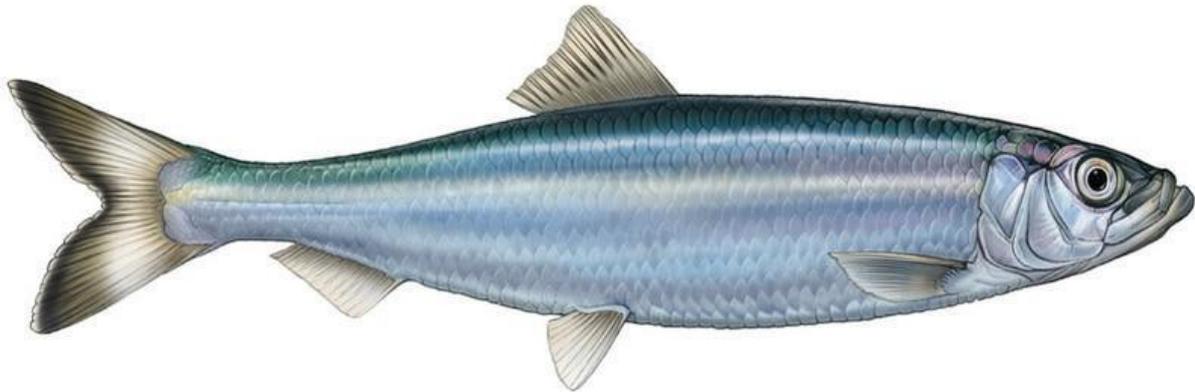


# Fisheries Research & Management Plan

## Summary of Recommendations and Next Steps for



### Atlantic Herring (*Clupea harengus*)

### in the North of Devon & Severn IFCA's District



**European Union**  
European Structural  
and Investment Funds

## Fisheries Research & Management Plans

As part of the [North Devon Marine Pioneer](#), Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA) and the North Devon Biosphere have produced an initial series of innovative Fisheries Research & Management Plans (FRMPs) for five commercially important species/ species groups in the north of D&S IFCA's District.

The FRMPs use existing information and stakeholder engagement to investigate whether a localised, ecosystem-based approach to management is possible and beneficial for each species. Each plan makes a series of research and management recommendations that need to be addressed to facilitate a transition to the most appropriate management approach.

### Atlantic Herring

Atlantic herring is currently classified as 'Least Concern' by the IUCN as numbers are growing, but there have been several large-scale stock collapses around the UK in recent decades. Currently, there is not enough data available to assess the status of distinct herring stocks and populations fished in the north of D&S IFCA's District.

Herring fisheries in the Bristol Channel are small-scale, using traditional gear and are an important part of local culture and heritage for fishers and their communities. Recent discoveries about the population and stock structure of herring in the Bristol Channel suggest that the current scale for managing herring in the Atlantic might not be appropriate. There are several distinct breeding stocks of herring present in the Bristol Channel, suggesting that the fishery may benefit from a localised approach to management. Further research on these stocks should be a priority so that managers have the information they need to make this change.

### Recommendations

Recommendations have been grouped into 'research' and 'management'. Many of the recommendations are interconnected and would need to be delivered as a whole for them to be effective. In general, it is likely that funding will need to be sought by relevant parties to enable the research. Specific details should be discussed early in project development.

You can find the detail of each recommendation and the supporting evidence in the full Atlantic Herring FRMP. The research recommendations are also available on D&S IFCA's website and will be shared periodically with interested parties to encourage collaborative research between fishers, scientists and managers that is relevant to management and policy.

## RESEARCH

### **Establish detailed knowledge of Bristol Channel herring stocks – *High Priority***

Understanding the size, extent, and distribution of genetically discrete herring stocks that spawn in the Bristol Channel is essential for effective management of the species in this area. Recent discoveries have shown herring population structure in the Bristol Channel to be more complicated than previously thought. Building on this research will help show an appropriate scale for future management and improve knowledge on local herring populations, allowing for more effective and sustainable management in the future.

### Next steps:

- D&S IFCA and stakeholders from the Bristol Channel Herring Project to explore options for conducting this research.
- Future monitoring or research should be designed in collaboration with Cefas and ICES to ensure the data is suitable for input to stock assessments.
- Findings can inform future Fisheries Management Plans (FMPs), and contribute to delivery of the ecosystem and scientific evidence objectives of the Fisheries Act 2020.

### **Involve fishers in the planning of future research – *High Priority***

Fishers' expertise and local knowledge has proven to be invaluable for projects such as the Bristol Channel Herring Project and should be used to co-plan and co-deliver future research.

### Next steps:

- D&S IFCA is well-placed to facilitate fisher/researcher collaboration and will investigate what is needed to make this standard practice (for example, collaborations will require standardised protocols and terms of reference, including for shared use of vessels and research equipment).

### **Identify and protect reported herring spawning grounds – *High Priority***

The possibility of spawning habitat near Minehead needs to be investigated. Fishers have reported catching herring in an advanced spawning state in the area and have suggested that spawning and nursery grounds exist nearby. This raises concerns regarding aggregate dredging and coastal development activities in the area. If found, the spawning grounds must be mapped thoroughly and the implications of human activity for the habitat need to be incorporated into the management of fisheries and other activities.

### Next steps:

- D&S IFCA will explore collaborative research opportunities with relevant stakeholders to investigate the reported spawning areas near Minehead.
- D&S IFCA will support appropriate investigations of essential fish habitat in undersampled coastal and estuarine areas. This information would inform regional Marine Plans, marine licencing and permitting processes.
- Findings from this research could inform future FMPs and contribute towards delivery of the ecosystem and scientific evidence objectives of the Fisheries Act 2020.

