

NWIFCA Authority Meeting
18th June 2026: 10:00 a.m.

**Report
no.
4**

SCIENCE REPORT FOR INFORMATION
5TH OF MARCH 2026 – 5TH OF JUNE

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 progress with the Wirral Netting surveys, collecting samples from both local netters and during science inspections. Work continues with collecting samples of shrimp and analysis of results alongside Salford University. The team have also completed a number of early mussel surveys, and are working to develop the drone methodology further, re-establish potting surveys, and prepare for the summer cockle surveys. Mergin Maps, a new application for officers to collect data in the field, has been finalised and officially rolled-out. Whelk applications have also been assessed, and discussions with external partners have taken place regarding whitebait filter surveys.

Key achievements since the previous TSB meeting:

- 1) Completed one cockle survey of Southport
- 2) Completed nine mussel inspections including four using the drone.
- 3) Completed three mussel dutch wand surveys and associated reports.
- 4) Completed eight shrimp sample collections and officer Lucy Loud spent three days at the University of Salford processing their respective microbiology samples.
- 5) Conducted four netting surveys and inspections along the Wirral coast.
- 6) Completed the clam survey of the bed on the Wirral, to inform the review of Byelaw 2.
- 7) Completed the application process for new whelk applicants, and moved to keep applications open until October 2026.
- 8) Completed the development and roll-out of Mergin Maps.
- 9) Agreed approval of the NWIFCA Cockle Fisheries Management Plan from TSB in May, a draft of which has been published on the website.
- 10) Held a joint shrimp workshop with the University of Salford at Grange-over-sands to present the current outputs of the shrimp project to stakeholders
- 11) Responded to two consultations and two dispensation requests.

ONGOING WORK STREAM UPDATES:

1. Survey and inspections

An overview of the surveys and inspections carried out this quarter across the District for all respective research work is provided in table 1. Full survey and inspection reports for the relevant cockle and mussel sites will be presented at the TSB meeting on August 5th. A brief

overview of the cockle and mussel surveys will be provided in section 2. Details on the outstanding surveys will be covered in the relevant section under ‘NWIFCA research projects’.

Table 1. Survey and inspections this quarter.

Survey Type	No. Sites Surveyed	Sites surveyed	Number of Survey Days	Survey Dates
Mussels DW surveys	3	Foulney x 2 Walney Channel Low bottom	4	Mar–Jun 2026
Mussel inspections	6	Duddon x 2 Bare ayre x 3 South America Heysham Fleetwood Crookscar	10	Mar–Jun 2026
Cockle surveys	1	Southport	1	04/05/2026
Shrimp samples	3	Fleetwood x 3 Halfmoon x 3 Flookburgh x 2	8	Mar–Jun 2026
Wirral Netting	2	Wirral x 2 Formby x 2	4	Apr–Jun 2026
Clam surveys	1	Leasowe	2	Apr 2026

2. Cockles and mussels

Mussels:

Biomass estimates of mussels across the three main mussel beds of north Morecambe Bay (Foulney, Walney Channel, and Low Bottom) were significantly lower this year than previous. There has been a large wash-off of older mussel lower down the bed, leaving large areas of bare substrate, with only a few old mussel embedded in.

A review of the historical data shows that this is potentially part of a multi-year cycle where the mussels wash off and provide for bare substrate for a new settlement to take place. Officers will be monitoring the conditions of the grounds for any indication of new settlement over the next quarter.

Inspections of the other mussel beds across the District which do not provide for biomass estimates, but allow us to determine the extent and availability of other mussel resources, also

showed limited mussel settlement. This may be due to the early timing of surveys and will be continually monitored throughout the year.

Cockles:

The timing of the Southport cockle survey means there is no data currently available to present at this time. Full results and survey notes will be provided at the August TSB meeting.

3. NWIFCA RESEARCH PROJECTS

a) Mergin – maps (officer sightings data)

This project has been led by Officer Robin Love, with the assistance of an external partner from the company Maptastic, who have developed an app which can be used by officers to collect shore and patrol sightings and inspection information. The aim is to improve both the officers accuracy in reporting and monitoring fishing activities in the District. This information can then be more readily available to Science officers for analysis and use in assessments.

The working app has now been completed, and training provided to all officers. Official adoption of the system occurred on June 1st. In parallel, development work is ongoing to automate mapping outputs for authority reports and improve our data presentation to stakeholders.

b) Whelk Fisheries in the North West

Officer, Gemma Grose, completed a review of the whelk flexible permit conditions under Byelaw 4 (Potting Permit Byelaw), which assessed fishing effort, landings data, landings per unit effort, stakeholder feedback and the policy direction recommendations.

At the Authority's Technical Science and Byelaw Sub-Committee (TSB) meeting on the 10th February 2026, members agreed to reopen the application process for whelk permits within the district for a two-month period between March and April 2026 of up to 2,500 pots in total will be made available to new entrants, with an initial target allocation of 500 pots for up to five vessels.

