NAMMCO

ANNUAL MEETING 31

Meeting of the Management Committee for Cetaceans

(Chair: Masaana Dorph)

Aqqalu Rosing-Asvid
Chair SC

Maria Garagouni
Deputy secretary

3.1 Narwhal

3.1 Active request

- ***R-3.4.11 (2008, standing):*** *To update the assessment of both narwhal and beluga, noting that new data warrant such an exercise.*

3.2 Response from SC/30

- The Ad hoc Working Group on Narwhal in East Greenland (NEGWG) met on 12-15 December 2023 and reviewed the status of narwhal in East Greenland (Chaired by Rod Hobbs)

Terms of Reference

i) To update the assessment of narwhals in Southeast Greenland using data from recent surveys.

ii) [To review the situation of belugas in East Greenland with participants from Norway.]

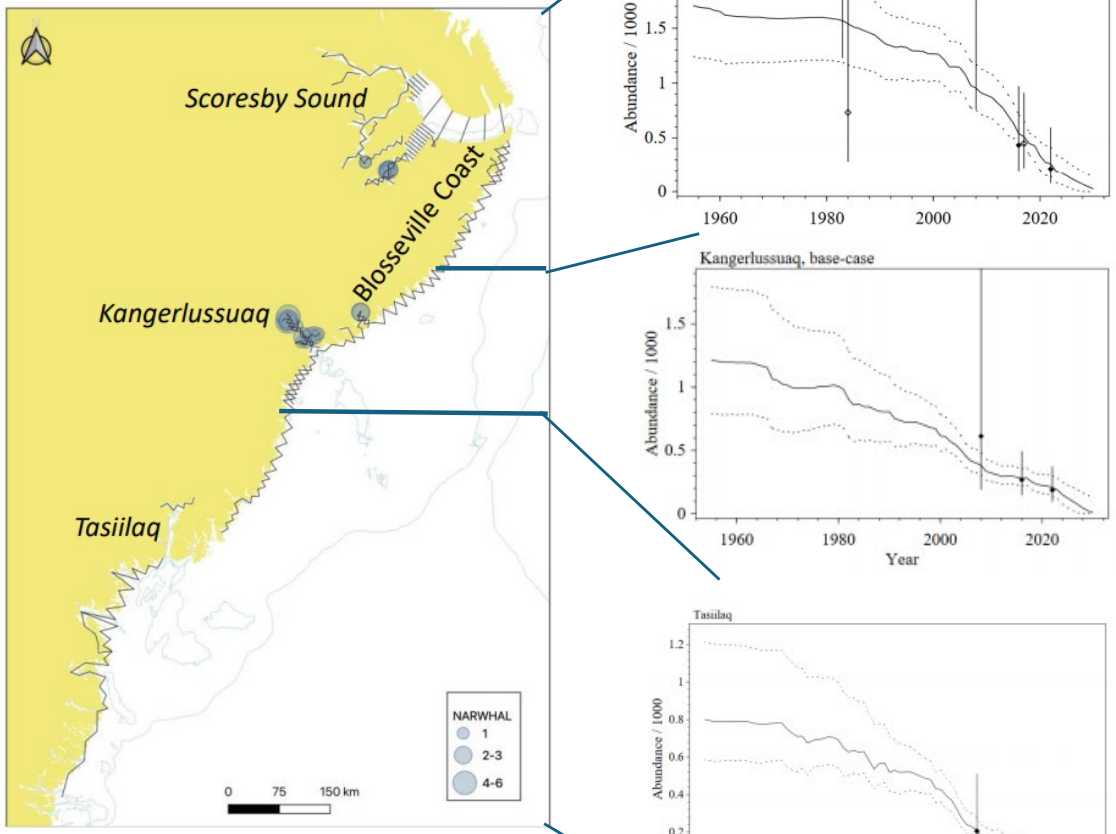
ii) To define suitable timeframes for abundance surveys and assessments for each specific case (species/stock).

3.1 Narwhal

- A two-day workshop between Pinngortitaleriffik and hunters from all towns and settlements in East Greenland was held in Iceland in June 2022.
- Hunters and scientists agreed upon where/when to fly and hunters participated in the survey

