NWIFCA Technical, Science and Byelaw Committee

12th May 2020: 10:00 a.m.

Information Report

SCIENCE REPORT 4TH JANUARY - 28TH MARCH 2020

Purpose: To provide an update to members on the work of the Science Team in the

last quarter

Recommendation: Report provided for information. Questions or comments be sent to the Senior Scientist by phone or email

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. 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.

1. 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 Liverpool University academic supervisor, student and NWIFCA science officers. This was 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, which is problematic when it can take up to 40 minutes for an individual to surface following salting. 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.
- c) Plastics in mussels Cumbria University. It is understood that analysis of samples supplied by NWIFCA had been processed and write up beginning; however this was curtailed by COVID restrictions.

2. 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. IFCAs were approached for their logistical support in deploying and recovering samplers on a monthly basis for 12 months, giving a wide coverage of England's waters. Applied Genomics are also approaching Welsh Government, Marine Scotland, Isle of Man, and Northern Ireland fisheries to take part in the project. NWIFCA along with other IFCAs has provided costs to be incorporated into the project funding bid.
- iv. During COVID lock down virtual meetings have been conducted via Skype in order to develop plans for an IFCA Science, Research and Environment Officer training package, the aim being to develop an online resource that can be utilised by new officers and so free up time required in training and induction. Discussion has also centred around possibilities of sharing more training between IFCAs and development of an accredited 'advanced' officer course. TAG Chair has discussed ideas with the national IFCA Training Officer lan Jones, who has been very supportive, and a proposal will be taken to COG.

3. Whelks

i. Dr Hartley attended the national Whelk Working Group meeting via Skype in February 2020. The group continues to provide high national value and work through the extensive program of tasks.

Completed tasks of note 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 of the Seafish report were large increases in the number of vessels, amount landed, income and value of whelks over the last ten years. The bait summary was presented to TAG and outlined 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 sees itself as an umbrella, which will encourage and oversee a range of bottom up grass-roots initiatives within the shellfish sector). The Whelk Management Group 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. Ongoing work of note, 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. Dr Hartley has contacted Cefas to investigate whether NWIFCA's data collection on Size and Age of Maturity

may be of use in improving these models and to discuss if the stock assessment models would be of use to NWIFCA in the management of whelk fisheries in the District.

4. NAEMO Mussel Research

Following participation at the North Atlantic European Mussel Organisation workshop in October 2019, the structure has been finalised and invitations sent to delegates to take up roles. 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.

5. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:

a) Natural England Conservation Advice

Natural England have distributed information on their response to Covid-19, and the consequences for the Conservation Advice project. They have undertaken a prioritisation exercise across the breadth of their work identifying those areas which are critical to business delivery through the Covid-19 period, and those areas which could be paused for a period of time to allow for resource distribution to support critical areas. Further information on how Natural England is facing the challenges presented by Covid-19 can be found in this operational update from CEO Marian Spain. https://www.gov.uk/government/news/operational-update-covid-19

The Conservation Advice project has been identified as an area to be paused for a short period of time. They will therefore not be publishing any new draft, or making updates to packages in September 2020. They still 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 will be redeployed from the end of April until August 2020, during this time the MCA mailbox will not be monitored.

Packages published in March 2020 are currently in the invitation to comment phase, with an end date of Wednesday June 17th. They are aware that many colleagues in partner organisations and other stakeholders may be experiencing disruption due to Covid-19 including furlough of key staff members. To accommodate this they will be extending the invitation to comment period for the sites detailed below until Friday August 28th 2020. They will respond to these comments once the national team have returned to the project from August.

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 the one day symposium culminating the end of the two year Defra funded AIFCA MPA project. The event was well attended with a variety of interesting speakers and presentations. The MPA Project Database to be used by regulators and statutory bodies needs some gentle tweaking but should prove to be a useful tool, especially when responding to requests for information. In that respect access rights have been given to the NWIFCA Comms Officer and science team.

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.

6. MMO Draft North West Marine Plan consultation

The SS has responded to the online consultation on the MMO Draft NW Marine Plan. There were reams of documents to be waded through, 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. The question arises as to how many stakeholders would have the time and energy to even consider responding to such a lengthy consultation. It took the SS many days to read through the documentation and it has been noted in the response that had it not been for COVID restrictions and lock down there would have been no possibility of this work being carried out alongside normal working and duties. The SS also reiterated NWIFCA concerns over the Explore Marine Plans online mapping tool.

7. Mersey Tidal Power - meeting and event

Liverpool City Region are investigating the feasibility of a tidal power project in the Mersey Estuary. The interest in developing a tidal power project on the Mersey has strong backing from the incumbent Metro Mayor. Officers Knott and Hartley were invited to meet with the project lead at Liverpool City Region offices to receive a short briefing on project development. The project 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 Mersey Tidal Power project in February 2020. This event outlined the outcome of the year-long feasibility study to councillors of the Liverpool City Combined Authority and invited stakeholders. The incumbent Metro Mayor of the Combined Authority provides strong backing to the project which is presented as essential to the renewable energy portfolio of the city region. Following the event the project was awarded a further £2.5M by the Combined Authority to move forward the feasibility study to determine the preferred option for location of the tidal project and assess environmental impacts.

8. 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 is an international fisheries consultancy based in London. 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.

9. 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. The tool 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 parameters can be manipulated to assess potential outcomes of a variety of management options e.g. gear modifications and spatial closures. Although the tool does provide a mechanism for exploring the outcomes of management options, the reliance on VMS/AIS/GPS data to determine fishing effort will limit the usefulness of this tool in Inshore areas. 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/

10. Time and Tide Bell - Citizens Science Workshop Morecambe

The SS attended a one day workshop in Morecambe based around the Time and Tide Bell that is situated on the stone jetty - https://exploremorecambebay.org.uk/see-and-do/time-tide-bell/ with the aim to initiate a pilot project of Citizens Science around the natural world of the Bay. Run by a scientist from the Marine Biological Association further detail on the project can be found here: https://timeandtidebell.org/morecambe-citizen-science/

11. Health and Safety Meeting

The SS, HoE and Operations Managers met with NWIFCA H&S consultant to review existing operational risk management within the organisation. A number of recommendations on how documents are used, processed and stored have been implemented.

12. St Bees Closure 16th March - 24th July

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

Mandy Knott Senior Scientist 29th April 2020