



## Halting and reversing biodiversity loss in the deep sea

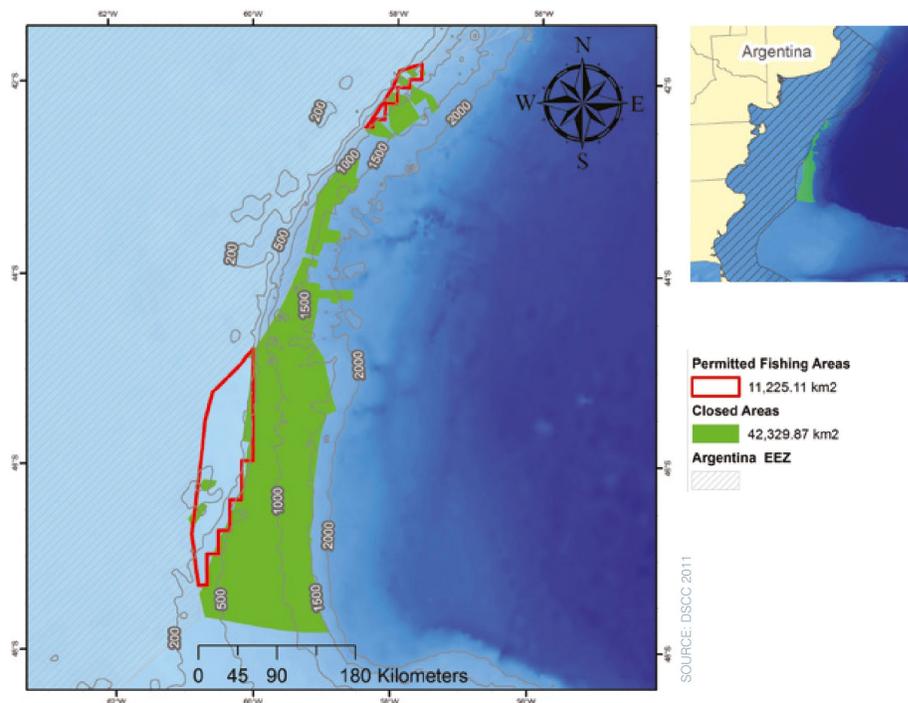
A critique of compliance by high seas fishing nations and RFMOs with global environmental commitments – October 2020

**Authors:** Susanna Fuller, Duncan Currie, Matthew Gianni, Lyn Goldsworthy, Cassandra Rigby, Kathryn Schleit, Colin Simpfendorfer, Les Watling, Barry Weeber.

# ANNEX A, SECTION 5: Detailed review of actions taken in the Southwest Atlantic and other non-RFMO areas

## Southwest Atlantic

No RFMO or other multilateral interim measures have been established to regulate the high seas bottom fisheries of the Southwest Atlantic, nor are any negotiations currently underway to establish an RFMO in the region.



**Figure A5: Map of EU/Spanish bottom fishery in the Southwest Atlantic**

**Contracting Parties:** Not applicable

## Description of high seas bottom fisheries

### Main high seas bottom fishing nations, number of vessels

The main high seas bottom fisheries are the bottom trawl fisheries for hake and squid along portions of the Patagonian shelf and upper slope in international waters. Bottom trawlers and longliners from China and Korea also catch hake, Patagonian toothfish and other demersal species in deeper waters.

The exact numbers and flags of vessels bottom fishing on the high seas of the Southwest Atlantic remain unknown. In November 2019, the Greenpeace vessel *Esperanza* conducted documentation work in the high seas area adjacent to the EEZ of Argentina, some 500km east of the Gulf of San Jorge, revealing the presence of Spanish, Chinese and Korean vessels engaged in bottom fishing in the area. Between 11 and 25 November, the *Esperanza* came across 16 trawlers flagged to China, and Greenpeace campaigners conducted interviews with seven captains aboard the vessels. The interviews confirm that some of these vessels engage in bottom fishing and, in addition to squid, several catch demersal species such as hake, Antarctic icefish, Patagonian toothfish, redfish, and skates, amongst others.<sup>1</sup>

On 12 November 2019, the *Esperanza* came across a bottom longliner flagged to Korea, the *Meridian 8*, which was documented fishing Patagonian toothfish.<sup>2</sup>

A significant unregulated Patagonian toothfish fishery may be taking place in the high seas of the Southwest Atlantic. The *Global Atlas of AIS-based fishing activity - Challenges and opportunities*, recently published by FAO, identifies substantial fishing activity in the high seas east-south-east of the Malvinas, which it believes "is likely to be mostly for Patagonian toothfish longlining using set longlines."<sup>3</sup>

### Main high seas bottom fisheries (catch)

Current catch is unknown.

