



Bottom Fisheries Closures in Areas Beyond National Jurisdiction

INDEEP/DOSI Deep Sea Webinar Series

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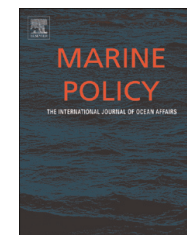


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Advancing marine biodiversity protection through regional fisheries management: A review of bottom fisheries closures in areas beyond national jurisdiction

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ABSTRACT

Fishing is a significant threat to marine biodiversity in areas beyond national jurisdiction (ABNJ). Bottom fishing in particular can impact deep-sea ecosystems, and the UN General Assembly has called on regional fisheries management organisations and arrangements (RFMO/As) to take actions to regulate bottom fisheries, including to close areas to bottom fishing activities where there is likely to be significant adverse impacts to vulnerable marine ecosystems (VMEs). This paper provides an update on the current status of closures, suggesting that RFMO/A biodiversity conservation efforts continue to advance slowly. RFMO/As have been slow to implement additional closures and to act in a precautionary manner based on available scientific evidence. Existing powers are not being fully utilised and best practice is not always followed. Closures have often been temporary or representative, or have not in fact restricted ongoing fishing activity. Some positive outcomes provide examples of good practice, though RFMO/As will need to fully utilise their powers and follow best practice before authorising bottom fishing to proceed in ABNJ.

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 - UNGA Resolution 61/105 (2006)
 - FAO International Guidelines (2008)
- Bottom fisheries closures
- Summary of closures to date
- Review of closures/state of play by region

Background

- Areas beyond national jurisdiction (ABNJ) increasingly under pressure from human activities
- Deep sea fisheries one of the major impacting activities
- Deep sea ecosystems are especially fragile:
 - Some corals grow at rate of 0.004-0.035 mm/year
 - 4,550 year old coral bycatch has been documented
- Serious impacts now widely reported in all oceans
- International community has called on Regional Fisheries Management Organisations (RFMOs) to act to protect vulnerable marine ecosystems (VMEs) in ABNJ

UNGA Resolution 61/105 (2006)

- Impact assessments
- Improved scientific research, data collection & sharing
- Regulation of new and exploratory fisheries
- 'Move-on' rules
- **Bottom fisheries closures**

Bottom fisheries closures

*“In respect of areas where **vulnerable marine ecosystems** (...) are known to occur or are likely to occur based on the best available scientific information, to close such areas to bottom fishing and ensure that such activities do not proceed unless conservation and management measures have been established to prevent **significant adverse impacts** on vulnerable marine ecosystems”.*

