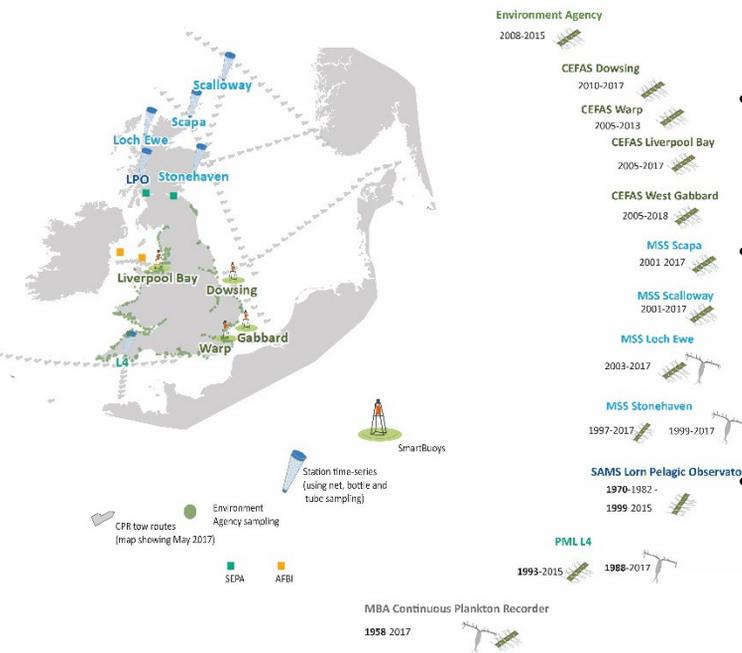


Pelagic Habitats Expert Group Highlights 2020

The UK Pelagic Habitats Expert Group:

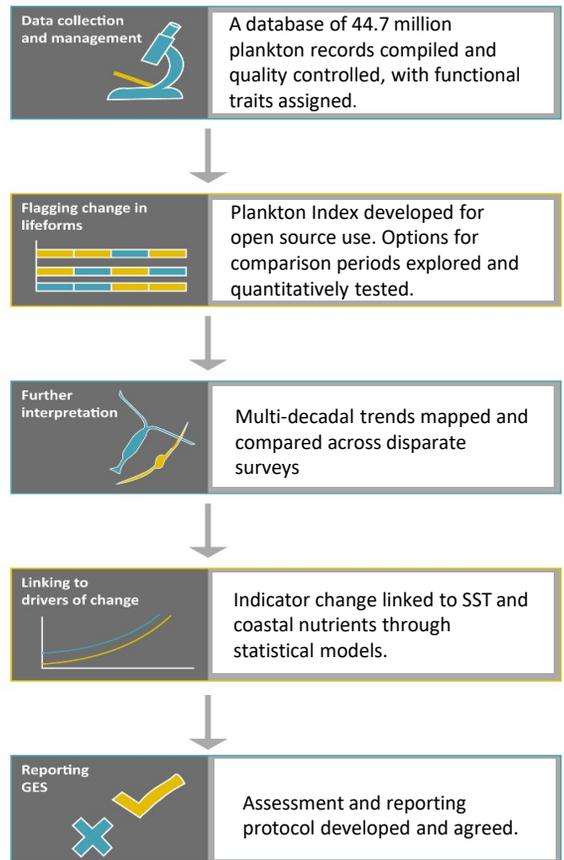
- A network of universities, agencies, governments and research institutes with expertise in plankton data, ecology, and dynamics
- University of Plymouth (UoP) and the Environment Agency co-chair the UK group; UoP also chairs the OSPAR Pelagic Habitats Expert Group
- Provides technical capacity to deliver information on the state of the pelagic habitat, and inform on pressures including climate change and eutrophication. This evidence fulfils the UK Marine Strategy as well as international obligations to OSPAR, UN-SDGs, and COP26
- Has primarily progressed their work through projects funded by mechanisms such as NERC (e.g. Knowledge Exchange Fellowships), EMFF (e.g. the EcAprHA and ICEGRAPH projects), and HBDSEG rather than through sustained or strategic government funding.
- Delivered the first assessments of UK pelagic habitats as part of the UK Marine Strategy and OSPAR Intermediate Assessment 2017



The UK plankton monitoring network, consisting of the Continuous Plankton Recorder Survey, coastal stations, and inshore (<1nm from the shore) sampling programmes.

