medicine) and provides training in collaborative and inclusive styles of leadership to enable women to influence decision-making for the greater good. The selected participants receive 12 months of leadership training, where they learn about topics such as how to: think and act strategically; manage teams and have difficult conversations; communicate science and enhance visibility; and influence policy and decision-making. The initiative has an aim to train 1000 women over a 10-year period. The 4th cohort included women from over 30 countries, 25 disciplines, and spanning an age range from 23-73. The 12 months of leadership training culminates in a three-week voyage to Antarctica. This year, the group was the largest all female expedition to Antarctica ever, with 100 participants + 12 faculty involved.

Being the [Lead Facilitator was a multidimensional role](#) involving several layers of responsibility. This included: being the daily face of the program for the participants; managing relationships within and between the various groups involved in the Antarctic voyage; coordinating the daily schedule; reading and responding to the energies of the group; and role modelling collaborative, inclusive and legacy-minded leadership. In addition to serving in the role as Lead Facilitator, Wickson also ran a 2.5 hour session on the topic of "Science Meets Ethics and Politics". This included a presentation and interactive session on environmental ethics, as well as running a coordinated role play exercise.

The role play exercise was collaboratively developed by the NAMMCO Secretariat. It was designed to provide an insight into the complexities NAMMCO deals with as a body providing environmental management advice at an international level, as well as to encourage participants to reflect on (and potentially reconsider) whether they think the harvest of marine mammals can be part of a sustainable

food system. The scene for the role play was a meeting of the 'Global Sustainability Council' (a hypothetical body charged by the UN to decide overarching directions for good environmental policy). The question open for debate at the meeting was: *Can the harvest of marine mammals be part of a sustainable food system? Why/why not? Under what conditions?*

The 100 participants were divided into different actor groups for the role play - three groups represented the position that marine mammals could be sustainably harvested (the Union of Commercial Hunters, the Association for Communal Hunting, and the Indigenous Communities Coalition); three groups argued against this position (the Federation for Animal Rights, the Alliance Against the Hunting of Marine Mammals and the Society for Environmental Preservation); and three groups had a position that could go either way depending on the conditions (the Alliance Supporting Sustainable Use, the Environmental Conservation Collective, the Advisory Group of Scientific Experts). There were also three people assigned to the position of Councillors to take a decision at the end of the meeting, as well as five Storyharvesters who were asked to observe the debate through particular analytical lens (e.g. leadership, power, emotion) and report their findings back to the group.

Each actor group was given a summary factsheet prepared by the Secretariat with information about the history and current context of marine mammal harvesting (including abundance estimates, catch quotas and trends for the different NAMMCO target species), as well as a sheet with more information about the particularities of their group's position (e.g. their beliefs/opinions on certain matters). All the groups were given time to discuss their position and prepare opening statements. The role play ran for an hour and a more detailed elaboration of the process and results can be read on this [blog](#).

The role play exercise was a powerful way to introduce people to the work of NAMMCO and to encourage them to reflect more deeply on their own assumptions and beliefs regarding the sustainable harvest of marine mammals. It also opened up the potential for perspectives to shift. Furthermore, having Wickson serve in the role as Lead Facilitator for the Homeward Bound program enhanced the visibility of NAMMCO to 100 emerging female leaders in science from around the globe, allowed NAMMCO to join this international network, and enabled the organisation to be [recognised as a sponsor of the program](#).

BI-ANNUAL MEETING OF THE NORWEGIAN SMALL WHALERS UNION

NAMMCO attended the biannual meeting of the Norwegian Small Whalers Union in 2019, where Winsnes gave a presentation on "Sjøpattedyr som matvareressurs". The presentation described the pilot study carried out by NAMMCO in collaboration with the Research Institute of Sweden that evaluated the sustainability of food choices in Greenland using Life Cycle Assessment.

The discussion that followed the presentation centred on how the findings of the study could help market whale meat by pointing to its environmental superiority when compared to farmed terrestrial animals. The participants at the meeting also expressed an interest in taking part in a possible future project through collection and reporting of necessary data.

Other agenda items for the meeting were: assessment of the 2019 season, review of the work undertaken by Norsk Hval to promote whale meat, and a presentation on the process of exporting to Japan.

Participants at the meeting represented the Ministries of Foreign Affairs and Fisheries, various Directorates, Fisheries Associations and research institutes as well as minke whale hunters and buyers.

