

**NWIFCA Annual Meeting:  
18 June 2020: 11.00 a.m.**

**AGENDA  
ITEM NO.  
14**

**SCIENCE AND SURVEY QUARTERLY REPORT 3rd FEBRUARY - 30<sup>th</sup> APRIL 2020**  
**FOR INFORMATION**

**Purpose:** i) to provide an update on work carried out in the last quarter;

**Recommendation:** i) Members approve the report.

**1. IMPACTS OF CORONAVIRUS LOCK DOWN**

The latter part of this quarter was severely affected by the coronavirus restrictions. At the start of COVID restrictions all surveys and inspections were stood down until detailed risk assessments could be carried out and means of managing risk could be implemented. Collaborative research projects were put on hold. Since then intertidal survey and inspection has re-started, with officers assisting with shellfish classification sampling.

All boat work has been aborted as social distancing cannot be safely observed. This has put a severe limit on some areas of work and may affect management decisions in the coming months. In particular it has affected all the planned work in the Solway aboard NWP for the subtidal mussel and the Middle Bank cockle bed. It has also prevented officers accessing mussel beds in north Morecambe Bay and industry were subsequently requested to assist with data. This is causing problems between sectors.

Some Science Officers began working from home on 16th March as a precaution prior to lock-down on 23<sup>rd</sup> March. By taking computer equipment from the office it has been possible to access the NWIFCA system although internet speeds may not be as fast as in the office. Each officer's circumstances have created certain problems in being able to work from home, but as Team Lead I am proud of the way Science Officers have continued to demonstrate their dedication to their posts and worked through what has been a very stressful and uncertain time for many. Virtual Science Team meetings were instigated on 1<sup>st</sup> April and have been working well.

Recruitment of a new Inshore Fisheries and Conservation Advisor to fill the vacant post had to be put on hold. Shortlisting has taken place with a 'long-list' of candidates contacted during lock-down to ascertain who is still interested and available, to enable interviews to be actioned once restrictions are relaxed and it is safe to conduct them.

**2. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:**

**a) Natural England Conservation Advice**

National Natural England distributed information on their response to Covid-19, and consequences for the Conservation Advice project. They prioritised their work identifying areas which are critical to business delivery through the Covid-19 period, and areas which could be paused to allow for support to critical areas.

The Conservation Advice project was paused. They will therefore not be publishing any new draft, or making updates to packages in September 2020. They aim to complete a publication

round in March 2021. Those packages which were due for draft, formalisation or update in September 2020 will now be moved to the March 2021 publication round. The national Conservation Advice team were redeployed from the end of April until August 2020.

Updates to the following advice packages of sites within the NWIFCA District had previously been released:

Morecambe Bay and Duddon Estuary SPA (UK9020326)  
Ribble and Alt Estuaries SPA (UK9005103)

**b) Shell Flat and Lune Deep SAC**

MMO, Natural England and NWIFCA have discussed the MMO draft assessment of fisheries activity in the Shell Flat and Lune Deep SAC - comments and inshore fishing activity data had previously been provided by NWIFCA. Officers await the outcome.

**c) Marine Conservation Zones**

Science Officers have responded to Natural England with comments and suggested edits to a draft Smelt Recovery Management Plan for the Solway.

**d) Highly Protected Marine Areas**

No further updates.

**e) AIFCA MPA Symposium Fishmongers Hall London**

The Senior Scientist, HoE and Dr Hartley attended a one day symposium in March signalling the end of the two year Defra funded AIFCA MPA project. The event was well attended with a variety of interesting speakers and presentations.

**f) NWIFCA MPA Monitoring and Control Plan**

The rolling programme of review of HRAs for all activities in all sites continues to ensure if any significant change occurs the HRAs are still fit for purpose and management is appropriate.

**3. NWIFCA RESEARCH PROJECTS**

**a) Razor Clam collaborative research**

(i) Bangor University Shellfish Centre electro-dredge study - a detailed HRA has been agreed with Natural England and MMO dispensation has been issued. Due to COVID restrictions all work has been put on hold.

(ii) Liverpool University MRes research project on intertidal razor clam on the Leasowe shoreline. A methodology was drawn up between the university and NWIFCA science officers, and trialed on two large spring tides in March. It is evident that razor clams at Leasowe are only present at the extreme low water line and time available for survey is restricted to about 1 ½ hours at most. Plans to refine the methodology and obtain more samples during April and May were aborted due to COVID restrictions. The study will resume in March 2021.

**b) Whelk Fisheries in the North West** – samples continue to be supplied by Cumbrian fishers and Science Officers are able to process them at the lab observing safe distancing. The detailed analysis of statoliths carried out by a Lancaster University student has been suspended.

