

Global Conservation Issues in a Northern Context: Addressing Seabird Bycatch in Arctic Fisheries

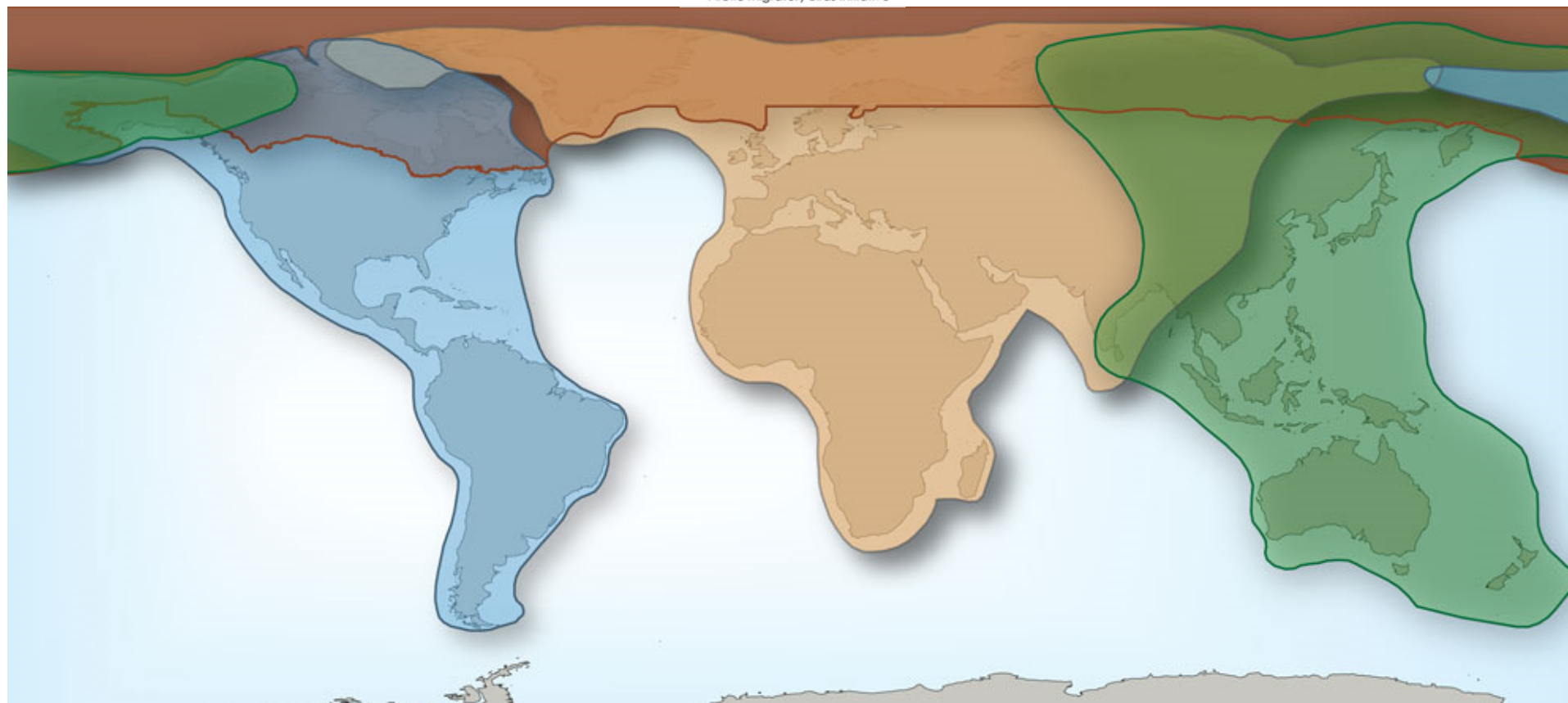
Amie Black¹ Christine Anderson², Jennifer F.
Provencher², Sam Iverson¹, April Hedd¹,
Flemming Merkel³, Mark L. Mallory², Rory
Crawford⁴

¹Environment and Climate Change Canada, ²Acadia
University, ³Aarhus University, ⁴ BirdLife International