Pod of narwhals, © Kristin Laidre, NOAA

3.1 Narwhal



Estimates based on counts August-September 2022

176 whales 95% CI: 53-590

188 whales 95% CI: 85-417

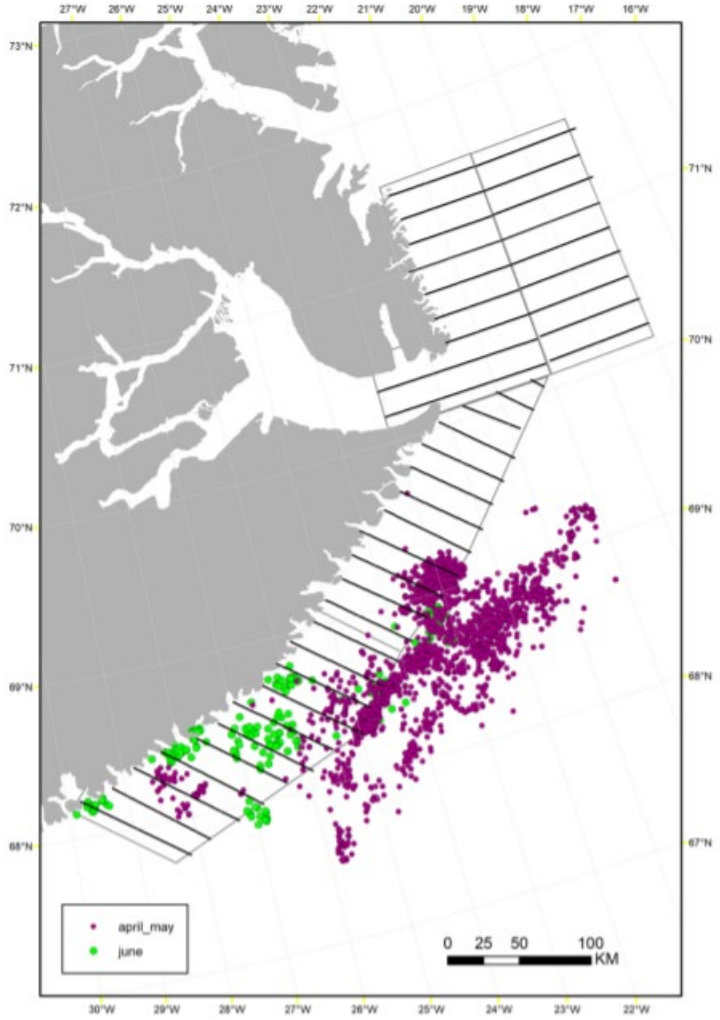
No whales seen

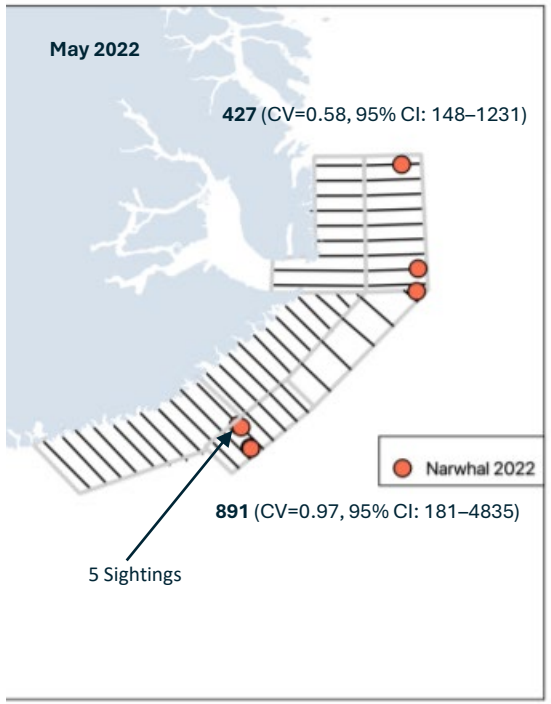
The survey was planned and conducted together with hunters from East Greenland.

Probability that there will be no individuals left between now and 2030, given different levels of total removals (R).

R	2025	2026	2027	2028	2029	2030
15	0.60	0.76	0.85	0.90	0.93	0.95
11	0.57	0.71	0.80	0.86	0.89	0.91
7	0.53	0.64	0.71	0.77	0.82	0.85
3	0.47	0.54	0.59	0.62	0.66	0.69
0	0.32	0.32	0.33	0.33	0.33	**0.33**

