

**NWIFCA Quarterly Meeting:  
18<sup>th</sup> March 2021: 10.00 a.m.**

**AGENDA  
ITEM NO.  
10**

**SCIENCE QUARTERLY REPORT 9<sup>th</sup> NOVEMBER 2020 – 31<sup>st</sup> JANUARY 2021**

**FOR INFORMATION**

- Purpose:**
- i) to provide an update on science work in the last quarter;**
  - ii) to consider resource implications of changing the 2021 cockle close season as a derogation from Byelaw 3, to mitigate the effects of the EU shellfish export ban (requested by February TSB).**
- Recommendations:**
- i) Members approve the report.**
  - ii) Earlier cockle surveys to permit fishing in the 2021 closed season would be difficult to achieve against existing plans and priorities.**
  - lii) Current reports suggest cockle stocks may be too low to justify a change to the closed season.**

**1. UPDATE ON STAFF CHANGES**

Ms Mandy Knott left on 16 December and Dr Melanie Hartley left on 5 January. Ms Knott left to take up a post in Natural England as a Coastal Lead Advisor. Dr Hartley left to take up a post in Natural England where she will be working on mathematical modelling of marine ecosystems using 'R' stats. This post requires specialist skills which Melanie developed during her doctorate and is keen to advance. The Authority extends congratulations to Mandy and Melanie with sincere thanks for their valuable input to the science work and wishes them great success at Natural England. In December IFCO Elliott Waltho requested a move from enforcement team to science team.

The changes were considered at the Finance and HR Committee in December. The Committee approved the promotion of Mr Jonathan Haines to Acting Senior Scientist, the move of Mr Waltho to the science team and considered that the post of Senior Scientist should be advertised externally.

Following advertisement and shortlisting, interviews for an Inshore Fisheries and Conservation Advisor officer were held on 19 January. Mr Matthew Carroll started on 1<sup>st</sup> March, he studied Marine Vertebrate Zoology at Bangor University and followed this up with a Masters at Exeter University in Aquatic Biology and Resource Management. Then worked for the Environment Agency for 5 years specialising in freshwater and transitional waterbody ecology and species identification and analysis. Following this moved on to work for multiple Rivers Trusts in Cumbria and the North West as a project officer, working on conservation projects to improve the freshwater habitats in the area.

The Senior Scientist post has been advertised with a closing date of 15<sup>th</sup> March 2021.

The staff changes are mitigated to some extent as they arose in winter and field work has not yet been affected. The aim is to have a full science team in place and sufficiently trained by the start of the main field work programme in spring. Unfortunately a great deal of experience and

skills have been lost with the departure of Mandy and Melanie. This will take some time to overcome. Controlling impacts on survey work will be a priority. It is expected that involvement in less critical projects will have to be reduced.

In preparation for the departure of two experienced members of staff and the foreseen decrease in the science team work capacity, much of the quarter was spent handing over work, and where possible finishing off work streams. The priorities over the coming months will be:

- Recruitment of the Senior Scientist
- Training new members of staff
- Delivering the survey requirements of the Authority
- Assessing netting within the Solway Firth SPA
- Continuing the Size of Maturity (SOM) whelk work to inform the MCRS
- Assisting with the implementation of the potting byelaw and assessing Whelk Track Record Applications
- Responding to Marine License applications
- Processing byelaw dispensation requests
- Dealing with general science enquires.

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

### **a) 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.

### **b) EU Exit Changes to Habitat Regulations**

The Secretary of State for the Environment, Food and Rural Affairs (Defra) and Welsh Ministers have made changes to parts of the Conservation of Habitat and Species Regulations 2017 (as amended) so that they operate effectively. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change. More information is provided in the link below:

<https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017#contents>

### **c) SPA Management**

Defra are currently looking at the management of SPAs after finishing the recent designation of SPAs in England. Defra are gathering information on the current situation and identifying any potential gaps in management and establishing next steps. The Authority has provided information and highlighted the current situation with the recently designated Solway Firth SPA (information below).