- c) **Plastics in mussels - Cumbria University.** COVID restrictions have caused this project to cease with the current student. Discussions are on-going on recruiting a new student to take over next term, and NWIFCA continue to gather samples to be frozen and processed at a later date.

#### 4. TAG meeting - February 2020

- i. Ms Knott has offered to continue in her post as Vice Chair of the national IFCA Technical Advisory Group for a further year.
- ii. TAG meeting was held in February with discussion around the items below:
  - MLS Byelaws, Size at Maturity and Landings Obligations
  - Under 10m Catch Reporting and IFCA byelaws
  - AIFCA MPA Management Tool - Database presentation
  - Mussel stocks and perceived decline - impacts on protected sites
  - MMO data sharing agreement and issues
  - Extension to eDNA work (see iii. below)
  - Crown Estate Seabed and Coastal Survey Licences
  - MMO Fisheries Evidence Projects
  - EA monitoring programmes 2020-21
  - TAG Conference
- iii. Funding was being sought for the expansion of a pilot project run by Applied Genomics (<https://appliedgenomics.co.uk/>) and Natural England using a novel sea water sampler for eDNA analysis to assess fish populations. IFCA's were approached for logistical support in deploying and recovering samplers on a monthly basis for 12 months. Welsh Government, Marine Scotland, Isle of Man, and Northern Ireland fisheries have also been approached. NWIFCA along with other IFCA's has provided costs to be incorporated into the project funding bid.
- iv. During COVID lock down virtual meetings have been conducted via Skype to develop plans for an IFCA Science, Research and Environment Officer training package, to develop an online resource for new officers and so free up time required in training and induction. Discussion also centred around possibilities of sharing more training between IFCA's and development of an accredited 'advanced' officer course. TAG Chair has discussed ideas with the national IFCA Training Officer, who has been very supportive, and a proposal will be taken to COG.

#### 5. Whelks

- i. National Whelk Working Group meetings held by Skype continue. The group is developing high national value and work through the extensive program of tasks.

Completed tasks include an economic assessment of whelk fisheries undertaken by Seafish, and a summary of information collated on bait used in whelk fisheries. The main findings from Seafish were large increases in the number of vessels, amount landed, income and value of whelks over the last ten years. The bait summary outlines that edible crab with dogfish were the main bait choices, and that there are concerns over increased pressure on crab stocks.
- ii. Industry also recognises there are issues around the fishery, that co-management of fisheries is supported by Defra and have set up a Whelk Management Group within the Shellfish Industry Advisory Group, which has met to address the specific issues in the

rapidly expanding whelk fishery. Likewise, a Crab and Lobster Group is now under way, and by the Group's next meeting it is aimed to have a draft outline plan for the future management of the crab and lobster fisheries to discuss: <https://nffo.org.uk/news/new-shellfish-group-gets-under-way.html>

- iii. Cefas are investigating stock assessments for whelk and have had some success with exploratory surplus production models produced for Irish Sea, Bristol Channel, Western and Eastern English Channel, North Sea, but these are still in development. To produce length or age structured models further data collection is required. NWIFCA have offered our data on and are exploring if the stock assessment models would be of use to NWIFCA in the management of whelk fisheries in the District.

## **6. NAEMO Mussel Research**

After participating in the North Atlantic European Mussel Organisation workshop in October 2019, Ms Knott was asked and has agreed to join the Advisory Board, which will provide non-binding strategic advice to the management of the network.

## **7. MMO DRAFT NORTH WEST MARINE PLAN CONSULTATION**

The SS responded to the online consultation on the MMO Draft NW Marine Plan. There were reams of documents, and it felt a very unwieldy process as there was a great deal of repetition, many errors found in these documents and the Plan as a whole came across as quite jumbled and uncoherent. It took many days to read through the documentation. The SS questions how many stakeholders would have the time and energy to consider responding to such a lengthy consultation. She also reiterated NWIFCA concerns over the Explore Marine Plans online mapping tool.

## **8. MERSEY TIDAL POWER PROJECT**

Liverpool City Region are investigating the feasibility of a tidal power project in the Mersey Estuary. The project has strong backing from Metro Mayor, Steve Rotherham. Officers Knott and Hartley met with the project lead to receive a short briefing on project development. It has completed a phase of option modelling and is seeking funding for the next stage of development.

Dr Hartley also attended the launch event for the project, where the outcome of the year-long feasibility study was outlined to councillors of the Liverpool City Combined Authority and invited stakeholders. The project is presented as essential to the renewable energy portfolio of the city region. The project was awarded a further £2.5M by the Combined Authority to move forward the feasibility study to determine the preferred option for its location and to assess environmental impacts.

