



28 år med fokus på

ET BÆREKRAFTIG NORD





NAMMCO landene





Fundamentet

- *Prinsippet om bærekraftig utvikling – bærekraftig utnyttelse av naturressursene (UNCED, «Bruntland report», 1987)*
 - *Folks rett til selvbestemmelse – utnytte naturressursene og ikke bli fratatt midler til å sørge for eget livsopphold (UN Charter, UDHM, ILO etc)*
- NAMMCO:
- ✓ kystbefolkningers rettigheter og behov
 - ✓ en dedikasjon og forpliktelse til å sikre at rettigheten utøves på en bærekraftig og ansvarlig måte



Hvorfor NAMMCO

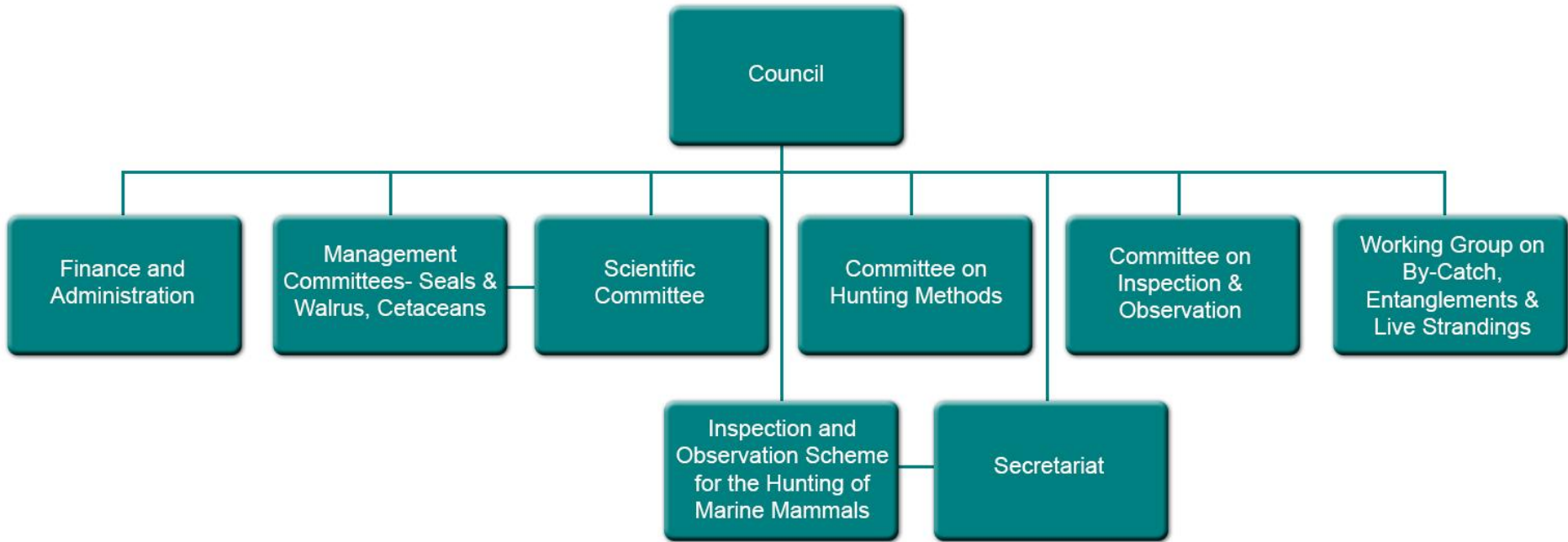
FNs Havrettskonvensjon (1994) – behov for et internasjonalt forum for – IWC allerede etablert

- Samarbeid om forvaltning og bevaring av alle sjøpattedyr (småhvaler, sel og hvalross) ikke dekket av IA
- Sette fokus på kystfolks behov – rettigheter og plikter/ansvar
- Fokus på praktiske spørsmål fangst, sikkerhet og dyrevelferd



1992 – 2020

Hva er oppnådd?





Internasjonal anerkjennelse



- **Mellomstatlig organisasjon** - Arktisk Råd, IWC
- **Regional fiskeriorganisasjon** under FAO - NEAFC, NAFO, NASCO
- **Observatørland** - Canada, Danmark, Japan, Russland
- **Gjensidig observatør status** - AC, IWC, NEAFC, NAFO, FAO.....
- **Internasjonalt samarbeid**
 - **vitenskapelig** - AC (AMAP, PAME, CAFF), IWC, ICES, NAFO
 - **fangstorganisasjoner** - NTI, AWC, ATMMCH

Performance review rapporten



- NAMMCO has given a high priority and expended **considerable human and financial resources** to its work on the **safety, efficiency and animal welfare issues** in all hunting activities under its purview and that **outputs** from Committee on Hunting Methods, including those from the workshops and Expert Group Meetings, have been **substantial**. The Panel is of the view that **the work** of the Committee on Hunting Methods together with the approval of its recommendations by the Council and implementation of these recommendations by member countries **is one of the key elements that have made NAMMCO a credible organization**



Rådgivende mandat

- **Bevaringsstatus bestandsnivå**
 - Truet (kritisk, sterkt, sårbare) - livskraftig
- **Bærekraftig fangst**
 - Kvotesetting under hensyntaken til andre påvirkningsfaktorer enn fangst
- **Ansvarlig fangst**
 - Menneskelig sikkerhet og dyrevelferd
- **Overvåking av fangstmetoder**
 - Er utøvelsen i samsvar med lovverk og reguleringer?