WORLD MARINE MAMMAL CONFERENCE

The [WMMC](#) was the second joint meeting organised between the European Cetacean Society and the Society for Marine Mammalogy. It attracted 2731 attendees from more than 95 different countries, who offered 1636 presentations and 45 pre-conference workshops. The overall theme for the conference was *Together for Science and Conservation* with the goal of bringing "together scientists, managers, policymakers, educators, and students from across the globe". There were two days of

workshops on the weekend, followed by four days of conference. Desportes and Hansen were present throughout both the weekend of workshops and the week of the conference.

The conference represented a significant opportunity to enhance the visibility of NAMMCO as a science-based management organisation and to suscite new ways of thinking about the use of marine mammal resources. Through their attendance, the Secretariat pursued this in three ways:

1) Participating and contributing to four different workshops organised ahead of the main conference “Harmonising global strandings response” (GD participated on the behalf of the Working Group on BYCELS), “The effects of climate change on marine mammals” (SH), “Incentivising consistent data collection and transparent reporting of marine mammal by-catch in fisheries” (GD) and “‘Arts’ as a tool for communicating marine mammal science” (SH).

2) Hosting and manning a stand in the exhibition hall throughout the entire conference. The theme of the stand was the abundance of marine mammals versus removals in the NAMMCO core area and this was illustrated through two posters, one for pinnipeds and one for cetaceans. NAMMCO also invited to its stand B. Porgilsson, who developed the geometer for NASS 2015 (at the initiative of the MFRI (IS) and NAMMCO). The geometer is a unique device that allows for a precise measurement and automatic recording of angles to sightings for aerial surveys. The device has since been further developed and used in many other aerial surveys.

The combination of having NAMMCO staff and the geometer designer manning the stand was very successful. The designer attracted survey scientists from all over the world, for whom the main interest may not have been NAMMCO as a management organisation but who then also showed interest in NAMMCO and its survey coordination work. Likewise, those visitors to the stand who came due to their interest in NAMMCO and its management of marine mammals also had an opportunity to learn more about our survey coordination work and support for technological innovation in the field.

3) NAMMCO (Desportes) gave a talk on Thursday December 12th titled “Outreach on the case of Arctic sealing: Opening up for a reframing of the sustainability discourse?”. This talk was held in the session of the conference organised on Education and Outreach. The talk presented the Greenlandic use of seal meat and products in the context of global sustainability and true environmental costs, advocating for assessing the sustainability of resources in a global perspective. This talk was provocative in this forum, but was surprisingly well received by many, including people from Conservation NGOs and traditionally anti-sealing countries (e.g. from BE, DE, FR, IT, NL, SP, UK, USA) who thanked NAMMCO for presenting sealing from this standpoint and raising interesting food for thought regarding the interplay between “moral concerns and measures” and sustainability. It also generated a flow of persons to the NAMMCO booth interested in discussing further the perspectives presented and asking for more information.

The WMMC workshops attended by the Secretariat

[“Harmonising global strandings response”](#)

The overarching aim of this workshop was to harmonise international marine mammal stranding responses and investigations so as to enhance data and sample collection and information sharing. Both countries with established networks, as well as countries with minimal or no current capacity for stranding response but interested in the development of such capacities, participated in the workshop. To follow up on the workshop, the [“Global Stranding Network”](#) was created. This network will provide a forum for collaboration between those responding to strandings around the world and enhance responses to stranded marine mammals globally.

Organisations such as the IWC and ACCOBAMS are members of this Global Stranding Network and NAMMCO may therefore consider whether to also become a partner.

[“The effects of climate change on marine mammals”](#)

The new research presented at this workshop showed a global shift in distribution for marine species. Topics such as the potential increase in shipping traffic in Arctic waters and new stressors like algae

blooms - both issues of future importance for the sustainable management of marine mammals in the NAMMCO area - were debated. The use of local knowledge as a resource to ensure the best solutions for addressing climate change issues was also discussed.

[“Arts’ as a tool for communicating marine mammal science”](#)

This workshop gave an interesting overview of different forms of outreach that are available, including the use of visual arts to create sculptural models or composing musical pieces to communicate scientific information to non-specialist audiences. An interesting example that was given was the use of pop culture movie analogies to explain complex structures such as the Arctic marine ecosystem. NAMMCO could, for example, consider the types of analogies that may be able to be used to describe its role as manager of the Arctic environment to an audience uninitiated in science.

