

2nd Meeting of the Scientific Committee

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SC-02-21

FAO Global database and mapping application for Vulnerable Marine Ecosystems (VME Database)

Secretariat

Introduction

In 2006, the United Nations General Assembly adopted UNGA Res. 61/105, which set time-bound actions necessary for States and Regional Fisheries Management Organizations /Arrangements (RFMO/As) to understand and prevent significant adverse impacts of bottom fisheries in areas beyond national jurisdiction on Vulnerable Marine Ecosystems (VMEs). UNGA Res. 61/105 invited FAO to develop a VME database and encouraged FAO to develop technical guidelines to assist States and RFMO/As. A VME Database addresses the need for sharing the widely distributed information on the various measures already developed to protect vulnerable benthic ecosystems. It will also serve to facilitate best practices and the further development of measures, and to demonstrate that responsible action has been taken by the fisheries sector.

The first *FAO Workshop on the Global Database for Vulnerable Marine Ecosystems* was held in Rome, Italy, during 7-9 December 2011. The SPRFMO was represented at this initial workshop by the Interim Data Manager (Susie Iball). During 2012 and 2013 FAO produced a Beta version of the VME Database. In early 2014, an online Beta 1 version was shared with various RFMO/As for data input, validation and feedback.

A second workshop on this subject was held in Rome, Italy, during 7–9 May 2014. This workshop was organized and funded by FAO through a suite of projects supported by France, Norway and Japan, in support of the implementation of the deep-sea guidelines.

The SPRFMO was represented by Craig Loveridge (SPRFMO Data Manager). This paper summarises workshop outputs. In particular, the Scientific Committee is requested to make a recommendation regarding the inclusion of the SPRFMO bottom fishing footprint into the VME Database which is a public facing application.

Description of the VME database

The VME database is an online data structure that allows information access (including shapefiles) through a mapping interface and associated “factsheets”. It is expected that the VME Database will be released publically prior to the 2nd SC meeting – thus there will have been some opportunity for participants to become familiar with the application.

The VME database can be used to display areas which have been closed to fishing in order to protect VMEs from significant adverse impacts. The VME database contains various layers, including footprints, defined VME areas, areas with special measures, RFMO/A areas, FAO statistical areas, and GEBCO undersea features, all of which can be hidden or displayed. The factsheets are associated with RFMO/As, bottom fishing footprints, delineated VME closed areas, and contain general descriptions, closure dates, management measures and links to other important documents. The VME Database also has a feature which enables users to select the year of interest from 2006 to present in order to see how VME area protection has evolved through time.

Workshop Summary

The workshop was organized in response to the need for implementation and development of a Global Database for Vulnerable Marine Ecosystems (VMEs). The main objectives of the workshop were to:

- review the functionality of the Beta 1 version and submitted information,
- develop a plan with regional bodies that have management responsibilities for deep-sea species to finalize and release the VME DataBase,
- identify future needs and plans for future developments.

The regional bodies with deep-sea species responsibilities that were represented at the workshop included CCAMLR, GFCM, NAFO, NEAFC, NPFC (interim), SEAFO, and SPRFMO. Various other independent experts were also present in their personal capacity.

The workshop was divided into five sessions:

1. Introduction to VME DataBase and a possible future “Portal”;
2. Reviews and detailed discussions,
3. Regional input, approval and information,
4. Conclusions and list of actions, and
5. Policies and future priorities.

The key outputs were:

FAO will develop a “Portal” that would include sections about the VME database, its key concepts and key background information. The Portal would also have links to species-identification guides, partners, and the VME DataBase itself. Portal services should include options to download shape files, a publications and references page, contacts, help and a comments area.

Furthermore participants agreed to improve the map interface, add some additional layers and separate the factsheet pop-ups into RFMO/As and individual closures categories.

The process for uploading content, proofing and defining appropriate access rights was also discussed and will continue to be developed.

The deep-sea RFMO/As that attended the workshop agreed to review their information by 1 September 2014. The SPRFMO Data manager has completed this review (refer following section). FAO agreed to implement some high priority VME database changes, and aims to publish the VME Database by 15 September 2014.

SPRFMO Scientific Committee Considerations

The VME Database is a public facing application that will be housed on FAO controlled servers. The Secretariat Data Manager has reviewed the SPRFMO-related information which is already included in the database. Currently, this information consists exclusively of an overview of the SPRFMO, references for approximately a dozen meeting reports/papers (to be found on the SPRFMO website) and a description of the following SPRFMO measures that help prevent or mitigate significant adverse impact on VMEs:

- 2007 Interim Measures for Bottom Fishing;
- 2009 Interim Measures for Deepwater Gillnets;
- CMM 1.02 – Gillnets in the SPRFMO and;
- CMM 2.03 – Bottom Fishing in the SPRMO Area.

It is anticipated that keeping the VME Database current would require around 1.5 days of work per year.

Once SPRFMO defines VMEs, it is expected that they will also be included in the FAO VME database. However, the bottom fishing footprint(s) referenced in CMM 2.03 are not currently included in the VME Database and a decision by the Organisation in this regard has not been taken.

CMM 2.03 Para 6 defines the term '*bottom fishing footprint*' as a map of the spatial extent and distribution of historical bottom fishing in the Convention Area of all vessels flagged to a particular Member or CNCP over the period 1 January 2002 to 31 December 2006.

Four Members have submitted their *bottom fishing footprints* to the Secretariat - Australia, Chile, Korea and New Zealand. The Secretariat is aware that parts of these *bottom fishing footprints* are derived from the activities of individual vessels and there may be other confidentiality concerns. Whilst the Secretariat has previously produced an image of a Joint Trawl Footprint (refer SWG-10-INF-10), it would like guidance from the SC as to what would be an appropriate submission for the FAO VME Database.

The Secretariat would like to propose that the SC considers making a recommendation to the Commission regarding the submission of SPRFMO footprint information to the FAO Global VME database, including the level of aggregation.