Arbeidsmetode

NAMMCO ser på det **marine økosystem** som en helhet og gir råd basert på best tilgjengelig

Vitenskaplig informasjon,

lokal kunnskap and

teknologisk utvikling



Arbeidsmetode

NAMMCO ser på det **fangstutøvelsen** som en helhet og gir råd basert på best tilgjengelig **vitenskaplig informasjon, lokal kunnskap and teknologisk utvikling**



Holistisk tilnærming

Klimaendring

- Havis (habitatreduksjon/ åpning av nytt habitat)
- konkurranse med nye arter
- økosystem endringer

Fangst

Fiske

- Bifangst av sjøpattedyr

Forstyrrelser

- økende menneskelig tilstedeværelse – lyder /bråk

Forurensing

- oljeutslipp

Skipstrafikk

- kollisjon med båter
- ødeleggelse av habitat



Å sette bitene sammen til en fungerende enhet som er bærekraftig og kjører ansvarlig er utfordringen





Arbeidsmetode

- Involverer eksterne eksperter og fagfolk
- Åpenhet om beslutningsprosessene



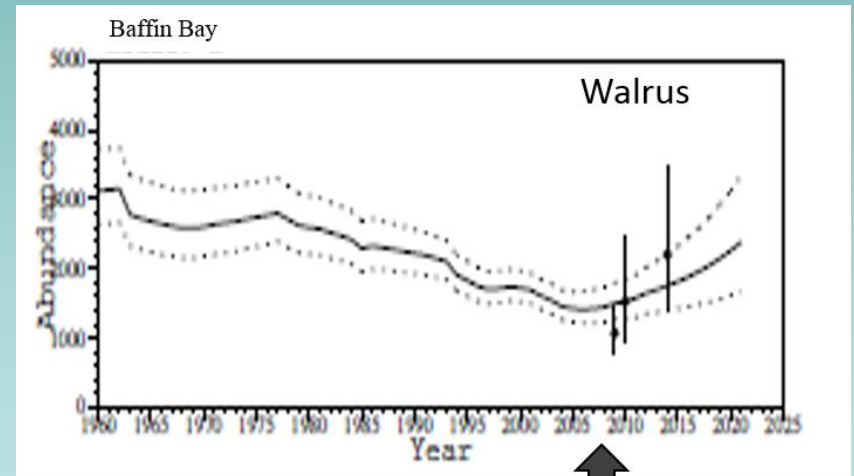
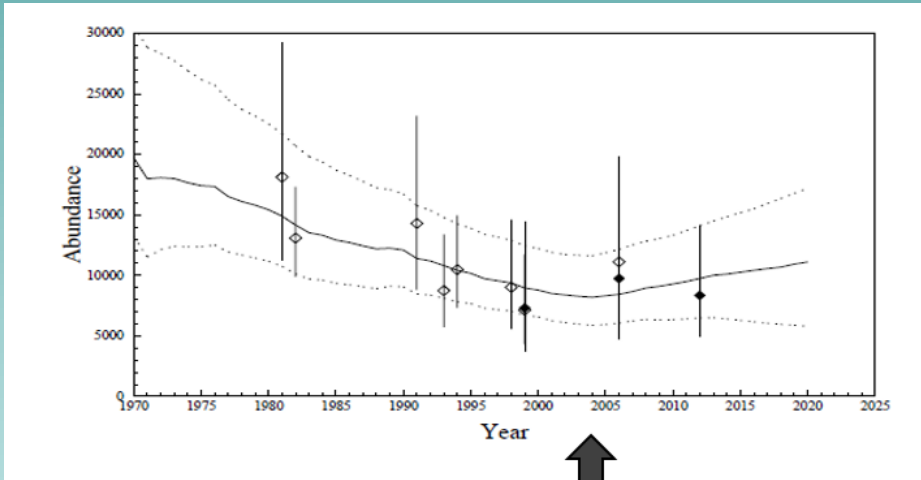


Blir rådene fulgt?



Blir rådene fulgt?

Gjennomføring av forvaltningstiltak har gitt positiv effekt på bestandene av beluga og hvalross





Blir rådene fulgt?

- Signifikant forbedring av fangstmetoder





- Utvikling av nytt utstyr – Hvalgranat-99/spinallansen
- Identifisering av viktigheten av skuddvinkel og treffpunkt

Suksesshistorier:

- IDR fra 17 % til 82 % - norske vågehvalfangsten
- IDR 84 % - islandske finhvalfangsten



Protokoller

- How to collect TTD data the “Norwegian Way” (Dr Egil Ole Øen)
- Statistical analyses and presentation of TTD the “Norwegian Way” (Prof Lars Walløe)


Muliggjør:

- sammenligninger av TTD/IDR mellom fangster
- identifisering av årsaker bak TTD/IDR




Manualer

Tilrettelegging for opplæring og kunnskpsformidling i fangsten



NORTH ATLANTIC MARINE MAMMAL COMMISSION



LEIDBEINING FYRI AVLÍVING AV GRINDAHLVALI

North Atlantic Marine Mammal Commission
Address: Science Park, POB 6453, N-9294 Tromsø, Norway
Tel.: +47 77 68 73 71, Fax: +47 77 68 73 74 Email: nammco-sec@nammco.no




ATLANTIKUP AVANNAANI MILUUMASUT IMARMIUT
PILLUGIT ATAATSIMIITTALIAQ




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arfanniarnermi sakkut atortullu
aserfallatsaalinnissaannut atornissaannullu
najoqqutassiaq

North Atlantic Marine Mammal Commission
Address: Science Park, POB 6453, N-9294 Tromsø, Norway
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NORTH ATLANTIC MARINE MAMMAL COMMISSION



Manual for the instruction on the maintenance and
use
of weaponry and equipment
deployed in hunting of baleen whales in
NAMMCO member countries

North Atlantic Marine Mammal Commission
Address: Science Park, POB 6453, N-9294 Tromsø, Norway
Tel.: +47 77 68 73 71, Fax: +47 77 68 73 74 Email: nammco-sec@nammco.no