Arctic Migratory Birds Initiative



Proposed 2019-2023 AMBI Circumpolar Flyway Objectives and Actions

Obtain critical information on key at-sea sites for marine bird congregations

Develop and implement at-sea surveys

Develop and implement at-sea tracking

Identify where key marine seabird habitats intersect with resource development

Mitigate habitat degradation

Facilitate protection of marine birds and marine bird habitat

Link tourism industry with responsible seabird colony viewing protocols

Mitigate seabird and seaduck bycatch

Undertake gill net bycatch assessment in key regions

Initiate discussions about mitigation measures with fisheries partners

Mitigate unsustainable harvest

Work with CBird to promote dialogue with authorities for management plans to combine the knowledge of status of hunted species between countries.

Begin to assess status of Snowy Owls

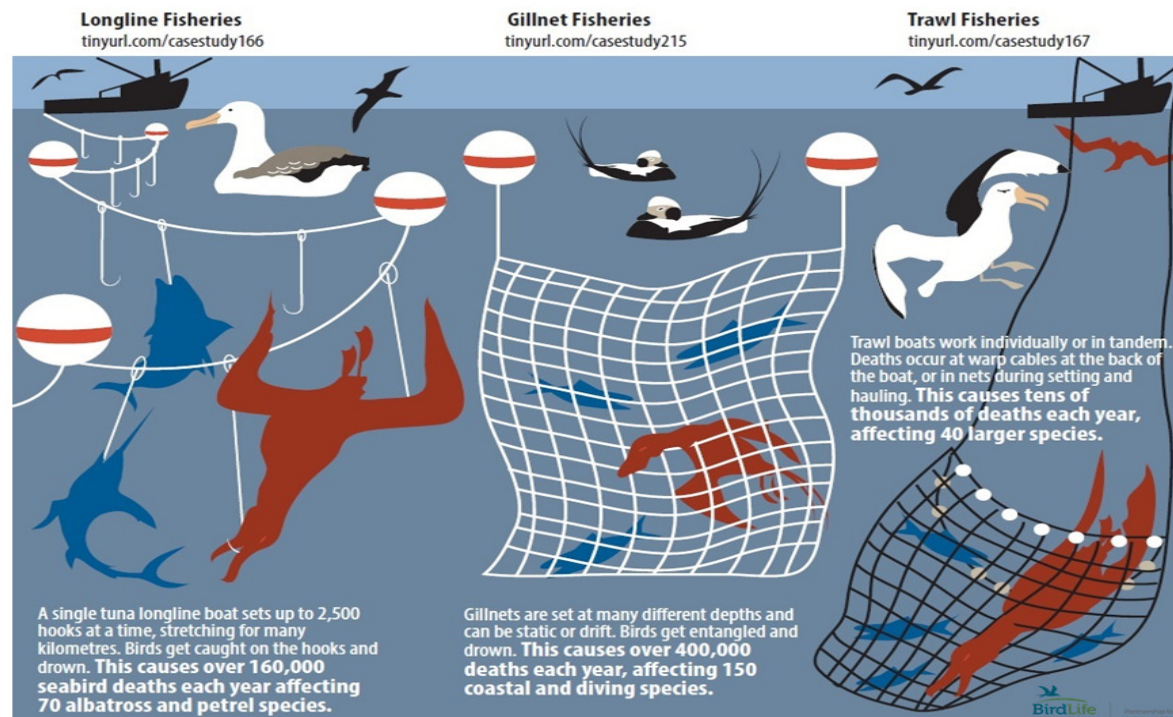
Support the activities and priorities of the International Snowy Owl Working Group

Mitigate seabird and
seaduck
bycatch

Undertake
gill net
bycatch
assessment
in key
regions

Initiate
discussions
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partners

Seabirds can be accidentally caught by fisheries either while setting nets, or when the nets are being brought back on to the boats. This can result in death for the birds.



