



WWF

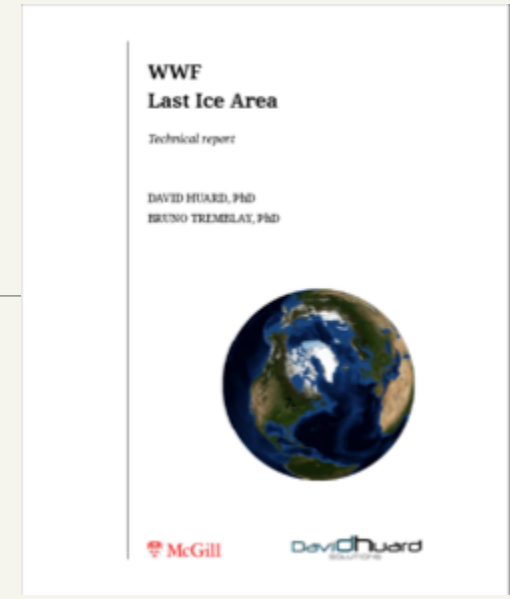
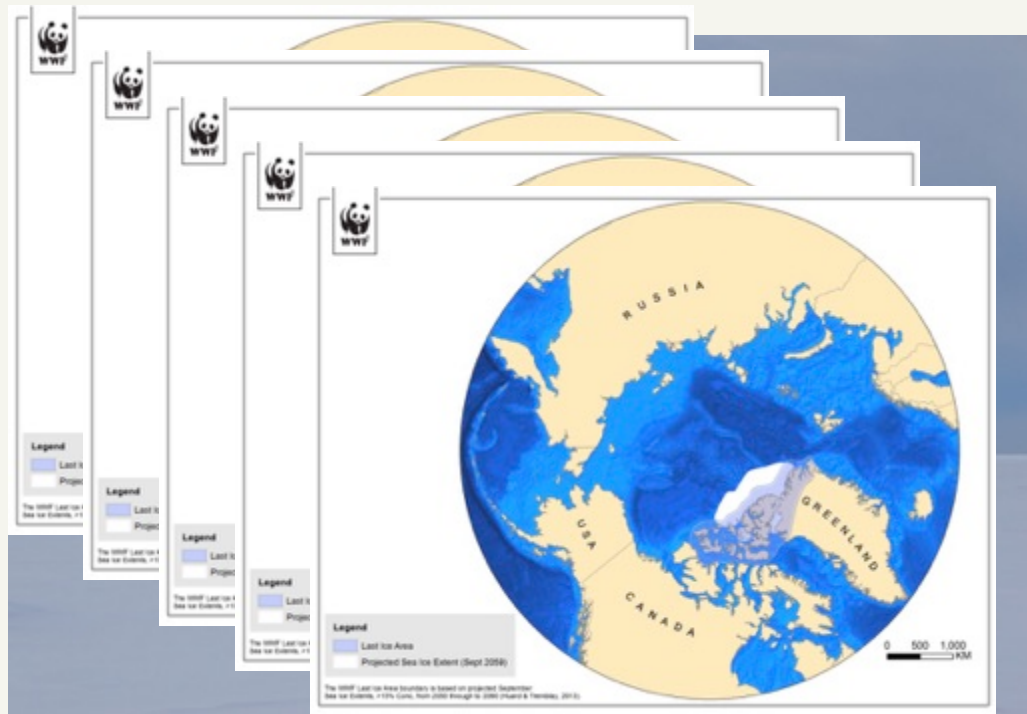
Last Ice Area

- managing resilient sea ice for the future

Mette Frost
WWF Denmark

Arctic Biodiversity Congress 2014
Protected/sensitive areas

Last Ice Area



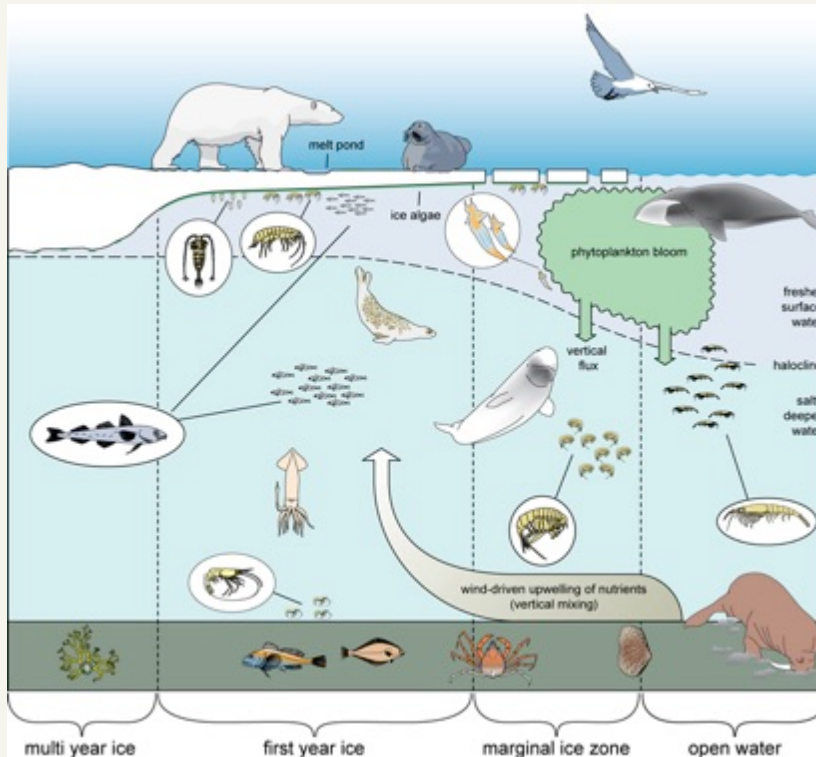
Mapping resilient summer sea ice using global climate models.

