

FAO Workshop on the Global Database for Vulnerable Marine Ecosystems FAO, Rome, Italy – 7-9 May 2014

Session 2: Detailed review of the database

(Factsheets)

VME DB – factsheets

Web view

The screenshot shows a web browser window displaying a factsheet for 'Corner Seamounts'. The page has a blue header with the 'vulnerable marine ecosystems DATABASE' logo and a descriptive paragraph. Below the header, the title 'Corner Seamounts' is displayed with a 'Selected year: 2014' and navigation links for 'Print', 'PDF', 'XML', 'Source', and 'Citation'. A horizontal menu includes 'Description', 'Map', 'Management', 'Regional overview', 'Meeting reports', and 'Media'. The 'Description' tab is active, showing a table of key information on the left and detailed text on the right. The table lists geographical reference, management body, area type, and measure start date. The text on the right covers 'Habitat and Biology', including general biology and physical descriptions, and 'Impacts'. A footer section provides information about the Northwest Atlantic Fisheries Organization (NAFO), including its mission and website links.

vulnerable marine ecosystems DATABASE

Global inventory of fisheries measures adopted in ABNJ to prevent significant adverse impacts of high-seas bottom fisheries on vulnerable marine ecosystems (VMEs) and associated information

Corner Seamounts

Selected year: 2014

Print PDF XML Source Citation

- Description
- Map
- Management
- Regional overview
- Meeting reports
- Media

Geographical reference	Northwest Atlantic
Management Body/Authority	Northwest Atlantic Fisheries Organization (NAFO)
Area Type	VME
Measure first applied in	2007

Habitat and Biology

General Biology
Information was available which suggested fishing on the Corner Seamounts had encountered hard corals, that fixed gear (e.g. Pots) had been used in some areas and was likely lost due to entanglement in corals, although exact locations were not available.

Physical description of the environment
SC 2007: Consists of 19 peaks with some summits being only 800-900 m deep.

Impacts

The shallow peaks have been heavily fished. Spanish fisheries information available in this area between 2005 and March 2007 (SCR Doc. 07/26) showed that one seamount in particular, and western Corner Rise in general, seem to have more species diversity.

Management Body/Authority
Northwest Atlantic Fisheries Organization (NAFO)

The Northwest Atlantic Fisheries Organization's (NAFO) overall objective is to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of its area of competence, and to ensure the long term conservation and sustainable use of the fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources are found.

Web site
<http://www.nafo.int/>

Regional Fishery Body fact sheet
<http://www.fao.org/fishery/rfb/NAFO/en>

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VME DB – factsheets

PDF view

Corner Seamouth Selected years: 2014

Regulatory status
Seamouth 4 (2014)
Seamouth 4 (2014)
Seamouth 4 (2014)
Seamouth 4 (2014)
Seamouth 4 (2014)

Habitat and Biology

Current Status
The current status of the Corner Seamouth is reported to be good. The Corner Seamouth has experienced good results. The fishery is well managed and the fishery is well managed. The fishery is well managed and the fishery is well managed.

Management

Management
The Corner Seamouth is managed under the Corner Seamouth Management Plan. The Corner Seamouth is managed under the Corner Seamouth Management Plan. The Corner Seamouth is managed under the Corner Seamouth Management Plan.

Map



Management

Management
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Management

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Regional history of VMEs

Regional history of VMEs
The regional history of VMEs is a complex one. It involves the interaction of various factors, including the environment, the fishery, and the management of the fishery. The regional history of VMEs is a complex one. It involves the interaction of various factors, including the environment, the fishery, and the management of the fishery.

Development of fishing footprint

Development of fishing footprint
The development of the fishing footprint is a key factor in the regional history of VMEs. It involves the expansion of the fishing area over time, which has led to the depletion of the fishery. The development of the fishing footprint is a key factor in the regional history of VMEs. It involves the expansion of the fishing area over time, which has led to the depletion of the fishery.