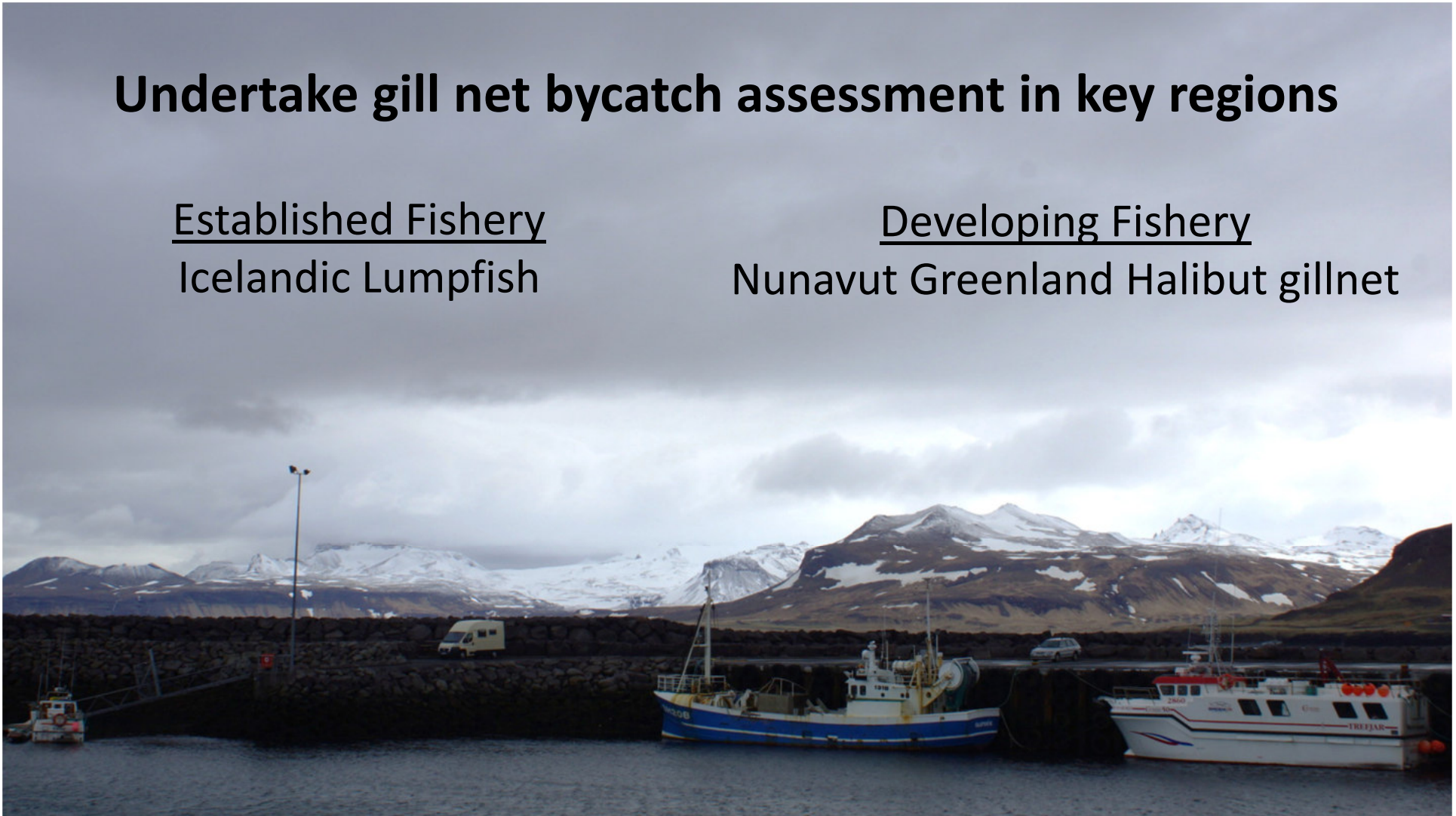
Undertake gill net bycatch assessment in key regions

Established Fishery

Icelandic Lumpfish

Developing Fishery

Nunavut Greenland Halibut gillnet



Icelandic Lumpfish Gillnet Fishery

- Drive came from Marine Stewardship Council certification
- Previous data heavily reliant on self-reporting; need for independent data
- In agreement with the fisher's association, BirdLife hired an Icelandic consultant to conduct bycatch observation





Icelandic Lumpfish Gillnet Fishery

Key findings:

- Bycatch rate of 0.182 birds/km net/day
- Most-caught species – black guillemot, eider, cormorant (~90% of bycatch)
- Bycatch more likely – and more intense – in shallower waters

The background of the slide is a grayscale photograph of a fishing net and thick rope, likely part of a gillnet fishery, draped over a white surface.