Retningslinjer

Undersøkelser av ammunisjonstyper og utvikling av retningslinjer for skyteprøver

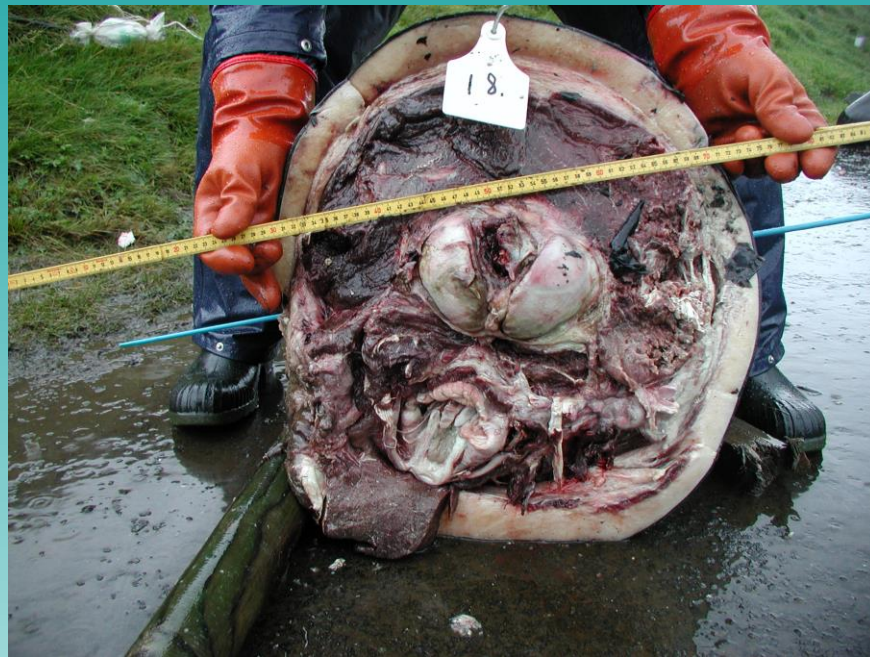
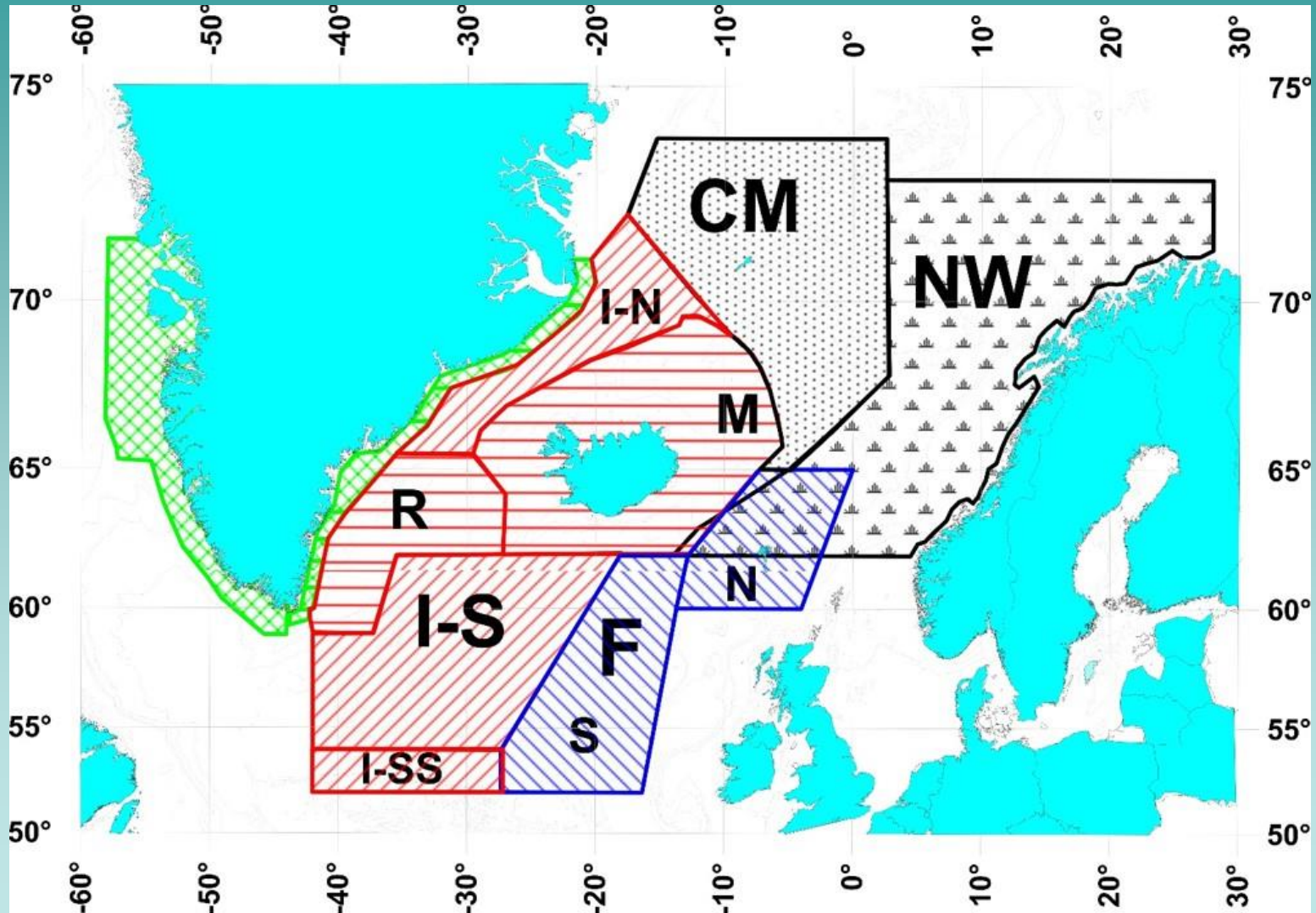


