

Developing options for the UK Marine Biodiversity Monitoring Programme

Summary

Over the past several years, JNCC have led a programme of work to develop an integrated marine biodiversity monitoring programme for all UK waters, both within and outside of Marine Protected Areas. We have worked closely with the other UK nature conservation bodies and the wider marine monitoring community. As part of this ambitious process, JNCC produced a monitoring strategy that described an approach to develop monitoring options for different biodiversity components (benthic habitats, cetaceans, seals, seabirds, fish & cephalopods, plankton and ecosystem functions). The options range in the amount of evidence delivered, associated risks and cost. This strategic approach has been applied to the biodiversity components and JNCC are working with Governments and the UK's Healthy and Biologically Diverse Seas Evidence Group (HBDSEG) to bring the preferred options together into a coherent whole. The end goal is an integrated programme of monitoring that can meet national and international obligations and robustly inform advice on management of human activities in the marine environment.

Work involved

JNCC have produced an overarching strategy¹ for the UK integrated marine biodiversity monitoring programme, to guide the process and provide the underpinning concepts. We have also produced a range of monitoring options for deep-sea benthic habitats, offshore benthic habitats, cetaceans and seabirds, using a risk-based approach. JNCC have also supported the HBDSEG community in producing monitoring options for the other elements of biodiversity. Several suites of monitoring options have now been presented to policy colleagues across the UK for consideration and discussion. The work that JNCC has led over the past several years is taking the UK towards a programme of marine biodiversity monitoring that is better able to answer important questions about the status of the marine environment, in a more cost effective and collaborative way.

Key outcomes

- UK Marine Biodiversity Monitoring Strategy document to provide a framework for producing monitoring options
- Conceptual Ecological Models of broad scale marine benthic habitats to inform monitoring
- Risk-based framework to develop monitoring options, both within and outside of Marine Protected Areas (MPAs)
- Monitoring options for deep-sea benthic habitats, offshore habitats, cetaceans and seabirds, plankton, fish and seals
- Policy discussions around which monitoring options may be preferable across the countries of the UK
- Engagement with the wider marine monitoring community of the UK to encourage collaboration, platform sharing and new ways of thinking

Future work

Now that the options phase of the work is nearing completion, JNCC are developing how the individual outputs can be brought together into an integrated, ecosystem scale UK marine biodiversity monitoring programme. This development will involve in-depth discussion with the marine monitoring community of the UK before being presented to UK Governments to allow them to take a decision on what should be implemented in future. Integrated monitoring will provide a more holistic and ecosystem-based understanding of the environment, thus enabling us to provide more robust evidence for assessments and subsequently better management of the marine environment. An integrated approach to marine monitoring will also help identify further opportunities for more efficient and effective ways of collecting data and use of resources.

Further information

¹http://jncc.defra.gov.uk/pdf/Marine_Monitoring_Strategy_ver.4.1.pdf

Country: United Kingdom

Project drivers: Marine Strategy Framework Directive (MSFD), Habitats Directive, Birds Directive, The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) and The Marine and Coastal Access Act, and Marine (Scotland) Act.

Contact point:

MarineMonitoring@JNCC.gov.uk

Partnership: JNCC, Healthy and Biologically Diverse Seas Evidence Group (HBDSEG), Chief Scientists Group (CSG), Country Nature Conservation Bodies (CNCBs).

