#### **NOCCA 2018**

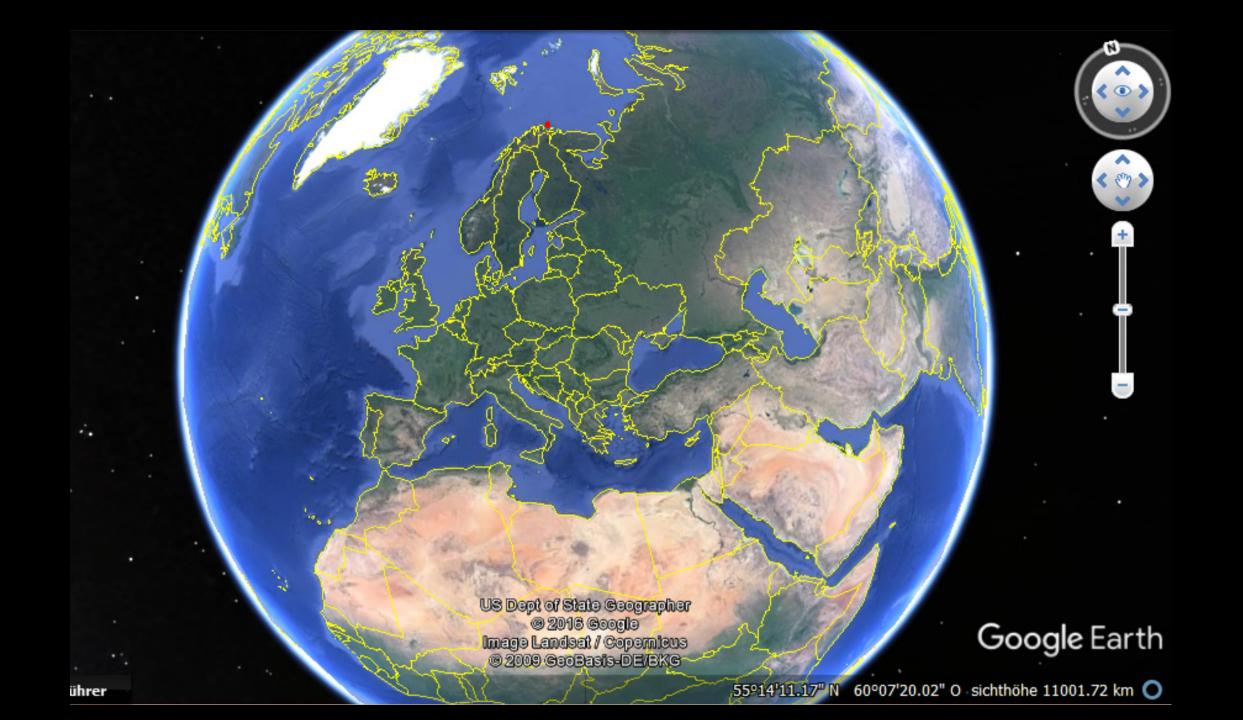
Seal. A cultural resource and immaterial indigenous heritage for sustainable life in times of climate change.





### Arctic Culture Lab, Kjøllefjord, Northern Norway







# Arctic warming hotspot in the northern Barents Sea linked to declining sea-ice import

Sigrid Lind 1,2\*, Randi B. Ingvaldsen and Tore Furevik

The Arctic has warmed dramatically in recent decades, with greatest temperature increases observed in the northern Barents Sea. The warming signatures are not constrained to the atmosphere, but extend throughout the water column. Here, using a compilation of hydrographic observations from 1970 to 2016, we investigate the link between changing sea-ice import and this Arctic warming hotspot. A sharp increase in ocean temperature and salinity is apparent from the mid-2000s, which we show can be linked to a recent decline in sea-ice import and a corresponding loss in freshwater, leading to weakened ocean stratification, enhanced vertical mixing and increased upward fluxes of heat and salt that prevent sea-ice formation and increase ocean heat content. Thus, the northern Barents Sea may soon complete the transition from a cold and stratified Arctic to a warm and well-mixed Atlantic-dominated climate regime. Such a shift would have unknown consequences for the Barents Sea ecosystem, including ice-associated marine mammals and commercial fish stocks.