[“Incentivising consistent data collection and transparent reporting of marine mammal by-catch in fisheries”](#)

This workshop was organised by the Marine Stewardship Council (MSC). The MSC wanted to explore how to incentivise data-sharing and reward transparency so that the true extent of fisheries impacts can be understood and mitigated where necessary. It included discussions on best practice data collection, consistent data standards, risk-based approaches and behavioural incentives. The particular interest for NAMMCO in this workshop was to make more visible the attention given to By-catch in the NAMMCO framework and the work accomplished with the organisation and at the national level.

2. OVERVIEW OF PUBLICATIONS

Progress is being made towards the publication of volume 11 of the NAMMCO Scientific Publications series under the title *Sightings surveys in the North Atlantic: 30 years of counting whales*. There are 13 papers scheduled for publication in this volume. Three of these articles have already been published as early online versions and are available on the NAMMCO Scientific Publications series website (<https://septentrio.uit.no/index.php/NAMMCOSP/issue/view/NSP11>). Seven of the articles are currently undergoing peer review, while a further two are being revised by authors following completion of the peer review process. The final planned article is still being drafted by the authors. The intention is to have the full volume complete and published within 2020.

Below is a list of publications that have been worked on in 2019 and in which NAMMCO is given as an affiliation by one or more of the authors (marked in bold text).

Published

G. Hoogensen Gjørsv, E.E. Oddsdóttir, **F. Wickson**. 2019. Gender and intersectional approaches to security in the Arctic. In G. Hoogensen Gjørsv, M. Lanteigne and H. Sam-Aggrey (eds), *Routledge Handbook of Arctic Security*, London: Routledge.

E. Jourdain, F. Ugarte, G.A. Víkingsson...and **G. Desportes**. 2019. North Atlantic killer whale *Orcinus orca* populations: a review of current knowledge and threats to conservation. *Mammal Review* 49(4): 384-400.

D.G. Pike, T. Gunnlaugsson², B. Mikkelsen, S.D. Halldórsson, G.A. Víkingsson, **M. Acquarone** and **G. Desportes**. 2019. Estimate of the abundance of cetaceans in the central North Atlantic from the T-NASS Icelandic and Faroese ship surveys conducted in 2007. *NAMMCO Scientific Publications* 11: Early Online Version available at <https://septentrio.uit.no/index.php/NAMMCOSP/article/view/4941>

D.G. Pike, T. Gunnlaugsson, **G. Desportes**, B. Mikkelsen and G. Víkingsson and D. Bloch. 2019. Estimates of the relative abundance of long-finned pilot whales (*Globicephala melas*) in the Northeast Atlantic from 1987 to 2015 indicate no long-term trends. *NAMMCO Scientific Publications*, 11: Early Online Version available at <https://septentrio.uit.no/index.php/NAMMCOSP/article/view/4643>

In Press

R. Hobbs, **J.S. Prewitt**, R. Reeves and **G. Desportes**. In press. Preface to the Global Review of the Conservation Status of Monodontid Stocks. *Marine Fisheries Review*.

R.C. Hobbs, R. R. Reeves, **J.S. Prewitt**, **G. Desportes**, et al. In press. Global Review of the Conservation Status of Monodontid Stocks. *Marine Fisheries Review*.

D.G. Pike, T. Gunnlaugsson, B. Mikkelsen, S.D. Halldórsson and G. Víkingsson. 2019. Estimates of the abundance of cetaceans in the central North Atlantic based on the NASS Icelandic and Faroese shipboard surveys conducted in 2015. *NAMMCO Scientific Publications*, 11.

F. Wickson. In press. Atlantic Walrus Management, Regulation and Conservation. In X.A. Keighley, M.Tange Olsen, P. Jordan and S.P.A. Desjardins (eds) *The Atlantic Walrus*, Elsevier.

Submitted

D.M. Leonard, N.I. Øien. Submitted. Estimated abundance of cetacean species in the Northeast Atlantic based on ship surveys conducted between 2002-2007 and 2008-2013. *NAMMCO Scientific Publications*, 11.

D.M. Leonard, N.I. Øien. Submitted. Cetacean species in the Northeast Atlantic based on ship surveys conducted in 2014-2018. *NAMMCO Scientific Publications*, 11.

U. Siebert, M.A. Blanchet...and **G. Desportes**. Submitted. Haematology and clinical blood chemistry in harbour porpoises (*Phocoena phocoena*) from the inner Danish waters exposed to high pollution levels. *Environmental International*. Baltic Balthealth special issues.