Management and Reporting System (MARS)

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A printed factsheet


Header and Footer



vulnerable marine ecosystems
DATABASE

Global inventory of fisheries measures adopted in ABNJ to prevent significant adverse impacts of high-seas bottom fisheries on vulnerable marine ecosystems (VMEs) and associated information

Already discussed

<p>Management Body/Authority Northwest Atlantic Fisheries Organization (NAFO)</p>		<p>Web site http://www.nafo.int/</p>
<p>The Northwest Atlantic Fisheries Organization's (NAFO) overall objective is to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of its area of competence, and to ensure the long term conservation and sustainable use of the fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources are found.</p>		<p>Regional Fishery Body fact sheet http://www.fao.org/fishery/rfb/NAFO/en</p>

OK?

Factsheets : General Information consistency

(note: factsheets are always for a selected year)

VME specific

Region specific

VME specific

Deepwater Fisheries Management
Selected year: 2005

Print | PDF | XML | Source | Citation

Description | Map | **Management** | Regional overview | Meeting reports | Media

Measures specific to this VME area

Recommendation GFCM/2005/1: DEEPWATER FISHERIES 2. The Members of the GFCM shall prohibit the use of towed dredges and trawl nets fisheries at depths beyond 1000 m of depth.

Period in force: 2005 – ...

Source of information
Recommendation GFCM/2005/1 on the management of certain fisheries exploiting demersal and deepwater pelagic
 Commission 2005
See measure

General measures

Fishing areas
Recommendation GFCM/2005/1 on “the management of certain fisheries exploiting demersal and deepwater species” is noted in the pre-amble that this recommendation is primarily aimed at protecting fish stocks from expanding fisheries when their status is unknown, but also notes in the preamble “ RE-AFFIRMING the principles of the FAO Code of Conduct for Responsible Fisheries and recalling the precautionary approach to fisheries management therein and, in particular, in relation to the development of new fisheries;”. The recommendation states for “deepwater fisheries” 2. The Members of the GFCM shall prohibit the use of towed dredges and trawl nets fisheries at depths beyond 1000 m of depth.

Source of information
Recommendation GFCM/2005/1 on the management of certain fisheries exploiting demersal and deepwater pelagic
 Commission 2005
See measure

Is this mix of VME and Region acceptable??

Note: all information is for the selected year

Factsheets : General Usage of space

30% of the screen contains factsheet information – OK?

The screenshot displays the 'vulnerable marine ecosystems DATABASE' website. The main content area is titled 'Deepwater Fisheries Management' and is selected for the year 2005. A red rectangular box highlights the central factsheet information, which is organized into two columns. The left column contains 'Description' with sub-sections: 'Geographical reference' (Mediterranean and Black Sea), 'Management Body/Authority' (General Fisheries Commission for the Mediterranean (GFCM)), 'Area Type' (Other types of closed/restricted area), and 'Measure first applied in 2005'. The right column contains 'Habitat and Biology' with sub-sections: 'General Biology' (Little known), 'Physical description of the environment' (Mud, seamounts, etc; Benthic areas deeper than 1000 m, Total area: approx. 1 700 000 square km), and 'Impacts' (Bottom fishing has not been recorded in this area (2005 information)). Below the factsheet, there is a 'Management Body/Authority' section for the GFCM, a 'Web site' link (http://www.gfcm.org), and a 'Regional Fishery Body fact sheet' link (http://www.fao.org/fishery/rfb/GFCM/en). A 'BETA 1.0' banner is visible in the top right corner of the browser window. At the bottom of the page, there are small text elements: 'Credits', 'powered by FIGS', and '© FAO, 2014'.



General

Print | PDF | XML | Source | Citation

Move to bottom of screen

Selected year: 2014

Can factsheets be scrolled through years without going back to map?

Source of Information

This document is provided and maintained by the "Food and Agriculture Organization of the United Nations (FAO- UN)" under the ownership of "Food and Agriculture Organization of the United Nations (FAO- UN)" and is part of the "VME fact sheets" data collection.