### **d) Designation of the new Solway Firth SPA**

The new Solway Firth SPA was designated on 3<sup>rd</sup> December 2020. The SPA includes the previously classified Upper Solway Flats and Marshes SPA and a large area of the Outer Solway from Whithorn in Scotland to just north of Whitehaven. As well as including all of the originally designated birds it also includes, Red Throated Diver and Ringed Plover as qualifying features and Common Scoter, Goosander, Cormorant, Lapwing, Herring Gull, Common Gull and Black Headed Gull as qualifying features as part of the waterbird

assemblage. There are a number of outstanding HRAs to be completed for the Solway Firth SPA which were on hold after we raised concerns on the approach to proposed management in the consultation documents. After discussions with Natural England the outstanding HRAs will be developed over coming months with netting being a priority.

**e) St Bees Headland Voluntary Code of Practice 2021**

The sea around St. Bees Head is important for many species of birds which nest on the cliffs and feed on fish in the area. Some of the birds are susceptible to becoming accidentally entrapped by nets and disturbed by vessel movement.

At particular times of year (around the breeding season) these birds are at especially high risk. Nobody wants to see birds caught in fishing gear, including those fishing the gear. Apart from the obvious damage to those individual birds, it can cause distress to the public and lead to a damaging perception of fishing.

In 2018 NWIFCA with consultation with Natural England and stakeholders developed the first voluntary Code of Practice (COP). The COP is typically in operation as required from mid-march to the end of July where there is agreement with the netting sector not to fish nets within a 1km area around St Bees. Since the introduction of the COP there have been no known breaches of the COP and impacts of netting on birds have been much reduced.

On 10<sup>th</sup> February 2021, significant number of Guillemots at St Bees and on the nesting ledges were sighted by North Western Protector (NWP) patrols. Natural England and RSPB were informed and monitoring of bird activity was increased to establish if this was a short lived pre-nesting ledge check event or the start of the breeding season. On 3<sup>rd</sup> and 4<sup>th</sup> March, a NWP patrol near St. Bees observed Guillemots present and potting gear in place. Therefore The St. Bees code of practice (COP) was implemented on 5<sup>th</sup> March. This is approximately 10-14 days earlier than in previous years.

**3. NWIFCA RESEARCH PROJECTS**

**a) Razor Clam collaborative research**

Bangor University Shellfish Centre electro-dredge study – due to delays in use of an industry vessel for survey work an extension to the project was requested. An amended HRA was agreed with Natural England and extension to the MMO dispensation was provided until November 2021. Officers await a report from Bangor University on when work aboard industry vessel may be started.

**b) Whelk Fisheries in the North West**

Samples for size of maturity (SoM) study continue to be supplied and are being processed and analysed in the Carnforth lab.

**c) Plastics in mussels**

Cumbria University project will re-start with a new student taking over. Mussel samples have continued to be collected and stored and will be provided to get the project up and running again.

**4. NATIONAL WHELK WORKING GROUP**

A further meeting was held virtually in January of this multi-agency / multi-area group which was attended by Mr. Waltho. Updates were given by members on the research, monitoring

and management which is planned or being carried out. Many of the members are involved in reviewing their potting byelaws, regional size at maturity research, management options on MLS and closed seasons, and considering the implications and compliance options of different MLS in different areas within the District. Officers are particularly interested in research into possible stock assessment methods and potential use in the future within NWIFCA district.

## **5. FUTURE INSHORE STRATEGIC HAND GATHERING IMPLEMENTATION GROUP (FISHGIG)**

An IFCA based group has been set up with a representative from each IFCA to discuss the management of both recreational and commercial hand gathered fisheries. FISHGIG provides a strategic working group to focus upon shared solutions to future management, through both non regulatory and regulatory means and allows for the sharing of resources and ideas. Mr Haines attended a meeting in January where current management of hand gathering was discussed and planning the future steer of the group.