P. Verborgh and **G. Desportes**. Submitted. Long-finned pilot whale (*Globicephala melas*). *Cetacean Volume. Handbook of the Mammals of Europe*. Springer.

F. Ziegler, K. Nilsson, N. Levermann, M. Dorph, B. Lyberth, **G. Desportes**. Submitted. Local seal or imported meat? Sustainability evaluation of food choices in Greenland, based on Life Cycle Assessment. *Food Policy*

3. OUTREACH TO OTHER RFBS

Since 2011, the RSN - the Regional Fishery Body Secretariats' Network – has edited and published a Newsletter (since 2019 called a Magazine) that has 1-4 issues a year. NAMMCO has actively contributed to this Magazine by submitting inputs describing the importance of its work on conservation and management of marine mammals and highlighting ongoing priorities.

The most recently published issue (No. 18 – February 2019) had a special corner celebrating twenty years of working together in the context of this network (currently consisting of 58 RFBs and partners), with shared vision, efforts and achievements. This issue sought to reflect on the lessons learned, the experiences gained, and the goals achieved since that First Meeting of FAO and Non-FAO Regional Fishery Bodies in 1999, under a special editorial and the corner theme "LOOKING BACK: THE JOURNEY SO FAR". NAMMCO contributed a piece to the looking back theme that described the history of the organisation's establishment and prerequisites for its key successes.

NAMMCO has also contributed to issue No. 19, which will be published in 2020.

All of the Magazine/Newsletters can be found at <http://www.fao.org/fishery/rsn/newsletter/en>

4. SUMMARY OF ACTIVITIES ON SOCIAL MEDIA & THE NAMMCO WEBSITE

Since the last Council meeting in April 2019, the activities on the NAMMCO social media accounts have continued to grow, both on Facebook and Twitter, and work to ensure that the NAMMCO website reports the latest information on abundance estimates and assessment has been carried out. To help ensure clarity and consistency in reporting, the Secretariat has decided to present information in this

report that is focused on outreach activities by calendar year. This means that the following information on social media and website activity is focused on 2019. Since the report from last year covered the months of 2019 before the Council meeting, there can be some overlap in the information presented. It has, however, been clearly indicated where there is the possibility for this by explicitly referring to the time periods covered.

4.1 FACEBOOK.COM/NAMMCO

As of 1st January 2020, the [NAMMCO.org](https://www.facebook.com/nammco.org) Facebook account had 1 197 page likes and 1 222 followers. This means that the account received 379 new followers in 2019, and 330 new likes. The general reach of the NAMMCO Facebook posts increased from 379 to 1 311 from 2018 to 2019.

The top five Facebook posts of 2019 (measured in terms of how many people were reached by the post) ranged between 8 800 and 22 200 users. This included posts on the report of the joint IMR/NAMMCO workshop on harbour porpoises, marine mammal facts and the internship at NAMMCO. The most liked post was a Fun Fact Friday post on sei whales that also introduced the release of the new NAMMCO sei whale webpage, which received more than 1 500 likes.

A summary of insights on the NAMMCO Facebook account for 2019 can be found on page 13 below.

4.2 TWITTER.COM/NAMMCO_SEC

Although NAMMCO has a Twitter account, activities on this platform are not prioritised and receive very little time and attention from the Secretariat. Nonetheless, the number of followers and engagements with NAMMCO through its Twitter account have also increased in 2019. As of 1st January 2020, the [NAMMCO_sec](https://twitter.com/nammco_sec) Twitter account had 290 followers (an increase of 230 new followers from 2018), 434 post likes and a total of 156 tweets and/or re-tweets.

The five top tweets include information on NAMMCO activities, such as the Marine Mammal Student Symposium (post-event tweet with 27 276 impressions), and tweets about new marine mammal research. The highest number of re-tweets on a NAMMCO post was 23.

See the Twitter summary analysis on page 14 for more details.

4.3 WEBSITE - NAMMCO.NO/.ORG

Between 1st January 2019 and 1st January 2020, the [NAMMCO website](https://www.nammco.no) has had 19 747 users, 88 % of whom were new users. Most users find the website through a search engine, while 15% navigate to the site directly. Facebook and Twitter referred just under 10% of users, which was a slight decline from last year. Other referring sites included Wikipedia with 45 referrals, marenet.de with 43 referrals and natur.gl with 41 referrals. It is worth mentioning that the number of visitors arriving at the site from an organic search has increased significantly since the last report, from 56.4% to 71% of all site visitors. Although the Secretariat has not yet maximised search engine optimisation (SEO) for the website, new posts and updates have been done with this in mind and this may, at least partly, explain this increase.

