

## Location

The Galicia Bank is located at 42° 67' N and 11° 74' W about 200 km West of the Galician coast of Spain.

## Potential Reasons for Selection

Seamounts such as the Galicia Bank function like an island within the ocean. Based on their three-dimensional structure, they provide a higher number of microhabitats than the barren surroundings and host a more biodiverse benthic fauna respectively. The intensity of vertical mixing of the water column and thus the primary productivity is often higher around them than in the open ocean. Many fish species and cetaceans tend to aggregate in their vicinity and use them as feeding and spawning grounds.

Information about the Galicia Bank and its ecosystem is rather scarce as only very few biological surveys have been taken place there. The anthropogenic impact on the bank e.g. in terms of fishery has not been addressed yet. Following the precautionary principle the designation of the bank as a MPA under OSPAR would help to preserve its biological features and to coordinate any kind of human activity in a sustainable manner. Moreover, it could promote further investigations to address the actual condition of the bank and to obtain further scientific data to evaluate its importance for the maintenance of marine biodiversity at global level.

## Site Description

The Galicia Bank is a large seamount with the shallow part of the bank encompassing about 6,250 km<sup>2</sup>. A channel of about 2,500 m depth separates the bank from the shelf. The shape of the bank is irregular and its total extension is difficult to assess. A peak in the Eastern zone of the bank comes within 600 m of the surface.

## For information, contact:

Stephan Lutter  
 WWF North-East Atlantic Programme  
 Am Gütpohl 11 · D-28757 Bremen · Germany  
 Tel: +49 421 65846-22 · Fax: +49 421 65846-12  
 E-mail: lutter@wwfneap.org

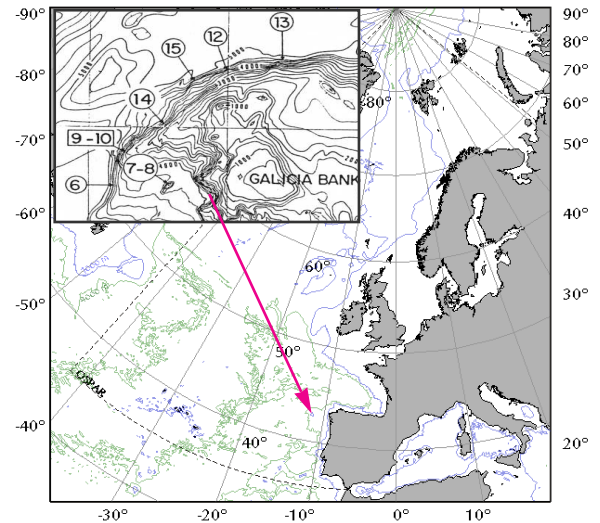


Fig. 1: Location of the Galicia Bank (after Lallemand et al. 1985)

To the North, Northwest it slopes very steeply from approximately 1,000 m down to the abyssal plain at 5,000 m. It is mainly composed of basaltic lavas and uplifted oceanic crust.

On top of the bank, the sediment primarily consists of shells of pelagic foraminifera while the organic carbon content is quite low. The bank is located within a seasonal upwelling area which means that the waters above the bank are particularly rich in nutrients and primary production.

## Biological Features

As far as this has been investigated to date, a high species richness through several taxa has been found within the bank area. The community structure differs significantly from the continental shelf and the surrounding deep sea in both the macrofaunal and the meiofaunal community.

The cold water coral *Lophelia pertusa* is known from other areas to host a high species diversity by itself. *Lophelia pertusa* is the most prominent megabenthos species in the summit area of the bank.



Fig. 2: *Epigonus telescopus*

**The Galicia Bank -  
 a Showcase Example  
 for the OSPAR System  
 of Marine Protected  
 Areas**

The benthic macrofauna is characterised by filter-feeders of several taxa like different sponge species and brittle stars and representatives of various carnivorous taxa like different crustaceans. In the deeper zones of the bank, remarkably high numbers of asteroids have been found. An unrecognised partially transparent sessile animal has been reported for the bank in 1992. The species has not been identified yet and remains classified as an 'Enigmaticum'.

About 86 fish species have been reported in association with the bank so far. Among others, 11 shark species including the kitefin shark *Dalatias licha* and the ray *Raja batis* which has been suggested as a threatened species to OSPAR for the North-East Atlantic.

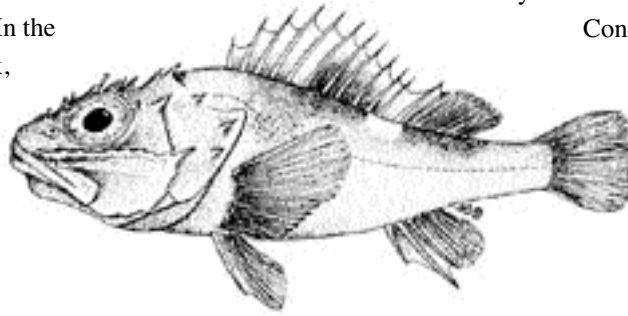


Fig. 3: *Trachyscorpia cristulata*

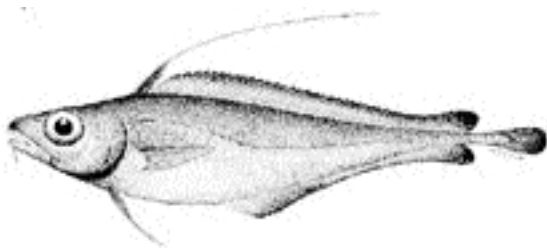


Fig. 4: *Lepidion eques*

### Human Impacts

The actual human impacts have not been addressed for the bank in detail. It is subject to pinnacle fishing by long line for crustaceans and deep-water sharks. It has not been clarified if any physical damage to the fauna on the bank due to human activities has occurred or not. However, this lack of knowledge should not lead to the assumption that action is not required.

Lack of knowledge is typical for offshore features in general, and for possible alterations of the natural state at seamounts within reach of fisheries in particular. Here, the precautionary approach has to be applied in order to minimise and control future human impacts.

### Existing/Proposed Protection

As far as known, there are no specific regulations or limitations for any kind of use to the bank. Moreover, the priorities for Spanish offshore waters in terms of fishery and the conservation of the natural resources are not clear as the National and the Regional have not reached agreement yet. Due to its reef-like character, the Galicia Bank qualifies as a potential offshore Special Area of Conservation (SAC) under the EU Habitats Directive.

WWF urges Spain to clarify the priorities for its offshore waters and initiate the necessary steps to fulfill the obligations set by the EU Habitats Directive, in order to contribute to the prospective Natura 2000 network of

protected sites. As a further step, WWF proposes the Galicia Bank and its slopes to be designated as part of the envisaged system of MPAs under the OSPAR Convention (Annex V). Seamounts such as the Galicia Bank have been proposed to be of prime concern to OSPAR. It is high time to move from identification of the problems to developing programmes and measures. The Galicia Bank is in need of an appropriate management system to maintain its ecological and biological features and to ensure further research being conducted without causing any unnecessary harm to it.

*Text prepared by*

Stefanie Fine Schmidt & Raúl García

### References/Further Reading

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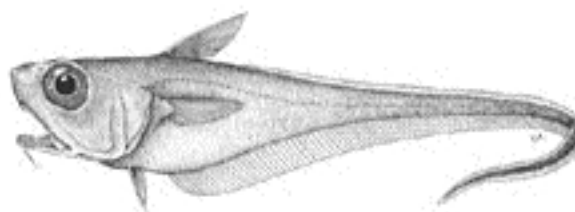


Fig. 5: *Malacocephalus laevis*