## **6. NEPHROPS CREEL STUDY – CUMBRIA WILDLIFE TRUST**

Science Officers and Cumbria Wildlife Trust Officers met to discuss the Nephrops Creel Study Project and the work that would be carried out in 2021. Discussions focused around the timescale of the project, ownership of the pots and trial locations. The project will focus in the West of Walney MCZ where bottom towed gear is prohibited. The project will investigate the feasibility of using creels at a more commercial scale to catch Nephrops and builds on previous work carried out.

## **7. MERSEY TIDAL POWER PROJECT**

Ms Knott attended a second online environmental workshop convened over the Mersey Estuary Tidal Barrage project. Led by the Merseyside Environmental Advisory Service (MEAS) who have been appointed by the Liverpool City Region Combined Authority to undertake some evidence-based environmental work to support the development of a Mersey Tidal Power project, the workshop was designed to:

- Seek environmental stakeholder input into proposed environmental data and evidence strategy including MTP commissioned studies and surveys.
- To identify any requirement for more detailed engagement and discussion.

The workshop was attended by representatives from wide ranging environmental agencies both statutory and non-statutory with knowledge and expertise in the area of potential influence from the proposed barrage. This area stretches from the Ribble Estuary down to north Wales and out in to Liverpool Bay, centering on the Mersey.

Ms Knott ensured that all data that NWIFCA held that is relevant to the development has been provided to the project, such as fisheries data both commercial and recreational and any stock data we hold for cockle and mussel beds within the area.

More information on the project proposal: <https://www.liverpoolcityregion-ca.gov.uk/metro-mayor-appoints-industry-veteran-to-deliver-mersey-tidal-power-project/>

## **8. FISHERIES – BIVALVES**

The 2021 survey schedule was provided in the February 2021 TSB science report showing surveys seen as essential for 2021 and highlights the times of year these surveys will be completed. An updated plan will be provided at subsequent TSB meetings.

## **a) Issues with UK export to the EU and request from TSB**

Since the 1<sup>st</sup> January there has been limited fishing activity from the open cockle beds within Morecambe Bay. Currently all live bivalve exports from class B is prohibited unless they have been deperated.

At the TSB meeting officers were asked to prepare a report for the Authority meeting outlining the work and considerations that would need to be taken into account for an amendment to the close to be made this year due to export issues. Two options were discussed at the TSB meeting:

- Should there be a change on the restrictions on export of live bivalves from class B waters close to or after the start of the close season 2021, would it be possible to delay the close season to allow fishing to occur? The reasoning would be that the beds have had a forced closure where only very small volumes of cockle have been removed, and the cockle being removed in the closed season would have already been removed in normal circumstances.
- Should there be no change on the restriction on export of live bivalves from class B waters would it be appropriate to suspend the close season early, potentially in June to allow fishing in summer months? Other fisheries around the UK open at this time of year.

Annex A provide an outline of considerations to inform a decision on changing the cockle close season 2021.

## **b) Mussels**

- i. Chinese Mitten Crab – Surveys for Chinese Mitten Crabs may not be needed this year after the 2020 records of the species in Morecambe Bay. Officers have contacted regulators to investigate if there is still value in providing reports as previously done.
- ii. Morecambe 2021 mussel settlement - there have been a number of reports that many of the areas have already received a 2021 mussel settlement, which is earlier than normal. This was confirmed by officers during an inspection of South America. A full report will be provided at the May TSB meeting. Officers will plan to inspect the other beds over the coming month to see if it is a common theme around the bay.
- iii. Morecambe Bay Mussel Management Plan - Science officers met with Natural England to discuss previous work on the Plan which was halted in 2016 due to unresolved issues around bird food requirement and spawning stock biomass. Discussions on bird food requirements centered on the current cockle and mussel HRAs and how cockle and mussel stock data is presented. Mr. Calum Booth (RSPB) examined what individual birds need for feeding throughout winter, and if this information could be crossed referenced against landings data. Since the meeting Mr Browning (NE) has investigated work nationally on bird food requirements to see if there is a consistent approach to assessing requirements in shellfisheries. There are a range of methods used around the UK and it is recommended that we look to update the work done by Mr Booth. Officers intend to make progress this year but a full plan is unlikely to be in place for this year's mussel fisheries. Limiting factors are the volume of work required to update the plan, requirements to consult with industry, the HRA assessment of the plan, and the reduced capacity of the science team.