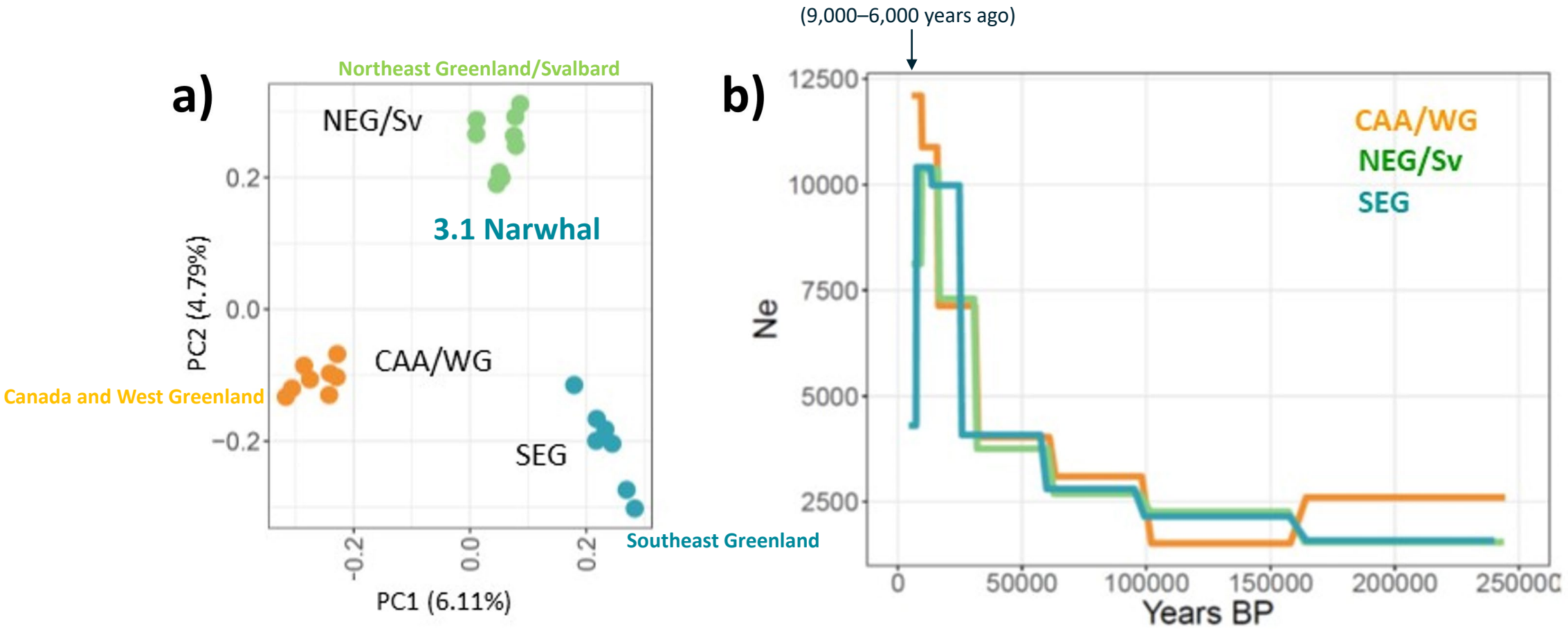
3.1 Narwhal



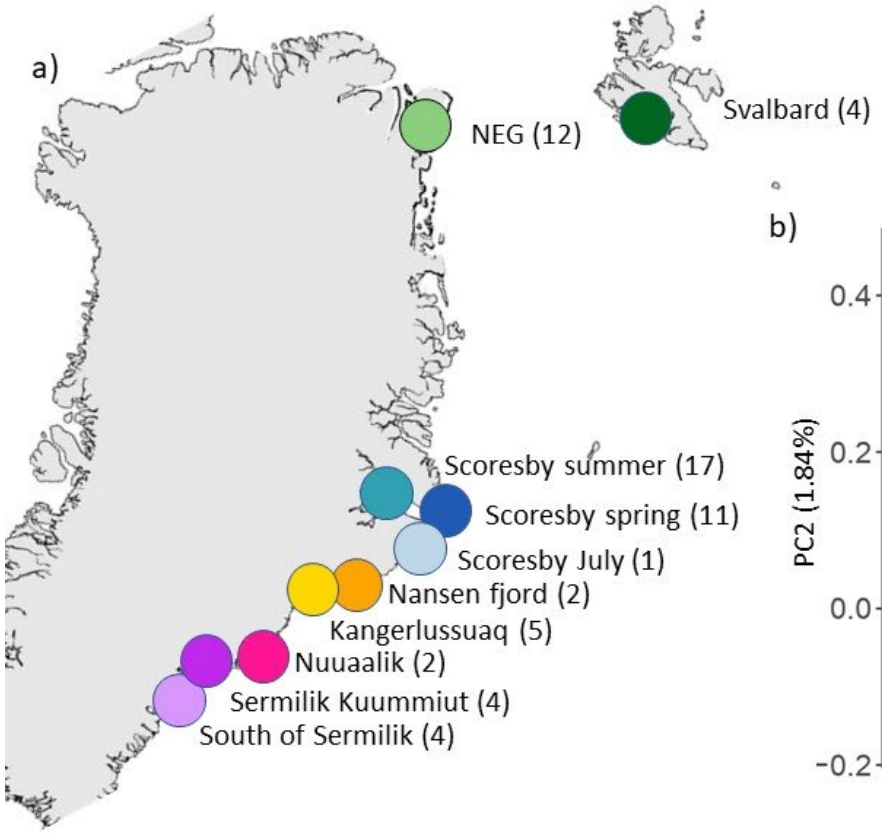


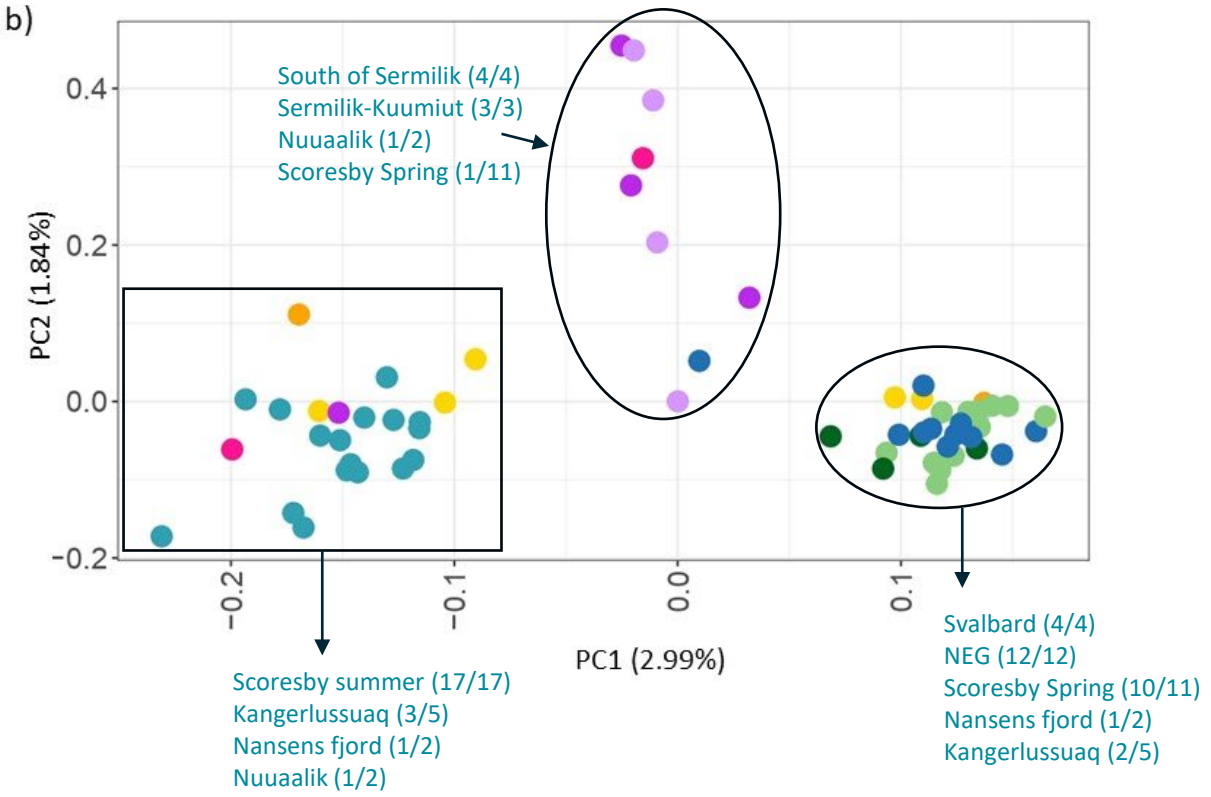
The spring survey supported the believe that animals caught in spring are segregated from the summer population as suggested by satellite tracking, genetic studies and hunting records.

