

The Bristol Channel Herring Project

Breaking Down Barriers to Regional Management of Fish Stocks

A contribution to the North Devon Marine Pioneer Programme

Project Rationale

A small-scale herring fishery has existed in the inner Bristol Channel for many hundreds of years. Local fishermen believe that the herring are spawning locally and may constitute a separate stock. No scientific evidence of a separate herring stock currently exists and there is no documented herring spawning area in the Bristol Channel. However, this would be consistent with the ecology of herring in other major UK estuaries.

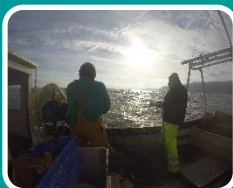
Whilst the Bristol Channel fishery is relatively small scale it is an important heritage fishery and major development projects such as nuclear power stations, aggregate dredging and tidal power have the potential to impact the local herring stock or their spawning habitat. By building on fishermen's knowledge, research and management strategies will be better informed and more robust and include all pathways for impact, not just those relating to commercial fisheries. A second workstream will look to provide shoreside facilities for local small-scale fisheries, using ecological provenance of the stock in marketing and sustainability initiatives in order to add value to those fisheries and enhance the **Natural Capital** of local stocks in small **coastal communities**.

'Pioneering' because...

Using fishermen's knowledge to guide science and possible delineation of a separate stock. Increasing our knowledge of a key stock in an area with heavy development pressure and incorporating this in a management strategy.

Building on the knowledge base to enhance Natural Capital of heritage fisheries.

Project Aims



Aim 1 - Building on Local Fishermen's Knowledge

Investigate the stock structure of herring in the Bristol Channel by i) using a range of genetic and morphometric techniques and ii) identifying whether suitable herring spawning habitat exists in the inner Bristol Channel and Severn Estuary and map its distribution.



Aim 2 - Develop Ecosystem-Based Fisheries Management for herring

Use the findings from stock structure analysis to develop ecosystem based fisheries management through the iterative Pioneer Programme Research and Management Plan for herring.

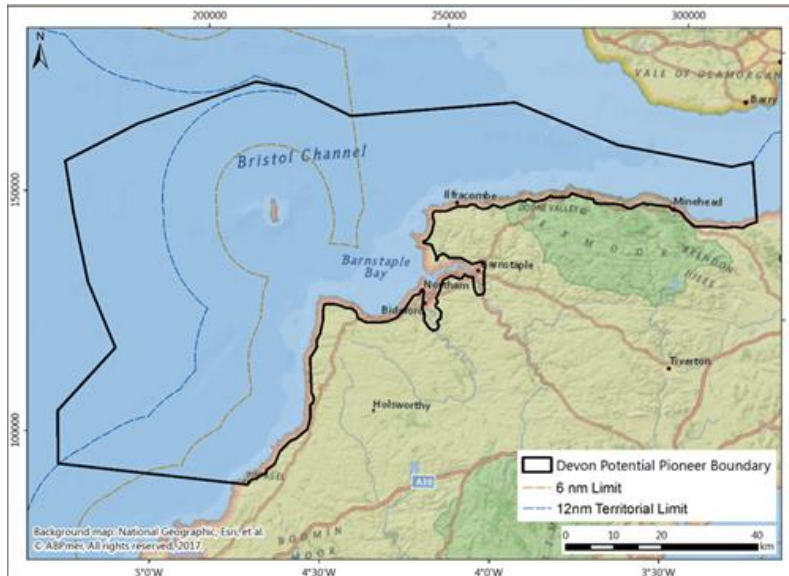


Aim 3 - Enhancing the Natural Capital of a Heritage Fishery

Work with local fishermen to improve infrastructure (such as smokeries) allowing market diversification and adding value to the end product. Promote the North Devon herring's provenance and heritage thus maximising the Natural Capital value of herring landed in the Pioneer area.

Project partners TBC (lead), Cefas (?), North Devon Marine Pioneer steering group, BLUE Marine Foundation (?), University of Plymouth (?), Bristol Channel herring fishermen, Devon and Severn IFCA, MMO

The North Devon Marine Pioneer Programme



The North Devon Marine Pioneer Programme is one of four Pioneers being run in different environmental settings around the UK. The Pioneer Programmes are integral to Defra's 25- year Environment Plan and are being asked to test approaches to integrated governance and management with regard to Natural Capital. Defra has asked that the pioneers:

- Test new tools and methods as part of applying a natural capital approach in practice;
- Demonstrate a joined-up, integrated approach to planning and delivery;
- Pioneer and 'scale-up' the use of new funding opportunities; and
- Grow our understanding of 'what works', sharing lessons and best practice