

Benthic habitats

Marine ecosystems

Assessment of the Status of Benthic Habitats

Summary

There is a huge diversity of life inhabiting the seafloor in UK waters. Benthic habitats are subjected to physical disturbance by human activities on the seafloor, such as fishing, sand extraction, offshore construction, and other activities. Some habitats, such as coral gardens are highly sensitive to disturbance and can be easily damaged. Other habitats, like mobile sediments, are more resilient and are less affected by human disturbance. Understanding the effects of those pressures within the context of natural disturbance and climate change is essential to assessing the health of those habitats and the effectiveness of management measures.

Work involved

JNCC plays a key role in delivering the biodiversity aspects of the UKMMAS. JNCC is leading, in collaboration with other organisations, the development of indicators and targets to assess the human impacts on the health and function of benthic communities in UK waters. JNCC is leading the development of these indicators in the wider geographical context of the North-East Atlantic. On behalf of the UK, JNCC has worked with other Contracting Parties (CPs) from the OSPAR Convention to develop a common set of biodiversity indicators. Assessments of these international indicators will help OSPAR CPs deliver national and international requirements under the European Commission Marine Strategy Framework Directive and the Habitats Directive, and other international obligations such as the Convention on Biological Diversity.

Key outcomes

JNCC is leading the assessment of:

- Extent of physical damage to predominant habitats (NE Atlantic)
- Extent of physical loss of predicted biogenic habitats (UK)
- Condition of benthic habitats communities, (NE Atlantic) and Typical species composition (UK)

Future work

- Improve assessments of physical damage by measuring impacts from small /inshore fishing vessels and from other human activities (e.g. offshore construction);
- Define reference conditions values for what unimpacted species communities should look like

Identified research priorities

Improvement of quantitative methods to assess temporal and spatial changes to the resilience and resistance of vulnerable habitats, and integration of different indicators to produce an overall assessment of the health of benthic ecosystems and associated ecosystem services

Further information

JNCC Marine Assessments Webpage - <http://jncc.defra.gov.uk/page-5329>



Country/Region: NE Atlantic

Main driver: UK Marine Strategy, OSPAR Convention

Period of work: 2012- present

Partnership: UK Marine Monitoring Assessment Strategy (UKMMAS) community, OSPAR Contracting Parties



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