

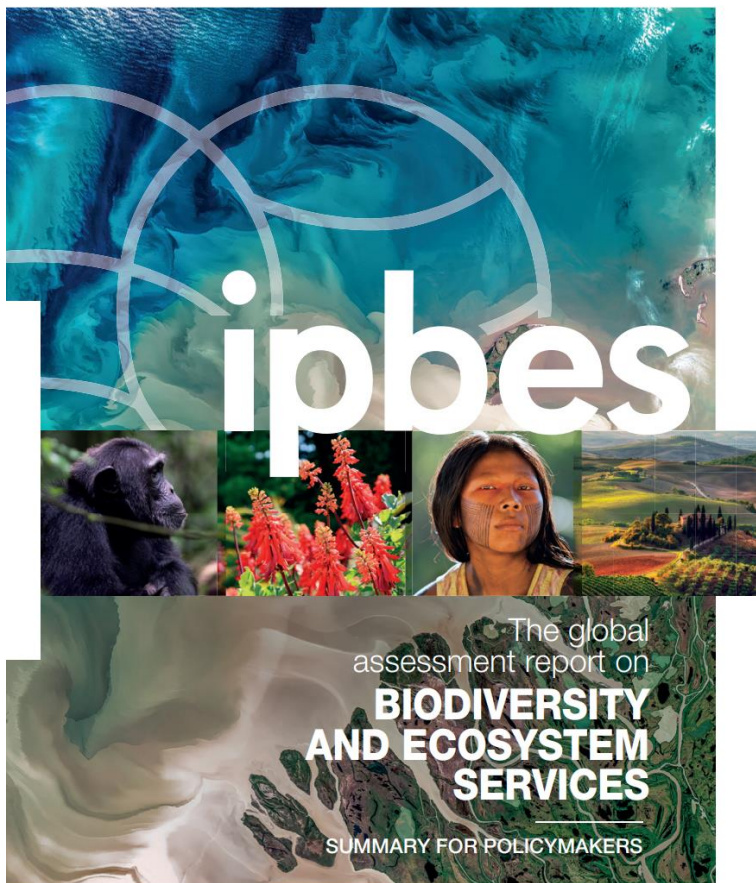
MARINE VERNEOMRÅDER - HVA MÅ TIL FOR Å OPPNÅ POSITIVE EFFEKTER?

An underwater photograph showing a fish swimming in the upper left. In the center, a diver's hand is visible, holding a net that contains a small fish. The background is a dark, blue-green underwater environment with some rocky structures and coral-like formations at the bottom.

Alf Ring Kleiven
Forsker
Havforskningsinstituttet

Molde 24.10.2021

Noen rammer for foredraget



- Fokus på fiskeri (reguleringer av dette er i hovedsak ikke integrert med marint vern i Norge)
- Naturpanelet (IPBES) argumenterer for at fiske er den påvirkningen som har hatt størst effekt på den marine biodiversiteten (både målarter og andre arter, samt habitater) de siste 50 årene.
 - Ingen grunn til at Norge skal være et unntak fra dette
 - Ikke et argument mot at verneområder også trenger annen form for beskyttelse

The coastal zone in *Anthropocene* – drivers of change according to the UN intergovernmental panel on biodiversity and ecosystem services (ipbes)

Fisheries



Habitat loss/ -alteration
(coastal hardening, bottom trawling)

Pollution (run-off, heavy metals, persistent organic pollutants, plastics,...)

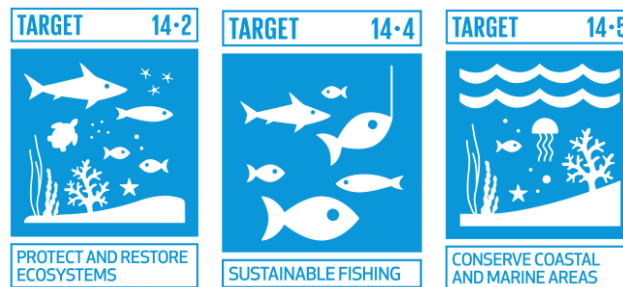
Anthropogenic global warming



Kilde:

https://ipbes.net/sites/default/files/inline/files/ipbes_global_assessment_report_summary_for_policymakers.pdf

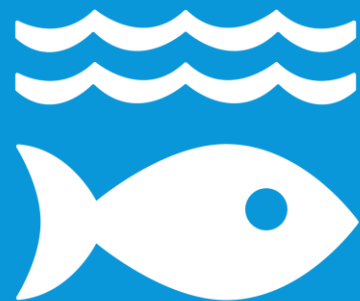
FNs Bærekraftsmål



Innen 2020 bevare minst 10 prosent av kyst- og havområdene, i samsvar med nasjonal rett og folkeretten og på grunnlag av den beste vitenskapelige kunnskapen som er tilgjengelig.

Oversatt fra engelsk av FN-sambandet
<https://www.fn.no/om-fn/fns-baerekraftsmaal/livet-i-havet>

14 LIFE BELOW WATER



FNs 10-år for økosystemrestaurering



TEN MORE YEARS TO RESTORE THE PLANET

There has never been a more urgent need to revive damaged ecosystems than now.

Ecosystems support all life on Earth. The healthier our ecosystems are, the healthier the planet - and its people. The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change and prevent a mass extinction. It will only succeed if everyone plays a part.



Økt oppmerksomhet rundt marint vern i 2021



Meld. St. 29

(2020–2021)

Melding til Stortinget

Heilskapleg nasjonal plan for bevaring
av viktige område for marin natur



MARINT VERN

Havforskningsinstituttets ekspertvurdering av utfordringer
og status for arbeid med marint vern og beskyttelse i Norge

Lis Lindal Jørgensen, Even Moland, Vivian Husa, Tina Kuttli, Alf Ring Kleiven og Gro van der
Meeren (HI)



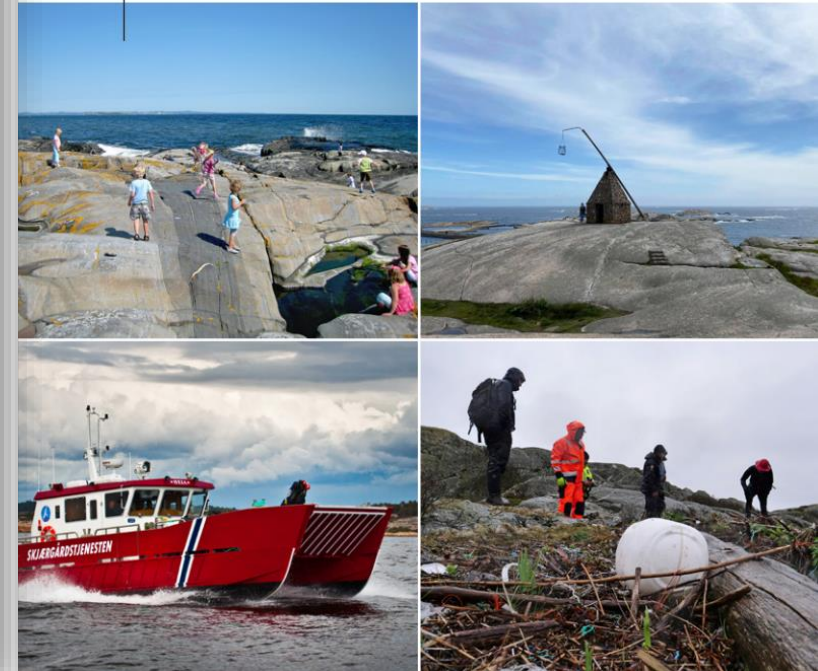
RAPPORT FRA
HAVFORSKNINGEN
NR. 2021-9



Klima- og
miljødepartementet

Tiltaksplan

Helhetlig tiltaksplan for en
ren og rik Oslofjord med
et aktivt friluftsliv



Norge overrasker med hårete mål for naturvern

Om ni år skal verden ha vernet 30 prosent av klodens natur. Det har Norge sagt ja til å være med på, selv om vi fortsatt er milevis unna fjorårets mål.



Brånakollane naturreservat i Larvik er blant skogene som er vernet i Norge.
FOTO: TRUDE MYHRE



Iselin Eise Fjeld
Journalist

NRK

Publisert 24. apr. kl. 22:10
Oppdatert 25. apr. kl. 15:05



The Minister

The Rt Hon the Lord Goldsmith of Richmond Park,
Minister of State

UNITED KINGDOM

Your ref

Our ref
19/425-

Date
23 April 2021

Norway accepts the invitation to join the Global Ocean Alliance

Dear Minister Goldsmith,

Thank you for your kind invitation to join the Global Ocean Alliance of countries who support a 30by30 target to protect at least 30% of the global ocean within Marine Protected Areas and Other Effective Area-based Conservation measures (OECMs) by 2030. Norway is delighted to join the Global Ocean Alliance.

By joining the Global Ocean Alliance, we will support the adoption of a 30by30 target in the Post-2020 Global Biodiversity Framework, under the Convention on Biological Diversity. We would also be delighted to act as champions encouraging other countries to join the Alliance.

By working together, we can galvanise global ambition in order to protect the marine environment upon which the health of our planet depends.

Yours sincerely

Sveinung Rotevatn



I mars fikk den norske klima- og miljøministeren en invitasjon fra sin britiske motpart:

«**Jeg inviterer deg til å bli med oss å sikre et mål om å beskytte minst 30 prosent av verdenshavene innen 2030.**».

Storbritannia, som leder Global Ocean Alliance, vil ha så mange som mulig med på laget, så verden kan bli enig om **30 innen 30** under FNs naturtoppmøte til høsten. Så langt har mer enn 40 land sagt ja.

Fredag kom også [svaret](#) fra Norge: – Ja, takk!

Men ikke bare det. Samme dag [kunngjorde regjeringen](#) at Norge også slutter seg til et mål om 30 prosent naturvern på land.