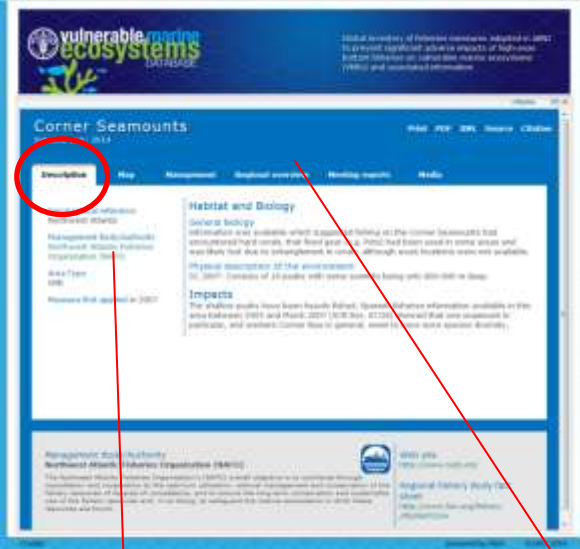
The text does not seem to describe the "Source of information"

Bibliographic citation

[email it](#)

© Food and Agriculture Organization of the United Nations (FAO-UN) 2014.
 Vulnerable Marine Ecosystems 2014. Corner Seamounds. [online]. Rome. Updated . [Cited 2 May 2014].
<http://fiqisapps.fao.org/fishery/vme/23614/176361/en>

This would be a correct citation, but should we encourage users to go to original sources



Description tab

Geographical reference
Northwest Atlantic

Management Body/Authority
Northwest Atlantic Fisheries
Organization (NAFO)

Area Type
VME

Measure first applied in 2007

Habitat and Biology

General Biology

Information was available which suggested fishing on the Corner Seamounts had encountered hard corals, that fixed gear (e.g. Pots) had been used in some areas and was likely lost due to entanglement in corals, although exact locations were not available.

Physical description of the environment

SC 2007: Consists of 19 peaks with some summits being only 800-900 m deep.

Impacts

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Repeat of pop-up

- A general summary of the VME.
- NOT well entered in to VME DB yet

Where has Geoform gone??

Description tab (References)

Habitat and Biology

General Biology

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References

Where reasonable, references should be included in the text, sufficient to find the source.

Description tab

(text preparation and data entry)

Habitat and Biology

General Biology

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Drafting text

- This text may not exist within RBs. It is probably best drafted by a biologist familiar with the area. It could also be drafted by a coordinator at the RB.
- For all historical information, this need only be drafted once
- Is this reasonable and is it likely to happen?

Map tab

Corner Seamounts

Selected year: 2014

Print | PDF | XML | Source | Citation

Description | **Map** | Management | Regional overview | Meeting reports | Media

Main layers

- NPFC example
- VME
- Risk area
- Other types of closed/restricted area

• Placemarks

Base layers

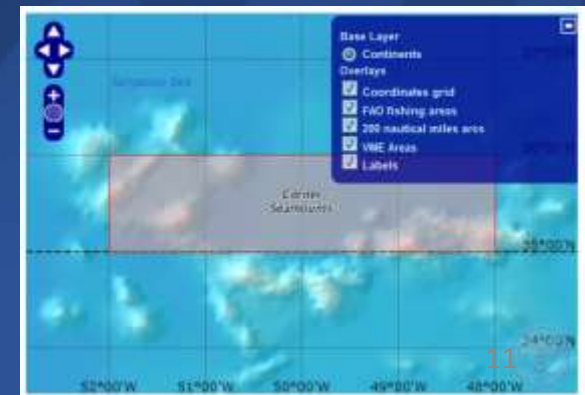
- FAO fishing areas
- 200 nautical miles arcs