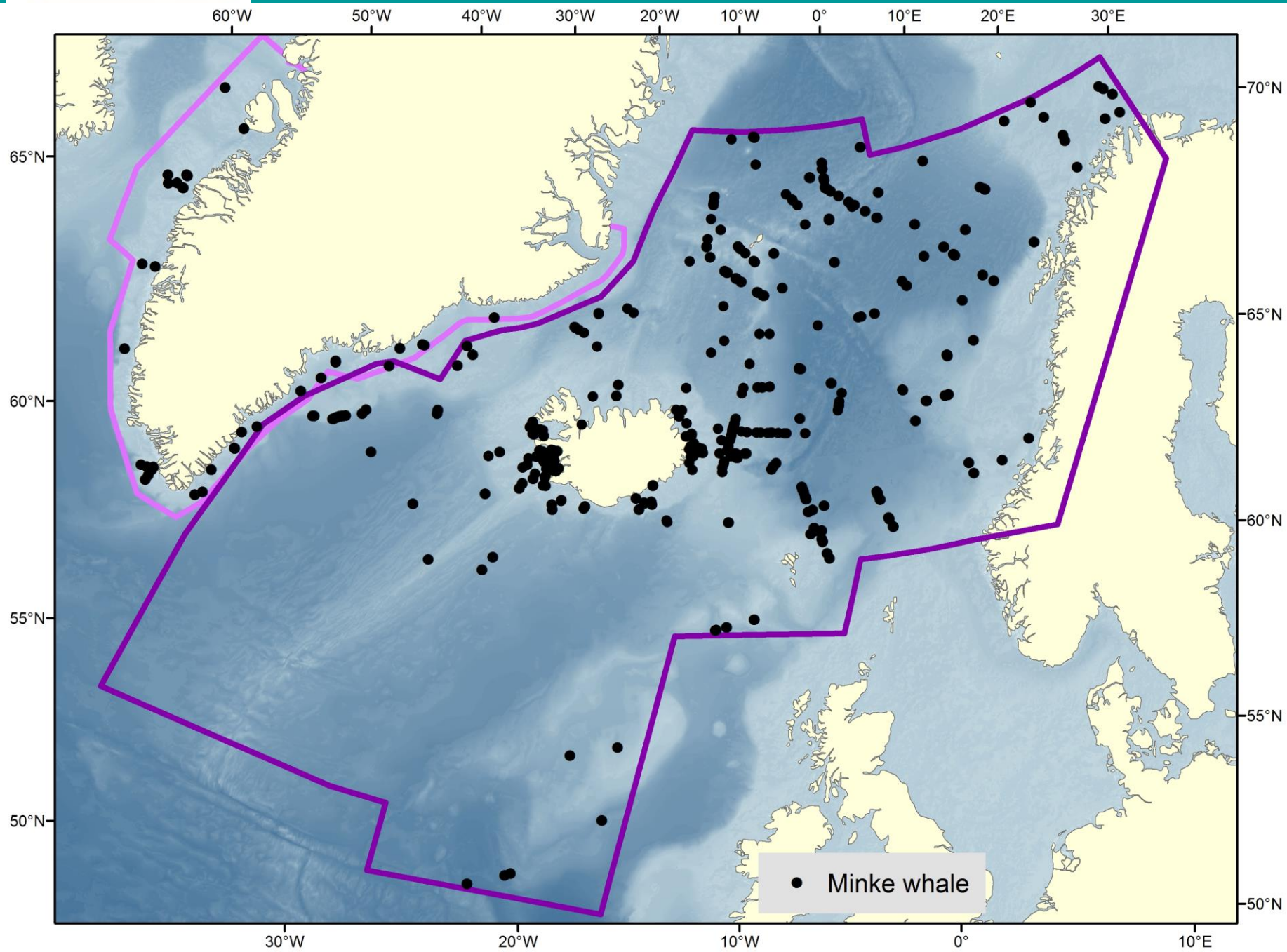
Table 2: Shooting trials on heads of dead pilot whales. The shots are arranged according to projectile type