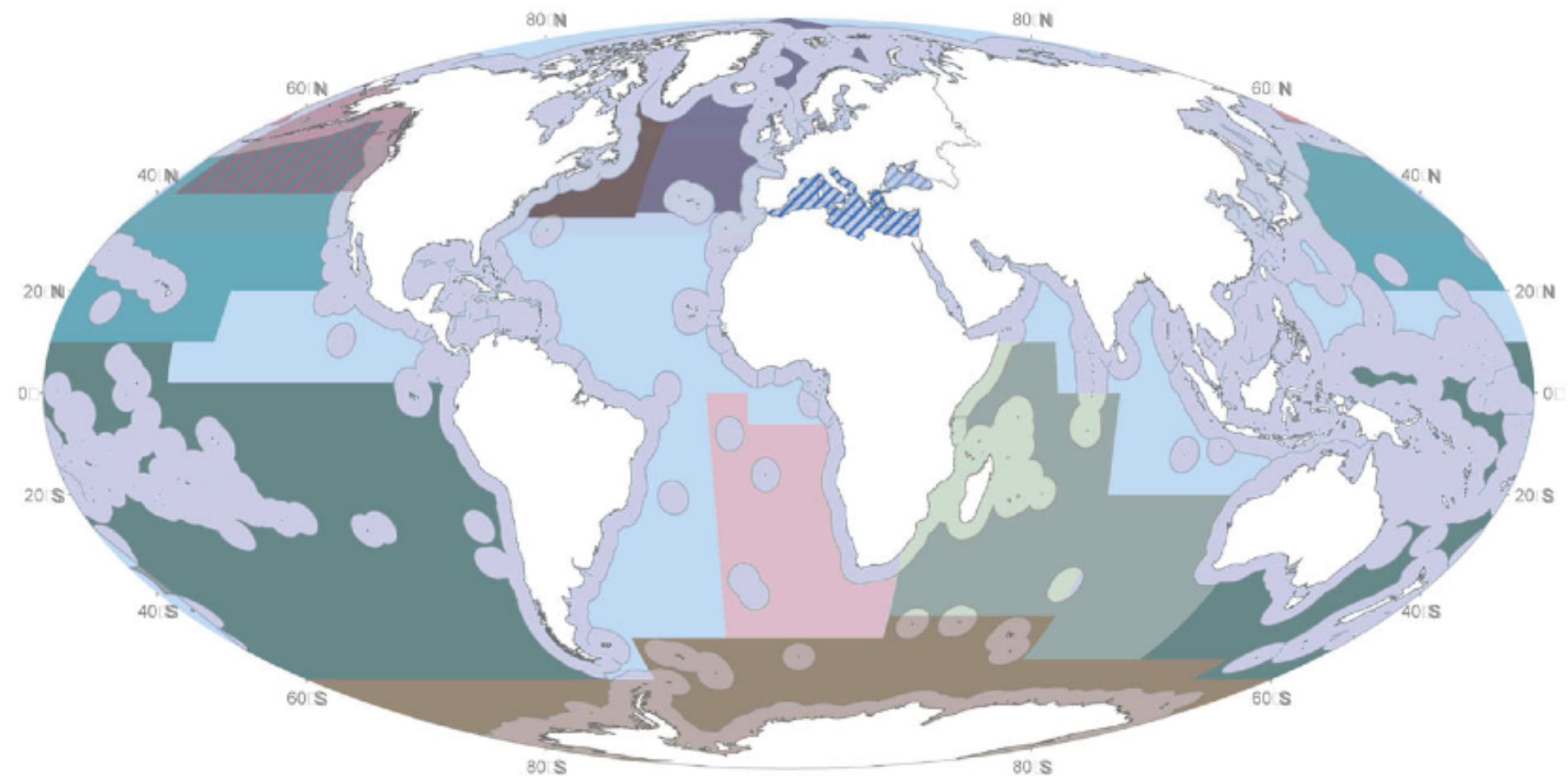
FAO International Guidelines (2008)

VMEs:

- **Vulnerability:** *“likelihood that a population, community, or habitat will experience substantial alteration from short-term or chronic disturbance, and the likelihood that it would recover and in what time frame”*
- **Ecosystem:** uniqueness or rarity; functional significance; fragility; life-history traits of component species that make recovery difficult; and structural complexity

SAIs:

- Impair the ability of affected populations to replace themselves; degrade long-term natural productivity of habitats; cause significant loss of species richness, habitat or community types.
- **6 factors:** intensity or severity; spatial extent; sensitivity/vulnerability of ecosystem; recovery ability/rate; extent to which ecosystem functions may be altered; timing & duration.



200nm limit

Non-Tuna Regional Fisheries Management Organizations

Conv. on Cons. of Antarctic Marine Living Resources

Conv. on Cons. & Mgmt of Pollock Resources in the Central Bering Sea

General Fisheries Council for the Mediterranean

International Pacific Halibut Commission

Northwest Atlantic Fisheries Organization (NAFO)

North East Atlantic Fisheries Commission (NEAFC)

North Pacific Anadromous Fish Commission

South East Atlantic Fisheries Organization (SEAFO)

