

**NWIFCA Quarterly Meeting:
13th September 2019: 11.00 a.m.**

**AGENDA
ITEM NO.
10**

SCIENCE AND SURVEY QUARTERLY REPORT 18th MAY - 9th AUGUST 2019

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

Recommendation: i) Members approve the report.

The Science Team has welcomed new officer Tom Brook who came into post on Monday 12th August and who is undergoing induction and training.

1. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:

a) Marine Conservation Zones

i. West of Walney MCZ

The MMO MCZ Byelaw prohibiting bottom-towed gear throughout this site came in on 4th July 2019.

ii. Defra consultation on Tranche 3 MCZ sites

Three T3 MCZ sites were designated in the NWIFCA District in June: Solway Firth, Lune and Wyre Estuary and the Ribble Estuary. All three sites are designated for smelt with a recover management objective. It is not anticipated that fisheries activities will require any management. An extension was made to the T1 Cumbria Coast MCZ to include razorbill and extend the site boundary. This will not affect the closed area used for the NWIFCA Voluntary Code of Practice.

b) Highly Protected Marine Areas (HPMA) - Review

Defra announced that they are carrying out a review into possible Highly Protected Marine Areas and are seeking the public's views. An online portal can be found:

<https://www.gov.uk/government/publications/highly-protected-marine-areas-hpmas-review-2019>

The experts making up the Review panel has been announced

(<https://www.gov.uk/government/news/highly-protected-marine-areas-review-panel-confirmed>) and includes:

- Richard Benyon, MP (Chair)
- Joan Edwards (Wildlife Trusts)
- Callum Roberts (University of York)
- Michel Kaiser (Herriot Watt University)
- Nathan de Rozarieux (Inshore fisherman and fisheries consultant)
- Susan Owens (University of Cambridge)
- Peter Barham (Seabed User and Developers Group)
- Benj Sykes (Ørsted)

The panel was due to have its first meeting week of 22nd July and will:

- Review whether and how to introduce HPMA's
- Possibly recommend some pilot sites
- Consider types of activity that could continue without causing harm, including navigation through these areas

c) Assessment of Fishing Activities in Marine Protected Areas

- i. Work continues to assess bait collection and hand-gathering activity within the District's MPAs.

d) 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.

e) St Bees Head - Cumbria Coast MCZ - Netting Voluntary Code of Practice

The Voluntary Code of Practice around St Bees headland for 2019 began on March 18th. Natural England and RSPB were consulted on any need to extend the closure which is flexible depending on weather and bird behaviour. No need was identified and the proposed date for lifting the closure of 22nd July was upheld.

IFCOs provided regular reports from clifftop and boat patrols in the area. These included fishing activity sightings along with information on what was observed from the birds on and around the cliffs, which are all logged. Reports indicate 100% compliance and the science team extend gratitude to both licensed and unlicensed fishers for their co-operation.

2. NWIFCA RESEARCH PROJECTS

a) Bass populations and tagging study – Cefas project. A meeting was held in London with colleagues from Cefas and Isle of Man fisheries to discuss proposals for inclusion in a "north west bass plan". Cefas scientists planned to carry out further bass tagging with electronic data storage tags (DST) in NWIFCA District in July, but the trip was cancelled due to a lack of >50cm bass which are needed for DST tagging.

b) Razor Clam collaborative research – NWIFCA scientists approached MMO over the required dispensation for use of electro-dredge gear, and began a draft HRA. Officers await full information from industry and the Bangor scientist following adaptation of the gear to progress the project further.

c) Whelk Fisheries in the North West – samples obtained from industry are being processed in the lab. Flesh containing statoliths for aging are frozen. Due to the time it takes to process and analyse these an approach has been made to Lancaster University for assistance through a student project.

3. NATIONAL IFCA TAG MEETING and WHELK WORKING GROUP

The Senior Scientist now has the position of TAG Vice Chair and co-ordinates and provides the secretariat for TAG. TAG Chair is Colin Trundle from Cornwall IFCA. Monthly bulletins are circulated with contributions from TAG members. July saw a meeting in London well attended with a packed agenda and a note of the meeting can be provided to Members of TSB on request.

The Whelk Working Group held a Skype meeting in May and an update on the work to date provided to TAG. A further Skype meeting is scheduled for September.

TAG and WWG both use online portal facilities as a means to store and disseminate information to group members.

4. HALITE GAS STORAGE AND BRINE DISCHARGE

No further news on this development.