### **Understand how herring stocks in the Bristol Channel move and interact with other stocks – *Medium Priority***

Information on the migratory movements and interactions of Bristol Channel herring stocks is needed to determine the appropriate scale of management. If the herring stay in the Bristol Channel for most of their lives, localised management would be able to protect the herring. If the herring migrate to other areas, sustainable management of the stock becomes much more

challenging due to exposure to pressures elsewhere in their range. A localised management approach would be a collaboration between fishers, IFCAs, Cefas and Defra.

#### Next steps:

- This will be of particular interest to researchers involved with the Bristol Channel Herring Project as it would build on their existing research. This research could also be conducted in collaboration with Irish universities and incorporate wider movements of distinct herring stocks in the Celtic Sea.
- Any future monitoring or research should be designed in collaboration with Cefas and ICES to ensure the data is suitable for input to stock assessments.
- Findings can help inform future FMPs and contribute towards delivery of the ecosystem, scientific evidence, and sustainability objectives of the Fisheries Act 2020.

### **Investigate the ecosystem roles and interactions of herring – *Medium Priority***

Information on the ecosystem roles and interactions of herring and how these are impacted by human activity is needed to apply an ecosystem-based approach to management and highlight important interspecies interactions within ecosystems.

#### Next steps:

- This research topic would make a good postgraduate research project as it is timely and relevant to policy. The findings would help inform future FMPs and contribute towards delivery of the ecosystem and scientific evidence objectives of the Fisheries Act 2020.

## **MANAGEMENT**

### **Improve integration between fisheries management and marine planning – *High Priority***

Fisheries and environmental management need to be better integrated and more appropriately considered within marine spatial planning, licencing, and permitting processes. This is particularly important in the Bristol Channel and Severn estuary due to high levels of commercial interest, for example in aggregate extraction and renewable energy development.

#### Next steps:

- Findings from the research recommended in this FRMP should be incorporated into regional Marine Plans through discussions with D&S IFCA and the MMO.
- This would aid delivery of the Government's 25 Year Environment Plan and Fisheries Act 2020 objectives, including utilising an ecosystem approach and prioritising sustainability.

### **Improve communication and engagement with fishers to establish stronger fisheries enforcement presence in the north of D&S IFCA's District – *Medium Priority***

To enable enforcement officers to better tackle non-compliance and illegal fishing in the north of D&S IFCA's District there needs to be comprehensive reporting of illegal activity from fishers in the area and improved communication between officers, fishers, and other local stakeholders.

#### **Next steps:**

- D&S IFCA will improve collaboration and engagement through activities such as virtual roadshows for ports, sectoral meetings and future FRMP interviews. More information about planned activities is available in the D&S IFCA's Annual Plan and Communications Strategy, accessible via the D&S IFCA website.

### **Improve landings data collection for recreational and commercial fishers – *Medium Priority***

Until recently, national management measures have made it unlikely that many herring catches in the north of D&S IFCA's District were accurately recorded. Reliable catch data is needed from both recreational and commercial fishers to enable robust assessments of the effects of fisheries on local herring populations. Progress has been made regarding the development of the <10 metre vessel catch recording app, however, more detail is needed, particularly in a local context to properly understand the impacts of fishing on local fish populations.

#### **Next steps:**

- The IFCA's are well-placed to facilitate improvements in landings data. The need for additional data should be evaluated with the organisations that would use the information to make stock and distribution assessments (e.g. Cefas/ICES).
- If specific data needs are identified, for example, the mandatory recording of sea bass catch, a pilot study should be undertaken as part of D&S IFCA's Annual Plan.

### **Trial local assessment and management of Bristol Channel herring stocks – *Low Priority***

If the recommended research into Bristol Channel herring stocks suggests that a local approach to assessment and management may be beneficial, a trial should be conducted to investigate and test methods of fisheries management in a local context.

#### **Next steps:**

- If appropriate, D&S IFCA will work in partnership with Defra to investigate and test a localised approach to managing herring fisheries in the Bristol Channel (better recording of landings data needs to be in place for this trial to be successful - see above).

## **Establish a sustainability ecolabel for Bristol Channel herring fishery - *Low Priority***

The poor market for herring is currently the largest barrier to Bristol Channel herring fisheries. The nature of the fisheries - small-scale and low impact with little bycatch or destruction to habitats - makes them a suitable prospect for a sustainability ecolabel. Having a sustainability ecolabel could support struggling inshore fisheries by adding value to their catch.

### **Next steps:**

- The North Devon Biosphere is well-placed to work with local fishers to investigate a sustainability ecolabel.

## **Support viable investment in local infrastructure - *Low priority***

Management should collaborate with local fishers, the supply chain and other relevant stakeholders to investigate and implement infrastructure changes to support local fisheries, for example, installing a community-based smokery. This could add value to herring and other local produce and complement the development of a local sustainability ecolabel.

### **Next steps:**

- Fishers and other industry stakeholders are best placed to identify infrastructure needs and initiate developments and could be supported as appropriate by organisations such as North Devon Biosphere, Blue Marine Foundation and D&S IFCA.

## **Additional information**

You can download the full FRMP here –

<https://www.devonandsevernifca.gov.uk/Environment-and-Research/Fisheries-Research-Management-Plans/FRMP-Documents>

If you would like to speak to someone about the information in this plan, please get in touch using the details below:

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D&S IFCA is developing a second series of FRMPs for a range of species across the D&S IFCA's District. More information is available from the Fisheries Research and Management Plan Officer, or at <https://www.devonandsevernifca.gov.uk/Environment-and-Research/Fisheries-Research-Management-Plans>

Cover image – Atlantic herring (*Clupea harengus*)

(Seafish, 2014, <https://seafish.assetbank-server.com/assetbank-seafish/action/viewAsset?id=1920> [unedited])