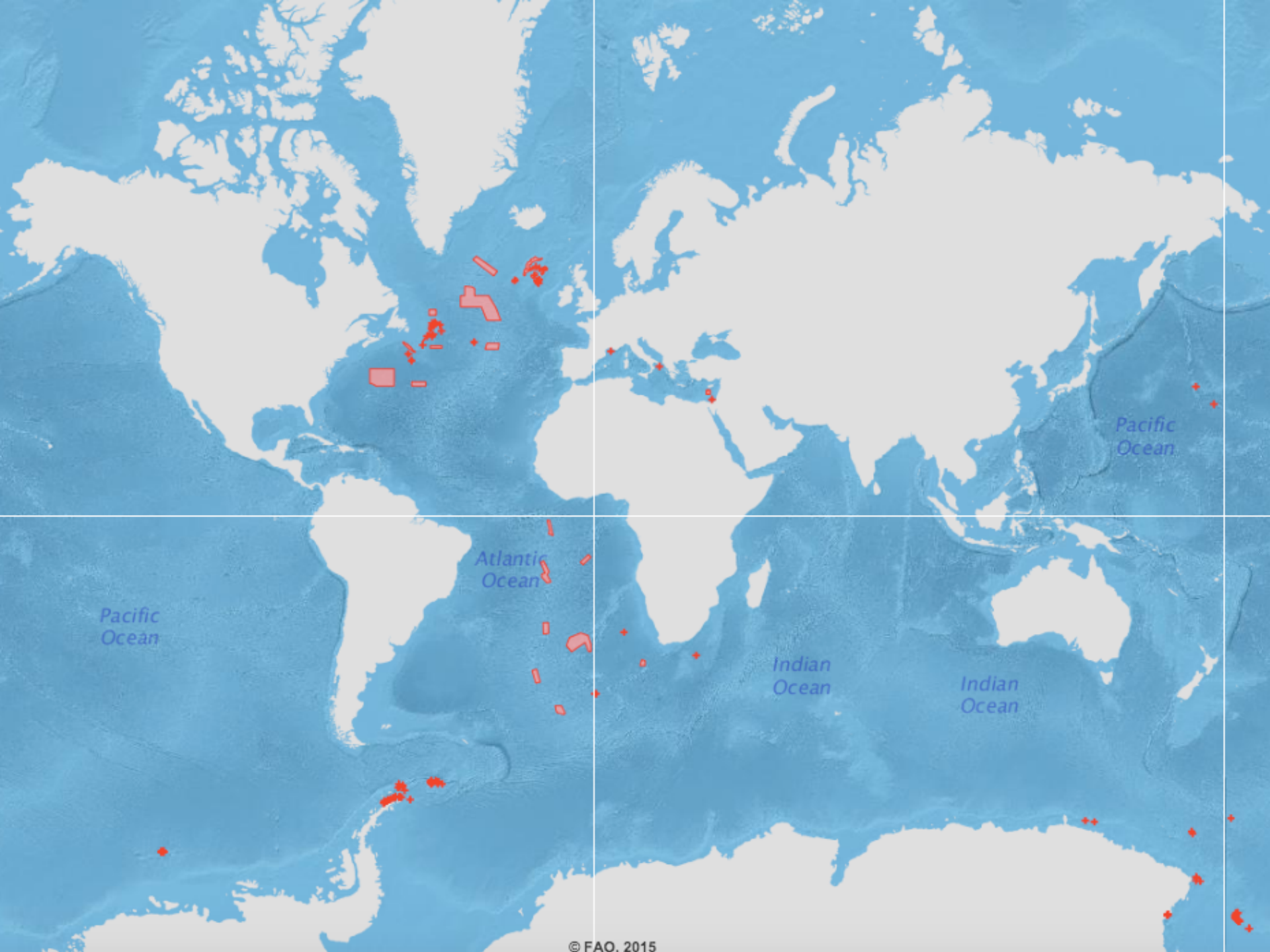
South Indian Ocean Fisheries Agreement (SIOFA)

South Pacific Regional Fisheries Mgmt Org

Southwest Indian Ocean Fisheries Commission

Bottom fisheries closures

- Value and effectiveness of 'no-take' marine reserves well-evidenced
- Closing areas to bottom fishing = only failsafe method for avoiding SAIs
- Recent research advocates:
 - creation of a high seas regeneration zone
 - complete closure of high seas to bottom fishing
- Closures are important because other measures are under-utilised and may in any case be ineffective.
- Recently became much easier to track closures with launch of FAO VME database/map