5. DEE TIDAL CATCHMENT PARTNERSHIP - DEE COASTLINERS PROJECT

Science Officers engage with a number of estuary conservation and steering groups in the District including the Dee Tidal Catchment Partnership. Involvement is minimal in most cases unless specific issues occur that require an IFCA response or input. In a recent mail-out it was noted that the DTCP had obtained funding through the Lottery Heritage Fund for a project entitled the Dee Coastliners Project:

“The Dee Coastliners Project is a sense of place initiative designed to inspire coastal communities on the Wirral and in Flintshire and Denbighshire about the natural heritage of the Dee Estuary. In doing so we want to create a new community of stewardship on the estuary which will take action to address the needs of that heritage.

It is a cross-border project working on both the English and Welsh sides of the estuary. Although sharing a common nature, the area is politically and socially divided. We hope to unite the communities across the estuary by reconnecting them to a common estuarine heritage. Our legacy will be a community attachment to place that will create a more resilience landscape and protect the livelihoods of those who depend upon it”.

Officers noted that there was no mention of fisheries, fishing communities or the importance of fishing heritage to the area, and so asked that consideration be made to include these aspects of coastal communities. Officers assisted in providing fishing / fisheries contacts who will engage directly with the project development.

6. EMFF WORKSHOP - Developing a participatory approach to the management of fishing activity in UK offshore Marine Protected Areas.

A second workshop was held in Lancaster in May attended by SO Hartley. West of Walney MCZ is being used as a case study in developing a tool for MPA fisheries management.

7. COCKLES

a) Morecambe Bay

Following the survey reports given to TSB in August, TSB have approved the closure under NWSFC Byelaw 16 on the following beds:

- i. Middleton and Aldingham - are subject to a NWSFC Byelaw 16 closure - ‘where any bed or part of a bed ... is so severely depleted as to require temporary closure to ensure recovery’:
- ii. Warton Sands and the west side of Pilling - are subject to a NWSFC Byelaw 16 closure - ‘where any bed or part of a bed ...contains mainly immature shellfish which in the

interests of protection and development of the fishery ought not to be disturbed for the time being’;

From 1st September - Newbiggin, Leven Sands, Flookburgh, and the east side of Pilling are open for size cockle fishing to Byelaw 3 permit holders. Methods for gathering as those laid out in NWIFCA Byelaw 3 (para. 7).

b) Leasowe - Wirral

Survey of the bed in the first week of August showed an increase in the current size stock. Work is underway in conjunction with Natural England regarding bird food requirements and the Habitats Regulation Assessment. Allowance must be made for bird feeding requirements throughout the winter, and as there is no mussel resource on the English side of the Dee the cockle resource becomes more of an issue. Any recommendations on this fishery will go back to TSB by email for approval, and the Authority will be kept informed.

8. MUSSELS

a) Exports of Mussel to Northern Ireland from Morecambe Bay for Relaying

Following decisions at the May TSB and the June Authority meetings, the Senior Scientist contacted the Association of IFCA’s Stephen Bolt who agreed to discuss the issue of DAERA’s approach to mussel exports from Morecambe Bay with SAGB (Shellfish Association of Great Britain). The Senior Scientist also tabled the issue at TAG under an item concentrating on the impact of Invasive Non Native Species on fisheries. Chinese Mitten Crab surveys continue quarterly with no sightings recorded. Reports continue to be distributed to all relevant parties.

b) Heysham Flat

i. Seed mussel fishery:

The fishery was authorised from Monday 22nd July as the mussel was ready and already scouring out in places. Posts marking out the exclusion zone to protect what remains of the honeycomb worm reef had been positioned by IFCOs. Unfortunately due to the prohibition of import of seed mussel into Northern Ireland the markets were limited. This was compounded when the main buyer reported that due to Brexit and risk of No Deal the aquaculture businesses he sold to in Southern Ireland were reluctant to purchase any seed this year. Subsequently no fishing has occurred to date (19th August).

ii. Natural England and Eden Project North:

The Senior Scientist accompanied a group of fourteen national Natural England IFCA representatives and three staff from the proposed Eden Project North to be based at Morecambe, on to the skear at Heysham Flat and attended a post-inspection meeting to discuss matters. It was an excellent opportunity to show others how unusual and unique the seed mussel stock can be in the Bay, as a large swathe of the skear was carpeted in dense mussel which was starting to put down mud and to clump up. It was also an opportunity for them to observe the thriving colony of honeycomb worm that has moved to the north of the skear and off the main area of mussel, and to hear how these two species compete. Natural England representatives were appreciative of the NWIFCA management of this fishery.