Icelandic Lumpfish Gillnet Fishery

Implications:

- Significant increase in observer effort by the Fisheries Directorate in recent years
- After lumpfish workshop in Faroes (March 2017), BirdLife and MFRI data combined to contribute to cross-Arctic analysis in collaboration with other Arctic countries
- Fishery suspended from Marine Stewardship Council sustainable designation – remedial action plan proposed

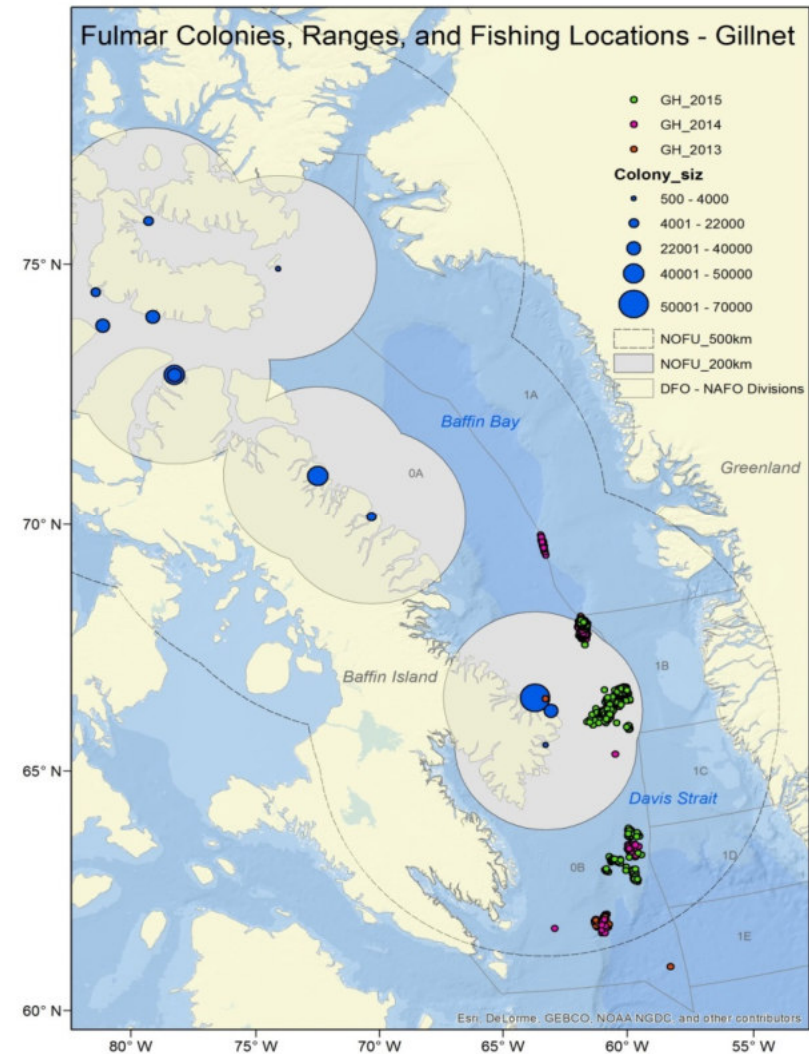
Icelandic Lumpfish Gillnet Fishery Lessons Learned

- Great example of NGO-government-industry collaboration in early days; laterally a good example of NGO-government collaboration
- Relations undoubtedly strained after findings and further challenged by MSC suspension. Relationship will need to be strengthened to proceed with remedial action
- Big opportunities out there for more collaborative work, but need this sustained support to keep stakeholders working together

Developing Fishery

Nunavut Greenland Halibut gillnet

- Very little assessment of bycatch in this emerging fishery
- Science: bycatch rates among highest in Atlantic and Arctic Canada, Northern Fulmars particularly vulnerable
- Goals:
 - assess conservation concern **before** fishery expands
 - **IF** mitigation measures needed, work with fisheries partners to implement them as industry grows



Developing Fishery

To better understand the potential impacts of fisheries on northern seabird populations it was necessary to bring together the many partners and stakeholders in the region.