Pacific
Ocean

Atlantic
Ocean

Pacific
Ocean

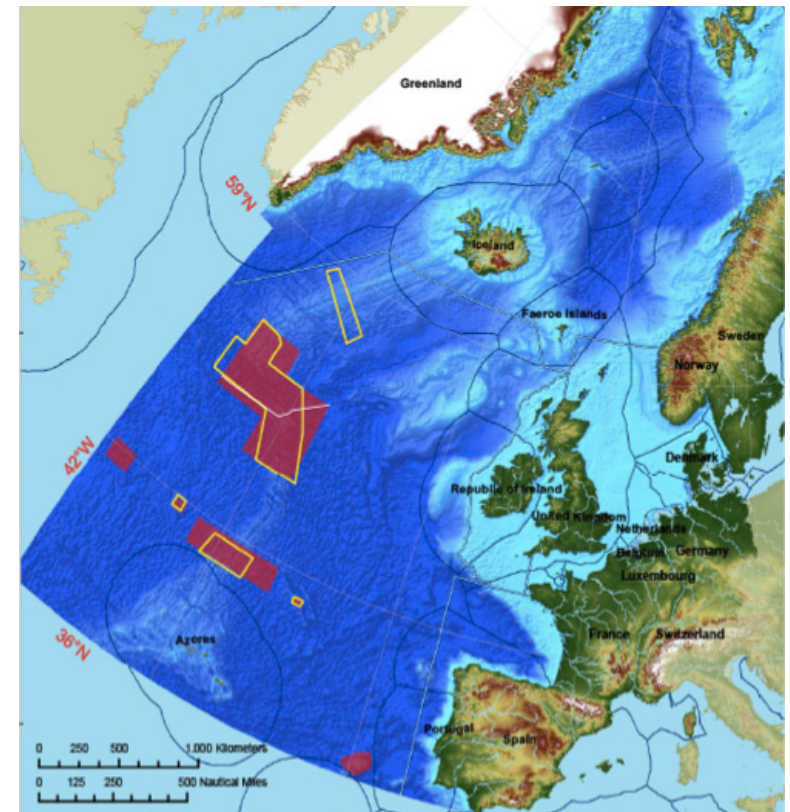
Indian
Ocean

Indian
Ocean

North-East Atlantic - closures

North-East Atlantic Fisheries Commission

- 11 closures (exp. 2017)
- Last added in January 2013



North-East Atlantic – state of play

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- NEAFC is actively debating additional closures (though discussions are currently postponed)
- NEAFCs agenda is focused on improving the overall framework for protection
- Working with OSPAR convention towards a “*Collective Arrangement*” for the collaborative management of selected aspects of biodiversity protection