3.1 Narwhal


a)
Northeast Greenland/Svalbard
NEG/Sv
3.1 Narwhal
CAA/WG
Canada and West Greenland
SEG
Southeast Greenland
PC2 (4.79%)
PC1 (6.11%)
0.2
0.0
−0.2
-0.2
0.0
0.2
b)
(9,000–6,000 years ago)
CAA/WG
NEG/Sv
SEG
Ne
12500
10000
7500
5000
2500
0
50000
100000
150000
200000
250000
Years BP

3.1 Narwhal


a)
NEG (12)
Svalbard (4)
Scoresby summer (17)
Scoresby spring (11)
Scoresby July (1)
Nansen fjord (2)
Kangerlussuaq (5)
Nuuaalik (2)
Sermilik Kuummiut (4)
South of Sermilik (4)


b)
South of Sermilik (4/4)
Sermilik-Kuumiut (3/3)
Nuuaalik (1/2)
Scoresby Spring (1/11)
PC2 (1.84%)
PC1 (2.99%)
0.4
0.2
0.0
−0.2
−0.2
−0.1
0.0
0.1
Scoresby summer (17/17)
Kangerlussuaq (3/5)
Nansens fjord (1/2)
Nuuaalik (1/2)
Svalbard (4/4)
NEG (12/12)
Scoresby Spring (10/11)
Nansens fjord (1/2)
Kangerlussuaq (2/5)

3.1 Narwhal

- **Narwhal as meat supply**
  - Estimates of the annual meat supply from large mammals, including narwhal, were calculated for East Greenland using 1993–2021 catch statistics. Narwhal meat has consistently contributed approximately 5–6% of the total meat quantity throughout this period.

3.1 Narwhal

3.1.3 Recommendations for Conservation and Management

- Greenland

1. Zero catches should be allowed in all three Management Areas **(strongly reiterated)**.

2. The next assessment of each Management Area should be conducted in 2026.

➢ *The SC requests guidance from the MCC on the need for continued monitoring and new assessments, considering there is no likelihood of recovery to a threshold that would allow sustainable removals within 3 years.*

3.1 Narwhal

3.1.4 Recommendations for Research

- Greenland

3. Deploy satellite tags on animals supplying the spring hunt in Management Area 1, as well as in Northeast Greenland, to investigate the range of the animals supplying the spring hunt.

4. Collect biological samples when available from East Greenland, including areas north of Scoresby Sound, to explore genetic connectivity of different stocks.

5. Investigate alternative methods to monitor depleted stocks (e.g., using targeted aerial surveys, passive acoustic monitoring, land-based surveys, mark-recapture, collecting incidental observations).

6. Conduct targeted aerial surveys of Kangerlussuaq, Nansen Fjord, southern Scoresby Sound, and other reported aggregation areas during summer of 2026.

3.2 Beluga

3.2.1 Active request

- ***R-3.4.11 (2008, standing):*** *To update the assessment of both narwhal and beluga, noting that new data warrant such an exercise.*

3.2.2 Response from SC/30

- The Ad hoc Working Group on Narwhal in East Greenland (NEGWG) met on 12-15 December 2023 and was tasked with reviewing the status of beluga in East Greenland.

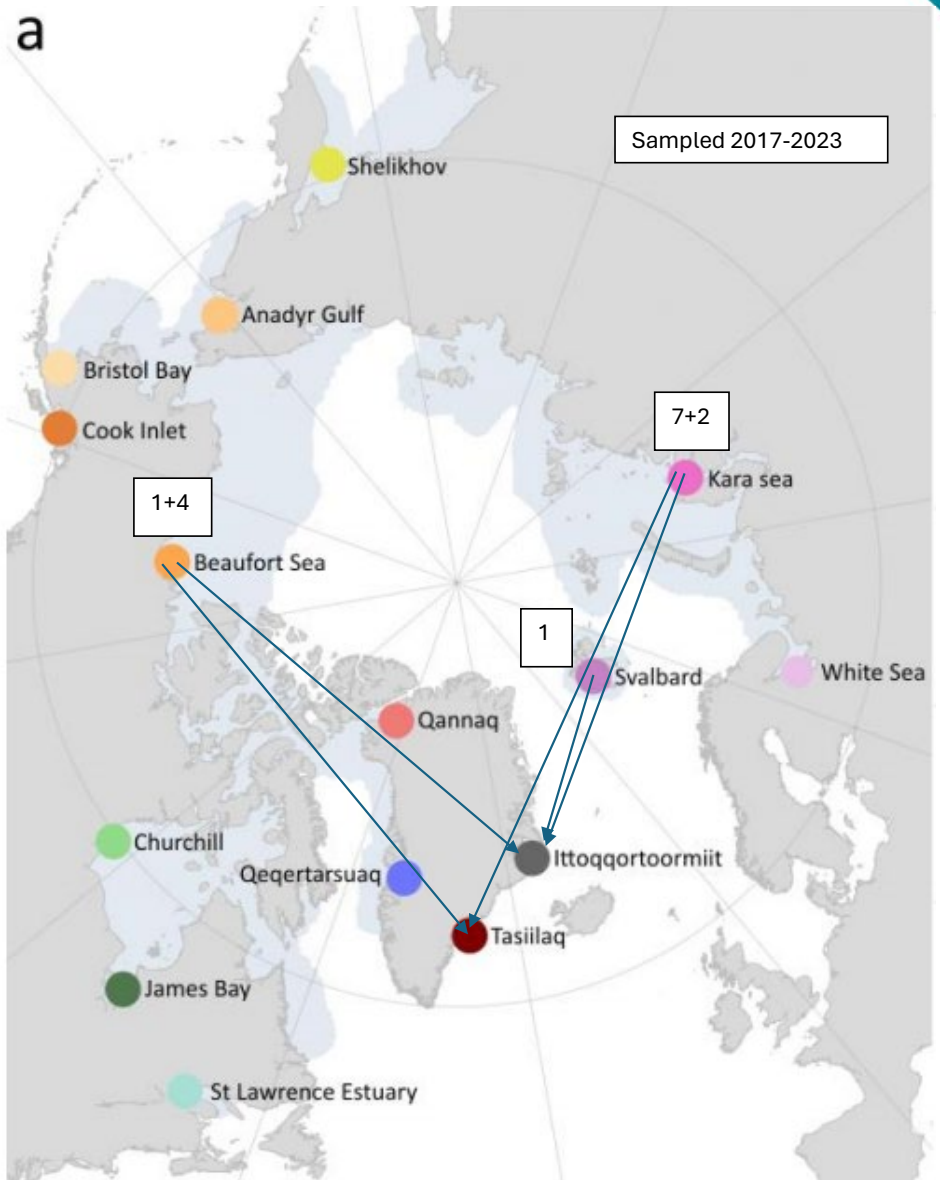
Terms of Reference

i) To review the situation of belugas in East Greenland with participants from Norway;

ii) To define suitable timeframes for abundance surveys and assessments.