Eden Project North is an exciting development with which NWIFCA scientists intend to fully engage. The intention is to create an educational and entertaining attraction that showcases the wonders of the Bay, including the importance of fishery resources and their heritage, the actual dynamics of the channels and sandbanks, and the protected features particularly the

importance of the area for over-wintering waders. They intend to have a research facility within the project and Lancaster University have been stakeholders in the project development to date. The proposed design of the dome buildings will take the form of mussels. NWIFCA and NE have made representation to Eden Project staff that incursion of any construction into the intertidal areas should be avoided. The project has entered the planning stages and more detail can be found here:

<https://www.edenproject.com/media/2019/06/eden-project-north-planning-process-begins>

c) Foulney / Walney Channel Size Mussel

Unusually for this area the mussel stock has grown though to size and is being gathered by a low level of Byelaw 3 permit holders. There has been no spat settlement this year. It is not known why this has occurred when in most years the area receives a substantial recruitment. It will be interesting to monitor this next year.

d) Solway Mussels

i) Development of sub-tidal survey equipment in the Solway

Officers continue to work to progress the capacity for survey of subtidal mussel and protected reef feature in the Solway. Admittedly and frustratingly, progress has been slow.

Side Scan Sonar - The side scan sonar was repaired and dates for training were scheduled for Cornwall IFCA's scientist Colin Trundle to come up and share his experience and expertise. Unfortunately the weather did not allow work to be carried out in the Solway itself but the equipment was fully deployed and data on hard and soft ground outside Whitehaven harbour obtained. There is apparent influence from the vessel's jets unless the 'fish' flies below this which is likely to be a problem in the shallow channel where the Silloth mussels are found. The 'fish' was therefore trialled in the marina deploying it from the bow of the vessel. Dates are planned in, weather permitting, to use this method to survey the Silloth mussel area in the coming weeks.

While attempting to use the software that 'stitches' together the side scan data to provide an image of the seafloor it became apparent that a higher spec computer is needed to manage the volume of data. This is being investigated.

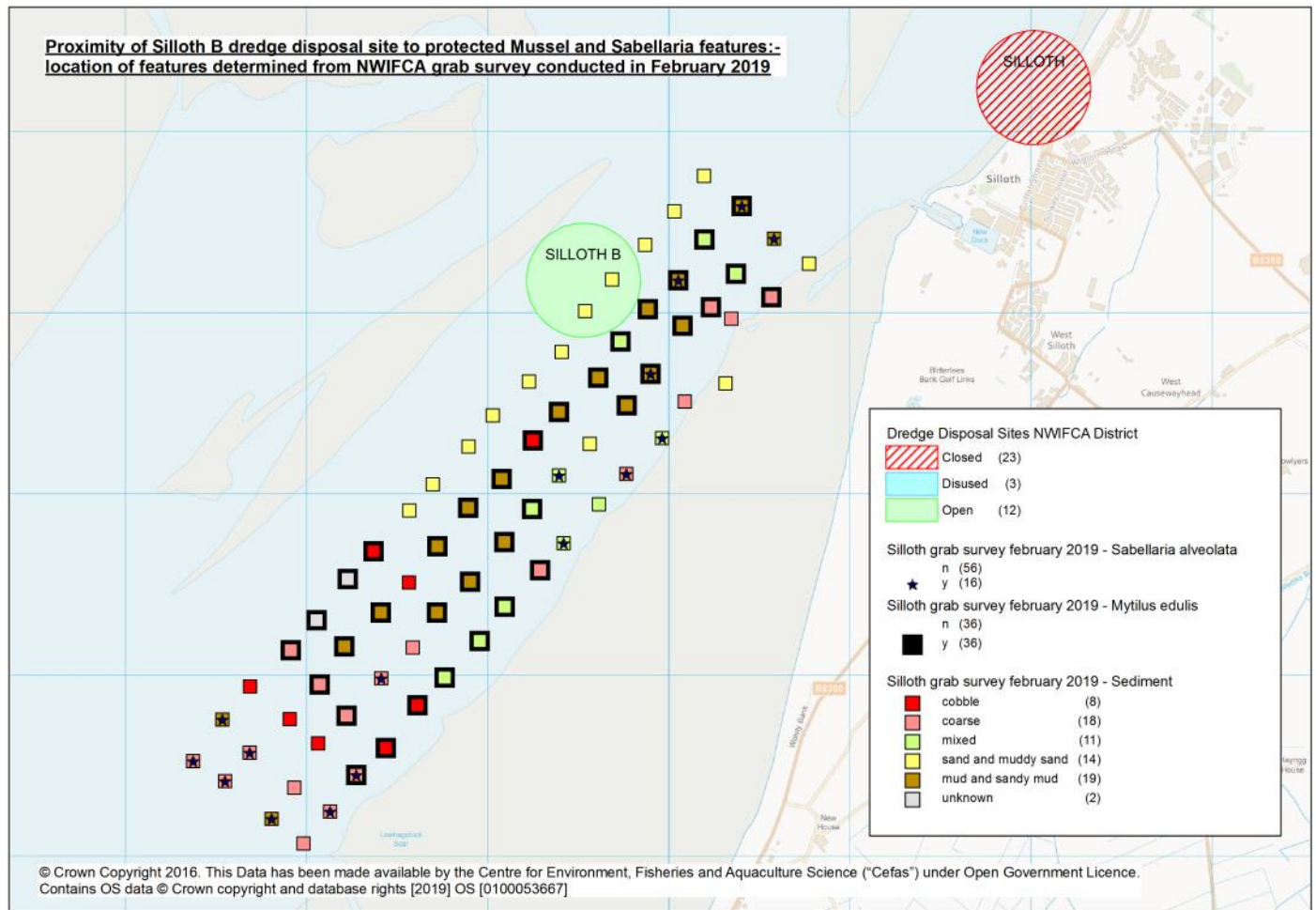
During the course of this training the shared IFCA side scan sonar equipment was also deployed – it is housed at Cornwall IFCA so officers took advantage of this opportunity to try out both pieces of kit. The more expensive higher spec EdgeTech equipment is more efficient to use and provides better data, so it may be one course of action to bring this equipment back to Whitehaven in the future if regular surveying is decided on.

