

NWIFCA Authority Meeting
7th of December 2023: 10:00 a.m.

**Agenda
Item
11**

SCIENCE REPORT FOR INFORMATION
21ST OF SEPTEMBER – 7TH OF DECEMBER 2023

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

Recommendation: Report for information, Receive the report

This quarter, the main priorities of the science team have been to complete the final cockle and mussel surveys with associated reports, collect samples for the whelk MLS program, complete drone training, liaise with partner organisations regarding the national fisheries management plans, complete relevant fishery HRA's and undertake the mussel MLS work.

Key achievements since the previous TSB meeting:

- 1) Completed analysis of mussel MLS study.
- 2) Completed HRA for the seed mussel fishery.
- 3) Completed HRA for Southport cockle fishery.
- 4) Completed additional cockle biomass survey at Flookburgh.
- 5) Carried out four mussel bed inspections with associated reports and data analysis.
- 6) Five consultation requests and two dispensation requests provided.

ONGOING WORK STREAM UPDATES:

1. POTTING PERMIT BYELAW

a) Permit database

The science team have been working to set up a database for the suitable logging and analysis of returns data. It is now agreed that a new database will be introduced in 2023, science officers will feed into the returns section to improve recording returns and new ways of analysing the data to help management.

2. COCKLES AND MUSSELS

a) Flookburgh re-survey

At the TSB meeting on the 15th of August, TSB Members voted for officers to re-survey Flookburgh to see if it has grown on. Officers undertook a re-survey in October. The results demonstrated that cockles had grown on (as is expected between July and October) but were still at low biomass levels in comparison to previous years. The Authority approved the recommendation that the bed remain closed.

b) Survey drone procurement

Officers have completed the theory training and practical training and have procured a drone. Work can now begin to develop survey methodology for 2024 mussel surveys using the drone and associated analytical software.

3. NWIFCA RESEARCH PROJECTS

a) Coastal Resilience

University of Salford has put together an expression of interest for a research bid looking into the coastal resilience of Morecambe Bay, with NWIFCA as a contributing stakeholder. This is a trans-disciplinary project pulling together researchers from ecology, geography and arts backgrounds that will share expertise and investigate the status of the main habitats and species in the Bay to understand how they shape community resilience, not just from an ecological or economic perspective but cultural as well. The project aims to implement a natural capital and ecosystem-based management framework incorporating citizen science approaches, to improve the resilience for future climate change scenarios and stakeholder needs. No updates on the progress of this proposal at this stage.

b) Whelk Fisheries in the North West

A new sampling schedule for determining the size-at-maturity for whelks was developed for the summer of 2023. The aim was 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 MLS stipulated in the flexible permit conditions.

The plan was for whelk samples to be provided by fishers once per month as part of their normal fishing activity from May to September from the main fishing grounds. However, there are only a limited number of fishers targeting whelk, which has resulted in lower numbers of samples being collected by fishers than originally hoped. The samples that have been gained will be analysed during the winter period, and the results combined with our historical data to make a prediction on size-at-maturity for whelks in the district. It is important to note that samples from the North of the District are still required, and that NWIFCA officers will be working to obtain these as they will be important for determining a representative sample of the District whelks.

c) Mussel Minimum Landing Size

NWIFCA officers have been undertaking surveys of the Foulney mussel bed following the request from Members to reduce the mussel minimum landing size of 45 mm to 40 mm. The work involved re-surveying the Foulney mussel bed at higher resolution and in addition to normal sampling, the presence of pearl and barnacle were also taken. The results of this work were presented at the TSB meeting on the 7th of November. In summary, it was identified that mussel across the Foulney mussel bed had high levels of pearling at 40 and 45 mm, and the bed demonstrated a typical size distribution structure. The Authority approved officer recommendations to retain the MLS for mussel at 45 mm.

4. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:

a) Highly Protected Marine Areas (HPMAs)

NWIFCA have been in discussions with Natural England regarding establishing a baseline monitoring program for assessing the changes in Allonby Bay HPMA alongside local fishers. The research project is currently in the early stages of development, and a Memorandum of Understanding and preliminary method statement have been developed. NWIFCA will lead in collecting data from fishers and undertaking potting surveys alongside industry members to gain an understanding of the levels of crab and lobster in the HPMA. The project will likely last for >3 years and aims to begin September. Further information on the project will be provided once methodologies and schedules are finalised.

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 place-based natural capital assessments of fisheries and Morecambe Bay. No further update.

5. FISHERIES MANAGEMENT PLANS

a) National

The SS has been engaging with the national fisheries management plans over the past quarter. IFCA's have been asked to collate and information on Defra's front runner FMP's - crab and lobster, and whelk, and also review them. To do this, the Association has developed a website to store relevant information, presentations and papers regarding the FMP's which NWIFCA will contribute to. The aim is to compile examples of best practice to show Defra the key work IFCA's play in fisheries management and contribution to FMPs. NWIFCA also responded to Defra's formal consultation on the 1st of October.

b) Cockle fisheries management plan

NWIFCA is working alongside the Association to contribute to the development of the national cockle management plan. The early stages have involved discussions around development and structure of a plan that must consider multiple different cockle fisheries (Thames cockle fishery, Morecambe Bay, The Wash fishery etc.) and develop clear objectives.

NWIFCA are providing data on the District's fisheries and are developing their own cockle fisheries management plan applicable to the District. Both projects will complement the other with the aim of developing a framework for future data collection and management, a decision-making framework, a research plan and management review.

6. MMO MARINE LICENCE AND OTHER CONSULTATIONS FOR THE QUARTER

a) Morecambe Bay Offshore Wind

Officers responded to the most recent consultation request on the works and discussed issues of concern with local stakeholders.

b) Mersey Tidal Power Project

NWIFCA officers continue to be involved in meetings regarding scope of works and providing information where necessary.

c) Geological Disposal Facility (GDF)

No further update

Consultations this quarter:

- Mostyn Energy Park Extension (September)
- Grange-over-Sands Lido - New pumped outfall
- HyNet Trenchless crossing of the River Dee

Dispensations this quarter:

- Lake District Coast Aquarium
- CEFAS Offshore Catch Sampling Programme 2024

7. WORKING GROUPS AND EXTERNAL PARTNERSHIP WORK

a) Technical Advisory Group

At the most recent TAG meeting, IFCA's discussed the possibility of a joint science training scheme for new officers, similar to that provided for the IFCO roles. Survey protocols and kit were discussed and AIFCA work was presented.

b) Whelk Working Group

NWIFCA attend, and contribute to, the biannual Whelk working group (WWG). The group brings together members of all IFCA's, NE, relevant stakeholders, researchers and government bodies (Welsh government, cefas etc.) from across the UK to share research and current management strategies in order to learn from one another. Next meeting TBC.

21st of November 2023