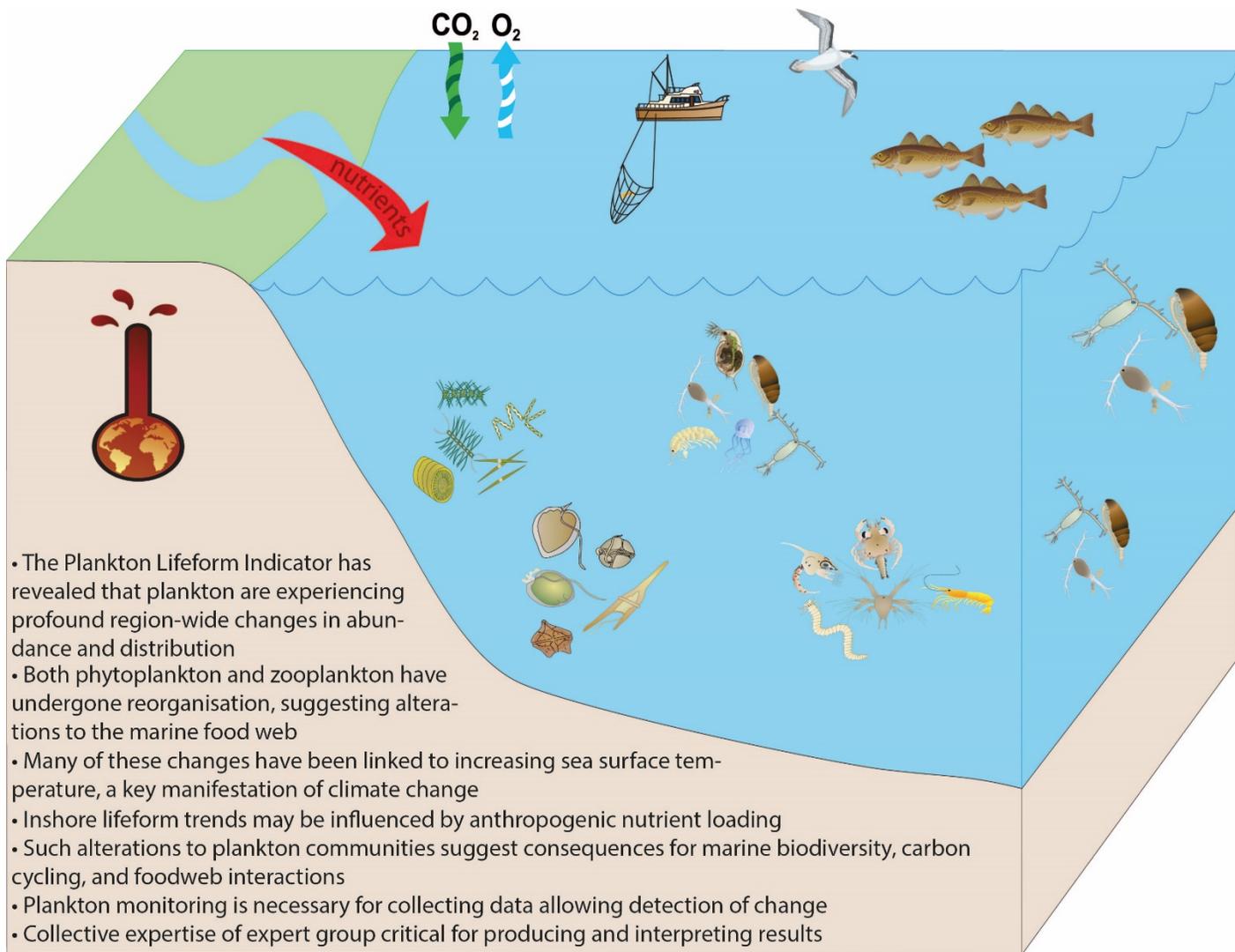
Key expert group achievements:

- Development of Plankton Lifeform Indicator, which can be used across the UK's and OSPAR's diffuse plankton monitoring programmes, regardless of sampling technique, fulfilling marine policy obligations of an integrated monitoring and assessment programme
- Construction of trait-linked plankton database containing 44.7 million plankton records for NW European waters. This database is essential for ensuring consistency of indicator application between datasets.
- Development of web-based tool for lifeform extraction, to facilitate indicator application
- Protocol for pelagic habitat assessment which can be used at UK and OSPAR levels



Indicator assessment protocol derived from Pelagic Habitats Expert Group research and development.

Profound changes revealed through the plankton lifeform indicator approach



Symbols courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/symbols/)

Outlook for upcoming pelagic habitats assessments

- Sustained funding is necessary for the plankton monitoring needed to recognise change in pelagic habitats. This monitoring covers multiple trophic levels at the base of the food web, yet is at risk, with financial cuts reducing our ability to detect change.
- Maintenance of the Pelagic Habitats Expert Group is critical for recognising and interpreting change in pelagic habitats. Diminished capacity in this group puts policy assessments, such as the OSPAR QSR2023 and the 2024 UK Marine Strategy, at risk.
- Future indicator development work needed includes further interpreting the implications of indicator changes to higher trophic levels, including fisheries and sea birds.
- Only with consistent resourcing can these important changes to the base of the marine foodweb continue to be evaluated in a fully integrated way, and the results assessed and interpreted to inform effective adaptive ecosystem-based management.