Olex - Email discussions have been had with an expert in the field regarding training in the use and analysis of ground-discriminating Olex equipment. The Olex is integral to the wheelhouse of North Western Protector and can be run continuously as the vessel steams over the seafloor. Officers have received very helpful advice on example data that has been sent, and apparently the data is as good as possible from the equipment. The problem is whether this type of equipment can actually discriminate between soft and muddy sediment and areas of mussel and *Sabellaria alveolata*. The thinking at this time is that there is nothing further to be gained from training, but to continue gathering data each time the vessel is in the area to assess the continuity in quality of data. It is useful to have an expert on hand should the need arise for more advice. Officers will also endeavour to ascertain what multibeam data could be made available to NWIFCA as this may prove to provide better ground discrimination capability.

Grab sampling – the apparatus to extend the A-frame for the use of the grab from the stern of North Western Protector is being fabricated. Once this has been acquired and used, further investigation will be made into design and acquisition of a Hamon grab.

ii. Port of Silloth Dredge Disposal

An issue was raised by IFCO Erik Thinnesen over his observations from the shore of the disposal of dredge from Silloth harbour. The vessel appeared to be dumping spoil over the area of mussel and protected reef. Some mapping work was carried out to investigate further and a conversation is on-going between NWIFCA, Natural England and the port authority over the position and extent of the licensed disposal site.



Mapping of the position of the licensed dredge disposal site in relation to NWIFCA grab sample data (2019) of protected mussel and *Sabellaria alveolata* in the Solway.

9. Defra Consultation on Management measures for widely spread Invasive Alien Species (IAS) in England and Wales

Defra are currently carrying out an online consultation on proposed management of specified invasive non-native species, most of which are terrestrial or freshwater but including Chinese Mitten Crab. The Senior Scientist has responded but Members are also encouraged to complete the survey:

<https://consult.defra.gov.uk/wildlife-management/invasive-alien-species-management-measures/>

10. MMO Marine Licence and other consultations for last two quarters:

MMO Marine Licence consultations

Liverpool Cruise Terminal Harbour Revision Order
Liverpool Cruise Terminal Marine License
Middleton Outfall Air Release Pipework
Cumbria Coastal Activities Centre Slipway
Heysham Power Station Routine Maintenance
Heysham 1 and 2 Dredging Activities
Port of Workington Maintenance Dredging
Crosby Beach Iron Man Pile Replacement
Warrington Centre Park Link – license conditions review

Dispensations

Springfields Fuels Limited – Environmental Monitoring Program
Cefas Endeavour – Irish Sea Beam Trawl Survey
Bangor University – Bass and Rays project
Cumbria Wildlife Trust & North Western Protector – Nephrops creels

Meetings and Training attended this quarter

Defra Review of IFCA's meeting
Liverpool Barrage conference call
Staff meeting

**Science Team
19th August 2019**