Computers remain the main tool used to access the website, but in 2019 there was a slight increase in mobile and tablet users compared to the previous year.

The top countries visiting the website remain the same as 2018, although in a slightly different order. In 2019, the US was the main user nationality, followed by the UK, Norway and Canada. Interestingly, Germany became eighth on the list of countries visiting the website, which was well above Greenland, Iceland and the Faroe Islands.

As was seen last year, the distribution of gender is relatively equal among the website users and most visitors were in the age class 25-34.

Some of the most popular pages, apart from the landing page, were the 'About NAMMCO' page, individual species pages, as well as the library and meeting pages. This suggests that people continue

to use the website as a general source of information on marine mammals and to learn about NAMMCO as an institution, and not only for internal information related to meetings. It is also worth noting that the narwhal species site was the third most visited page on the website in 2019.

A total of 37 news items presenting new publications, the release of reports, and information on the marine mammal student symposium were published on the website in 2019. In addition, five blogs describing different events that NAMMCO participated in were also published.

The [catch database](#) is also now available on the NAMMCO website in a searchable format. A new page on [laws and regulations](#) has been added linked to the original law/regulation text with translations where available or summaries in English.

Furthermore, three new pages on marine mammal species were published in 2019:

- [Sperm whale](#) (June 2019)
- [Blue whale](#) (August 2019)
- [Sei whale](#) (September 2019)

Work to include more species pages, as well as to update all of the abundance estimates and assessments for all species currently listed on the website has continued in 2020 and will be described in detail in next year's summary report. It is worth noting though that all of the abundance estimates and assessments data are currently up to date for all species. Research updates from National Progress Reports and general information updates will continue to be implemented as appropriate. A new process for quality controlling the scientific information on the website has also been decided with the Scientific Committee and will be implemented in 2020.

A summary of the data on the NAMMCO website is presented on page 15.

Facebook

Average NAMMCO post reach: 1 311

Top 10 page likes by country:

2019 (January)	Likes	867	Men:	49 %
	Followers	843		
2020 (January)	Likes	1 197	Women:	50 %
	Followers	1 222		

Faroe Islands	228
Norway	161
Denmark	147
Greenland	107
UK	60
France	59
Portugal	58
Spain	57
Greece	54
Iceland	42

Most liked post between January 2019 and January 2020:

Did you know that there is a whale species named after a fish? *The sei whale got its name from the Norwegian word «sei" (saithe/coalfish) because both the whale and the fish used to appear at the Norwegian coast at the same time. Have you never heard about this whale, you say? Do not despair, as we are happy to announce the publication of the sei whale species page (1537 likes)*

Top 5 posts (in terms of reach) between April 2018 and March 2019:

09/05/19	The report of the Joint IMR/NAMMCO International Workshop on the Status of Harbour Porpoises in the North Atlantic is now available! Find it here: https://nammco.no/t.../scientific-workshops-symposia-reports/... The workshop was held in December 2018, at Framcenteret in Tromsø, northern Norway. With an overarching aim to improve the knowledge base for ecosystem-based management, the central objectives of the workshop were to:	22 255 reached (boosted) 180 Reactions 3,124 Post clicks
12/08/19	Have you ever wanted to know more about the blue whale? Now's your chance! We are happy to announce that the blue whale has finally been added to our species pages. Here, you will find general, scientific and management information on this largest of animals, as well as its hunting history, other relations to humans, threats and more. Did you for instance know that the blue whale population appears to be increasing in the Central North Atlantic?	17 923 reached (boosted) 69 Reactions 254 Post clicks
03/09/19	Did you know that there is a whale species named after a fish? The sei whale got its name from the Norwegian word «sei" (saithe/coalfish) because both the whale and the fish used to appear at the Norwegian coast at the same time. Have you never heard about this whale you say? Do not despair, as we are happy to announce the publication of the sei whale species page:	14 753 reached (boosted) 1,689 Reactions 317 Post clicks
27/03/19	We just published a new article! "Abundance of whales in West and East Greenland in summer 2015" is the second article in the newest volume of the NAMMCO Scientific Publication Series, Volume 11. It was authored by Rikke G. Hansen, Tenna K. Boye, Rasmus S. Larsen, Nynne H. Nielsen, Outi Tervo, Rasmus D. Nielsen, Marianne H. Rasmussen, Mikkel H. S. Sinding and Mads Peter Heide-Jørgensen and presents the results of an aerial line transect survey of cetaceans in West and East Greenland.	11 497 reached (boosted) 39 Reactions 93 Post clicks
08/05/19	Would you like to be the next Intern at NAMMCO? Would you like to be the next Intern at NAMMCO? The North Atlantic Marine Mammal Commission is looking for a new member to join the Secretariat, and the internship is a great way for students or early career individuals to enhance their skills while working for an Intergovernmental Organisation. Our current intern, Sam Smith talks about his time at the Secretariat in Tromsø, and about the experience he has at the organisation. The next deadline is the 31st May: find out more and apply here!	8 844 reached (boosted) 65 Reactions 211 Post clicks