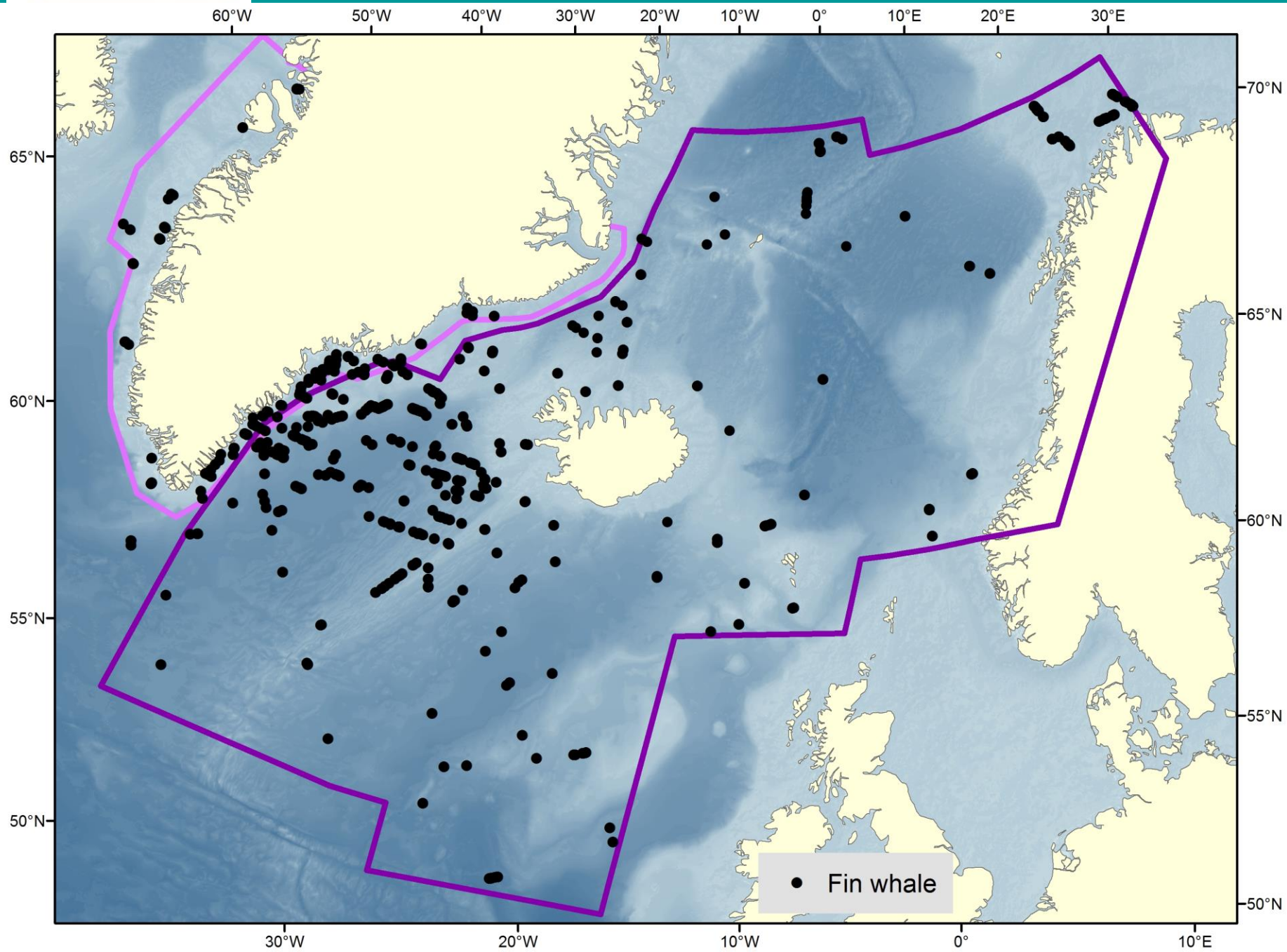
projectile type	calibre	weight	shot no.	head no	whale size	direction	penetration to brain	projectile fate
	375	270 grain	XXIV	12	7(adult)	sideways	yes, trough head	not found
			XXV	13	8 (adult)	frontal	no, stopped in bone	lead in bone
			I	1a	8(adult)	sideways	no, stopped in bone	bullet in bone
	338	200 grain	IV	2b	5(juvenile)	sideways	no, stopped in bone	bullet in sept. Nasi
			XVIII	9a	9(adult)	sideways	no, stopped in bone	expanded in bone
soft point			XXII	11a	3(juvenile)	frontal	no, stopped in bone	expanded in meat
			VI	3a	7(adult)	sideways	no, stopped in bone	disintegr. in bone
	308	150 grain	XIII	7a	3(juvenile)	sideways	no, stopped in bone	expanded in bone
			XX	10a	9(adult)	frontal	no, stopped in bone	expanded in bone
			X	5a	7(adult)	sideways	no, stopped in bone	disintegr. in bone
			XI	5b	7(adult)	sideways	yes, stopped in bone	expanded in bone
	270	150 grain	XII	6	7(adult)	sideways	yes, trough head	not found
			XVI	8a	5(juvenile)	frontal	no, stopped in bone	expanded in bone
			XVII	8b	5(juvenile)	frontal	no, stopped in bone	expanded in bone
			III	2a	5(juvenile)	sideways	yes, trough head	not found
	338	250 grain	V	2c	5(juvenile)	sideways	no, stopped in bone	not found
Barnes X			XXIX	9b	9(adult)	sideways	yes, stopped in bone	expanded in bone
			XXVI	14a	9(adult)	sideways	no, stopped in bone	not found
	375	300 grain	XXIX	15	9(adult)	sideways	yes, stopped in bone	expanded in bone
			XXX	16	7(adult)	frontal	yes, trough head	not found
Sharp point			XXVII	14b	9(adult)	sideways	no, stopped in bone	found in bone
FMJ	375	300 grain	XXXI	17	6(adult)	frontal	yes, trough head	found in the bank
			XXXII	18	5(juvenile)	sideways	yes, trough head	not found
			II	1b	8(adult)	sideways	yes, trough head	found in bank
Round nose	338	250 grain	XXIII	11b	3(juvenile)	frontal	yes, trough head	not found
solid			XXXVIII	14c	9(adult)	sideways	yes, trough head	not found
			VII	3b	7(adult)	sideways	yes, trough head	not found
Military Surpl.	308		VIII	4a	5(juvenile)	sideways	yes, stopped in bone	disintegr. in bone
FMJ.			IX	4b	5(juvenile)	sideways	yes, trough head	found, broken
			XXI	10b	9(adult)	frontal	no, stopped in bone	disintegr. in bone
Army Surpl.	308		XIV	7b	3(juvenile)	sideways	no, stopped in bone	found broken
FMJ			XV	7c	3(juvenile)	sideways	yes, stopped in bone	disintegr. in bone