Map tips

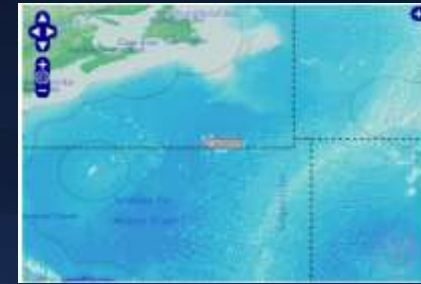
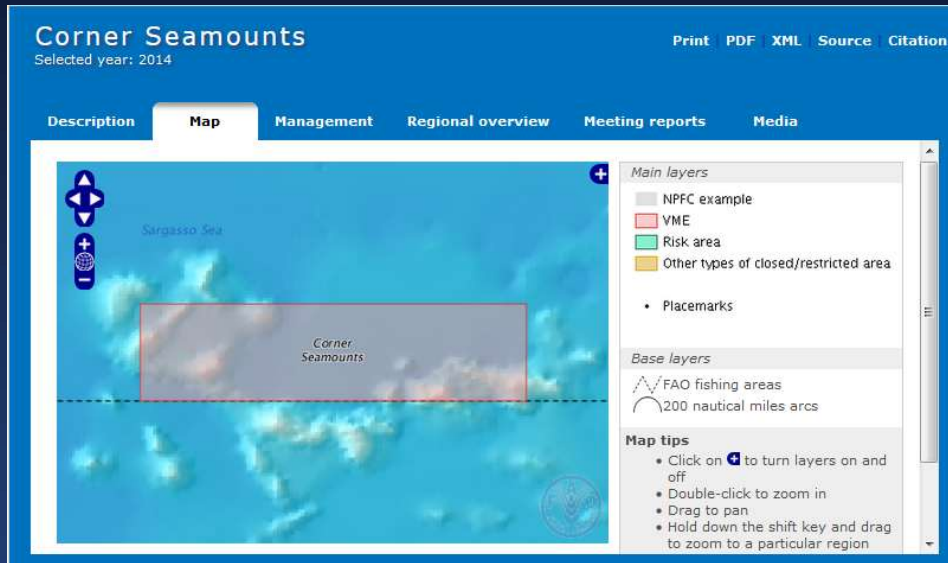
- Click on **+** to turn layers on and off
- Double-click to zoom in
- Drag to pan
- Hold down the shift key and drag to zoom to a particular region

This is a close up of the home page and is useful if the pdf is produced.

This map has a grid – should add to home page?



Map tab



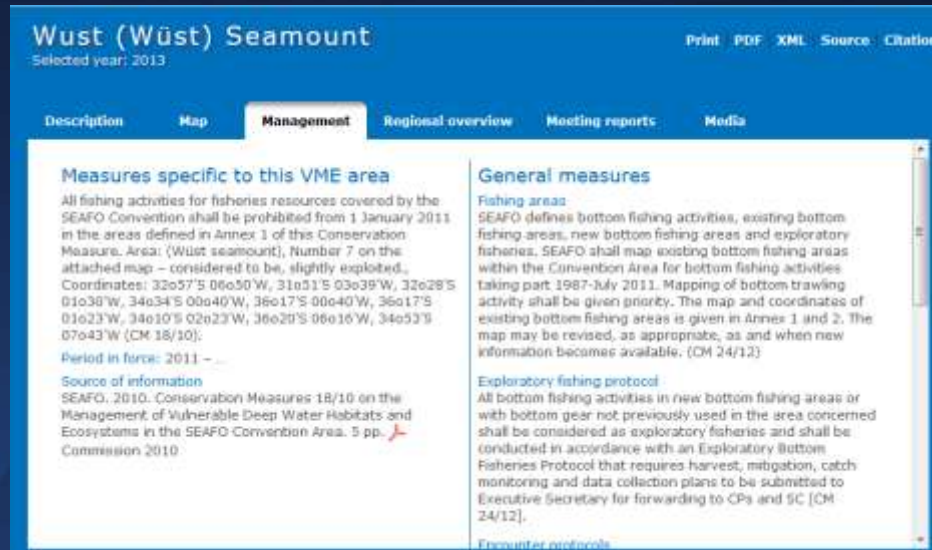
Is this map is over-zoomed?

The pdf uses the “base” map.