Twitter

2019 (March)
 (Re)Tweets 102
 Followers 60
 Likes 9

2020 (January)
 (Re)Tweets 156
 Followers 290
 Likes 434

Men: 41 %
Women: 59 %

Users by Country:

UK 22 %
 US 21 %
 Canada & Australia 6 %
 Norway 5 %

Top tweets

07/02/19	Amazing event held yesterday in collaboration with @UiTromso . The Marine Mammal Student Symposium brought together MSc a PhD candidates to discuss their work, make connections and contribute to the study of #marinemammals . Thank you to all those who attended!! pic.twitter.com/OKqQmRX7We	27 276 impressions	47 total engagements 3 retweets 7 link clicks
01/05/19	This Friday (3rd May) there will be an interesting talk @UiTromso about #belugas. Eleanor Bors from @OregonState will present "An epigenetic method for aging endangered beluga whales in Cook Inlet, Alaska, USA Time and Location: 11:15, Lille Auditorium, UiT. All welcome! https://t.co/EYSh0uhohn	16 952 impressions	11 total engagements 1 retweets 0 link clicks
05/02/19	Marine Mammal Student Symposium held tomorrow in Blix-salen, Arctic Biology Building, @UiTromso Presentations on current work with #marinemammals , ranging from biology to legislation, Followed by evening event with guest speakers and refreshments: https://nammco.no/topics/1-february-2019-nammco-marine-mammal-student-symposium/... pic.twitter.com/ztBCJDs6IX	11 836 impressions	28 total engagements 2 retweets 1 link click
20/09/19	Another awesome way to use #drones for #marine #mammal #research!	6 238 impressions	80 total engagements 23 retweets 1 link clicks
19/02/19	Over the past eight years, researchers have seen more than 20 killer whales trapped by ice.	4 618 impressions	45 total engagements 11 retweets 16 link clicks

NAMMCO.NO WEBSITE

Unique users:

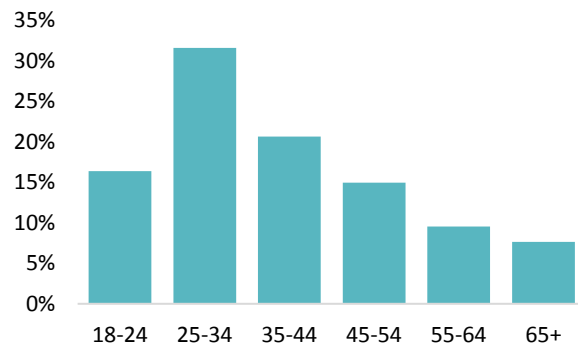
2018: (1 Jan – 31 Dec) 9 597

2019: (1 Jan – 31 Dec) 19 747

Men: 48.3 %

Women: 51.7 %

Age Distribution



Most popular pages:

Front page	8 956
About us	3 096
Narwhal	1 842
Library	1 736
Walrus	1 709
Fin whale	1 440
Minke whale	1 386
Pilot whale	1 316
Blue whale	1 303
Meetings/council	1 206

Web users by country:

US	27.4 %
UK	9.8 %
Norway	6.9 %
Canada	6.6 %
Denmark	3.4 %
Australia	3.4 %
Japan	3.0 %
Germany	2.5 %
Faroe Islands	1.9 %
Iceland	1.9 %
Greenland	1.6 %

How did they find NAMMCO?

Organic search	71.0 %
Direct	15.1 %
Social media	9.4 %
Referral	4.6 %

Which devices?

Computer	61.5 %
Mobile	31.4 %
Tablet	7.1 %