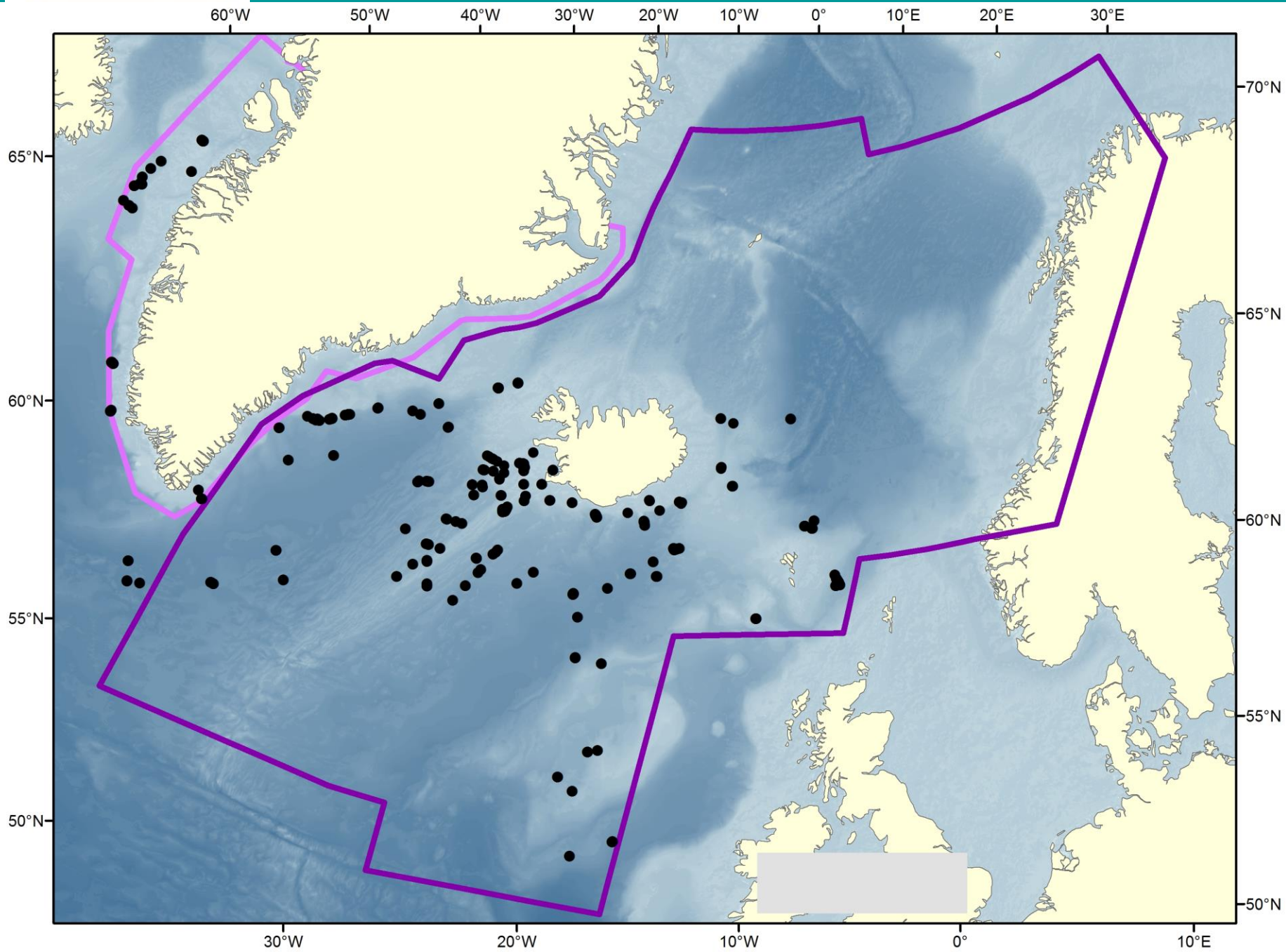


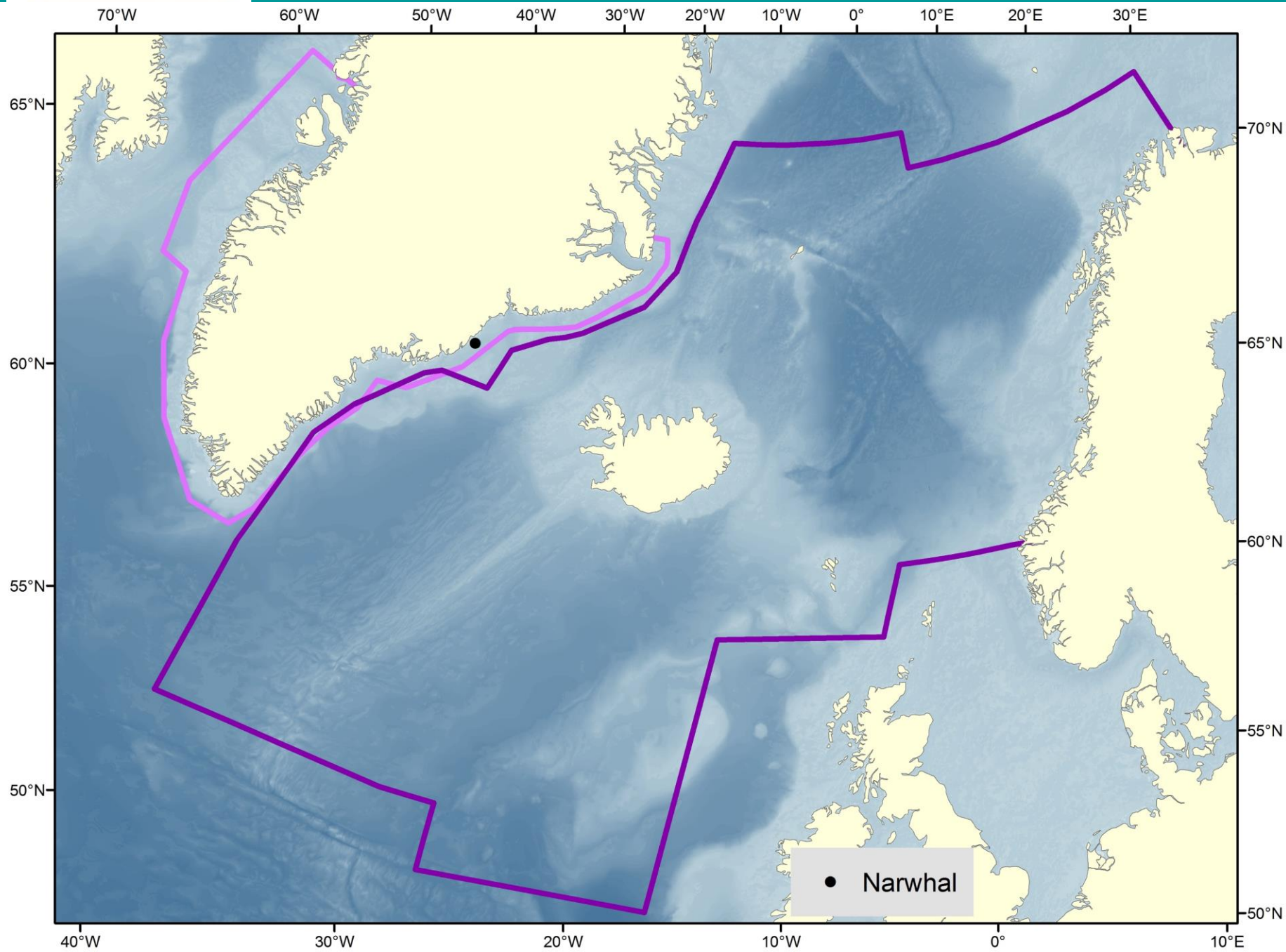
Måloppnåelse - telletokt













NAMMCO INSPEKSJONS OG OBSERVASJONSORDNING FOR FANGST AV SJØPATTEDYR

- Vedtatt i 1996 – første sesong med observatører 1998 – revidert flere ganger sist i 2019
- Blanding av observasjon og kontroll
- Etter 2019 en ren observasjonsordning basert på tilsvarende internasjonal ordninger så langt som de passer. medlemsland
- Sikrer åpenhet rundt hval og selfangst



Sjøpattedyr som matvareresurs



En matvareressurs

Prosjekt: Normalisere og øke synliggjøringen av sjøpattedyr som matressurs og ernæringskilde

God infallsport/døråpner til å si alt det andre...