### Bycatch (species, bycatch, status, rarity)

In 2006, FAO reported a high seas bottom catch of well over 100,000 tonnes. No further information has been available since then.<sup>4</sup>

## Implementation of measures to protect VMEs from SAls and ensure the long-term sustainability of deep-sea fish stocks

In July 2008, the EU adopted Council Regulation (EC) No 734/2008, a framework regulation for the management of high seas bottom fisheries by EU vessels operating in areas of the

high seas where no RFMO exists, and where no multilaterally agreed interim measures have been established – including in the Southwest Atlantic.<sup>5</sup> The EU adopted the regulation to implement the key provisions of UNGA Resolution 61/105 for areas of the high seas where no RFMO exists or is under negotiation, pursuant to paragraph 86 of the resolution. The DSCC is not aware of any measures adopted by other flag States whose vessels engage in high seas bottom fisheries in the region. To implement the EU regulation, Spain initially designated a “fisheries footprint”, or area where Spanish vessels were permitted to fish, but restricted this to the area of continental shelf and slope on the high seas between 42 and 48 degrees south latitude.

## Impact assessments

The Spanish Instituto Español de Oceanografía (IEO) conducted a series of research surveys between 2007 and 2010 to identify VMEs on the high seas of the Southwest Atlantic in the area where Spanish vessels had historically operated, and prepared a comprehensive assessment regarding the potential impact of Spain’s bottom trawl fisheries in the region.<sup>6</sup> Amongst the findings of the impact assessment were the following:

*The study of benthic deep communities in the area revealed the existence of a highly diverse fauna, with dominance of the phyla Porifera and Cnidaria, in terms of biomass and diversity. In shallower depth strata (less than 400m) the presence of vulnerable organisms was low or negligible, while the highest marine benthic biodiversity was found in depths ranging from around 800 to 1500m. The biodiversity (standardized for total abundance) and total abundance were both higher along the continental margins, compared to those found along the continental shelves.*

*The presence of organisms considered vulnerable by the UN and OSPAR standards was low or negligible at depths lower than 400m, where the majority of bottom trawling activities take place. Nonetheless, some scattered areas within the continental shelf, with the presence of rocky outcrops and carbonate mounds formed by deep-water corals, were observed, as well as catches of vulnerable organisms belonging to the order Alcyonacea (soft corals) and classes Demospongiae and Hydrozoa. These species, considered as significant in this study, were found on the north easternmost part of the shelf, outside of the Argentinean EEZ. All of these could be recommended as marine protected areas (MPAs).*<sup>7</sup>

No impact assessments have been conducted or published for any high seas bottom fisheries by other countries whose vessels conduct bottom fisheries in the region, as far as the DSCC is aware. This includes the flag States of the vessels identified as bottom fishing in the area in 2006 in the FAO Global Atlas of bottom fisheries in the high seas mentioned previously, and the vessels and flag States documented by Greenpeace in 2019.

### **Identify and close areas where VMEs are known or likely to occur unless bottom fisheries are managed in such measures to prevent SAIs**

On the basis of its impact assessment, the IEO identified nine large areas as VMEs. Seven of the areas cover most of the slope between the depths of 300 and 1,000 meters between 42 and 48 degrees south latitude (the maximum depth of the research). The remaining two areas are along the shelf at depths shallower than 300 meters. Spain adopted the IEO recommendations in 2011 and closed these areas, in effect restricting bottom trawl fishing by Spanish vessels in the area to depths shallower than 300-400 meters. The closures remain in effect as of 2020.<sup>8</sup> The area closures amount to approximately 41,300 km<sup>2</sup>.

No other flag State whose vessels engage in bottom fishing in the region has closed any areas where VMEs are known or likely to occur, as far as the DSCC is aware.

### **Move-on rule/cease fishing in areas where VMEs are encountered**

A move-on rule is required in the 2008 EU framework regulation.<sup>9</sup> However, no encounters have ever been reported. The EU regulation requires 100% observer coverage on Spanish vessels bottom fishing in the area, but the observer reports have not been made public.

## **Ensuring the long-term sustainability of deep-sea fish stocks, including bycatch species**

The high seas bottom fisheries in the region are not subject to quotas or other catch restrictions. However, given the relatively shallow depths at which the Spanish fishery operates, the catch and bycatch of deep-sea species may not be a major issue of concern.

## **Conclusion and recommendations**

The EU and Spain have largely implemented the UNGA resolutions in the Southwest Atlantic. However, an updated review of the implementation of the EU's 2008 framework regulation should be conducted, including an evaluation of the scientific information collected from the observer program that has been in place in the bottom fishery in the Southwest Atlantic since 2009, and the effectiveness of – and compliance with – the regulations.