**9. MMO MARINE LICENCE AND OTHER CONSULTATIONS FOR THE QUARTER:**

Wyre Beach Management Scheme - Ground Investigation	MMO Marine Licence
Wyre Beach Management Scoping Opinion EIA	MMO Marine Licence
EA 2021 Review of Shellfish Water Protected Area Designations	EA Consultation
Port of Mostyn, project Flagstaff: Glass Eel Survey	Dispensation
Wyre Rivers Trust – Smelt Survey	Dispensation

**10. MEETINGS, WORKSHOPS AND TRAINING ATTENDED THIS QUARTER**

Mersey Sediment Group  
Blue Carbon Working Group  
IFCA and MMO Licensing Engagement  
Meeting with Cumbria Wildlife Trust over the nephrops creels study  
Razor Clam Collaborative Research Progress Update meeting  
Meeting with Natural England over Solway Firth SPA and outstanding HRAs  
Whelk Working Group meeting  
Future Inshore Strategic Hand Gathering Implementation Group

**NWIFCA Officers  
5th March 2021**

## **Annex A – Consideration of a possible decision to change the cockle close season in response to the EU bivalve export ban following Brexit**

### **1. Background**

Currently all live bivalve exports from class B are prohibited unless they have been depurated in the UK. Large scale depuration facilities in the UK are not available and depurated shellfish have a reduced shelf life limiting distribution to Europe. This prohibition has effectively stopped cockle fishing in the District.

Since 1<sup>st</sup> January 2021 where cockle fishing has taken place (Flookburgh and Leven) landings per person have been relatively low with reports of low stock. Officers have limited reports from Pilling and Newbiggin, but neither have had much fishing activity since opening in September.

A cockle closed season under Byelaw 3 operates from 1 May to 31 August.

At the TSB in February 2021, members requested a report for the March Authority meeting outlining work and considerations which would be required to amend the 2021 close season to meet the possible situations described below:

1. Should there be a change on the restrictions on export of live bivalves from class B waters close to or after the start of the close season 2021, would it be possible to delay the close season to allow fishing to occur? The reasoning would be that the beds have had a forced closure where only very small volumes of cockle have been removed, and the cockle being removed in the closed season would have already been removed in normal circumstances.
2. Should there be no change on the restriction on export of live bivalves from class B waters would it be appropriate to suspend the close season early, potentially in June to allow fishing in summer months? Other fisheries around the UK open at this time of year.

### **2. Considerations**

**Stock levels:** Industry reports from Flookburgh and Leven are that stock levels are low and that a fishery now looks unlikely for the 2021-2022 season. Information of stock on Pilling Sands and Newbiggin is limited but neither have had much fishing activity since the opening in September. Reports before Christmas were that the Pilling cockle has a lower meat content which might affect the demand from this bed. If exports were operating as normal, quantities fished in 2021 would be lower than in recent years so changing the closed season may have little effect.

**Closed season:** Byelaw 3 defines a cockle close season from 1<sup>st</sup> May to 31<sup>st</sup> August. The aim of the closed season is to protect spawning stock and newly settled spat. With that aim in mind a change to the timing of the closed season would need to be considered to ensure there was no significant impact of current and future stocks.

**HRA amendments:** Any opening within the closed season would be outwith the current HRA and therefore any potential opening of a cockle bed in the close season would need to take into account the potential impact to the designated features.

