

**NWIFCA Authority Meeting**  
**5<sup>th</sup> December 2024: 10:00 a.m.**

**Agenda  
Item  
12**

**SCIENCE REPORT FOR INFORMATION**  
**26<sup>TH</sup> OF SEPTEMBER – 21<sup>ST</sup> OF NOVEMBER 2024**

**Purpose:** To provide an update on the work of the Science Team in the quarter.

**Recommendation:**

- a) Receive the report

**UPDATE FOR THIS QUARTER**

This quarter, the main priorities of the science team have been to continue progressing outstanding workstreams following the significant number of cockle surveys and Byelaw 3 consultation work conducted in the first half of the year. This quarter, the main priorities were to complete the final Allonby Bay HPMA potting survey alongside Natural England, host two placement students from Lancaster University, progress with the whelk size-at-maturity study in the district, undertake the annual autumn mussel surveys, launch the shrimp fishery research questionnaire, undertake fisheries observation work on the open cockle fisheries, and continue progressing our workstreams with partner organisations regarding Natural Capital work and our internal cockle fisheries management plan.

**Key achievements since the previous TSB meeting:**

- 1) Completed the third and final run of HPMA surveys in Allonby Bay using North Western Protector.
- 2) Completed five mussel surveys and the associated reports.
- 3) Hosted two Lancaster University students on a 7-week placement and developed research projects with them.
- 4) Developed and published the Shrimp Fisheries questionnaire to help gather information on this data-poor fishery.
- 5) Conducted six fisheries observations and associated mapping.
- 6) Responded to four consultation requests and three dispensation requests.

**ONGOING WORK STREAM UPDATES:**

**1. POTTING PERMIT BYELAW**

**a) Permit database**

Science officers have been contributing to the returns section of the new permit database to improve recording returns and new ways of analysing the data to help management. They have also been leading on the roll-out of the returns database to the Byelaw 4 permit holders, initiating a trial-run period and informative materials to help fishers with the transition to the new system. Much work has been involved in designing the best approach to logging returns in the system, and gaining advice from other IFCA's on the matter. This work is intended to conclude in spring 2025.

## 2. COCKLES AND MUSSELS

### a) Survey and inspections

Between September 26<sup>th</sup> and November 21<sup>st</sup>, NWIFCA science officers carried out six mussel inspections and seven cockle fishery observations (mapping the location and extent of the fishing activity on active beds) across the NWIFCA District.

Full inspection reports are provided in Annex 1 this report. \*please note observations are not provided as survey notes

**Table 1.** Mussel and cockle survey and inspections this quarter.

Surveys and inspections this quarter	Date
<b>Mussels</b>	
<b>Morecambe Bay (Figure 1):</b> Heysham inspection Walney channel x 2	14-11-2024 20-09-2024 & 12-11-2024
Low Bottom Foulney	20-09-2024 18-09-2024

### Mussel surveys overview

Between September 18<sup>th</sup> and November 14<sup>th</sup>, NWIFCA science officers carried out three mussel surveys and two inspections in the district.

Full inspection reports are provided in the November TSB reports. Results from the Dutch Wand surveys demonstrate that the main mussel beds of Foulney, Low Bottom and Walney channel remain relatively consistent with previous years, though Foulney has seen a slight decrease in biomass.

## 3. NWIFCA RESEARCH PROJECTS

### a) Whelk Fisheries in the North West

A new sampling schedule for determining the size-at-maturity for whelks was developed for the summer of 2024. The aim is to identify the size-at-maturity for whelks in the NWIFCA District as previous work has not provided a consistent dataset and it was important to assess the appropriateness of the minimum conservation reference size (MCRS) stipulated in the flexible permit conditions.

With the help of local fishers and NWP, samples for September, October and November have been collected and dissected from across the district – achieving a more complete dataset than has been previously obtained. Results of this work will be presented early 2025, with a view to determining a suitable MCRS.



Figure 1. Images taken by the Whelk MCRS project lead Gemma Grose, demonstrating the process of dissection and analysis of whelks.

#### b) **Shrimp research in the North West**

This work stream was developed after several industry reports raised concerns over the historical declines seen in both the number and size of shrimp across the district. There is a need for the Authority to better understand the current and historical state of the fishery, in order to best focus future research efforts and projects. Historical declines in the number and size of shrimp caught has lead to concern among some stakeholders as to the condition of the fishery. The shrimp project is looking to develop our baseline understanding of the shrimp fishery in the Northwest district, and from this, design useful, targeted research projects.

In November, two research questionnaires went live on our website, and were disseminated to fishers and members. The questionnaires aim to collect information on the practices, and historical changes fishers and processors have seen in the shrimp industry over time.