he Arctic is experiencing the strongest warming on the planet and, in recent decades, a loss of sea ice unprecedented

water column, the sea ice and the lower atmosphere on an interannual timescale, with the overarching objective to explain the Arctic



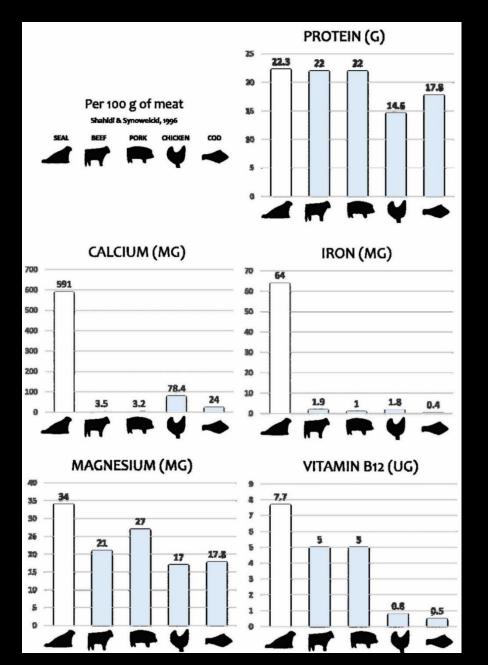


Aidni havert hunn Ákču steinkobbe hunn **Avijur** klappmyss Ávskárgahtte liten ringsel Bávdagas selunge Biertasammensydd selskinn Botkistierten på sel Ceavlatsove på vannet (om sel) CeavzzaOlje, tran DealijadatHud av grønlandssel Dealliá Grønlandssel Dealljádatskinn av grønlandssel Deavuthavert hann Fáhttenjunniklappmyss hann Farao-gandaRingselunge Fihččubakluffen på sel Gáhtirframluffen hos sel Gahtteringsel Gealditspenne rygg Geadgán, geadgenjuorju, norrošsteinkobbe Golpátsove på magen på vannet (om sel) JeagáskatHud av storkobbe JiegáskatStorkobbeskinn Jiegisblåsel, storkobbe Luostihavertunge Luddatsvømme under vannskorpen

Márfupølse av selkjøtt og spekk Njákčunyfødt selunge Njuorij odatselskinn Niuorii ohat Selskinnssko Njuorijotbeallisko med selskinnsåle Njuoriju, njuoriusel Njurietfangste sel Njurjohatselskinnsko OaidodatLyst selskinn med sorte små spetter. Oaidugrønlandssel Readdihavert, 2-3 år gammel Riehkkuhavert? Rohkasteinkobbe, fullvoksen hann Rohkadatskinn av steinkobbe SkávdodatSkinn av en årsgammel selunge Skávduårgammel steinkobbeunge Skuhttárlunsaskytterlunse Spárduarr på en sel Spierbbaldatreim (av selskinn) Suvjadealljágrønlandssel Varranábatnyfødt selunge Vatnilselflokk VieksádaťSkinn av steinkobbeunge Vieksisteinkobbeunge

lost heritage or neglecting identity

lost stories or neclecting the narrative (Sealkie)





#### Seal Reintroduction Project

- bringing seal to people
- Use of the entire animal
- Garving methods
- Sewing garmets for daily use
- Food preparation
- Annual Seal feast
- local contribution to blue economy









## Globalisation vs. Localisation

Colonisation vs. Decolonisation

#### Need for political climate change

https://www.facebook.com/angryinuk/videos/10156048822316950/

https://vimeo.com/164312125