3.2 Beluga

- Belugas in East Greenland are visitors from other populations.
- Catches have increased since 2017, peaked with 33 animals cumulatively for 2022 and 2023.



3.2 Beluga

3.2.3 Recommendations for Conservation and Management

- Greenland

7. Zero removals should be allowed, in order to allow for the potential establishment of a new population of belugas in East Greenland, and to avoid removing animals that have potentially originated from the small and protected Svalbard stock (prioritised by SC/30).
8. The next assessment should coincide with the next narwhal assessment.

➢ *The SC requests further guidance from the MCC regarding future assessments of belugas in East Greenland, given that they cannot yet be considered a stock and there are no data on behaviour and movement parameters from which to draw useful conclusions.*

3.2.4 Recommendations for Research

- Greenland

9. Collect incidental observations and biological samples when available, to monitor the occurrence of belugas in East Greenland (prioritised by SC/30).

3.3 Dolphins (White-beaked, white-sided & bottlenose dolphins)

3.3.1 Active request

- ***R-3.9.6****: To carry out assessments of dolphin species for which there are removals.*

3.3.2 Response from SC/30

- Autumn 2023: Working Group on Dolphins (DWG) 1st meeting

Terms of Reference:

i) Conduct an assessment of the sustainability of the removals of *Lagenorhynchus* dolphins in the Faroe Islands, Iceland, and Greenland.

ii) Review available information in other areas and identify knowledge gaps and needs for further research.

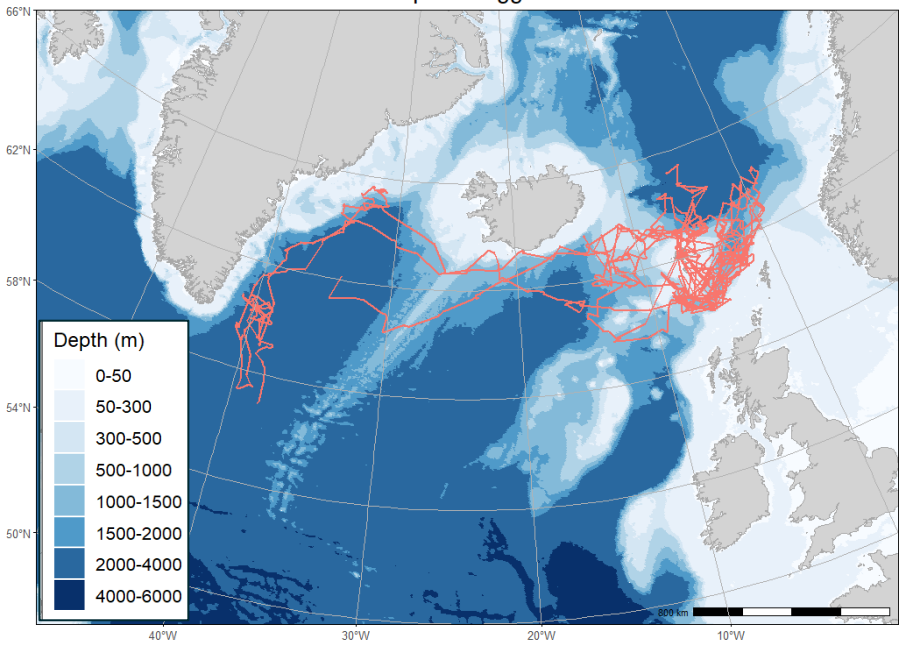
iii) Assess impacts from non-hunting related anthropogenic stresses (pollution, climate change, noise etc).

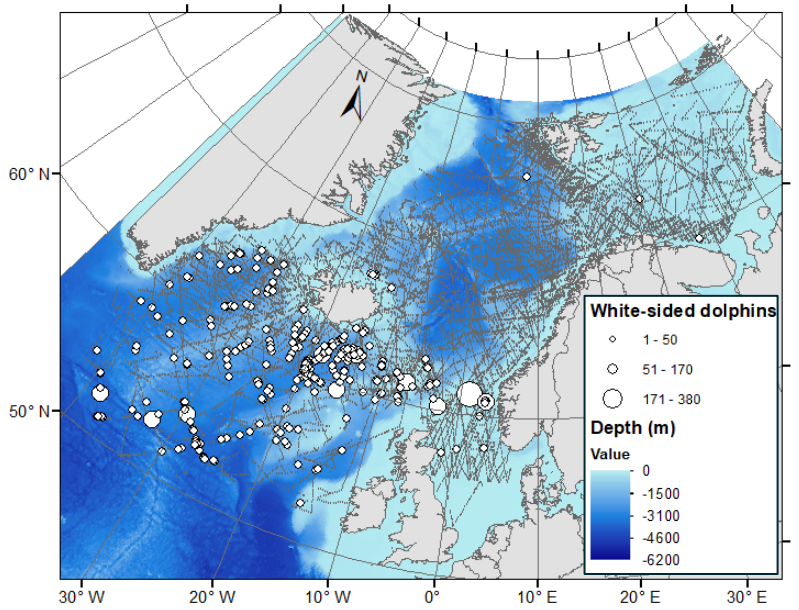
iv) Recommend the suitable regularity of abundance surveys and assessments for each specific case (species/stock).