– 750 år med dagens tempo for hav

Men så er det bare det at Norge allerede er langt unna FN-målet for 2020. Da skulle vi hatt 10 prosent havvern. Ett år etter fristen ligger vi offisielt på **3,6** prosent.

Spør man forskere og miljøorganisasjonene får man lavere estimater for havvern.



Vern kan være så mangt...

Guidelines for applying the IUCN protected area management categories to marine protected areas

Jon Day, Nigel Dudley, Marc Hockings, Glen Holmes, Dan Laffoley, Sue Stolton, Sue Wells and Lauren Wenzel

Second edition



Developing capacity for a protected planet

Best Practice Protected Area Guidelines Series No.19



IUCN category	Definition
la	<i>Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.</i>
lb	<i>Category Ib protected areas are usually large, unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.</i>
II	<i>Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.</i>
III	<i>Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine caverns, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.</i>

Strengt vern

Mildt vern

IUCN category	Definition
IV	<i>Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.</i>
V	<i>Category V protected areas are where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.</i>
VI	<i>Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in natural condition, where a proportion is under sustainable natural resource management and where low-level non industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.</i>

IUCN category	Definition	Primary objective	Permitted activities	Prohibited activities
Ia	<i>Category Ia are strict nature reserves or other protected areas set aside to protect biodiversity and also geological/geomorphological features, where human use and impacts are controlled and limited to the minimum. Such protection of the core values. Such protected areas serve as indispensable areas for scientific monitoring.</i>			Removal of species or modification, extraction or collection of resources (e.g. through any form of fishing, harvesting, dredging) is considered to be incompatible with this category. Anchoring, which can damage bottom habitat, should not be permitted. If necessary for research, mooring buoys may be an alternative
Ib	<i>Category Ib protected areas are usually large, unmodified or slightly modified and their natural character is unaltered or significantly modified, without permanent or significant human influence, which are protected and managed so as to protect their natural condition.</i>			As with Category Ia, removal of species or modification, extraction or collection of resources (e.g. through fishing, harvesting or dredging) is not considered compatible with this category.
II	<i>Category II protected areas are large natural or near-natural areas set aside to protect ecological processes along with the conservation of species and ecosystems characteristic of the area. They also provide a foundation for environmentally and culturally compatible spiritual, educational, recreational and visitor opportunities.</i>			Extractive use (of living or dead material) is not considered consistent with the objectives of category II (e.g. all types of fishing, including recreational, are not compatible), other than for approved research which cannot be done elsewhere
III	<i>Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine caverns, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.</i>	To protect specific outstanding natural features and their associated biodiversity and habitats.	Same as category II.	Extractive use (of living or dead material) is not considered consistent with the objectives of category III (e.g. all types of fishing, including recreational, are not compatible), other than for approved research which cannot be done elsewhere. All other activities which have the potential to impact the specific natural monument (e.g. aquaculture, waste discharge, habitation, etc) are also prohibited.

Fjerning av arter eller modifisering, uttak eller innsamling av ressurser (e.g. gjennom noen former for fiske, høsting eller mudring) er betraktet som inkompatibelt med denne kategorien. Ankring, som kan skade bunnhabitater, bør ikke tillates. Hvis nødvendig for forskning kan moringsbøyer være et alternativ.

Strengt vern

Mildt vern

IUCN category	Definition	Primary objective	Permitted activities	Prohibited activities
IV	<i>Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.</i>	To maintain, conserve and restore species and habitats.	Unlike categories Ia – III, within category IV MPAs extractive research is permitted, as is renewable energy generation and restoration/enhancement for other reasons (e.g. beach replenishment, fish aggregation, artificial reefs). Long-term and sustainable local fishing practices, small-scale aquaculture and works (e.g. harbours, ports, dredging) are all permitted so long as the activity can be managed in such a way that it is compatible with the MPA's objectives.	Industrial fishing, industrial-scale aquaculture, untreated waste discharge, mining and habitation not permitted.
V	<i>Category V protected areas are where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value; and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.</i>	To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.	Local communities living within and sustainably using the seascape is allowed, and long-term and sustainable local fishing practices or small-scale aquaculture are permitted. However, the primary objective of the area remains the sustainable interaction of people and nature over time. Works (e.g. harbours, ports, dredging) may also be permitted, provided they or any associated activities (e.g. waste discharge, sea dumping) do not cause adverse impacts on the ecological, biological, cultural or scenic values of the area.	Industrial fishing, industrial-scale aquaculture, untreated waste discharge and mining not permitted.
VI	<i>Category VI protected areas conserve ecological and habitats together with associated cultural values. They are generally large of the area in nature where a proportion of the area is managed and level non-industrial resources compatible with conservation is seen as the main aim of the area.</i>			Industrial fishing, industrial-scale aquaculture, untreated waste discharge, mining and habitation not permitted.

Industrielt fiske, industri-skala akvakultur, ubehandlet avfallsvann, gruvedrift og utbygging er ikke tillatt.



Saltstein-Kløvningen

392920

WDPA ID

12.13 km²

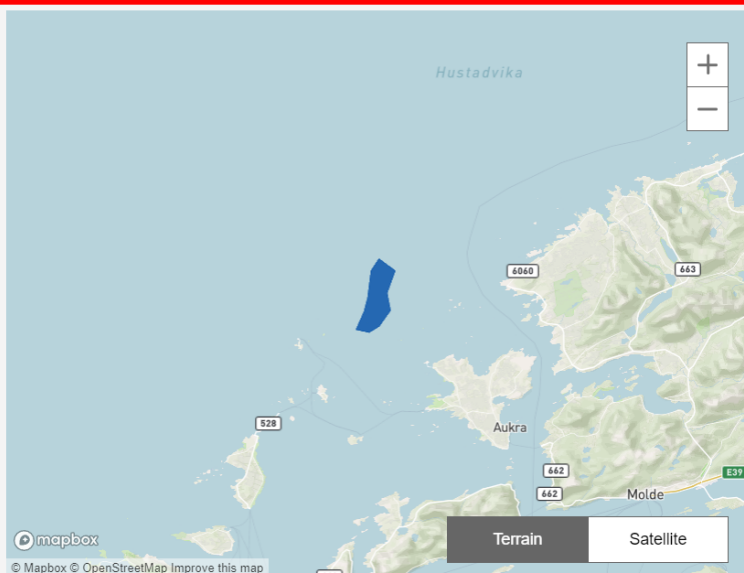
Reported Area

Type

Marine Protected Areas

Location

Norway



Map Disclaimer
The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Final status of the Abyei area is not yet determined.

Attributes

Original Name Saltstein-Kløvningen

English Designation Nature Reserve

IUCN Management Category Ia

Status Designated

Type of Designation National

Management Effectiveness Evaluations

No information available

Affiliations

No information available

§ 4. Generelle unntak frå vernereglane

Vernereglane i § 3 er ikkje til hinder for:

1. Drift og vedlikehald av Kystverket sine anlegg.
2. Beiting. Miljødirektoratet kan av omsyn til verneformålet regulere beitetrykket ved forskrift i heile eller delar av reservatet.
3. Sanking av bær og matsopp og plukking av vanlege planteartar inkludert tang til privat bruk.
4. Jakt, fangst og fiske i samsvar med gjeldande lovverk.
5. Vedlikehald av anlegg og innretningar som er i bruk på vernetidspunktet.
6. Vedlikehald av gjerde.
7. Utsetting og gjenfangst av stadeigne marine organismar i forbindelse med havbeitenæring etter akvakulturlova.
8. Taretråling i perioden f.o.m. 1. august t.o.m. 30. april.

0 Endra med [forskrift 15 mars 2013 nr. 284](#) (i kraft 1 juli 2013). Kilde: <https://lovdata.no/dokument/LF/forskrift/2010-05-28-875>

IUCN category	Definition	Primary objective	Permitted activities	Prohibited activities
Ia	<i>Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.</i>	To conserve regionally, nationally or globally outstanding ecosystems, species (occurrences or aggregations) and/or geodiversity features: these attributes will have been formed mostly or entirely by non-human forces and will be degraded or destroyed when subjected to all but very light human impact.	Scientific research involving collection may be permitted if that collection cannot be conducted elsewhere and if the collection activity is minimised to that which is absolutely necessary to achieve the scientific goals of the study. Extraction to control invasive species is also permitted in some category Ia MPAs.	Removal of species or modification, extraction or collection of resources (e.g. through any form of fishing, harvesting, dredging) is considered to be incompatible with this category. Anchoring, which can damage bottom habitat, should not be permitted. If necessary for research, mooring buoys may be an alternative



Raet

183284

WDPA ID

609.16 km²

Reported Area

Type

Marine Protected Areas

Location

Norway

Find even more information by visiting the Digital Observatory for Protected Areas (DOPA)

Link →



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Eksempel: Raet nasjonalpark



Attributes

Original Name	Raet
English Designation	National Park
IUCN Management Category	II
Status	Designated
Type of Designation	National
Status Year	2016
Sublocation	
Governance Type	Federal or national ministry or agency
Management Authority	Not Reported
Management Plan	Not Reported
International Criteria	Not Applicable

Management Effectiveness Evaluations

No information available

II

Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation.

As with category Ib. This category should also provide for visitation, non-extractive recreational activities and nature tourism (e.g. snorkelling, diving, swimming, boating, etc.) and approved research, provided that research cannot be done elsewhere (see p. 23 for more details).

Extractive use (of living or dead material) is not considered consistent with the objectives of category II (e.g. all types of fishing, including recreational, are not compatible), other than for approved research which cannot be done elsewhere

Tabell 2. Marine verne

Jærkysten
Framvaren
Skarnsundet
Tauterryggen
Ytre Karlsøy
Rystraumen
Lurefjorden og Lindå
Innervisten
Rødberget
Nordfjorden
Rossfjordstraumen
Kaldvåg fjorden og In
Karlsøyfjorden
Gaulosen
Saltstraumen

Har fjernet sju tonn med fiskesluker fra naturperle – hedret med pris

Bodø sportsdykkerklubb ble i dag tildelt prisen Gullklypa 2016 av organisasjonen Hold Norge Rent. – En stor utmerkelse, sier nestleder.