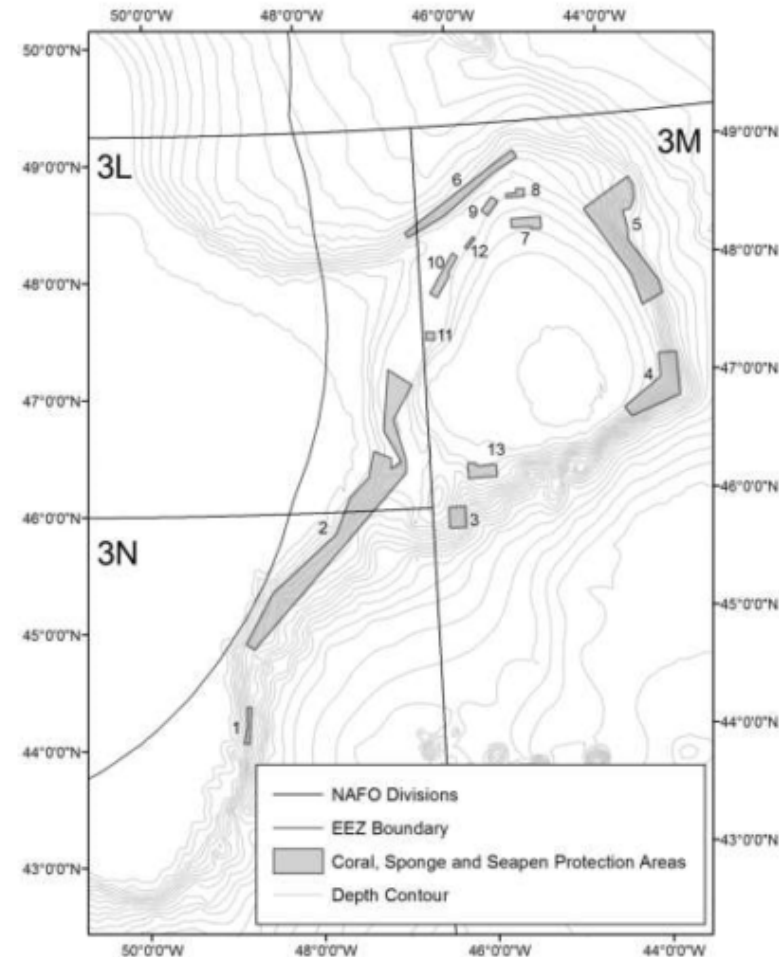
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- International Council for the Exploration of the Sea (ICES) has repeatedly called for expansion/further closures
- Close cooperation with OSPAR, but VME closures do not yet fully match OSPAR MPAs

North-West Atlantic

North Atlantic Fisheries Organisation (NAFO)

- 20 closures (exp. 2020)
- Majority adopted in 2009
- Last adopted in 2013



North-West Atlantic – state of play

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- NAFO currently undertaking comprehensive review of its Conservation and Enforcement Measures
 - Considering making all closures permanent
 - Some existing closures may be enlarged & that new closures may be implemented

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- Research reported by NAFOs Scientific Committee suggests that the actual area of the VMEs is much more extensive than the small areas protected by closures
- Available data indicates VME presence in two additional candidate areas; these have not yet been considered by the annual meeting

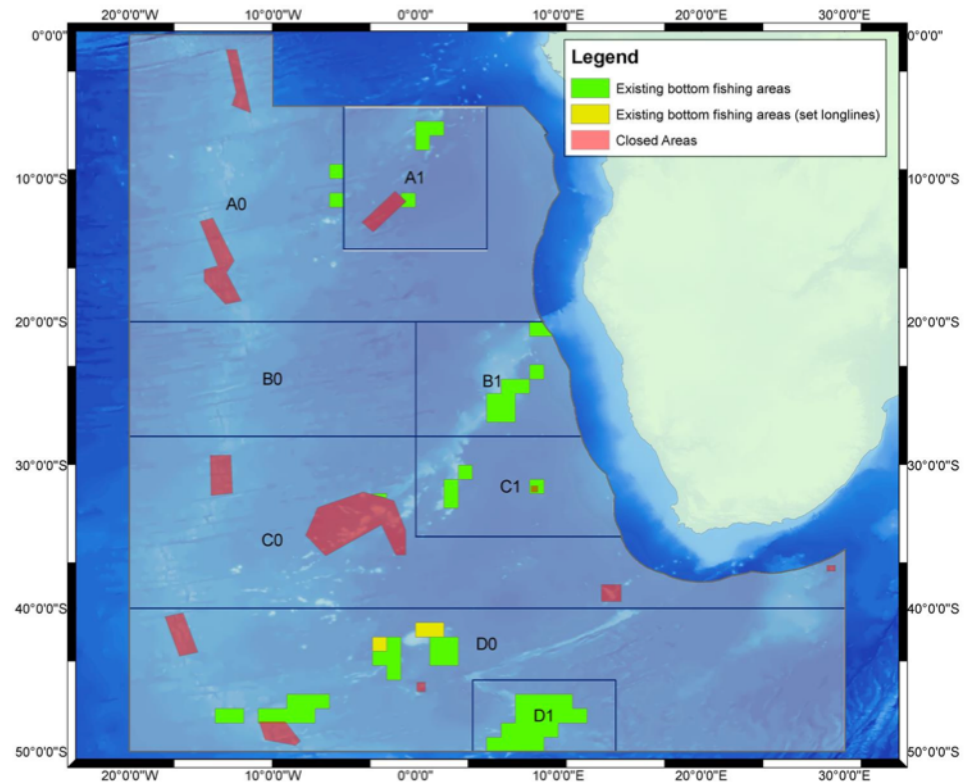
Stop press!