Two “+” signs is confusing to some?

Management, Regional Overview, Meeting reports tabs



Until now, and including the left hand column above, the information has been orientated towards single VMEs.

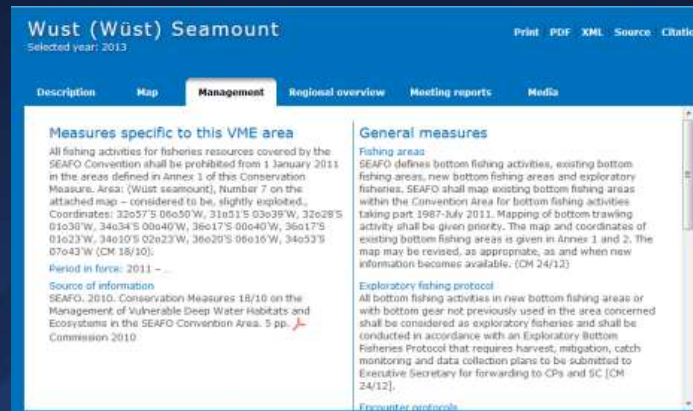
We depart from that , with the right hand column and other tabs, and deal with more general information.

This is the information that makes the VME DB special!

It is also information that is harder to get in to a database format.

[This part of the database was designed around a “NAFO” model. This works well in most cases, though some adjustments needed for some regions.]

Management tab



OBJECTIVE OF MANAGEMENT TAB

To bring to users the management measures that apply to VMEs within and between regions from 2006 onwards.

PLAN OF WORK

Firstly, we will look at details of what is currently under this tab

Secondly, we will step back and see if we are achieving our objective for this tab


Management tab – specific to this VME area

Measures specific to this VME area

All fishing activities for fisheries resources covered by the SEAFO Convention shall be prohibited from 1 January 2011 in the areas defined in Annex 1 of this Conservation Measure. Area: (Wüst seamount), Number 7 on the attached map – considered to be, slightly exploited., Coordinates: 32o57'S 06o50'W, 31o51'S 03o39'W, 32o28'S 01o30'W, 34o34'S 00o40'W, 36o17'S 00o40'W, 36o17'S 01o23'W, 34o10'S 02o23'W, 36o20'S 06o16'W, 34o53'S 07o43'W (CM 18/10).

Period in force: 2011 – ...

Source of information

SEAFO. 2010. Conservation Measures 18/10 on the Management of Vulnerable Deep Water Habitats and Ecosystems in the SEAFO Convention Area. 5 pp.  Commission 2010

Remove “VME”

A single measure usually applies to several VMEs. Each RB needs to decide how to apportion the measures to “Specific measures” and “general” measures. Generally the VME measures go in the specific measures and those dealing with bottom fishing go in the general measures. But note that annual amendments to specific measures need to be updated for each VME, whereas general measures apply to the region and are updated in only one place. It may be better to simply write “see General measures” here. CCAMLR is an example of this where they have some 100 VMEs and risk areas.


Management tab – specific to this VME area

Measures specific to this VME area

All fishing activities for fisheries resources covered by the SEAFO Convention shall be prohibited from 1 January 2011 in the areas defined in Annex 1 of this Conservation Measure. Area: (Wüst seamount), Number 7 on the attached map – considered to be, slightly exploited., Coordinates: 32°57'S 06°50'W, 31°51'S 03°39'W, 32°28'S 01°30'W, 34°34'S 00°40'W, 36°17'S 00°40'W, 36°17'S 01°23'W, 34°10'S 02°23'W, 36°20'S 06°16'W, 34°53'S 07°43'W (CM 18/10).

Period in force: 2011 – ...

Source of information

SEAFO. 2010. Conservation Measures 18/10 on the Management of Vulnerable Deep Water Habitats and Ecosystems in the SEAFO Convention Area. 5 pp.  Commission 2010

Like all the measure entries, there is a balance to be found between (1) simply inserting a link to the measure or (2) quoting the full text of the measure. Bear in mind that the purpose of the VME DB is to help users find information.