Bodø Sportsdykkerklubb viste fjor frem alle slukene de har plukket under NRKS Saltstraumen-sending. Undervannsfoto: Terje Olsen



Markus Thonhaugen
Journalist



Andreas Budalen
@Andreas_Budalen
Journalist

Publisert 8. feb. 2017 kl. 13:31
Oppdatert 8. feb. 2017 kl. 14:07



Artikkelen er
flere år
gammel.



Great Barrier Reef

2628

WDPA ID

15027.29 km²

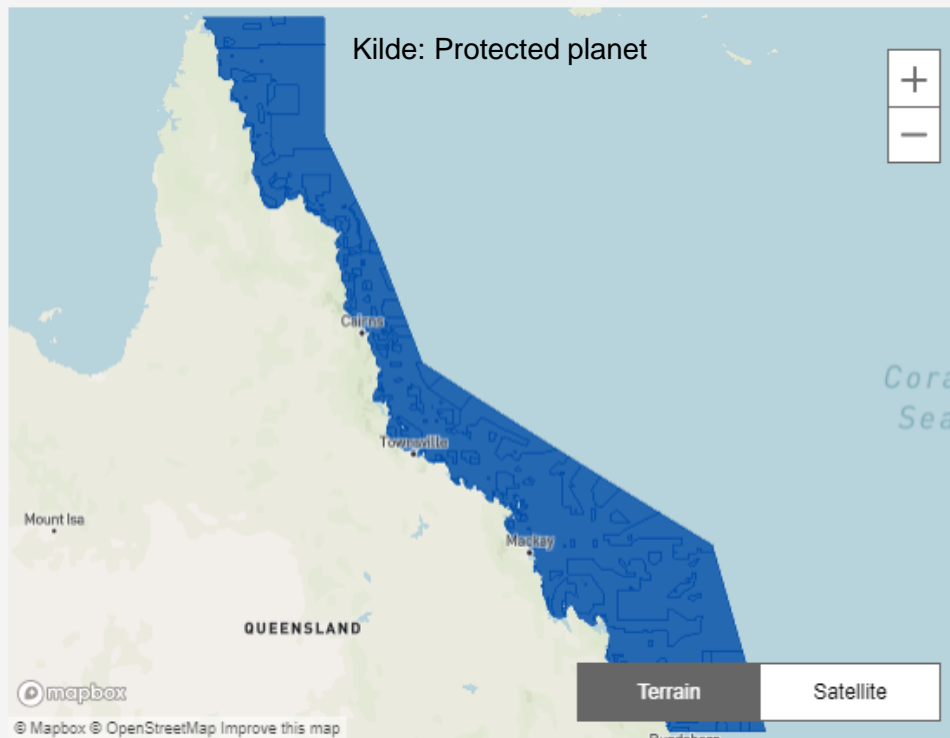
Reported Area

Type

Marine Protected Areas

Location

[Australia](#)



Map Disclaimer

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Attributes

Original Name Great Barrier Reef

English Designation Marine Park

IUCN Management Category IV

Status Designated

Type of Designation National

Status Year 2004

Management Effectiveness Evaluations

WH Outlook Report 2009

Affiliations

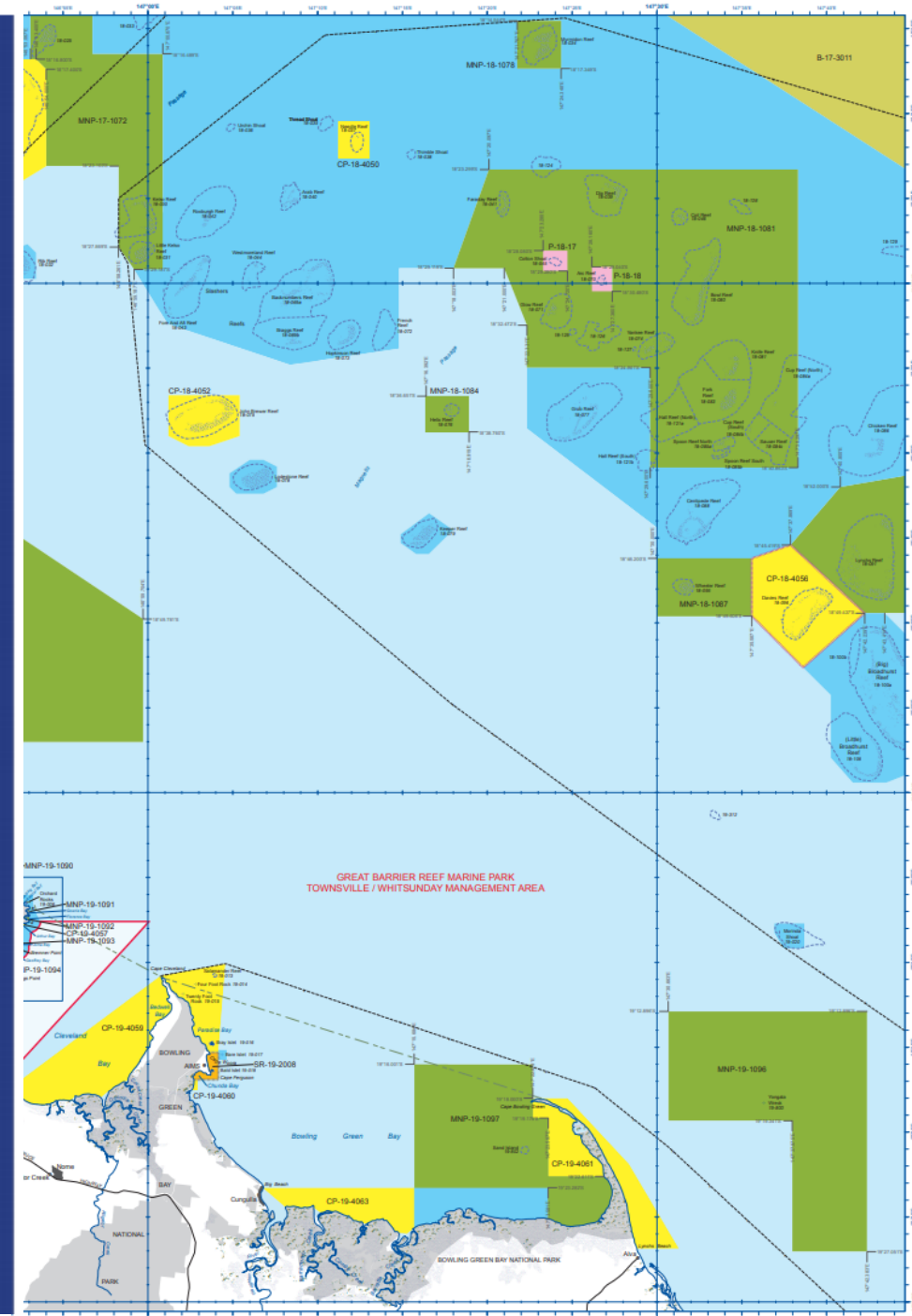
No information available

IUCN category	Definition	Primary objective	Permitted activities	Prohibited activities
IV	<i>Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.</i>	To maintain, conserve and restore species and habitats.	Unlike categories Ia – III, within category IV MPAs extractive research is permitted, as is renewable energy generation and restoration/enhancement for other reasons (e.g. beach replenishment, fish aggregation, artificial reefs). Long-term and sustainable local fishing practices, small-scale aquaculture and works (e.g. harbours, ports, dredging) are all permitted so long as the activity can be managed in such a way that it is compatible with the MPA's objectives.	Industrial fishing, industrial-scale aquaculture, untreated waste discharge, mining and habitation not permitted.

ACTIVITIES GUIDE

(see relevant *Zoning Plans and Regulations* for details)

	General Use Zone	Habitat Protection Zone	Conservation Park Zone	Buffer Zone	Scientific Research Zone ³	Marine National Park Zone	Preservation Zone
Aquaculture	Permit	Permit	Permit ¹	✗	✗	✗	✗
Bait netting	✓	✓	✓ ²	✗	✗	✗	✗
Boating, diving, photography	✓	✓	✓	✓	✓ ³	✓	✗
Crabbing (trapping)	✓	✓	✓ ⁴	✗	✗	✗	✗
Harvest fishing for aquarium fish, coral and beachworm	Permit	Permit	Permit ¹	✗	✗	✗	✗
Harvest fishing for sea cucumber, trochus, tropical rock lobster	Permit	Permit	✗	✗	✗	✗	✗
Limited collecting	✓ ⁵	✓ ⁵	✓ ⁵	✗	✗	✗	✗
Limited spearfishing (snorkel only)	✓	✓	✓ ¹	✗	✗	✗	✗
Line fishing	✓ ⁶	✓ ⁶	✓ ⁷	✗	✗	✗	✗
Netting (other than bait netting)	✓	✓	✗	✗	✗	✗	✗
Research (other than limited impact research)	Permit	Permit	Permit	Permit	Permit	Permit	Permit
Shipping (other than in a designated shipping area)	✓	Permit	Permit	Permit	Permit	Permit	✗
Tourism programme	Permit	Permit	Permit	Permit	Permit	Permit	✗
Traditional use of marine resources	✓ ⁸	✓ ⁸	✓ ⁸	✓ ⁸	✓ ⁸	✓ ⁸	✗
Trawling	✓	✗	✗	✗	✗	✗	✗
Trolling	✓ ⁶	✓ ⁶	✓ ⁶	✓ ^{6,9}	✗	✗	✗



Er disse kategoriene så viktig?