Marine Mammals: A multifaceted Resource

© NAMMCO



Greenlandic boy with dried humpback whale meat © F. Ujarto

To be cited as: *Marine Mammals: A multifaceted Resource*, NAMMCO 2017

Marine Mammals: A multifaceted Resource

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The good diet

Meat from marine mammals ranges on the top of seafood products and it is superior to meat from livestock animals.

Their meat is rich in protein, essential amino acids and mineral nutrients like iodine, potassium, selenium, magnesium, zinc, phosphorus and calcium. It is also a great source of vitamins A, B, D and E

The meat is low in saturated fats and rich in healthy long-chain monounsaturated fatty acids and *n-3* long-chain polyunsaturated fatty acids, the omega 3 fatty acids.

Health benefits of a traditional Inuit subsistence diet, which requires exercise and hard physical work, are substantial. This traditional diet with relatively little fish, some game meat and local berries - plus meat from marine mammals - has prevented the effects of lifestyle diseases raging in the Western world. It could also be a protective factor against prostate cancer.



Photo: Fernando Ugarte

Marine mammal oils have potentially beneficial effects on several diseases and symptoms. They have pain reducing effects, and reduce symptoms in food hypersensitivity and allergic diseases in offsprings. They have an antioxidant effect. Balenin, found in bones and muscles from whales, works as an antioxidant. It may hasten the recovery process of fatigue - and has a positive effect on memory loss and learning disability with ageing. It may also have a preventive effect against dementia.



Photo: Føroya Natúruvriðingipásavn

Marine mammal hunting amongst the Arctic peoples dates back some 4000 years. It has largely retained the same significance. It was and still is a means of survival for Inuit and other peoples both in order to guarantee local food security and the links to a long tradition

In the Arctic, food insecurity is particularly exacerbated by the changes brought by climate change and by widespread pollution of the oceans.



Sponsored by the Nordic Council of Ministers - AG-Fisk



Marine Mammals - a food resource vital to the Arctic and its peoples

No food - or?

Photo: Adobe Stock

www.nammco.no

Blue Growth

The oceans of the world is the planet's single largest resource. Blue Growth seeks to maximise economic value and resource efficiency while conserving ecosystems, bringing more sustainable livelihoods.

Whales and seals are traditional but updated elements of a blue economy. They are an ecologically sound resource. They contribute to food security. Hunting generates jobs and supports family networking, upholding a tradition and a spiritual link to the past.

The ban on seal products and fur in the EU affects Inuit sealing although Inuits were expressly exempted from the ban. Very few skins are sold and tanned – although the seals are killed for food.

Blue growth seeks to maximise resource efficiency: as little waste as possible. Not being able to use the skins, a by-product of seals caught for human food, is counter-efficient. It is anti-blue.



Photo: Fernando Ugarte



Photo: scanfishphoto.com/1-1.PTysnes

An abundant resource

23 species of seals, whales and dolphins are common in the Northern North Atlantic area. And people have always hunted them. After several years of precautionary management, many of the stocks are healthy and/or increasing and can bear controlled levels of removals. Others cannot and are protected

Management and conservation measures have for example ensured an increase in the populations of walrus, narwhal and beluga off West Greenland.

The harvested populations of fin, humpback, minke and bowhead whales are all on the rise because of favourable environmental conditions and sound management. Their conservation status is regularly monitored and assessed. The populations of seals that are harvested are abundant, some like harp and ringed seals counting millions of animals.

Still, management measures for marine mammals must be precautionary. A number of human generated stress factors, and not just direct catches, should be taken into consideration.

Pollution and by-catch are some of the influences that could have devastating consequences for marine mammal populations.

Threats from the South

Today in the Arctic marine mammals are not threatened by the hunting but they are severely threatened by climate and environmental changes. The build-up in the Arctic of pollutants and microplastics originating from the South is of serious concern. High levels of PCBs can impair reproductive capacity, as seen for example in European killer whales and bottlenose dolphins.

Taking an interest in seals and whales as a food resource carries with it serious concern for their habitat and for the consequences of human activities, not just in the Arctic.

The green alternative

Ecologically speaking, it is better that the Faroese, Greenlanders, Icelanders or Norwegians hunt sustainably in their own waters.

Locally hunting marine mammals is one of the environmentally sound sources of food in a harsh, Northern environment. The sustainable, energy efficient, non-polluting use of local renewable resources, with limited transport and low carbon footprint, is ecologically ideal. Imported products from Southern areas, filled with fertilizers, pesticides and other chemicals, are not a sound green alternative.

The environmental cost of replacing marine mammals in the Arctic diet is not a small one.

Contamination and reduction of local foods lead to a high dependency on imported products, which are at a prohibitive cost and have a high ecological footprint.

Animals like pigs, cows and poultry of the traditional livestock sector are raised outside their natural habitats. This sector is one of the most significant contributors to serious environmental problems at every scale from local to global.

Fishing generates bottom destruction and high by-catch of threatened species, including marine mammals, hindering the recovery of some populations.

“The seals up here have lived a very good life, they are hunted in a very sustainable way. The meat is eaten by the Greenlanders and the fur is sold. That’s as sustainable as it gets.

*Martin Lidegaard,
former Foreign Minister of Denmark*

Natural or factory?

Whaling and sealing requires no confinement and transport of live animals. The animals develop and thrive in the wild and in their natural habitats. They are born, live and die free in an environment that might be full of danger - but it is their natural environment.

BLUE GROWTH

71% of the Earth surface is WATER

BLUE ECONOMY

ue ed

WITH THE OLD

WITH THE NEW

BLUE ECONOMY

The Blue Economy is sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

The Blue Economy encompasses many activities...

RENEWABLE ENERGY

Sustainable marine energy can play a vital role in social and economic development.