Projected minimum sea ice cover (September)

Decades 2010-2019, 2020-2029, 2030-2039, 2040-2049 and 2050-2059.

Based on WWF Last Ice Area – technical report (by D. Huard and B. Tremblay, 2013).

Life linked to ice



Life Linked to Ice (CAFF, 2013)

Narwhal, beluga and bowhead whales are associated with sea ice year round. It structures their habitat and feeding opportunities

Ringed seal and bearded seal live on the sea ice year round – all aspects of their lives are adapted to it

Walrus give birth and mate on sea ice

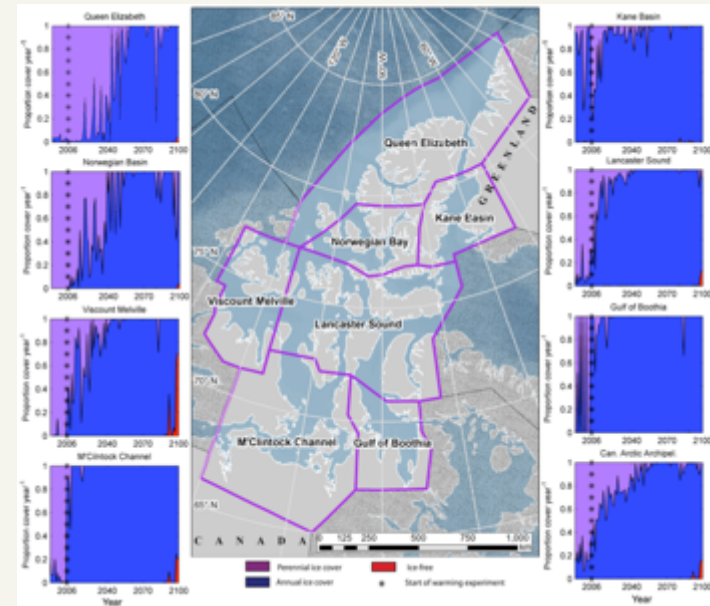
Polar bear use sea ice for travel and access to ice-associated seals

› a precautionary approach to conservation of sea ice habitat is warranted

Projected polar bear sea ice habitat



Polar bear (*Ursus maritimus*) standing on the edge of an ice flow, Spitsbergen, Svalbard, Norway.
© Steve Morello / WWF-Canon



Projected dominance of seasonal sea ice in the polar bear populations of the Arctic Archipelago.

The seven populations range from 65–85°N in latitude, with significant variation in the length of ice-free seasons. The proportion of multiyear ice, annual ice, and ice-free waters is given by regional means, and averaged over the total area.

Projected polar bear sea ice habitat

‘We find that sea ice conditions may become unsupportive of polar bear population persistence in the Canadian Arctic Archipelago and its surroundings by the late 21st century with ice-free seasons reaching critical duration, and early break-ups occurring in parts of all populations we examined.’

‘Conservation efforts to protect polar bear habitat in the Canadian Arctic should focus on regions that are slower to experience change in sea-ice concentration and ice-free period.’

Hamilton SG, Castro de la Guardia L, Derocher AE, Sahanatien V, Tremblay B, et al. (2014) Projected Polar Bear Sea Ice Habitat in the Canadian Arctic Archipelago. PLoS ONE 9(11): e113746. doi:10.1371/journal.pone.0113746



Activities

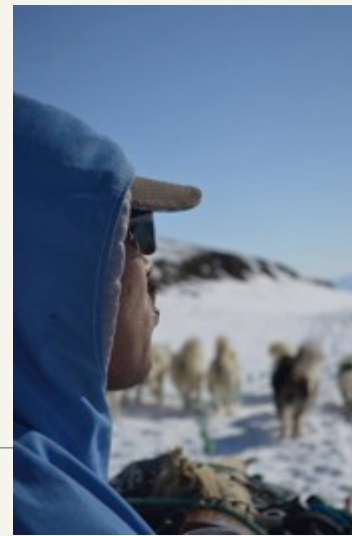
- Knowledge generation
- Stakeholder engagement
- Community visits
- Political dialogue

All to facilitate and inform discussions about potential management of the Last Ice Area





Activities



Climate change in the Arctic – first hand experiences
On wwf.dk and youtube

A potential World Heritage Site

'To maximize the resilience of Arctic ecosystems, effective protection of large representative tracts of habitat, including hotspots for unique Arctic biodiversity and northern 'refugia' areas, is of paramount importance. This includes Arctic islands together with mountainous areas and multi-year sea-ice refuges, where unique marine Arctic biodiversity has the best chance of surviving climate change.'
(Arctic Biodiversity Assessment)

'Canada and Greenland should consider creating a World Heritage site in NW Greenland / NE Canada as a refuge for ice-associated species'
(CAFF, Life Linked to Ice)

› WWF proposal for a new World Heritage Site
Bridging Nares Strait and connecting Quttinirpaq National Park with The National Park of North and East Greenland.



A photograph of a brown bear cub sitting in a snowy environment. The cub is wearing a green harness and is looking towards the camera. To the right, the leg of another bear is visible. The background is a vast, snow-covered landscape with some tracks and shadows.

Qujanaq/ thank you

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