- Vi bør snakke samme internasjonale språk
- Skalaen må kunne fange opp alle nivåer av vern
- Kategoriene er basert på forskning:
 - Strengt vern har betydelig større effekter enn mildt vern

Marine Policy 72 (2016) 192–198



A regulation-based classification system for Marine Protected Areas (MPAs)

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ABSTRACT

Marine protected areas (MPAs) are a global conservation and management tool to enhance the resilience of linked social-ecological systems with the aim of conserving biodiversity and providing ecosystem services for sustainable use. However, MPAs implemented worldwide include a large variety of zoning and management schemes from single to multiple-zoning and from no-take to multiple-use areas. The current IUCN categorisation of MPAs is based on management objectives which many times have a significant mismatch to regulations causing a strong uncertainty when evaluating global MPAs effectiveness. A novel global classification system for MPAs based on regulations of uses as an alternative or complementing the current IUCN system of categories is presented. Scores for uses weighted by their potential impact on biodiversity were built. Each zone within a MPA was scored and an MPA index integrates the zone scores. This system classifies MPAs as well as each MPA zone individually, is globally applicable and unambiguously discriminates the impacts of uses.

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Table 1

Gear scores for commercial and recreational fisheries. See Table A.2 and Appendix A (Text A.2) for details.

Fishing gear (commercial or recreational)	Gear score
Beach seines	8
Cast nets	3
Dredges (bivalves)	7
Drift nets	5
Fish traps	6
Fixed fish traps "madrague"	6
Gillnets	6
Hand dredges (bivalves)	5
Hand harvesting	4
Intertidal hand captures	3
Lines (jigs, hook and line, rod, troll)	5
Longlines (bottom)	5
Longlines (pelagic)	4
Purse seining (bottom)	9
Purse seining (pelagic)	5
Spearfishing/diving	3
Surrounding nets near shore	8
Trammel nets	8
Traps (lobster/octopus/crab)	4
Trawl (bottom)	9
Trawl (pelagic)	5

≤ 5 corresponds to highly selective and low impacting gears (e.g. lines, octopus traps)


6-8 medium impacting gears (e.g. fish traps, bottom longlines, pelagic towed gears)
9 to the most destructive gears affecting biodiversity and ecosystems (e.g. bottom trawling, bottom purse seining)

Økosystemtilnærming til forvaltning

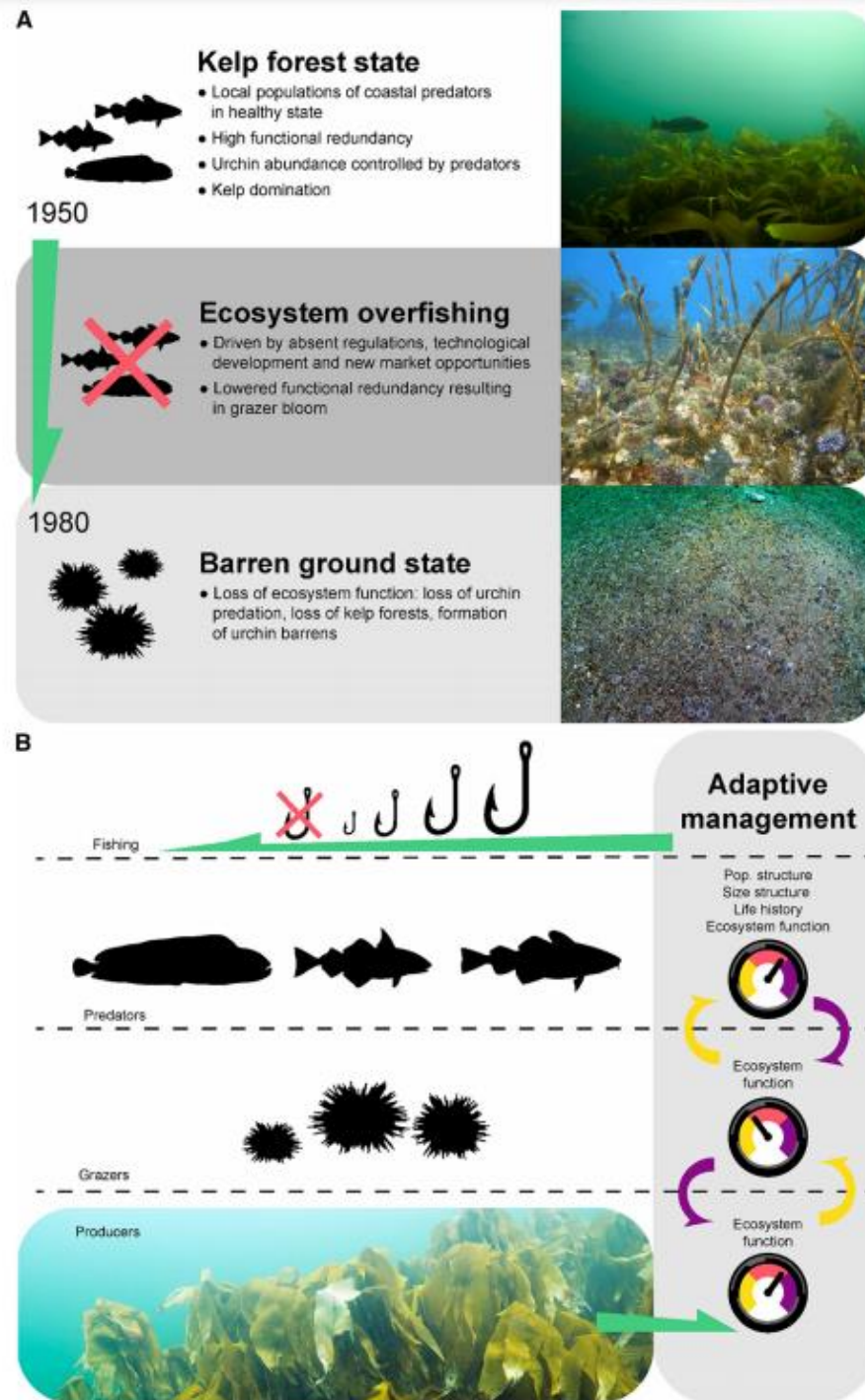
Ambio
<https://doi.org/10.1007/s13280-020-01362-4>

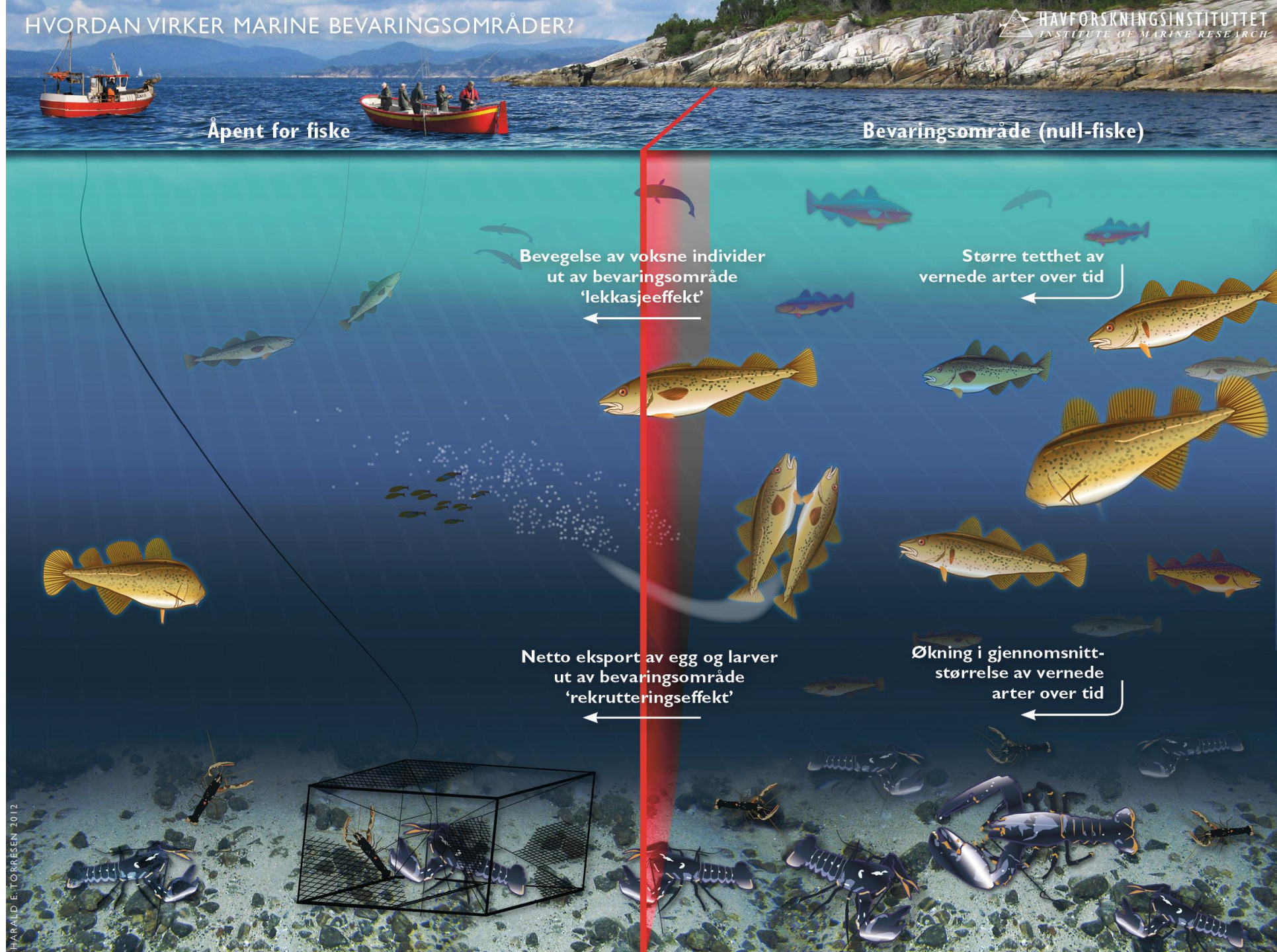
PERSPECTIVE

Depletion of coastal predatory fish sub-stocks coincided with the largest sea urchin grazing event observed in the NE Atlantic