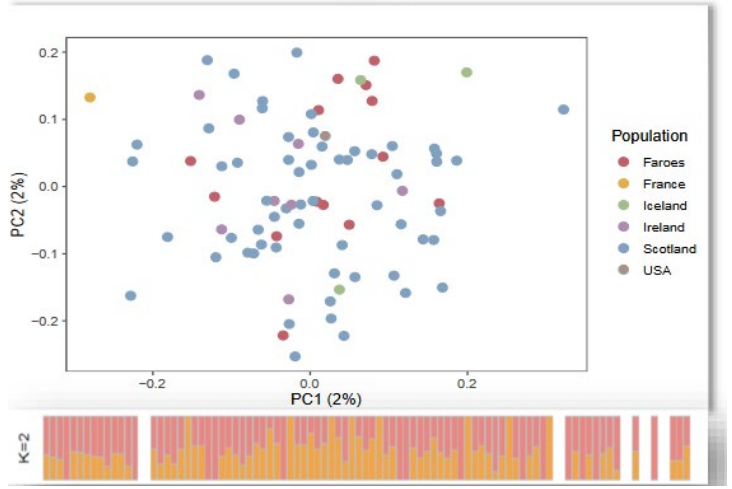
3.3 Dolphins
White-sided dolphin

No geographic or genetic distinctions across the eastern North Atlantic

Filtered tracks of 21 white-sided dolphins tagged in the Faroe Islands







3.3 Dolphins
White-sided dolphin

- Age, growth, reproduction data from Faroese drive hunts
  - Missing very young calves & older females
- Abundance
  - Central & Eastern North Atlantic: (approximately estimated) >200,000
- Removals
  - Faroe Islands: annual average 122 dolphins landed
    - Exception: 1423 dolphins landed in 2021
  - Greenland: likely negligible catches
  - Iceland: likely negligible by-catches (genetic confirmation)
  - Norway: low by-catches in reference fleet

3.3 Dolphins
White-sided dolphin

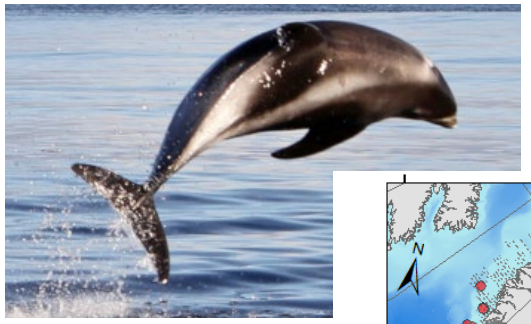
- Limited information on other human impacts
  - Persistent Organic Pollutants (e.g., PCBs) likely the biggest problem

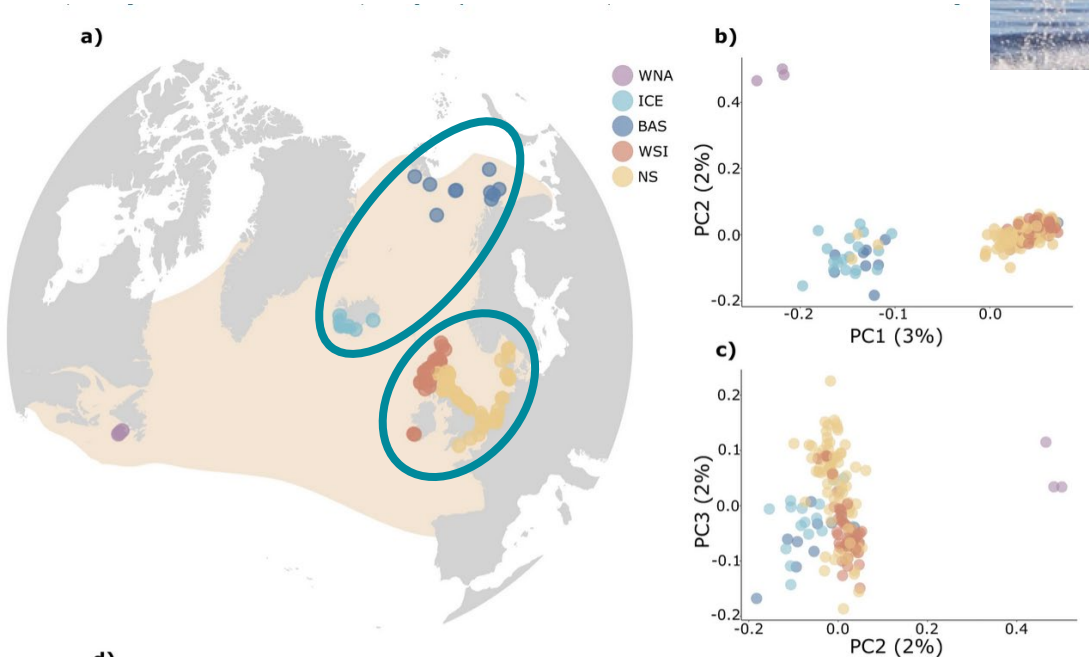
- Stock assessment:
  - Bayesian age-structured population model
  - Conservative approach: only FO & IS abundance
    - 2007: 81,008 (CV=54%)
    - 2015/2016: 131,022 (CV=73%)
  - Removals are **sustainable** at current levels

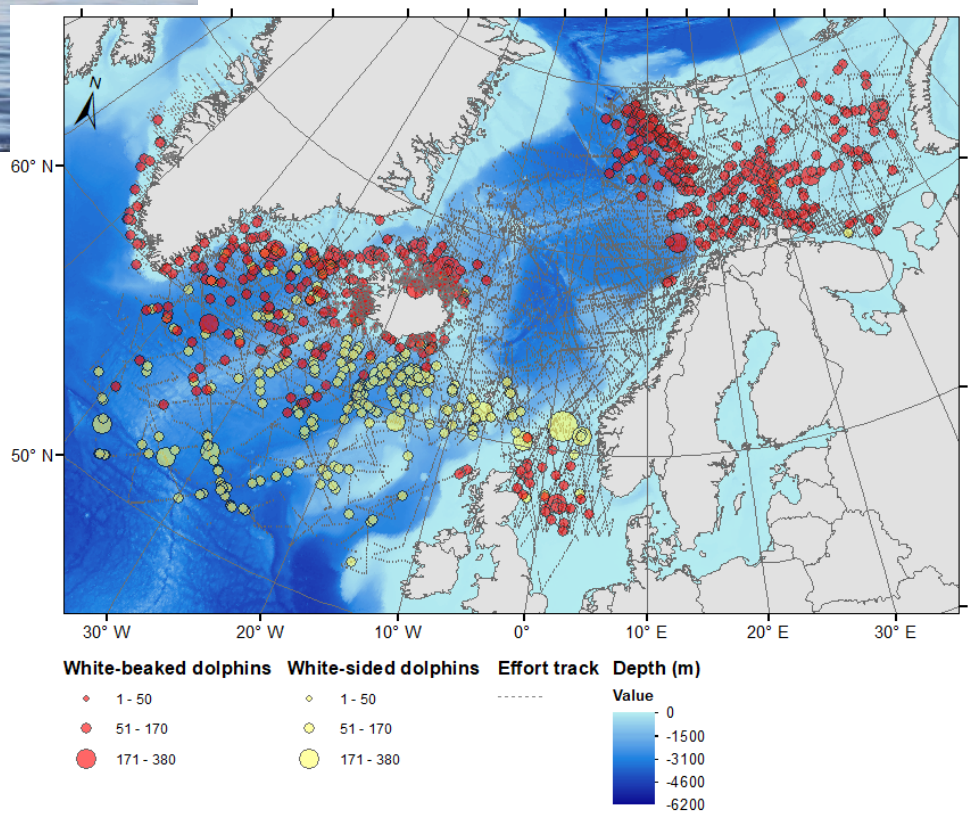
P	rs	rl
F	0.50	0.50
0.50	1121	1285
0.55	1020	1187
0.60	923	1109
0.65	836	1031
0.70	750	953
0.75	666	875
0.80	599	790
0.85	530	704
0.90	439	615
0.95	336	483