My own preference is to provide a very brief summary, using as much original text as possible. But it should read more like a “title” than text. Readers must not mistake it for the measure!

The source of the information is given below the text and is directly linkable via the pdf button.

Comments?

Specific measures entered under VME table

General measures entered under own table

Information on the general measures is divided into 5 categories

Vulnerable Marine Ecosystem

VME Specific Measures Section 3 of 4

Year

Validity Period

Validity Period - Start

End date, leave empty if not applicable

Validity Period - End

VME Specific Measure Summary

Source Of Information

General Measure

Authority

Information Sources

Year

RFB Fishing Areas

Exploratory Fishing Protocols

VME Encounter

VME Indicator Species

VME Threshold

Validity Period

Validity Period - Start

End date, leave empty if not applicable

Validity Period - End

Single entry

Multiple entries

Management tab – General measures

General measures

Fishing areas

SEAFO defines bottom fishing activities, existing bottom fishing areas, new bottom fishing areas and exploratory fisheries. SEAFO shall map existing bottom fishing areas within the Convention Area for bottom fishing activities taking part 1987-July 2011. Mapping of bottom trawling activity shall be given priority. The map and coordinates of existing bottom fishing areas is given in Annex 1 and 2. The map may be revised, as appropriate, as and when new information becomes available. (CM 24/12)


Exploratory fishing protocol

All bottom fishing activities in new bottom fishing areas or with bottom gear not previously used in the area concerned shall be considered as exploratory fisheries and shall be conducted in accordance with an Exploratory Bottom Fisheries Protocol that requires harvest, mitigation, catch monitoring and data collection plans to be submitted to Executive Secretary for forwarding to CPs and SC [CM 24/12].

Indicator species

VME indicator organisms, i.e. coral and sponge [Annex 6.3.1, CM 24-12]. Indicator species of coral identified as antipatharians, gorgonians, cerianthid anemone fields, lophelia, and sea pen fields or other VME elements [Annex 6.1, CM 24/12]

Source of information

SEAFO. 2012. Conservation Measure 24/12: on Bottom Fishing Activities in the SEAFO Convention Area 14 pp. 
Commission 2012

Encounter protocols

Actions from encounters above threshold depend on the gear deployed. All are reported to Executive Secretary and vessels are required to cease fishing and move 2 nmiles. An interim closure or 2 nmile radius is also implemented in New fishing areas. [Annex 6.1-3, CM 24/12].

Threshold

Separate thresholds set for trawls, longlines and pots (Trawl tow – more than 600 kg of live sponges and/or 60 kg of live coral in existing fishing areas and more than 400 kg of live sponges and/or 60 kg of live coral in new fishing areas. Longline set – at least 10 VME-indicator units (1 unit = 1kg or 1 litre of live coral and/or live sponge) in one 1200m section of line or 1000 hooks, whichever is the shorter, in both existing and new fishing areas; Pot set – at least 10 VME-indicator units (1 unit = 1kg or 1 litre of live coral and/or live sponge) in one 1200m section of line in both existing and new fishing areas.) [Annex 6.4, CM 24/12]

Same format as specific measures except these are region wide and entries are under five categories plus source.

We can have multiple “sources of information” but we are confined to the five categories

Linking to Documents (requires thought)


Before stepping back, let's talk about linking.

Currently, we have a reference in “[...]” e.g.

[Annex 6.4, CM 24/12]

And a source

Source of information

SEAFO. 2012. Conservation Measure 24/12: on Bottom Fishing Activities in the SEAFO Convention Area 14 pp. 
Commission 2012

Click on  and we get



i.e. 14 pages to search for Annex 6.4.

Is there a better way to link??

Management tab

Stepping back (requires thought)

IS THIS THE BEST WAY?

- Should we split specific and general measures like this?
- Are 5 categories OK for General measures?
- Information displayed as:
 - Link only
 - Summary text
 - Full text

Regional Overview tab

The objective of the regional overview is to briefly present the history of the development of VMEs and of Fishing Areas. The read should be able to get an idea as to what the RB has done from start – present.