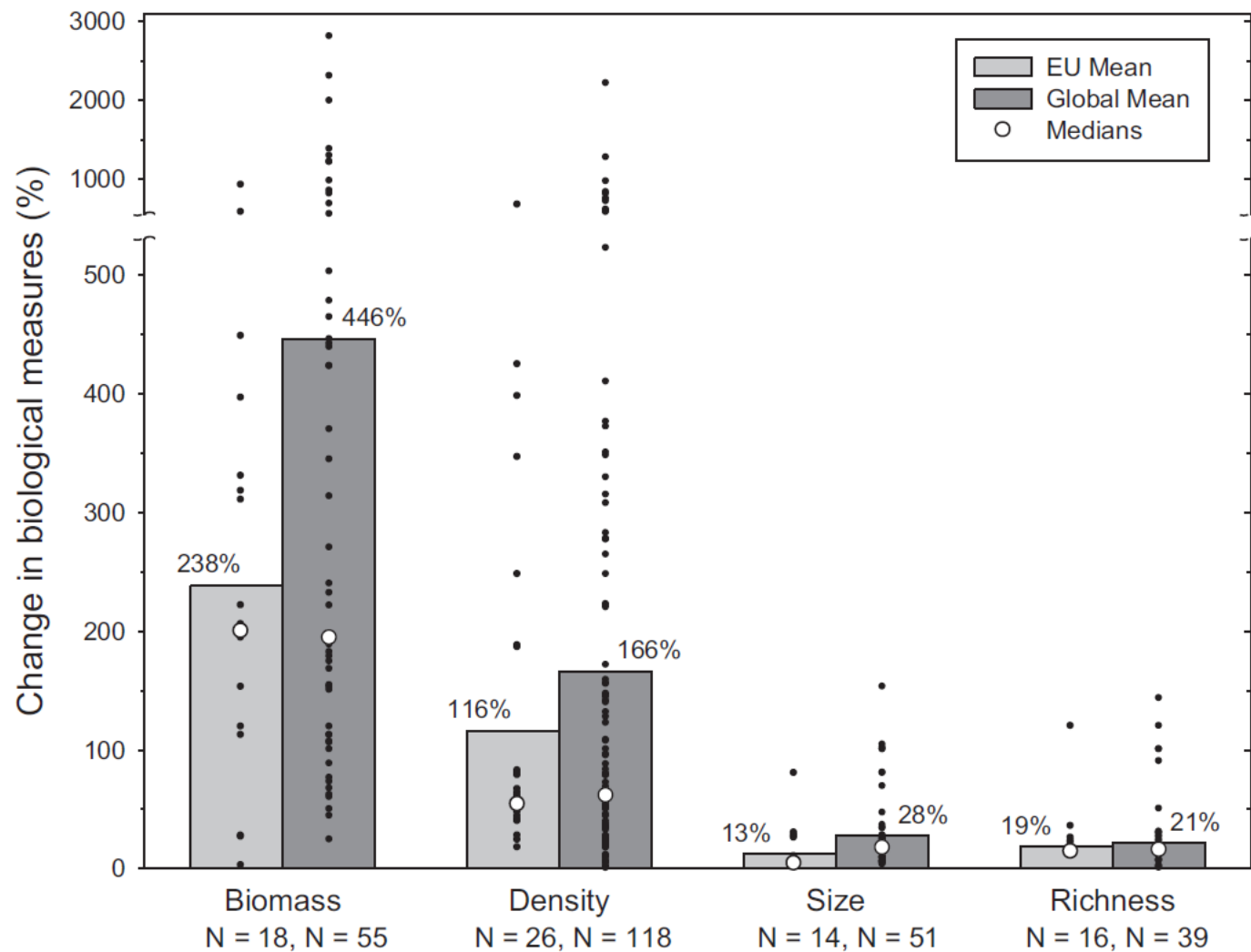
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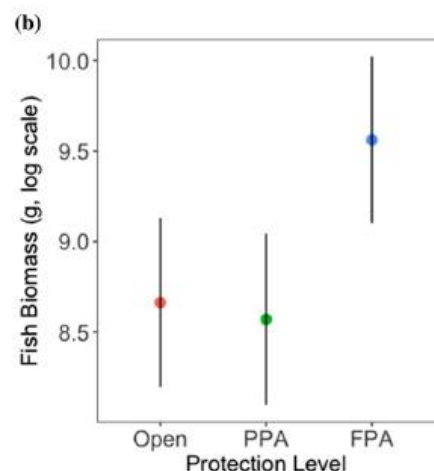
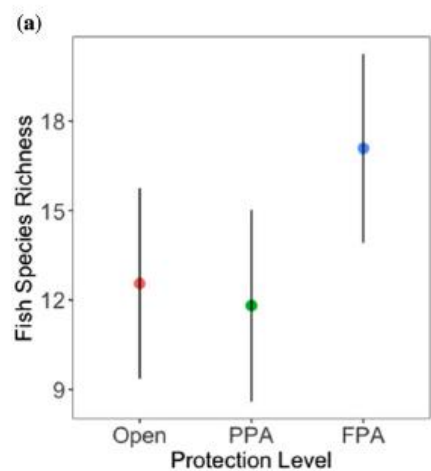
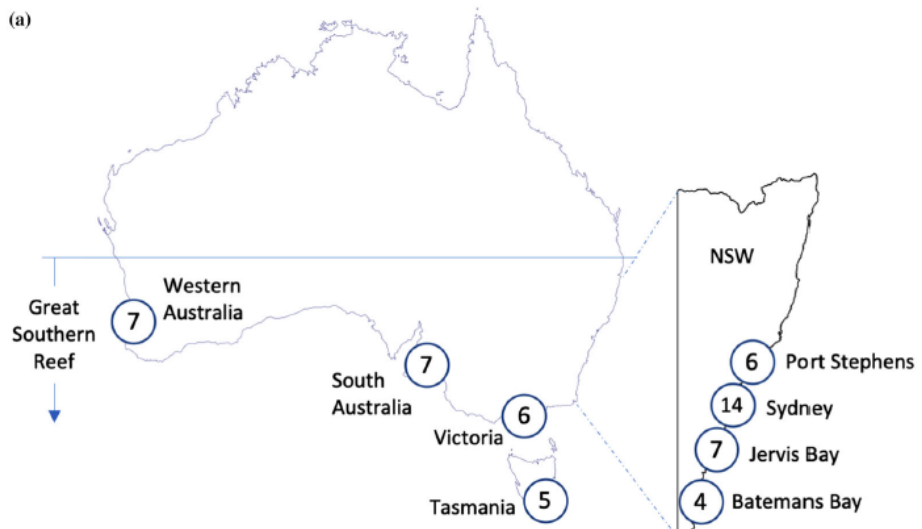
Hva viser internasjonal forskning?





Evaluating the social and ecological effectiveness of partially protected marine areas




John W. Turnbull ,^{1,2} Emma L. Johnston ,^{1,2} and Graeme F. Clark ^{1,2}



		PPA	FPA
Ecological			
	Fish diversity (species richness)		↑
	Fish biomass		↑
	Large (20+ cm) fish biomass		↑
	Mobile macro-invertebrate diversity (sp. richness)		
	Mobile macro-invertebrate abundance	↓	↓
	Mobile macro-invert abundance (excl. urchins)		
	Sessile invertebrate diversity (CATAMI)	↓	
	Sessile invertebrate cover	↓	
	Algal diversity (CATAMI)		
	Algal cover		
Social			
	Human usage community		↔
	Attraction to ecological values		↑
	Attraction to protection values		↑
	Understanding of MPA and level of protection	↓	↑
	Perception that marine life is better at site		↑
	Perception that marine life is improving over time		↑



Evaluating the social and ecological effectiveness of partially protected marine areas

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Vi vil argumentere for at delvis beskyttede områder kan være et villspor i marin bevaring fordi de skaper en illusjon om beskyttelse og bruker opp begrensede økonomiske ressurser til tross for at de sosialt eller økologisk bidrar lite eller ingenting sammenlignet med åpne områder (oversatt fra engelsk).