3.3 Dolphins
White-beaked dolphin

- Genetic population structure
- Distribution “gaps”







3.3 Dolphins

White-beaked dolphin

- Abundance
  - Central & Eastern North Atlantic: (approximately estimated) >300,000
- Removals
  - Greenland: likely high catches, uncertainty about underreporting and struck and lost rates
  - Iceland: ~18 *Lagenorhynchus* by-catches per year, species identification not always certain
  - Norway: likely low by-catch levels, species identification not always certain
- Stock assessment
  - Potential Biological Removal
  - Removals likely **not sustainable** at current levels in Greenland

	Scenario (i)		Scenario (ii)
	West Greenland	East Greenland, Iceland, Faroe Islands	West Greenland, East Greenland, Iceland, Faroe Islands
Survey year	2015	2015–2016	2015–2016
AE	4,503	232,849	237,352
CV	48.1%	45.1%	44.3%
PBR	**31**	**1,621**	**1,662**
GL average annual reported catch (2019–2021)	262	50	312
GL reported catch corrected for underreporting (×2.42)	634	121	755
GL reported catch corrected for S&L (×3.5)	917	175	1,092
GL total estimated annual catch (corrected for S&L and underreporting)	2,219	424	2,643
IS estimated annual by-catch (2016–2019)	NA	18 (3–44)	18 (3–44)
Total removals	**2,219**	**442**	**2,661**
Sustainable removals (<PBR)	**No**	**Yes**	**No**

3.3 Dolphins (white-beaked & white-sided dolphins)

3.3.3 Recommendations for Conservation & Management

- All Parties

10. Considering the low levels of reported catch compared to the estimated population size, a new assessment of white-sided dolphins might be conducted within the standard 5-year period, integrating the 2024 abundance estimate, full catch reporting, and validated age structure information.

- Multiple Parties

11. Maintain *total removals* below 750 white-sided dolphins per year across Greenland, Iceland, and the Faroe Islands.

- Faroe Islands

12. Validate the completeness of the Faroese white-sided dolphin catches, focusing on the apparent lack of juveniles in the catch *(prioritised by SC/30).*

- Greenland

13. Validate the Greenlandic removals with a special focus on minimising underreporting and estimating struck and lost rates, thus facilitating a full assessment of white-beaked dolphins as soon as possible (high priority).

3.3 Dolphins (white-beaked & white-sided dolphins)

3.3.4 Recommendations for Research

- All Parties

14. Deploy satellite tags on both white-sided and white-beaked dolphins, preferably in areas other than the Faroe Islands, to obtain more movement and dispersion data.

- Faroe Islands (White-sided dolphins)

15. Investigate if there is older (i.e., 1986–1992) existing biological material from the Faroe Islands that could be processed and analysed, and to continue collecting relevant samples to investigate reproduction parameters and age structure.

16. Collect eye lenses to explore alternative age-determination methods.

17. Collect information from stranded animals, including age, length, and sex data.

18. Program satellite transmitters to collect higher resolution dive data at shallow depths to allow aerial survey availability correction factors to be estimated.

3.3 Dolphins (white-beaked & white-sided dolphins)

3.3.4 Recommendations for Research

Greenland

19. Determine the stock identity of white-beaked dolphins in West Greenland, using increased genetic sampling and tagging efforts in Greenland (prioritised by SC/30).