MARITIME TRANSPORT

Over 80% of international goods traded are transported by sea and the volume of seaborne trade is expected to double by 2030 and quadruple by 2050.

FISHERIES

Marine fisheries contribute more than US\$210 billion annually to global GDP. More sustainable fisheries can generate more revenue, more fish and help protect fish stocks.

TOURISM

Ocean and coastal tourism can bring jobs and economic growth. Coastal Least Developed Countries and Small Island Developing States receive more than 41 million visitors per year.

CLIMATE CHANGE

The impacts of climate change on oceans—rising sea-levels, coastal erosion, changing ocean current patterns, and acidification—are staggering. At the same time, oceans are an important carbon sink and help mitigate climate change.

WASTE MANAGEMENT

80% of litter in the ocean is from land-based sources. Better waste management on land can help oceans recover.

Blue economy

EU Blue Growth Initiative

to contribute to the promotion of sustainable use and preservation of aquatic living resources

components:



Our Oceans, everybody's business

Ocean Governance listening tour

@KamenuVella #EUOceanGov



GREENPEACE



THE CIRCLE

Shaping The Arctic Sea Transport Via Blue Economy's Policy Commission

THE BLUE ECONOMY



To learn about other aspects of the blue economy, visit www.worldbank.org/oceans

Nordic Road Map for Blue Bioeconomy





“Blå vekst for en grønn fremtid”

Samme prinsipper som grønn økonomi:

**“improved human well-being and social equity,
while significantly reducing environmental risks and ecological
scarcities”**

[UNEP 2010 - UN DESA 2014]

- bruk av lokale råvarer
- bærekraftighet
- reduksjon av karbonutslipp, og lav energi løsninger
- effektivisering og optimalisering av ressursene
- sosial inkludering



Lokalt fanget selkjøtt eller importert svinekjøtt?

Miljøkonsekvenser av matvarevalg i Grønland

Livssyklus analyse – LSA

- Anslår miljøpåvirkningen til et produkt fra «vugge til grav», fra uttak av råvarer, via produksjonprosessen, distribusjon, forbruk og avfallshåndtering (ISO standardiser)
- Vurderer utslipp av drivhusgasser, overgjødsling og arealbruk + dyrevelferd og sosiale, kulturelle og økonomiske dimensjoner knyttet til produksjon og forbruk av mat
- Anerkjent verktøy - muliggjør informerte valg på alle nivå



Lokalt fanget selkjøtt eller importert svinekjøtt?

Resultater

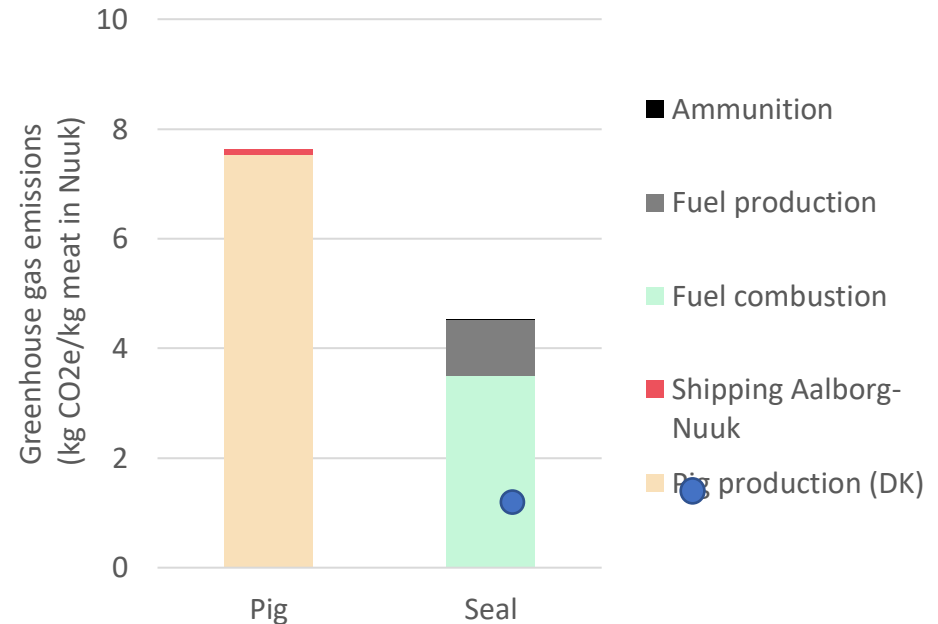
Drivhusgasser (DHG) importert svinekjøtt > lokalt fanget selkjøtt

Sel DHG (1.8 - 4,5 kg CO₂e/kg)

- 2 senario for drivstoff forbruk
- Miljøfaktoren: drivstoff utslipp og produksjon

Svin DHG (7,6 kg CO₂e/kg)

- 4 x sel beste senario
- ca. 2 x sel verste senario
- Miljøfaktoren: produksjonsfasen, ikke skipstrafikk





Sjøpattedyr som matvareresurs

Sjøpattedyr har andre fordeler som matvare kilde

- Ingen eller veldig begrensede utilsiktede konsekvenser
 - ingen bifangst eller utkasting (spesialisert aktivitet)
 - ingen habitatødeleggelse/forstyrrelse
 - bærekraftige bestander
 - minimalt uttak av ferskvann
- Dyrevelferd (frittlevende dyr, menneskelig påvirkning kun ved avliving)
- Høyt sosialt avtrykk

=> Maksimering av havets verdier til lav miljømessig kostnad



Utfordringer fremover

- Identifisere og vurdere hele spekteret av menneskeskapte påvirkninger
- Fortsette å utvikle og forbedre fangstmetoder
- Styrke kommunikasjon vedr
 - Mangfoldet/diversiteten av sjøpattedyr bestandene – stor forskjell i bevaringsstatus
 - Sjøpattedyr som matvareresurs– ofte en miljøvinner og i tråd med innsatsen for å sikre blå vekst



Å få fakta rett

Sjøpattedyr snakker til følelser – ikoniske dyr

- Hvalen - Selen

www.nammco.no

Takk for oppmerksomheten