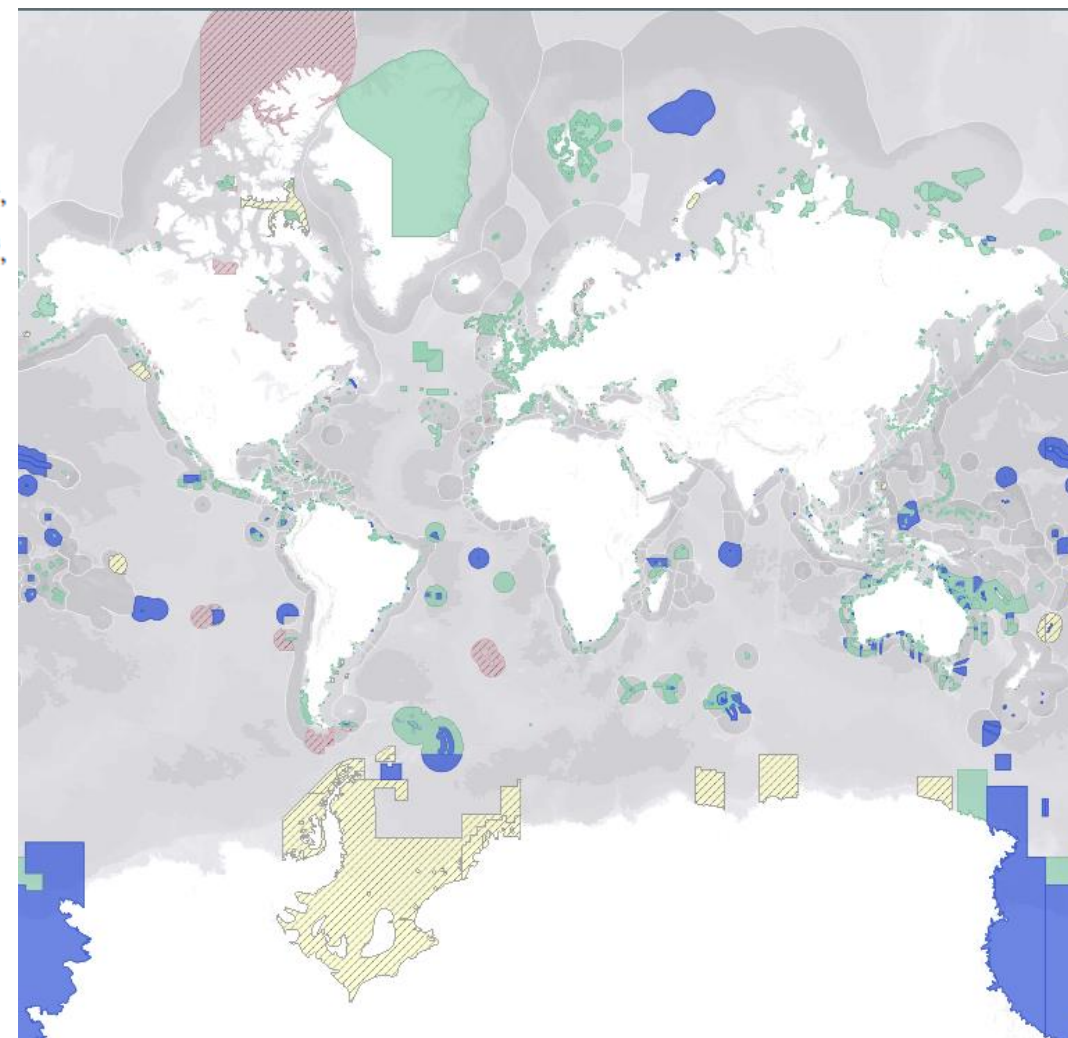


Global conservation outcomes depend on marine protected areas with five key features

Graham J. Edgar¹, Rick D. Stuart-Smith¹, Trevor J. Willis², Stuart Kininmonth^{1,3}, Susan C. Baker⁴, Stuart Banks⁵, Neville S. Barrett¹, Mikel A. Becerro⁶, Anthony T. F. Bernard⁷, Just Berkhout¹, Colin D. Buxton¹, Stuart J. Campbell⁸, Antonia T. Cooper¹, Marlene Davey¹, Sophie C. Edgar⁹, Günter Försterra¹⁰, David E. Galván¹¹, Alejo J. Irigoyen¹¹, David J. Kushner¹², Rodrigo Moura¹³, P. Ed Parnell¹⁴, Nick T. Shears¹⁵, German Soler¹, Elisabeth M. A. Strain¹⁶ & Russell J. Thomson¹

Suksesskriterier for marine verneområder:

- 1) Null-uttak
- 2) Godt overvåket/kontrollert
- 3) Gamle (mer enn 10 år)
- 4) Store (mer enn 100 km²)
- 5) Isolert av dypvann eller sand



Kilde: Marine Protection Atlas



Ocean Solutions That Benefit People, Nature and the Economy

LEAD AUTHORS
Martin R. Stuchtey, Adrien Vincent, Andreas Merki, Maximilian Buehler

CONTRIBUTING AUTHORS
Peter M. Haugan, Jane Lubchenco, Mari Elka Pangestu

oceanpanel.org



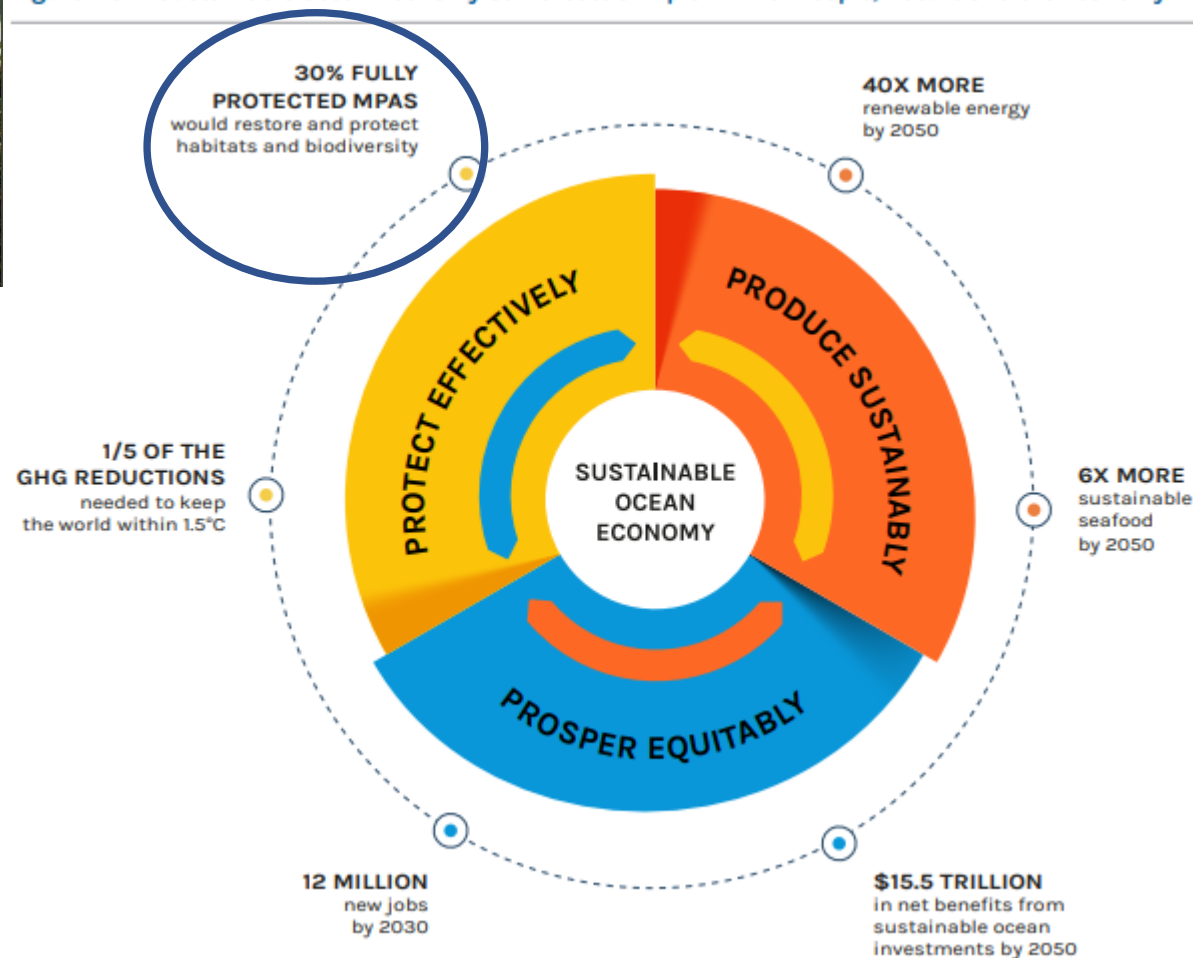
Norway establishes international high-level panel on sustainable ocean economy

TOPICS: International High-Level Panel Norway Sustainable Ocean Economy



Press Conference: Friends of the Ocean

Figure 2.3. A Sustainable Ocean Economy Can Create a Triple Win for People, Nature and the Economy



8.4 Well-Enforced, Green-Listed, Fully Protected Marine Reserves

There is strong evidence that the implementation of well-enforced, fully protected MPAs that include 30–40 percent of key marine habitats will conserve biodiversity, enhance biomass and abundance of marine life as well as improve the resilience of marine ecosystems (Roberts et al. 2001; Lester and Halpern 2008; Gaines et al. 2010; Sciberras et al. 2013; Edgar et al. 2014; Mellin et al. 2016; Sala and Giakoumi 2017). These MPAs can also benefit fisheries (Roberts et al. 2001; Gaines et al. 2010; Di Franco et al. 2016; Ban et al. 2017), provide coastal protection (Roberts et al. 2017) and improve the resilience of ecosystems against the impacts of climate change (Mellin et al. 2016; Roberts et al. 2017).

Hva med Norge?

- I hovedsak delvis beskyttede områder
- Forskning på effekter har vært mest rettet mot fredningsområder for hummer