Only the EU and Spain have implemented paragraphs 86 and 87 of UNGA Resolution 61/105, as far as the DSCC is aware. Paragraph 86 was a significant compromise between States that were of the view that there should be no bottom fishing on the high seas in regions where no multilaterally agreed measures could be put into place. s

DSCC recommends that the UNGA calls for an immediate halt to bottom fishing in all high seas areas where no multilateral measures are in place, in particular in the Southwest Atlantic, by any vessels flying the flag of any country that has not:

- Conducted an impact assessment of its bottom fisheries in the region;
- Established management measures consistent with the provisions of UNGA Resolutions 61/105, 64/72, and subsequent resolutions;
- Made the impact assessment and the management measures established publicly available; and
- Clearly demonstrated that the bottom fisheries are being managed to prevent SAIs on VMEs and to ensure the long-term sustainability of deep-sea fish stocks

---

<sup>1</sup> Personal communication, Sebastian Losada, Senior Oceans Policy Adviser, Greenpeace International.

<sup>2</sup> It may be worth noting that the vessel had previously been included by both SEAFO and CCAMLR in their respective lists of vessels engaged in IUU fishing a decade ago, but was removed from the lists in 2008. See “Combined IUU Vessel List”. Retrieved from <https://iuu-vessels.org/Vessel/GetVessel/7588d72c-dba5-4343-88bc-778674092520>.

<sup>3</sup> Taconet, M., Kroodsma, D., & Fernandes, J.A. (2019). *Global Atlas of AIS-based Fishing Activity: Challenges and Opportunities*. Rome: FAO.

<sup>4</sup> Food and Agriculture Organization of the United Nations (FAO). (2020). *Worldwide Review of Bottom Fisheries in the High Seas in 2016*. FAO Fisheries and Aquaculture Technical Paper No. 657. Rome: FAO.

<sup>5</sup> European Union. (2008). *Council Regulation (EC) No. 734/2008 of 15 July 2008 on the protection of vulnerable marine ecosystems in the high seas from the adverse impacts of bottom fishing gears* (OJ L 201/8, 30 July 2008), paragraph 2.

<sup>6</sup> Instituto Español de Oceanografía. (2011). *Informe sobre Ecosistemas Marinos Vulnerables en aguas internacionales del Atlántico Sudoccidental y de las posibles interacciones las actividades pesqueras*. Madrid: Proyecto ATLANTIS, Programa Pesquerías Lejanas, Instituto Español de Oceanografía.

<sup>7</sup> Portela, J.M., Pierce, G.J., del Río, J.L., Sacau, M., Patrocinio, T., & Vilela, R. (2010). Preliminary description of the overlap between squid fisheries and VMEs on the high seas of the Patagonian Shelf. *Fisheries Research*, 106(2), 229–238. doi:10.1016/j.fishres.2010.06.009.

<sup>8</sup> Personal communication, Ms. Margarita Mancebo, Head of International Fisheries Area, General Subdirectorato of Agreements and RFMOs, Spanish Secretariat General for Fisheries, with Matthew Gianni during the Annual Meeting of the North-East Atlantic Fisheries Commission, 12–15 November 2019.

<sup>9</sup> EU Regulation 734/2008, above note 5, Article 7.

## Acronyms

BFIA	bottom fishing impact assessment
CBD	Convention on Biological Diversity
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CMM	conservation and management measure
CEM	Conservation and Enforcement Measure
CPUE	catch per unit effort
DOSI	Deep Ocean Stewardship Initiative
DSCC	Deep Sea Conservation Coalition
EEZ	exclusive economic zone
ERAWG	Ecological Risk Assessment Working Group (SOFIA)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FRA	Fisheries Restricted Area
HERMIONE	Hotspot Ecosystem Research and Man's Impact on European Seas
HSFG	High Seas Fisheries Group (SPRFMO)
ICES	International Council for the Exploration of the Sea (NEAFC)
IEO	Instituto Español de Oceanografía (Spain)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPSO	International Programme on Science and the Oceans
IUCN	International Union for the Conservation of Nature
IUU	illegal, unreported and unregulated
MPA	marine protected area
NAFO	Northwest Atlantic Fisheries Organization
NEAF C	North-East Atlantic Fisheries Commission
nm	nautical mile
NPFC	North Pacific Fisheries Commission
PICES	North Pacific Marine Science Organization
RFMO	regional fisheries management organization
SAI	significant adverse impact
SDG	Sustainable Development Goal
SEAFO	South East Atlantic Fisheries Organisation
SIODFA	Southern Indian Ocean Deepsea Fishers Association
SIOFA	South Indian Ocean Fisheries Agreement
SPRFMO	South Pacific Regional Fisheries Management Organisation
SSRU	small-scale research unit
TAC	total allowable catch
UNCLOS	United Nations Convention on the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
UNGA	United Nations General Assembly
VME	vulnerable marine ecosystem
VMS	vessel monitoring system
WGDEC	Working Group on Deep-Sea Ecology (NAFO/ICES)
WGAEFM	Working Group on Ecosystem Approach to Fisheries Management (NAFO)
WGESA	Working Group on Ecosystem Science Assessment (NAFO)
WOA	World Ocean Assessment