- At its 37th meeting (September 2015), NAFO decided to ban all bottom fishing on seamounts in its regulatory area.
- There are not many seamounts in the NAFO area, nonetheless this ban will protect approximately 10 additional seamounts.
- An impressive decision in the context of RFMOs which have often been slow to implement an ecosystem approach to fisheries.

South-East Atlantic - closures

South East Atlantic Fisheries Organisation (SEAFO)

- 11 closures
- Last updated in 2010



South-East Atlantic – state of play

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- SEAFO has made all existing closures permanent

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- SEAFO reopened several closed areas to bottom fishing in 2010
- Most closures contain seamounts at unfishable depths (greater than 2000m)
- Closures of representative areas of seamounts, whereas UN res. requires closures wherever there are SAs
- Scientific Committee advises that conservation measures should consider any area with topographic feature that rises to within 1000m of the surface: substantial areas of seamounts and ridge systems therefore remain open to bottom fishing in the SEAFO area (under exploratory fishing protocols)

Southern Ocean

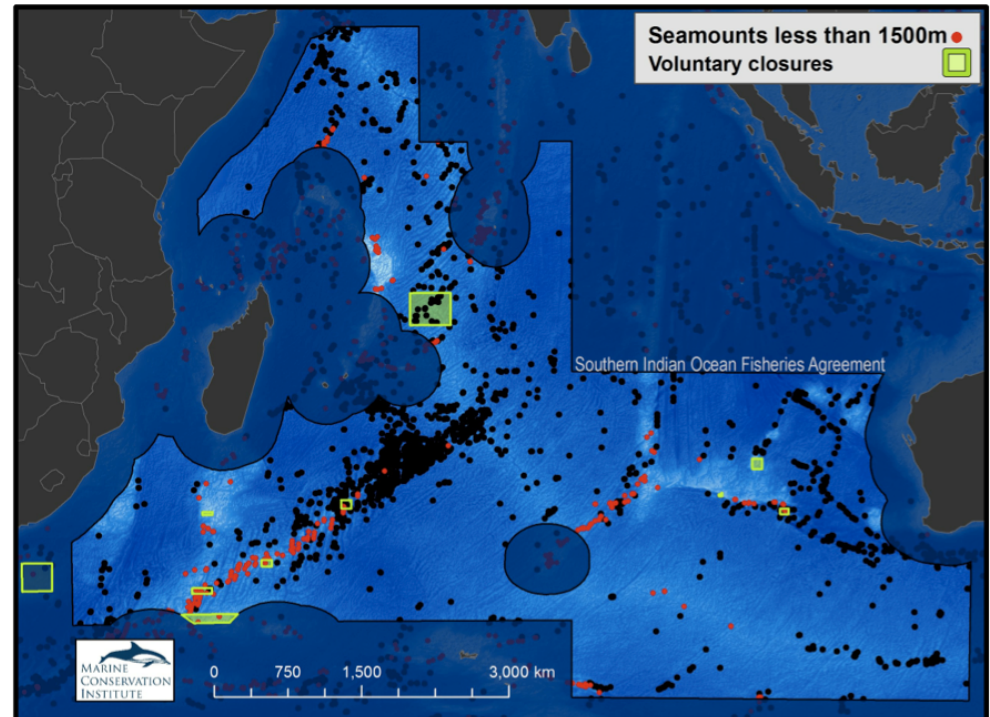
Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

- 1 MPA, discussions ongoing
- Commercial bottom trawling prohibited
- 4 specific VME closures
- VME database