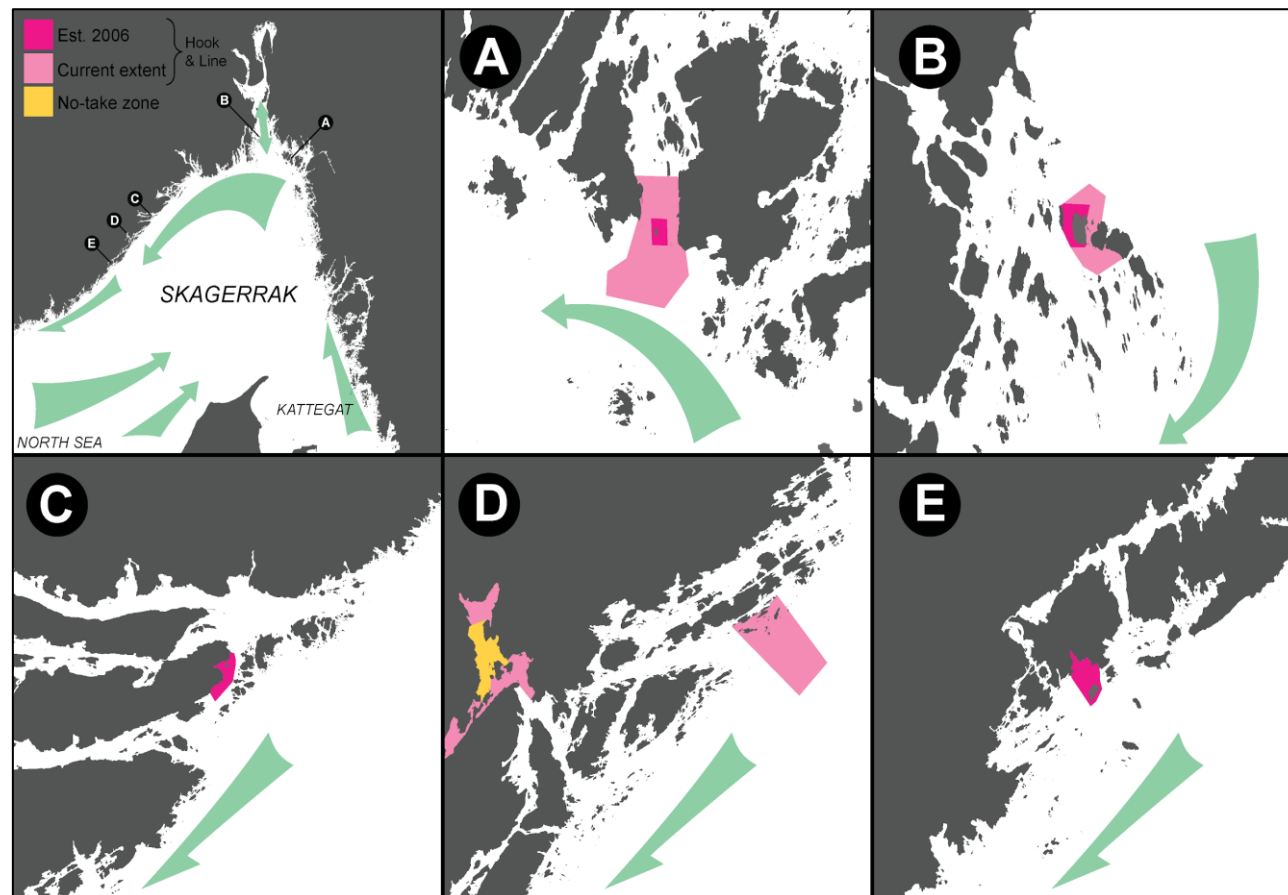


Restoration of Abundance and Dynamics of Coastal Fish and Lobster Within Northern Marine Protected Areas Across Two Decades

OPEN ACCESS

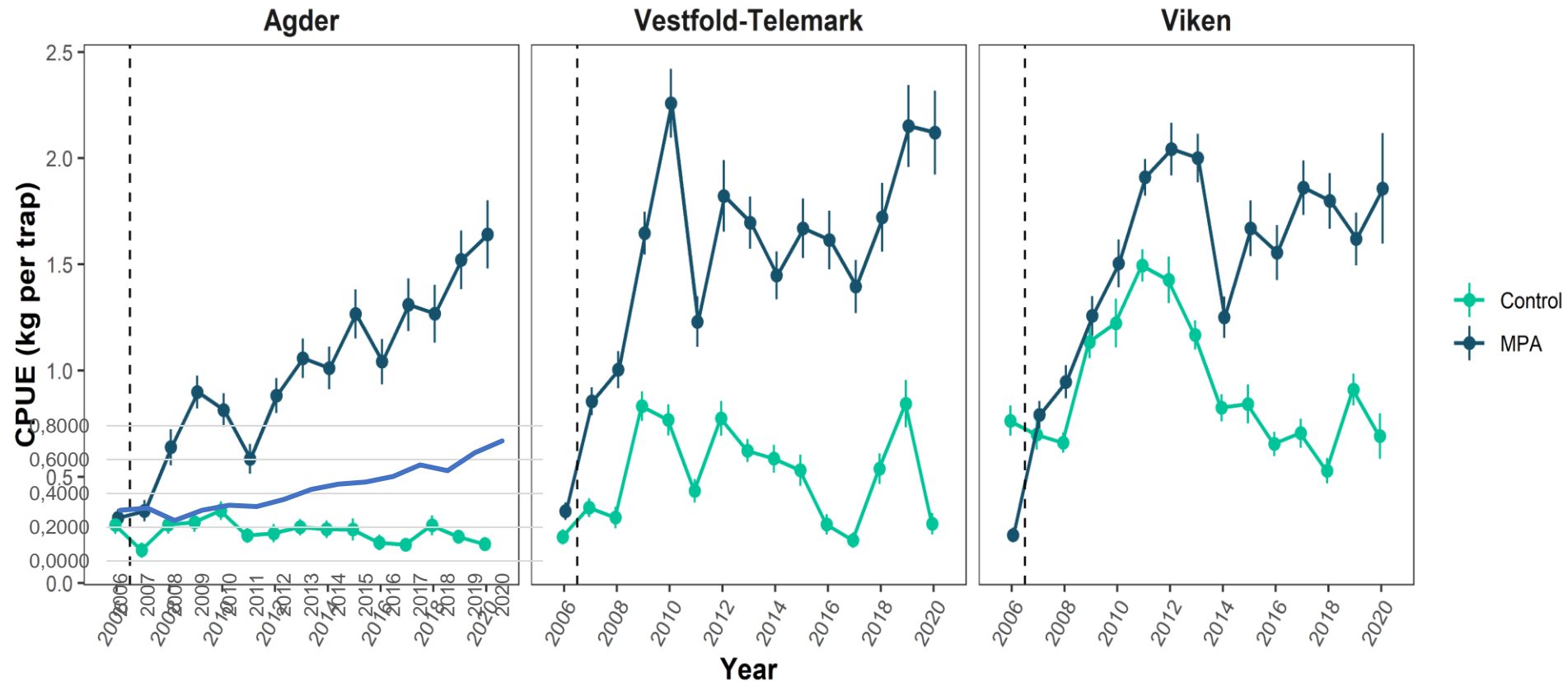
Edited by:
Juan Jacobo Schmitter-Soto,
The South Border College (ECOSUR),

Even Moland^{1,2*}, Albert Fernández-Chacón², Tonje Knutsen Sordalen², David Villegas-Ríos^{3,4}, Susanna Hunelde Thorbjørnsen^{1,2}, Kim Tallaksen Halvorsen¹, Mats Huserbråten¹, Esben Moland Olsen^{1,2}, Portia Joy Nillos Kleiven¹, Alf Ring Kleiven¹, Halvor Knutsen^{1,2}, Sigurd Helberg Espeland^{1,2}, Carla Freitas^{1,2} and Jan Atle Knutsen¹



Kilde: Moland m.fl. 2021. *Frontiers in marine science*

Fredningsområder for hummer



Kilde: Knutsen m.fl. akseptert. Marine Policy

Research

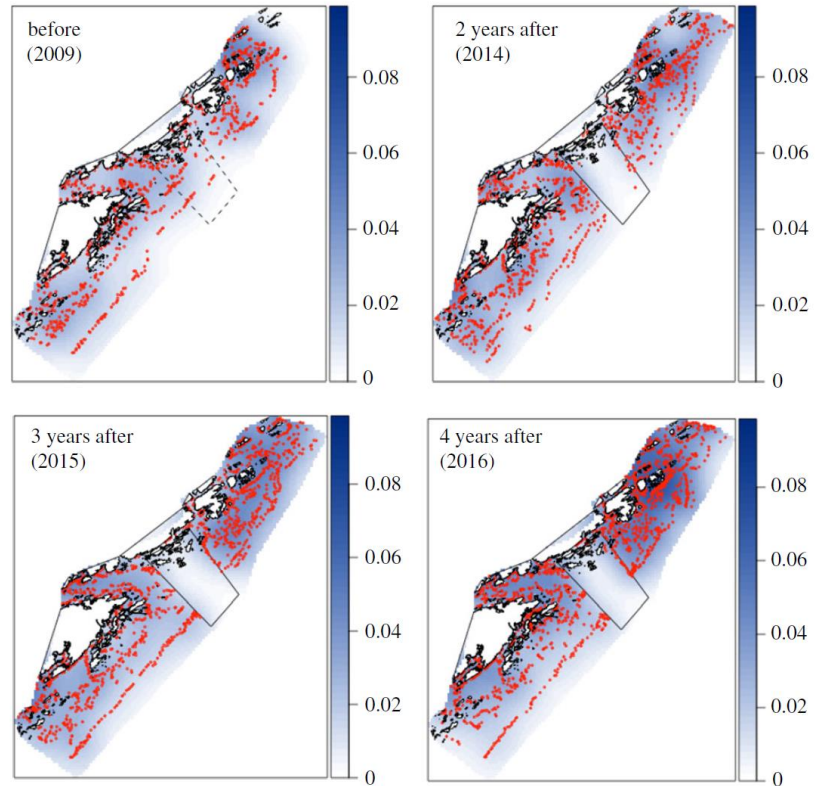
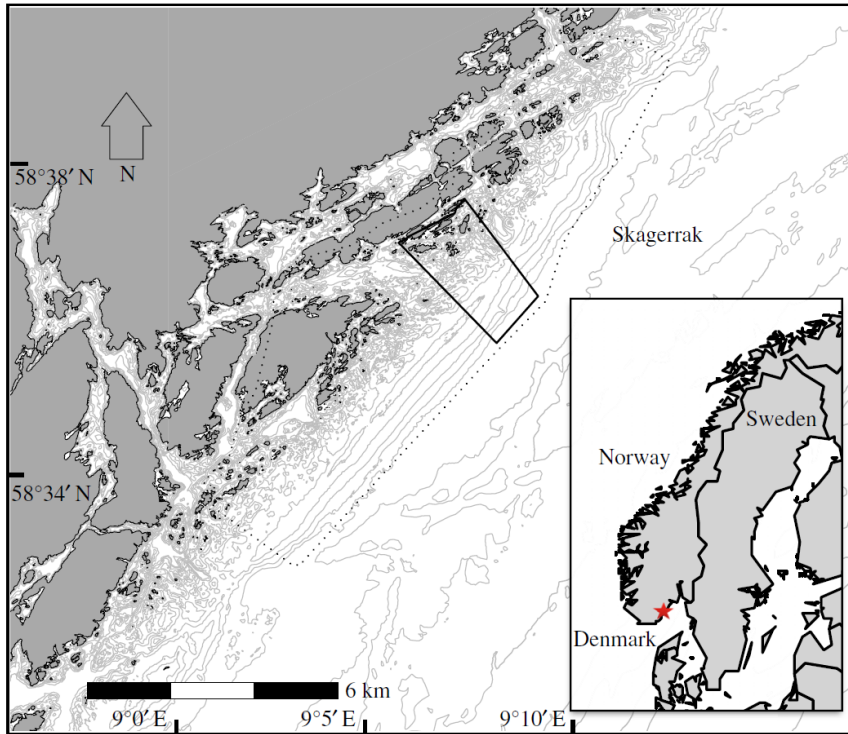
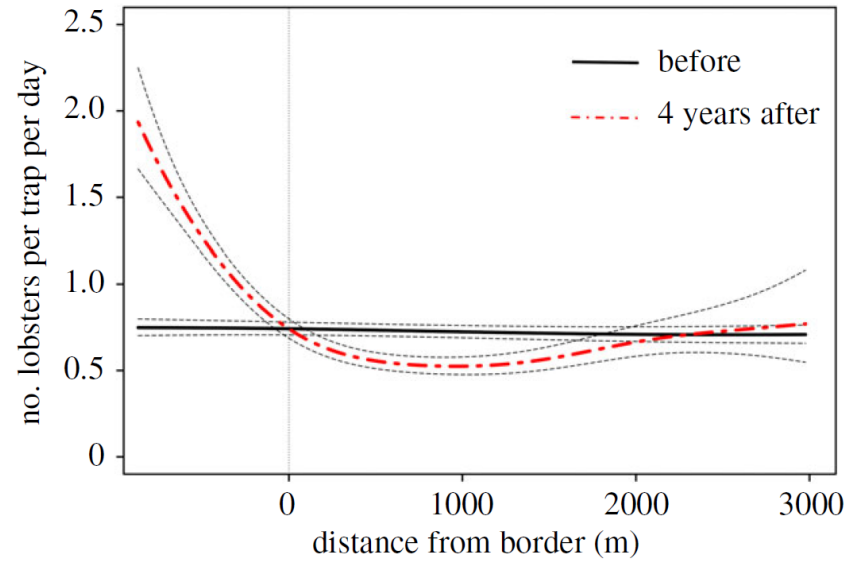


