

New information regarding vulnerable habitats in the NEAFC Regulatory Area

Advice summary

ICES advises no additions to or extensions of the existing closed areas to protect vulnerable marine ecosystems (VMEs) in the NEAFC Regulatory Area are warranted at this time.

Further records of VME indicators were obtained inside and around the Haddock Box on the Rockall Bank. Assuming that the Haddock Box remains closed, ICES does not consider that any changes are needed to the boundaries of NEAFC bottom-fishing closures in this area.

Request

NEAFC requests ICES to continue to provide all available new information on distribution of vulnerable habitats in the NEAFC Convention Area and fisheries activities in and in the vicinity of such habitats, and provide advice relevant to the Regulatory Area and the above mentioned objectives.

Elaboration on the advice

There were no new VME data provided within the Northwest and Southwest Rockall closure areas on the Rockall Bank. However 19 records of VME indicators were obtained inside and around the Haddock Box on the Rockall Bank. One trawl survey station recorded 140 seapen observations. This station was outside the Haddock Box.

The VME closures on the eastern side of Rockall Bank were generally well observed, although there is some suggestion of trawling and vessels with no gear type registered operating within the Haddock Box. Vessels registered as using static gears work outside this area. To the south of Rockall Bank, trawling is now confined to the NEAFC existing bottom-fishing area while static gears continue to be used across the Bank.

Hatton Bank has ten additional VME habitat records—all within the existing boundaries—and no extensions are required.

The closures to the northern side of Hatton Bank are generally well observed. A small number of bottom trawl tows appear to extend into the closed area at the easternmost part of the existing bottom fishing area, however these incursions are limited. There was little evidence of vessels using static bottom contact gears, or activity of vessels without a registered gear type, in this area. Closures on the western side of the Bank are also well observed.

In 2018, ICES received a single additional historical VME indicator record from the Reykjanes Ridge.

As in previous years, the pattern of activity around the Reykjanes Ridge is uncertain. A high proportion of this activity takes place in waters over 3000 m in depth—too deep to represent bottom-fishing activity—and is believed to be vessels targeting midwater redfish being miscoded in the database. One potential area of actual bottom fishing occurs to the southeast of the Mid-Atlantic Ridge in depths of around 1300–1500 m.

Suggestions

In its quality check, ICES observed that 25% of 2017 NEAFC VMS data supplied have a polling frequency greater than one hour which limits the ability to accurately determine the location of fishing activity in relation to fisheries closures. In addition, ICES uses an algorithm based on vessel speed to determine if a vessel is fishing or not—this leads to assumptions of fishing when a vessel may only be steaming slowly. ICES notes that NAFO is moving towards a mandatory reporting frequency for VMS of at least once per hour and also requiring the reporting of the start and end points of tows. NEAFC may wish to consider upgrading its VMS supply requirements in a similar way, in order to allow ICES to provide more precise information.

The inclusion of VME indicators is considered to aid in the detection and representation of VME habitats. WGDEC use VME indicators to calculate a vulnerability index. The classification method is used to partition grid rectangles (c-squares) into

the three vulnerability classes (low, medium, and high). More refinement/testing of classification methods is required before the VME vulnerability index classes are finalized and used to assess the likelihood of VME occurrence.

The systemic issues with gear coding of vessels trawling for redfish in midwater over the Reykjanes Ridge continue within the NEAFC VMS data. ICES recommends that the gear coding of VMS data be improved.

Basis of the advice

Results and conclusions

VME Indicators

New records of VME indicators outside the Haddock Box have been added to the ICES VME database (Figure 1). There are 11 new records of stony corals, sponges, and sea pens outside both the existing VME closures and the Haddock Box. However, at this time no modification is recommended. ICES noted that there are singular new occurrences of stony corals and sponges and multiple occurrences of seapens.