20. To collect life history and age data from white-beaked dolphins in Greenland.

Iceland

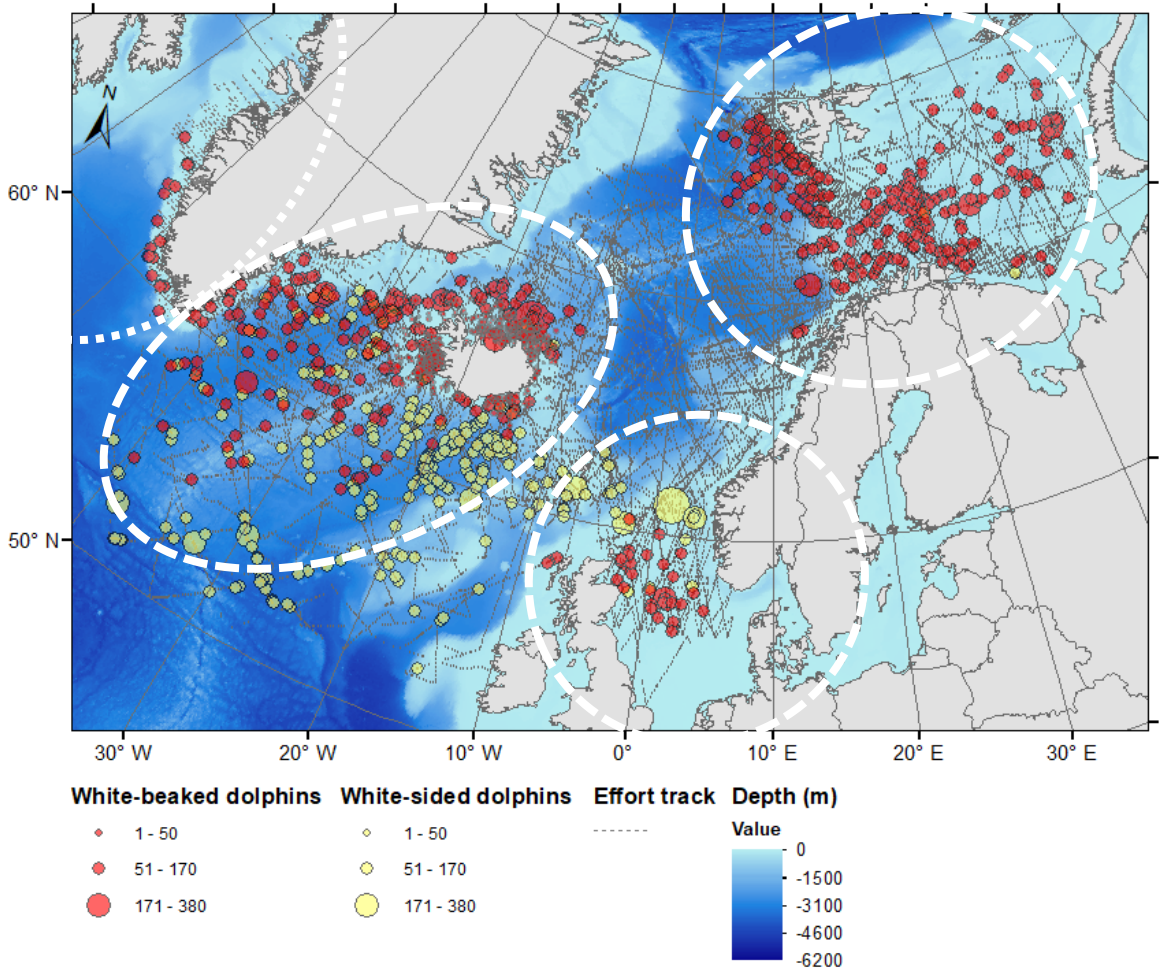
21. Make existing and newly collected biological data (age and reproductive information) from Iceland available for the next white-beaked dolphin assessment.

3.3 Dolphins (white-beaked & white-sided dolphins)

3.3.5. Management Areas

- White-sided dolphin
  - Central North Atlantic

- White-beaked dolphin
  - West Greenland & Western Atlantic (pending genetic confirmation)
  - East Greenland & Iceland
  - Northern Norway & Svalbard
  - Southern Norway & North Sea



3.4 Northern bottlenose whale

3.4.1 Active request

- ***R-1.7.11 (2019, ongoing):*** *To develop estimates of abundance and trends as soon as possible once the [NASS 2015] survey has been completed.*

3.4.2 Response from SC/30

- This has been completed for all species except bottlenose whale
  - Norway in charge of analyses, which have not progressed
- SC members will provide pertinent data prior to SC/31 for review of this species.
- The SC discussed the usefulness of conducting assessment of species undergoing limited or no removals, such as bottlenose whales.

3.4 Northern bottlenose whale

3.4.3 Recommendation for Conservation and Management

- Greenland

22. Validate the reported catches of this species, as there appears to be misreporting.

4.1 Harbour porpoise

4.1.1 Active request

- ***R-3.10.1****: To perform an assessment of harbour porpoise throughout its range, which might include distribution and abundance, stock identity, biological parameters, ecological interaction, pollutants, removals, and sustainability of removals.*

4.1.2 Response from SC/30

- The Working Group on Harbour Porpoise conducted an assessment of harbour porpoises off Norway in November 2022
- Assessment of Icelandic stock is of high priority
  - Next abundance estimate likely not available before 2026
  - Assess all stocks in that year

4.1 Harbour porpoise

4.1.3 Recommendations for Research

From SC/30

- Iceland

23. Collect data on biological parameters, to facilitate an assessment of the Icelandic stock *(high priority).*

From HPWG 2022

- Faroe Islands
  - Support the creation of an App where users of coastal areas (i.e., fishers, recreational boats) can report observations, catch and by-catch of harbour porpoises.
  - Initiate the collection of biological data on harbour porpoise.
- Iceland
  - Generate the best back-calculated by-catch estimates (i.e., a time series going back to the beginning of the fishery) for the upcoming Icelandic assessment.

4.2 Pilot whale

4.2.1 Active request

- ***R-3.8.6****: To continue work to complete a full assessment of pilot whales in the North Atlantic and provide advice on the sustainability of catches, as soon as necessary further information becomes available, with particular emphasis on the Faroese area and East and West Greenland.*

4.2.2 Response from SC/30

- Assessment in 2025
  - Abundance estimate from NASS 2024
  - Recommendations to FO from HPWG 2022:
    - Analyse teeth and reproductive samples (life history parameters)
    - Collect and analyse genetic samples together with Iceland and Greenland (stock identity)
    - Investigate potential relationship between pollutants and life history parameters between two sampling periods (1986–1989 & 2013–2022).

5. Members' responses to Proposals

Proposals forwarded to Faroe Islands:

- Pilot whale
  - Research: 2 (no updates provided)
- Dolphins:
  - Research: 2 (updates provided)
- Harbour porpoise
  - Research: 2 (updates provided)

Proposals forwarded to Greenland:

- Beluga
  - Conservation and Management: 1 (no development)
- Narwhal:
  - Conservation and Management: 4 (updates provided)
  - Research: 2 (updates provided)
- Pilot whale
  - Research: 1 (updates provided)
- Dolphins
  - Research: 3 (updates provided)

Proposals forwarded to Iceland:

- Dolphins
  - Research: 1 (no updates provided)
- Harbour porpoise
  - Research: 1 (no updates provided)

Proposals forwarded to Norway:

- Harbour porpoise
  - Conservation and Management : 5 (updates provided)
  - Research: 5 (updates provided for 2)