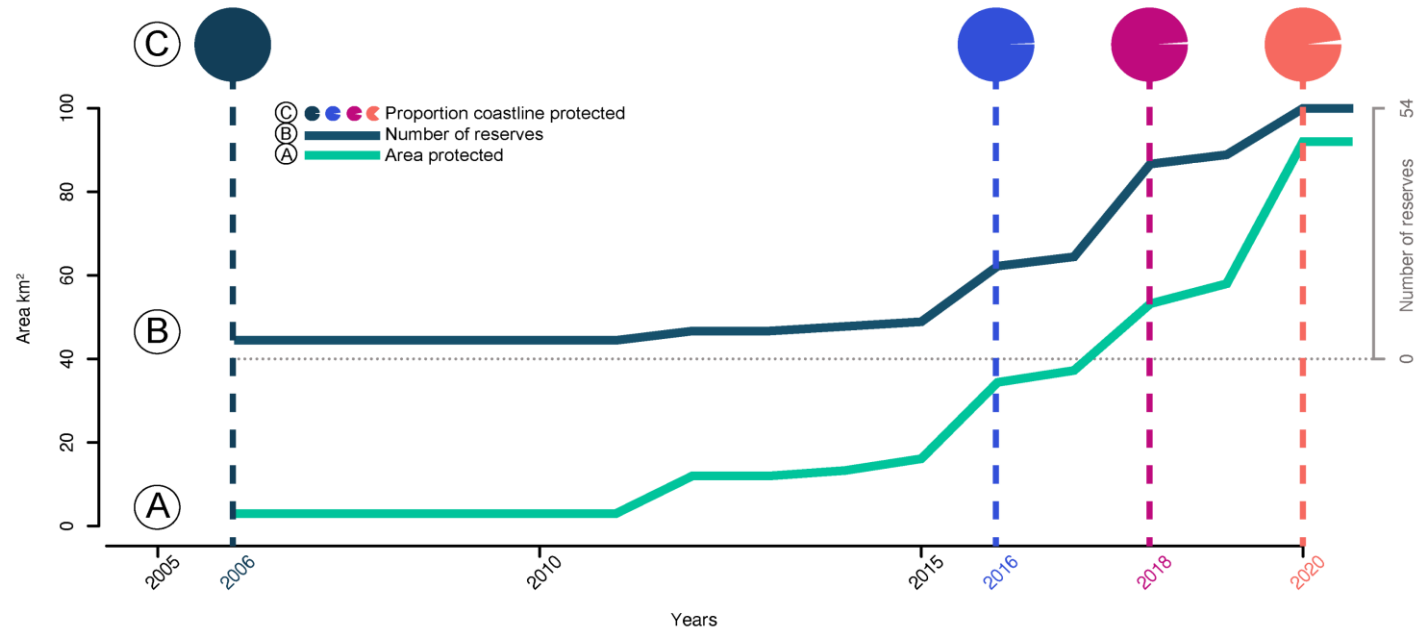
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Fishing pressure impacts the abundance gradient of European lobsters across the borders of a newly established marine protected area

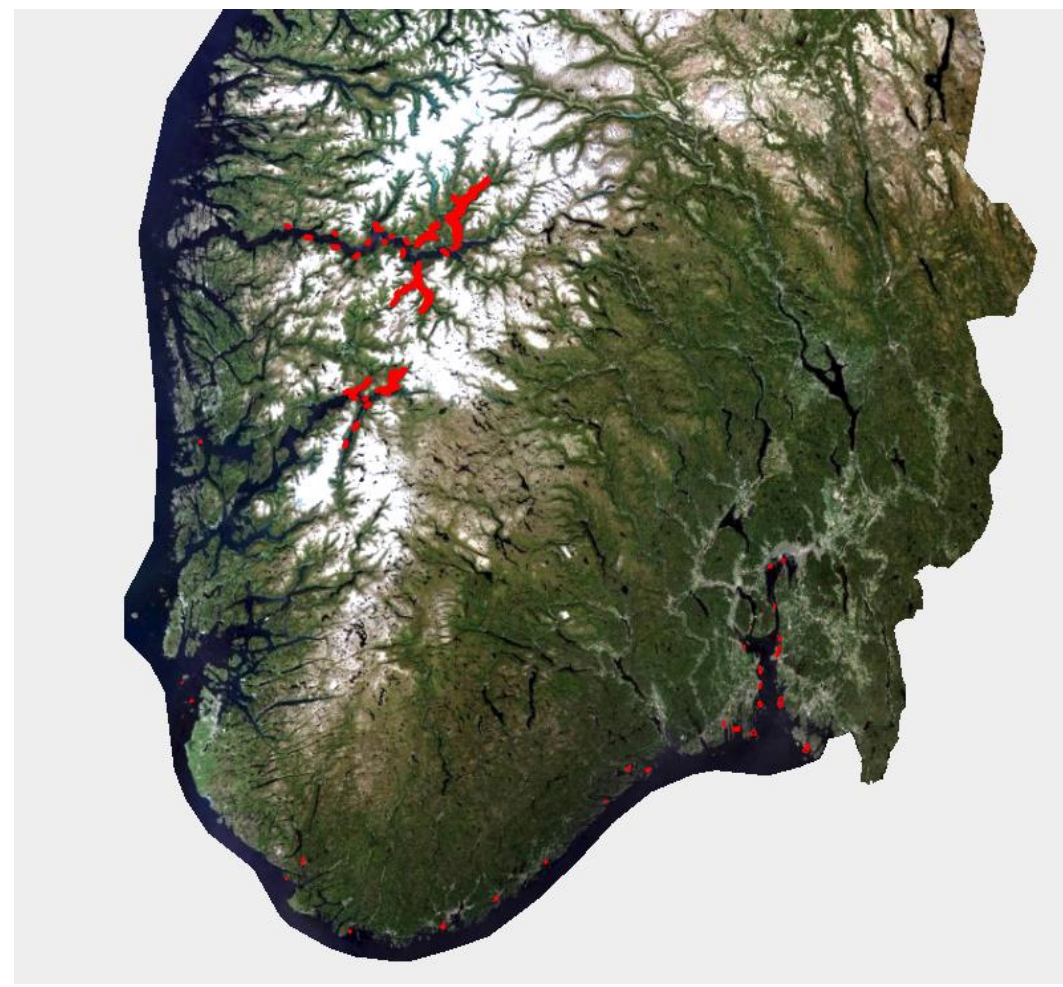
Portia Joy Nillos Kleiven^{1,2}, Sigurd Heiberg Espeland^{1,2}, Esben Moland Olsen^{1,2}, Rene A. Abesamis³, Even Moland^{1,2} and Alf Ring Kleiven¹

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Kilde: Knutsen m.fl. Akseptert. Marine Policy



Kilde: Fiskeridirektoratet



Oppsummert

- Økt fokus på marin restaurering og bevaring nasjonalt og internasjonalt:
 - FNs 10-år for naturrestaurering
 - FNs bærekraftsmål
 - Havpanelet
 - Stortingsmelding
 - Norge med i målet om 30 % marint vern globalt innen 2030
- Vern virker; men det er områder med sterk beskyttelse som i hovedsak har positive effekter for enkeltarter og biologisk mangfold
 - Har også potensial som fiskeriforvaltningsverktøy: Kan bidra til mulig høyere uttak og lavere innsats i fremtiden (i omkringliggende områder).
- Norske verneområder har generelt sett et svakt vern – fiske er i hovedsak ikke inkludert





Takk for
oppmerksomheten!

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Foto: Erling Svensen