- Northern Offshore Allocation Holders Association
- Federal and Territorial government departments
- Nunavut Land claim organizations
- Academia
- Non-government organizations



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Nunavut Wildlife Management Board

Partnership for
nature and people

Environment and
Climate Change Canada

Developing Fishery Nunavut Greenland Halibut gillnet

Key findings:

- Assessment indicated that if the fishery grows as expected, bycatch would impact Northern Fulmars at the population level... however...
- Data to inform the models needs to be improved
- Further work to standardize and improve collection of fisheries data needed



Seabird Reporting form
All Sea-Birds (except Herring Gulls and Great Black-backed Gulls)

Date		Time		Location		Observer		Species		Sex		Age		Status		
Year	Month	Day	Hour	Lat	Long	Name	Organization	Male	Female	Immature	Unknown	Adult	Young	Unknown	Unknown	

Notes:
If you are unsure of the species, please write 'Seabird' and provide a description of the bird. If you are unsure of the sex or age, please write 'Unknown'.

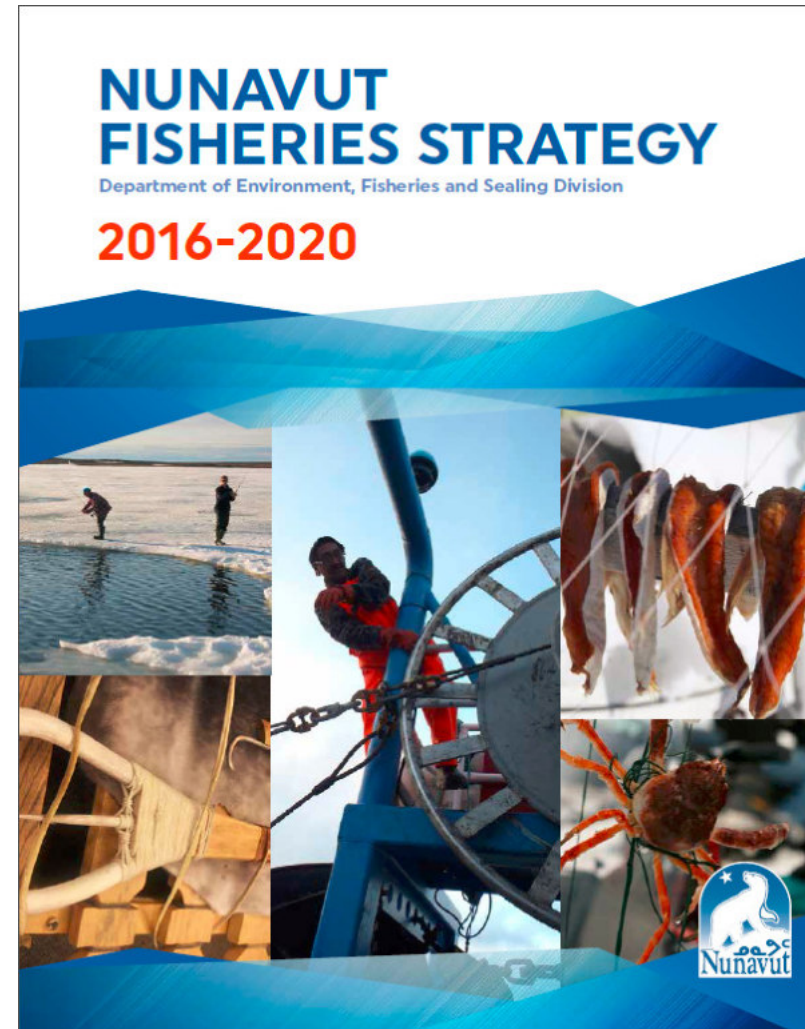
Comments:
If you are unsure of the species, please write 'Seabird' and provide a description of the bird. If you are unsure of the sex or age, please write 'Unknown'.