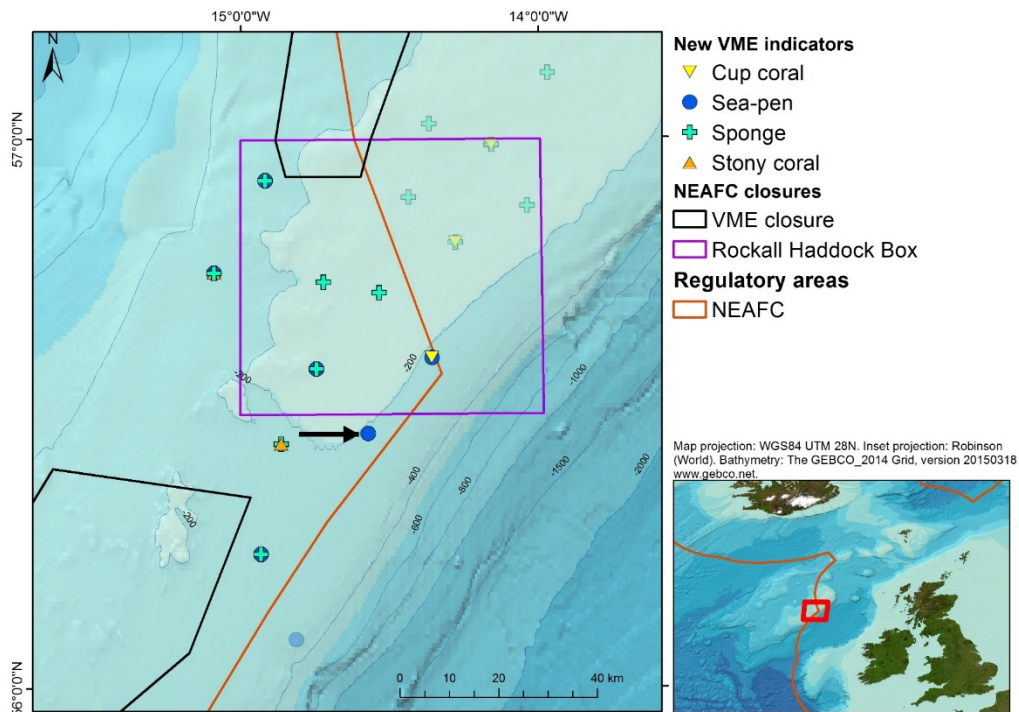


Figure 1 New VME indicator records submitted for WGDEC 2018 on Rockall Bank within the NEAFC Regulatory Area (new records outside the NEAFC Regulatory Area are displayed as transparent). A research trawl survey station which collected 140 seapens is indicated with an arrow.

Historical records of VMEs in Hatton Bank and Reykjanes Ridge have been added to the ICES VME database (Figure 2).

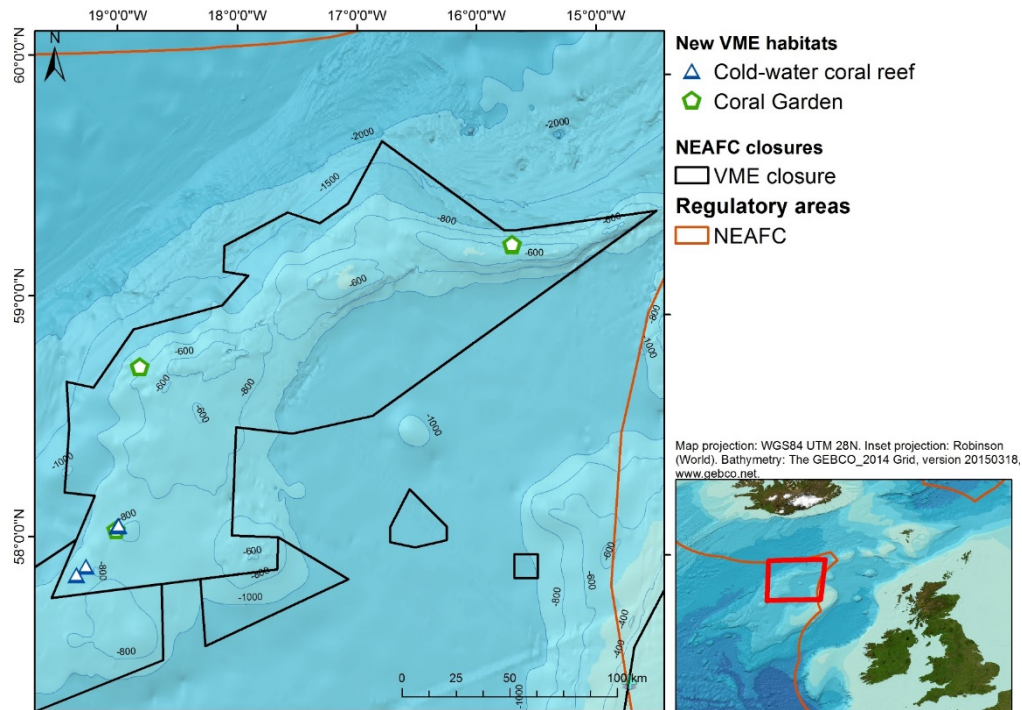


Figure 2 New VME records submitted to the VME database ('historical' data) for WGDEC 2018 on Hatton Bank within the NEAFC Regulatory Area.