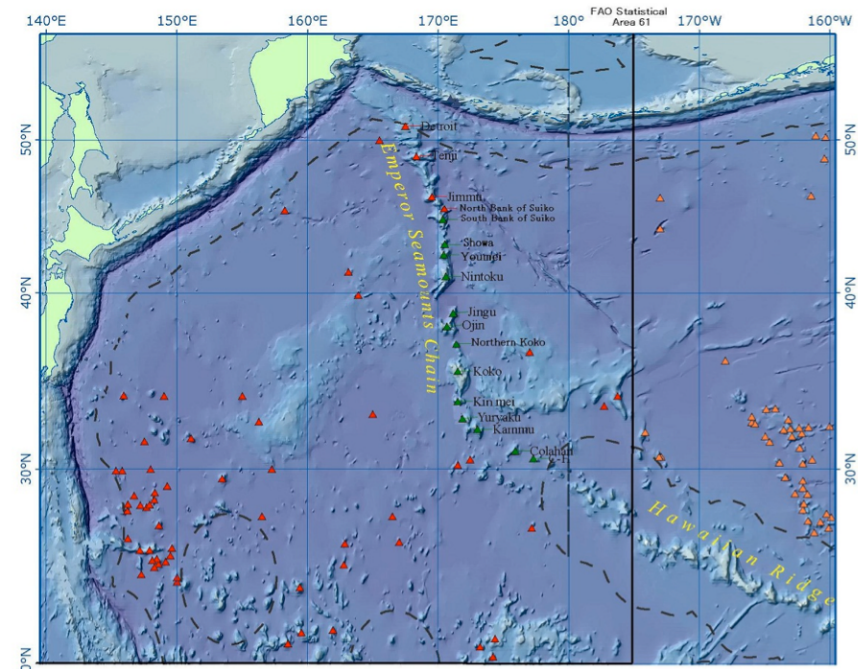
Indian Ocean

- South Indian Ocean Fisheries Agreement (SIOFA) only recently concluded
- No closures have yet been implemented
- 13 voluntary “Benthic Protected Areas” by commercial fishers in region



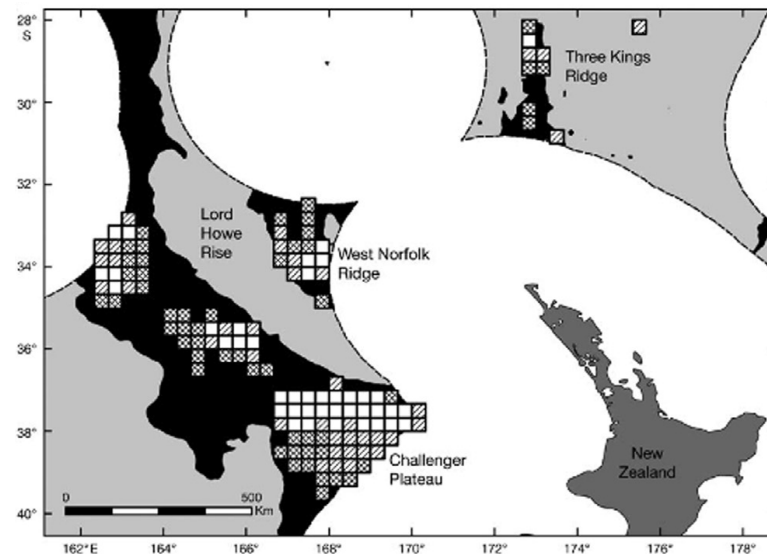
North Pacific

- North Pacific Fisheries Commission not yet a fully functional RFMO
- Currently no VME closures
- Tentative agreement between parties on 1 seamount



South Pacific

- South Pacific Regional Fisheries Management Organisation (SPRFMO) is quite new
- No formal closures established yet
- New Zealand has closed some large fishing blocks to its own vessels



Mediterranean

General Fisheries Commission for the Mediterranean (GFCM)

Closures

- Prohibited the use of towed dredges and trawlnets fisheries at depths beyond 1,000m
- 3 specific fisheries closures

Current state of play:

- GFCM working to achieve ecosystem-based management, though there has been no further discussion specifically regarding protection of VMEs



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