## **9. MRAG Barriers to Bivalve Aquaculture**

The SS provided information to MRAG who are carrying out a study: Analysis of the Growth Potential of the UK Bivalve Aquaculture Sector commissioned by Seafish. MRAG, an international fisheries consultancy, say the purpose of this study is to inform Seafish's aquaculture work on ensuring the policy and regulatory framework enables businesses, incentivising a positive investment climate, and revising and developing national aquaculture strategies.

## 10. Benthic Impacts Tool Training

Dr Hartley attended training in the Benthic Impacts Assessment Tool developed by scientists at Bangor University. This tool is part of the output from the EMFF funded project led by the JNCC: Developing a participatory approach to managing fishing activity in UK offshore MPAs, and is intended to support decision makers to assess outcomes of management of bottom towed gear in sedimentary habitats, and utilises information on fishing effort, gear efficiency and the recovery rates of habitats following fishing activity to generate a “relative benthic impact score”. The workshop was valuable and the inputs from NWIFCA were valued by the tool developers.

Project outputs are now live on their website, and include a management toolkit which summarises the regulatory framework underpinning MPAs, outlines guidance for adaptive management of MPAs and robust stakeholder engagement to develop a participatory governance structure.

<https://jncc.gov.uk/our-work/mpa-adaptive-management/>

## 11. St Bees Closure 16<sup>th</sup> March - 24<sup>th</sup> July

Officers implemented the St Bees Voluntary Netting Closure on 16<sup>th</sup> March and the area has been monitored for compliance by IFCOs.

## 12. Defra Blue Carbon Group

Ms Knott attended a meeting of this new group convened by Defra on behalf of TAG. Blue Carbon is a term for carbon captured by living organisms in coastal and marine ecosystems, and stored in biomass and sediments. These are ecosystems that are relatively amenable to management, and have high carbon burial rate per unit area, accumulating carbon in soils and sediments. The purpose of the group is to investigate possibilities for protecting and restoring blue carbon habitats as a nature based solution to the impacts of climate change. Considering the wealth of appropriate blue carbon habitats in NWIFCA District, including mudflats, saltmarsh, seagrass and sub-tidal mud, continuing involvement is important and Dr Hartley has taken a seat on the group.

## 13. Survey and Inspection Report

A full report was provided to TSB in May presenting survey results up to the end of April. Areas of work that are on-going are shown below.

### a) COCKLES

All cockle surveys are scheduled for the summer months to provide the Authority with data on which to decide management in time for the end of the seasonal closure in September.

### b) MUSSELS

- i. North Morecambe Bay mussels will require a TSB decision on their management, and Ms Knott convened a virtual Bivalve Mollusc Working Group meeting to bring sectors together to discuss. Further evidence gathering is on-going and will be reported to TSB.
- ii. Issues around exports of Morecambe Bay mussel to Northern Ireland for aquaculture are being referred by the NI aquaculture sector to the Minister there now the NI Assembly has re-opened.

iii. Solway Mussels Subtidal Survey

NWIFCA purchased a mini Hamon grab at the beginning of March and this was used in a survey on the 4<sup>th</sup> and 5<sup>th</sup> March to trial it for ground-truthing side scan sonar data that was captured on the same voyage on board NWP. There are some logistical issues to iron out which NWP crew are dealing with. Data from the side scan is being analysed and results will be presented to TSB when a full report has been compiled.



Mini Hamon grab being deployed from NWP 4<sup>th</sup> / 5<sup>th</sup> March 2020.

**14. MMO Marine Licence and other consultations for last quarter:**

Howley Weir (archimedeses screw hydro project) - MMO Marine Licence  
Port of Garston sheet pile removal and wall reinstatement - MMO Marine Licence  
Hilbre Island Post and Rail - MMO Marine Licence  
Mersey Gateway post construction environmental monitoring - dispensation  
Whelk Sampling - dispensation  
Bangor University bass and ray research - dispensation  
Maryport Aquarium lobster hatchery - dispensation

**15. Meetings, Workshops and Training attended this quarter**

Skype meeting with Liverpool University x 2 – razor clam research Leasowe  
Skype meeting with Bangor University – razor clam research Liverpool Bay  
Benthic Impact model training  
Mersey Tidal Power meeting and launch event  
AIFCA MPA project symposium  
Time and Tide Bell - Citizens Science Workshop Morecambe  
Health and Safety Meeting internal with H&S consultant  
Shellfish Liaison Group meeting  
Defra Blue Carbon Group meeting

**Science Team  
1st June 2020**