Developing Fishery Nunavut Greenland Halibut gillnet

Implications:

- Government departments, Inuit co-managers and fishing industry is supporting the testing of new data standardization methods
- Fishing industry is collecting data to strengthen models
- Seabird researchers are now invited to fisheries science meetings and provided input into fishing strategy



Developing Fishery Nunavut Greenland Halibut gillnet

Lessons Learned

- Convening partners is easier if they are engaged before work begins, and have identified role in conservation actions
- Sustained dialogue needed to demonstrate commitment. This is challenging without committed research and engagement funds
- In Nunavut, fishing partners welcome science at the table to inform conservation actions

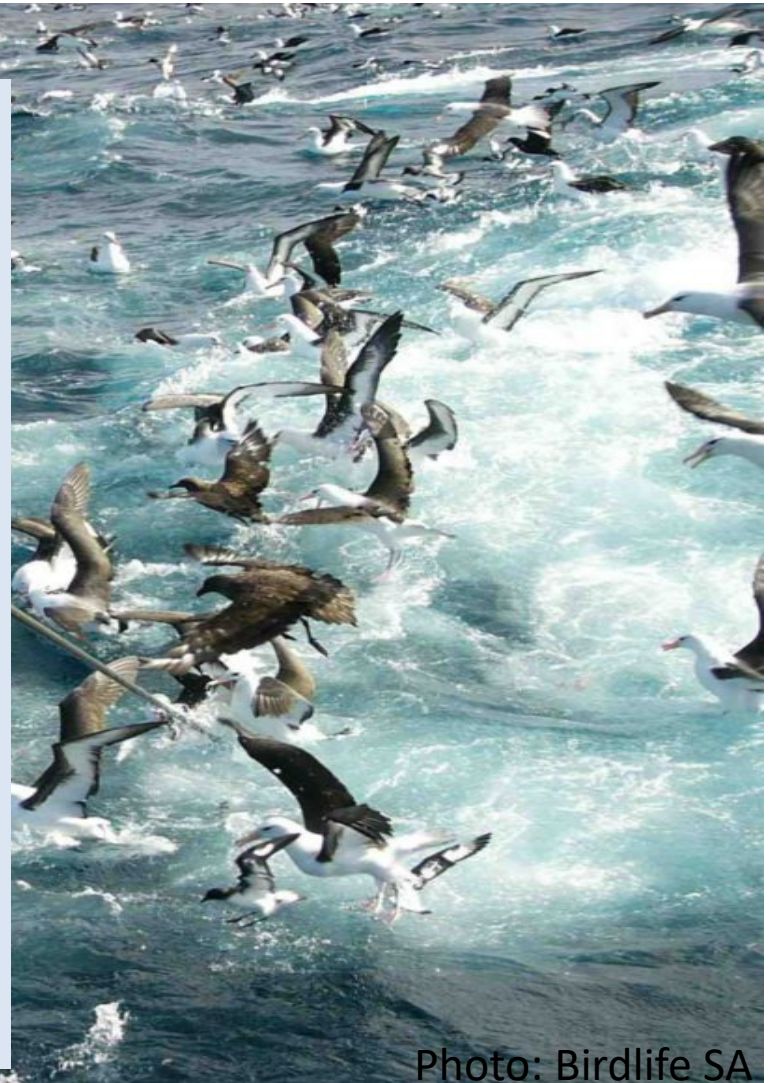


Photo: Birdlife SA

What next?

Under the Arctic Migratory Birds Initiative (AMBI), continue to work with partners to implement conservation actions relevant to the Northern context, but informed by work around the globe



Photo: Steve Brenner

Questions?

Amie Black

amie.black@canada.ca



Photo: Steve Brenner