Actually, two models are provided as examples to discuss.

- SEAFO looks at the changes year-by-year This is not really what is intended here and may be better placed in the meeting summaries)
- NEAFC provides a full history each time.

Regional Overview tabs SEAFO – annual summaries (example from 2010)

Regional history of VMEs

In 2010, SC undertook an extensive review of the areas closed to fishing for the 2007-2010 period to protect vulnerable marine ecosystems (Commission Report 2010, p. 59-72; SC Report 2009, p. 7-21). Based on the information available, and an interpretation of the requirements of UNGA Res. 61/105 and the associated FAO DSF Guidelines, the closed areas were revised with some areas made open to fishing, some areas having boundary changes, and some new areas closed along the MAR [CM 18/10]. There are now a total of 11 closures (Commission Report, para 8.8.5, p. 4)

Development of fishing footprint

The Commission requests that the development of the fishing footprint is to proceed using data from EU and Namibia that was in the required format (Commission report 2010, para 8.5, p.4) according to criteria given in 2009 (Commission 2009 report, para. 10.4, p. 5) following measure CM 12/08 requesting such information.

Regional Overviews – NEAFC (full history)

Regional history of VMEs

NEAFC have been active in establishing closed areas to protect vulnerable marine ecosystems. Reference to cold-water corals and seamounts was first raised at the 2003 Annual Meeting by the NGO “Seas at Risk” during an observer statement. A request for scientific advice was forwarded to ICES the same year to provide information on habitats vulnerable to fishing activities. At the 2004 Annual Meeting, NEAFC closed five areas to protect VMEs for a period of three years whilst more information was collected. Since then, there has been an active dialogue between NEAFC and ICES (particularly through the work of WG DEC) regarding VMEs. NEAFC have, since 2008, added new VMEs and modified the boundaries of existing VMEs, normally to add areas to protect newly discovered VMEs around the edges of existing VMEs. In 2014, NEAFC have a total of 12 benthic areas protected from significant impacts of bottom fishing.

Development of fishing footprint

NEAFC undertook three general processes in order to respond to UNGA Resolution 61/105: (1) Limiting deep-sea fishing effort to current levels or to a percentage of current levels. This has followed a decreasing trend at in 2014 (Rec 2014:3) the effort was not to exceed 65% of the highest level in previous years, (2) To develop and undertake better assessment techniques on data poor stocks; and (3) to map existing bottom fishing areas defined as “initially means areas where VMS data and/or other available geo-reference data indicating bottom fishing activities have been conducted at least in two years within a reference period of 1987 to 2007.” by 1 September 2008 (Rec 2008-16). The first map was produced in 2008 (Rec 2009-13), and was modified twice in 2010 (Rec 2010-pv, Rec 2010-11). The existing bottom fishing areas are subject to various management measures, including the effort restrictions given above, and various closures (eg VME closures and the Haddock box).

Regional Overviews - comments

1. Do you prefer the full summaries or just the annual summary?
2. Extend title by adding “measures”: Is this better “Regional history of VMEs measures”?
3. Would this summary be updated each year as new measures are adopted? Yes, providing there was something new to add.

Meeting Reports

Objective: To allow users to quickly find discussions and decisions on VMEs made by RB during their meetings. At present, only meetings of the primary bodies are included (i.e. Fisheries Commission and Scientific Council)

Meeting Reports

The main issue with meeting reports is that they do not link with individual VMEs. This would likely be a lot of work.

Further, many decisions are aimed collectively at all VMEs or at Deep-sea fisheries measures.