For those who are interested, or may know of others who's participation would be of value, the questionnaires are available here: [https://www.nw-ifca.gov.uk/shrimps\\_northwest/](https://www.nw-ifca.gov.uk/shrimps_northwest/)

#### 4. **MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:**

##### a) **Highly Protected Marine Areas (HPMAs)**

NWIFCA have agreed a baseline monitoring program for assessing the changes in Allonby Bay HPMA with Natural England.

This summer, NWIFCA have led data collection and potting surveys from North Western Protector to gain an understanding of the levels of crab and lobster in the HPMA. Officers have measured and tagged lobsters as part of the project. The first survey ran from 11<sup>th</sup> to 15<sup>th</sup> of June, and the second was completed between August 23<sup>rd</sup> and September 1<sup>st</sup>, and the final survey was early October. Each survey spans six days and has involved the deployment and hauling of 60 pots inside the HPMA.

Much effort from both the science team, and the North Western Protector crew has been required to get this work underway. The data from these surveys has been provided to NE for their analysis and will assist in developing possible further survey work for future years.

##### b) **Marine Natural Capital**

Morecambe Bay is the focus of marine Natural Capital study through the Association of IFCA's and Natural England. NWIFCA has provided information and historical data on the Bay to provide to the Association. The evidence collated will be combined with additional evidence on associated socio-economic value data to develop local placed-based natural capital assessments of fisheries and Morecambe Bay.

NWIFCA have been working with the Association of IFCA and Natural England to develop a two projects that will assist in our understanding and management of the Morecambe Bay cockle fishery.

1. **Bird food model** - The first project relates to bird food requirements and developing a model to predict bird food requirements for oyster catcher in Morecambe Bay. This will assist with understanding the
2. **Using social/cultural values in decision making** - The second project is looking into the social values of stakeholders, and how this can be used in management decision making. Often IFCA's have a clear framework for the consideration of scientific data, but it is less clear for the inclusion and consideration of cultural or values based information. Given our responsibilities under MaCAA to consider both socio and economic concerns, it is important we find a useful way to incorporate this into our decision making processes.

As part of the project, NWIFCA is assisting NE in setting up interviews with local stakeholders, and Exeter University will be analyzing the interviews to identify social values. A presentation and preliminary analysis of the results was presented in November for discussion with TSB members. There will be further engagement with the Authority as this project progresses, to see how this type of data could be used to assist with cockle fishery management decision making. A final report and presentation will be brought to the Authority in Spring 2025.

## **5. FISHERIES MANAGEMENT PLANS**

### **a) National (excl. cockle)**

A consultation for the national Cockle Fisheries Management Plan was held at Truckhaven on the 31<sup>st</sup> of October. Attendance by stakeholders was low. Tim Smith from the Association, presented the report and consultation questions for discussion. The consultation on the cockle fisheries management plan is currently live, and will be open for responses until January 19<sup>th</sup>. The consultation can be found here: <https://consult.defra.gov.uk/fisheries-management-plans-1/cockle-fmp-consultation/>

### **b) NWIFCA Cockle fisheries management plan**

NWIFCA is currently developing a cockle fisheries management plan applicable to the District. The management plan aims to provide a framework for future decision making, highlight knowledge gaps and develop a 5-year research plan and management review. In time the Districts cockle management plan will be presented to the TSB for review.

## **6. MMO MARINE LICENCE AND OTHER CONSULTATIONS FOR THE QUARTER**

### **a) Morecambe Bay Offshore Wind**

No further update

**b) Mersey Tidal Power Project**

No further update

**Consultations this quarter:**

- Living Sea Walls installation
- Port of Mosytn port expansion - compensation proposal
- Mersey Tidal Power Project - Baseline surveys - Biosecurity Plan
- A494 River Dee Bridge Over-slabbing

**Dispensations this quarter:**

- Environment Agency – Mersey Estuary fish surveys
- APEM - Mersey Tidal Baseline Surveys
- Natural England - Allonby Fish Surveys

**7. WORKING GROUPS AND EXTERNAL PARTNERSHIP WORK**

**a) Technical Advisory Group**

The next meeting of TAG is on the 28<sup>th</sup> of November, and will be reported on in the following Authority meetings report.

**b) Whelk Working Group**

No Further update

**c) Student placements**

NWIFCA hosted two Lancaster University Ecology MSc student placements (Will Harris and Luke Misra) for two months, from September to November. The students participated in all aspects of the organisation's work, including visiting Leasowe and Flookburgh cockle fisheries, undertaking mussel inspections, and attending TSB committee meetings. The students have also developed research projects based on their time with us, which will go on to contribute to their final year dissertations and assist in developing our knowledge gaps in key areas.

**21<sup>st</sup> November 2024**