Fishing activities in and near NEAFC closed areas

ICES plotted bottom-trawl fishing tracks, based on VMS data received in and near the Rockall Bank (Figure 3) and Hatton Bank (Figure 4) closures. There were no records of such fishing near other closures. There were relatively minor infringements into the Hatton Bank and Rockall Bank closures. Some trawling still occurs in the northwestern part of the Haddock Box and outside the fishing areas southwest of Rockall.



Figure 3 Bottom-trawl fishing tracks, based on VMS data received in and near the Rockall Bank closure.

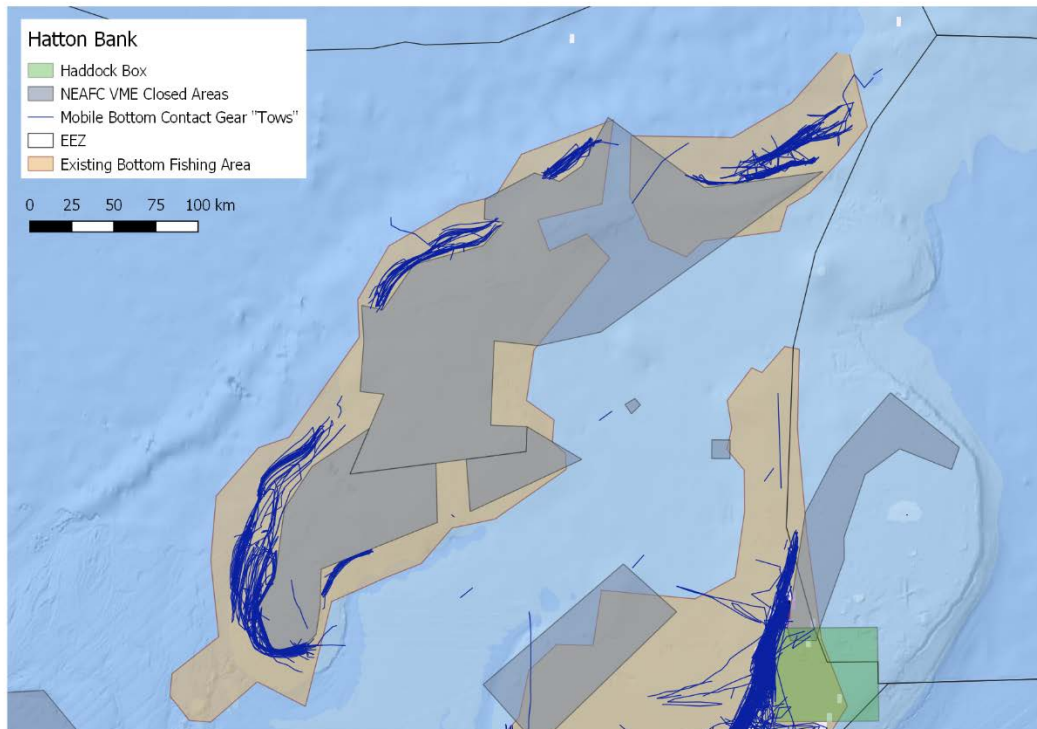


Figure 4 Bottom-trawl fishing tracks, based on VMS data received in and near Hatton Bank closures.

Sources and references

ICES. 2018. Report of the ICES/NAFO Joint Working Group on Deep-water Ecology (WGDEC), 5–9 March 2018, Dartmouth, Nova Scotia, Canada. ICES CM 2018/ACOM:26. 126 pp.

ICES. 2018. Report of the Working Group on Spatial Fisheries Data (WGSFD), 11–15 June 2018, Aberdeen, UK. ICES CM 2018/HAPISG:16.