PROTECTING THE UK AND IRELAND’S DEEP SEA

This map illustrates the predicted distribution of three deep-sea (found at depths of 200m or more) habitats in the UK and Irish exclusive economic zones (200m offshore) and continental shelves.

In areas in UK waters which have been designated as Special Areas of Conservation (SACs) and Marine Protected Areas (MPAs) and or Marine Conservation Zones (MCZs), no ban on bottom trawl fishing has yet been implemented making the habitats in these areas at risk of destruction. The current areas closed to bottom trawling by the North East Atlantic Fisheries Commission (NEAFC) and by EU regulations only cover a small percentage of the areas where these three key habitat forming species are likely to occur.

Even if bans were adopted within these SACs, MPAs and MCZs, these areas, together with the closures currently in place would provide limited protection for these key habitats. A complete phase-out of bottom trawling below 600m would likely protect 100% of the sponge and xenophyophore habitats, and close to 90% of the deep-water coral habitats found around the British Isles.

The habitats formed by all three species qualify as vulnerable marine ecosystems (VMEs) under United Nations General Assembly Resolutions and UN FAO Guidelines.

**Legend**

- **SAC / MPA / MCZ** (below 200m Isobath)
- NEAFC / EU closures
- Modelled species presence

**Lophelia pertusa reefs**
(a cold-water coral reef)

Deep-sea coral species often form complex and ornate reefs, some of which have been dated at 8000 years old. Ancient cold-water coral reefs may not only hold many undiscovered innovations, but they are also teeming with species that depend on them.

**Phoronema carpenteri aggregations**
(a sponge-dominated community)

Deep-sea sponge communities are extremely bio-diverse, create complex habitats, provide food and shelter to an array of deep-sea species, are a source of new medicines, and have an important role in recycling nutrients. Sponge aggregations tend to be found living near seamounts, shelves and banks where there is an abundance of nutrients.

**Syringammina fragilissima aggregations**
(a xenophyophore community)

Found only in the deep sea, xenophyophores are the largest known single celled organisms, at times measuring up to 25 cm in diameter. While forming communities of up to 7-10 individuals per meter squared, they create a highly biodiverse habitat for many species large and small.