If the change to the closed season is relatively small, such as delaying the start of the close season on the cockle beds that are currently open by one month, it is expected that it would be

possible to make an amendment to the current HRA, based on the reasoning that cockle removed in the extended closed season would have normally been removed earlier in the year.

If the change is more significant such as opening any potential cockle fishery in June rather than September, it would require a new HRA to be completed with the usual data requirements on mussel and cockle stocks around the district.

**Industry Views:** Industry is likely to be divided over opening in the close season. Should the Authority decide to proceed investigations into allowing fishing within the closed season, it would be recommended a survey should be conducted to further consider industry views.

**Survey:** The cockle beds were last surveyed in July 2020, if the closed season is shortened or moved significantly, further survey work will be required to ensure there has not been an unexpected decrease in stock.

To delay the close season by a month on the cockle beds now open, officers should carry out additional spot checks on the open beds to ensure stock is still present. This will give confidence to the reasoning used in an amended HRA.

To suspend the close season early allowing fishing to restart in July or August instead of September as usual, a new HRA would be required including a full district wide suite of surveys including information on mussel stocks which are an essential component of bird food requirements. A new assessment would then be made on the possible opening of cockle beds within the district as would be done for a typical September fishery.

**Resources:** Below are the survey resources that would be required to consider changes to the close season.

To delay the close season by a month:

Field work (open bed spot checks)	4 days,
Data processing and analysing	2 days
HRA amendment.	1 day

To suspend the close season early and complete a full suite of cockle surveys, process and analysis the data, provide reports and complete an HRA typically requires 6 weeks. Officers typically start cockle surveys in mid-june with the aim of having the HRA completed by the beginning on August.

This does not take into account the surveys which will need to be completed on the separate mussel beds to permit any seed mussel fishing. Limited survey resources could mean that not all required surveys can be completed in time to open all the potential fisheries when they are wanted by industry.

Information on the mussel beds is required in the cockle HRA. By moving the time of the surveys to earlier in the season, data will be missing on 2021 cockle spat. Biomass figures will be based on information collected before the cockles have had chance to grow through the summer. There may be requirements to complete additional surveys later in the year, as done by other fisheries that open in June / July, but this would need exploring further as the season develops.

It is important to consider the NWIFCA science team have recently had two experienced members of staff leave. Training of two new Inshore Fisheries and Conservation Advisors has started and the Senior Scientist post has been advertised. This is not an issue in terms of



surveying but in terms of completing the HRA as the new officers may not have the skills in time to draft a new HRA. There will also be staffing leave requests which may cause delay.

**Timing:** The main limiting factor will be the difficulty in timing. The potential changes to NWIFCA cockle management are based on possible changes to current restrictions on the export of live bivalves which will be difficult to predict.

To delay the closed season by a month, work would have to start in March to ensure there is enough time to get industry views, complete the spot checks on stocks, process and analysis the data, produce inspection reports, amend the HRA, submit to NE, and take into account their comments.

To suspend the cockle close season early such as in July or August, work would have to start immediately. Each year surveys start in March and run through to October. March to June is typically spent surveying mussel stocks for any potential seed fishery in the summer / early autumn. Late June and July are spent surveying cockles ready for any potential opening in September. To move all of the cockle surveys to earlier in the season will have an impact on the mussel surveys, some of which are required for any potential cockle HRA. This could have an effect on potential mussel fisheries in 2021. It may not be possible to condense all of the survey work into a shorter time frame without additional resources. It may be possible to contract outside work such as from Red Snapper who have assisted with enforcement work in recent years. However, we cannot be certain that adequately trained personnel would be available. A prioritisation of work streams would need to be agreed.

**Management:** To delay the close season by a month using the justification that the cockles removed would have typically been removed between January and April if there were not the issues with shellfish export, catch limits may be required to ensure exploitation is not greater than would have been expected normally.

To suspend the close season early, any management required must be decided on and agreed prior to the opening of the fishery as is typically done for a September opening.