Meeting reports are only included if they mention VMEs or related DSF measures

The meeting reports for the selected and previous year are displayed

Meeting Reports

Contain basic bibliographic information plus summary plus link. The [...] refer to agenda numbers in the report.

e.g. [SPRFMO 1st Scientific Committee meeting](#)

The Deepwater WG will conduct stock assessments of deepwater species and the bycatch issues will be dealt with by SC. Impact of fishing activities on ecologically or biologically significant marine areas (EBSAs) and on vulnerable marine ecosystems (VMEs) [8.1], benthic protection including spatial management and move-on rules [8.2], and demersal fished areas [8.3] were discussed. Data collection and observer coverage was discussed in relation to bycatch [11]. The FAO presented the GEF funded ABNJ DSF project [13].

Meeting Reports - comments

1. Maybe a reference to the document where the decision to implement a particular measure could be found would be helpful.
2. Perhaps further links required to evidence base for the area being important for VMEs - e.g. science papers/reports etc
3. I would suggest to try to make some links to the evidence bases that were used in identifying the area as important for VMEs - e.g. scientific publications/cruise reports/industry reports/ICES WGDEC reports etc.

Answer

It's more a question of input time. (1) is normally done at the annual meeting prior to the implementation of the measure and could be easily found. (2) and (3) move out of the main reports and into working group reports. These could be sourced through the relevant FC/SC reports.

Comments?

Meeting Reports - comments

Not sure if the formatting of the short abstract of each meeting/decision could be improved. The text looks to run on a lot and makes it hard to read

Answer

Agree. At present, the texts are all unformatted in the factsheets.

Comments?

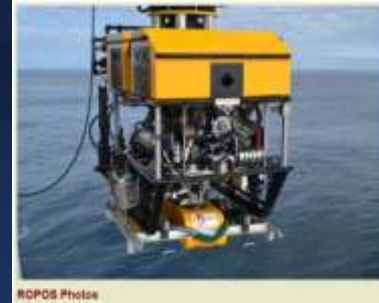
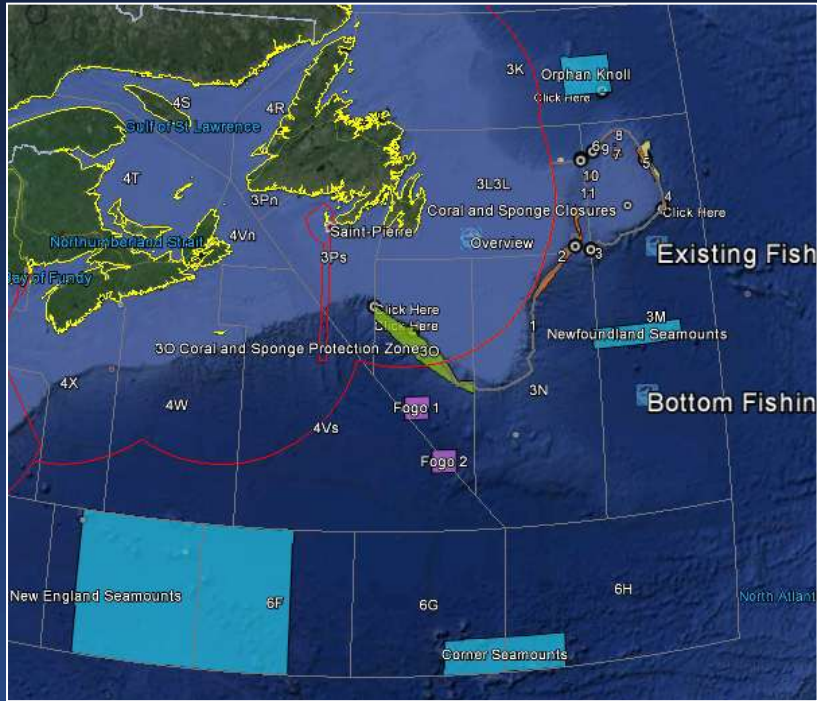
Media tab

Comments

Nice idea. It would be good to include licence information so that the proper people get credited not viewed here you could show any images of the types of VMEs found in the area, e.g. sponges, corals etc.

Pictures of VME (list of species) would be nice at this place, so that we could see what is protected

Media – NAFO VME Map



Credits to Ellen Kenchington, Neil Campbell, and team, NAFO