The application process closed in April and applicants were reviewed, with three new permits being issued. The application window has been extended until October 2026 to allow for further applications to be submitted.

c) Wirral netting research

In 2024, the Authority received concerns regarding the wash-ups of smooth-hound along Wirral coast beaches. At the time there was concerns that gill-nets were the cause of these, and an investigation was needed. This year, officer Gemma Grose has began a project with local fishers looking into the catch composition and fishing techniques of netters along the Wirral. This has involved disseminating surveys to relevant stakeholders, calls for information, and in-field surveys with fishers.

This project is also similar to one being run by Liverpool University along the north coast of Wales, and we are currently in discussions regarding collaboration of results.

d) Shrimp research in the North West

Officer Lucy Loud has assisted in developing a shrimp research project which has received funding, granted to the University of Salford (partners include NWIFCA, Cefas and Mersey Gateway Environmental Trust) through the Coast-R Network small grants fund. The aim of this project is to assess if there are contaminant levels (heavy metals, PFAS) in shrimps, sediments and water which may affect the population and to examine climate stressors (sea water temperature, salinity etc.)

The project will run until October with monthly samples of shrimp, sediment and water collected by NWIFCA from three locations in Morecambe Bay.

In April 2026, Lucy, alongside partners from Salford University held a joint workshop to present the results of the work completed so far by the project to relevant stakeholders. She has also recently attended laboratory sessions with the university to learn about the analysis process.

e) Drone survey work development

Senior Officer Jon Haines is leading the work on developing drone survey methodology, for surveying our District's mussel fisheries. Work to date has focussed on developing a novel method for identifying mussel using the DJI multi-spectral camera. This work has involved trialing different flight heights and speeds, to determine optimum resolution quality. Further work is involved in familiarising recently trained officers with the work and expanding to new beds in the District.

f) Cockle dispersal PhD project

Ongoing - The PhD candidate has begun her work on the project and will be introduced to the Authority at the August TSB.

4. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:

a) Highly Protected Marine Areas (HPMAs)

Work is currently in progress to re-start the NE potting surveys of Allonby Bay in the next quarter.

b) Marine Conservation Zone Assessments

NWIFCA are required to assess the impacts of fishing activities in each of the MPAs designated within its District. Officers have completed the final assessments and have received advice from Natural England regarding outstanding conditions regarding trigger point assessments. This work will be taken forward this year.

b) Marine Natural Capital – Oral Histories

Natural England have just published the outputs from the oral history research on the Morecambe Bay cockle fishery they commissioned as part of the Defra-funded Marine Natural Capital and Ecosystem Assessment programme (mNCEA). NWIFCA inputted into the scope of this work. The report and associated film can be found here:

<https://publications.naturalengland.org.uk/publication/6410423468032000>

5. FISHERIES MANAGEMENT PLANS

a) National (excl. cockle)

No further update

b) Cockle fisheries management plan

The first draft of the NWIFCA cockle fisheries management plan has been completed and was taken to TSB on May for agreement. Formal agreement was achieved and the final 1st version can be found on the NWIFCA website here:

<https://www.nw-ifca.gov.uk/nwifca-cockle-fisheries-management-plan/>

The plan aims to deliver meaningful progress toward the long-term sustainable management of cockle fisheries in the North West and a structured framework to achieve this goal. It will be used to guide decisions at the August TSB later this year.

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:

- Hoylake beach vegetation Removal
- Barrow offshore wind farm O&M marine licence
- Blackpool bespham coast project scheme
- Marine aggregate extraction at Area 393 (Hilbre Swash)

Dispensations this quarter:

- CEFAS Irish Sea Beam Trawl Surveys 2026

7. WORKING GROUPS AND EXTERNAL PARTNERSHIP WORK

a) Technical Advisory Group

HoS attended the London in-person meeting in March. Discussions focussed on the use of remote electronic monitoring (REM) to monitor pots, HRA work associated with the new fisheries management plans, and collaborative work streams IFCA's could undertake.

b) Whelk Working Group

No Further update

5th June 2026

Appendix

Detailed dates of surveys and inspections this quarter

Surveys and inspections this quarter	Date
Mussels	
Morecambe Bay	
Duddon	06-03-2026 & 18-05-2026
Bare Ayre	05-03-2026, 23-04-2026 & 06-05-2026
South America	20-03-2026
Heysham	30-04-2026
Fleetwood	22-05-2026
Crook Scar	02-06-2026
Low Bottom DW	23-03-2026
Walney channel DW	24-03-2026
Foulney DW	31-03-2026 & 19-04-2026
Cockles	
Southport	04-05-2026
Shrimps	
Shrimps Halfmoon	16-04-2026, 13-04-2026 & 11-05-2026
Shrimps Fleetwood	17-06-2026, 22-04-2026 & 14-05-2026
Shrimps Flookbrugh	25-03-2026 & 08-04-2026
Wirral netting	
Net survey	28-04-2026, 05-05-2026, 18-05-2026 & 01-06-2026
Clam Surveys - Wirral	
Leasowe clam survey	20-04-2026 & 21-04-2026