

**NWIFCA Technical, Science and Byelaw
Committee**

8th August 2017: 10:00 a.m.

**AGENDA
ITEM NO.**

7

SCIENCE REPORT
30TH APRIL – 16TH JULY 2017

Purpose: to provide an update to members on work of the Science team in the last quarter

Recommendation: that Members approve the proposal for a Voluntary Code of Conduct at St Bees Head for the protection of nesting birds

1. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT:

a) Marine Conservation Zones

Tranche 2 - West of Walney MCZ – Recover Objective. No further information – awaiting guidance from Defra and MMO on cross-boundary management approach.

Tranche 3 – three estuarine sites Ribble MCZ, the Wyre / Lune MCZ, and the Solway MCZ. No further developments.

b) Review of Fishing Activities in European Marine Sites

Work has continued on completing the Review of Fishing Activities in European Marine Sites; below is an update and summary of the number of assessments which have been carried out and number left to be completed.

- One document for each European Marine Site has been completed containing a list of activities not occurring within the site, for the audit trail;
- Eight documents have been completed containing activities that only occur on a recreational basis within the European Marine Sites. If the status of these activities change and the activity becomes commercial then the activity will be assessed;
- Fourteen assessments have gone through to the Test of Likely Significant Effect stage and have been completed and signed off by Natural England;
- Of the original activities screened into the Review, twelve assessments have gone through to Appropriate Assessment. Eleven of these have been completed and signed off by Natural England, and one is in progress (Dee Estuary – shrimp and light otter trawling);
- All assessments for the Solway Firth had been completed or were with NE for sign off;
- However, due to the boundary of the proposed Solway Firth Special Protection Area (pSPA) being much larger than the current SPA, a further assessment has to be completed for activity that did not occur within the old boundary (trawling);

The netting HRA is being reviewed to take the new boundary into account with specific activity data from industry.

c) St Bees Head SSSI – Netting and Bird Entanglement and Disturbance

Officers convened two meetings with fishing stakeholders (commercial and un-licensed) in Whitehaven along with valued input from Natural England colleagues. The aim was to gain an improved understanding of netting activity around St Bees Head, and discuss concerns and potential management options to prevent entanglement of and disturbance to nesting birds on the cliffs. The area is designated as a SSSI, is an RSPB reserve and is the only example of rock cliff in the NWIFCA District. Cumbria Sea Fisheries Committee had intended on making a byelaw to prohibit netting. There have been instances when diving birds such as guillemots and razorbills have become entangled and drowned, and also concerns around disturbance to birds rafting at the base of the cliffs, particularly juvenile birds.

Natural England are in the process of consulting with recreational users and further measures within a code of practice regarding boat speed and proximity to rafts of all users, both the fishing sector and otherwise, will be considered in due course.

A proposal has been made to implement a Voluntary Code of Conduct (Annex A) as a first measure, which would apply to all fishing sectors. Compliance would be monitored by IFCOs, and there have been offers from fishers for observers on-board. Officers seek approval to proceed with this course of management.

BAIT COLLECTION HABITATS REGULATIONS ASSESSMENTS

The Senior Scientist had been in discussion with Defra and Natural England about a perceived change in course of action over assessing the impacts of bait collection in EMS. She tabled the issue at the IFCA TAG meeting in June to ascertain how other IFCAs are dealing with it. There was a variety of responses indicating a level of confusion and dysfunction in communication. TAG Chair has sent a letter to Natural England lead Mike Quigley as an initial attempt to reach clarity.

A December 2018 deadline has been set for management of damaging bait collection activities from both recreational and commercial gathering. There is confusion over which bait collection activities should be included – whether only baitworm digging and pumping, or crab tiling, and what the rationale for singling these activities out is. NWIFCOs have been recording sightings of all activities. The HRAs will be completed site by site once clear direction has been given on expectations. No management from current known activity levels is envisaged.

C- BASS TAGGING PROJECT

The Cefas C-Bass tagging project began in the NW District in mid-June. Successful joint working between CEFAS, the NWIFCA, MMO and industry (2 local commercial bass fishermen) saw 34 data storage tags (DSTs) deployed in bass over 50 cm. 35 T-Bar tags were inserted in smaller 'schoolie' bass around 30 cm. The work took place onboard industry fishing vessels as well as from the shore. The project will continue in early September and will hopefully deploy the remaining 26 DSTs.

MOORSIDE POWER STATION

NuGen announced earlier this year that the Moorside Power Station development and associated North West Coast Connections projects had been put on hold, due to investors pulling out of the new nuclear build projects following the company manufacturing the reactors going into receivership. Officers have down-scaled involvement in these projects until such time as financial security has been declared. In the meantime the Lake District National Park has been designated a World Heritage Centre, and it will be interesting to see whether this affects NWCC plans for the high power cable route. If that should occur it is likely there will be greater attention on routing offshore.

WEST CUMBRIA MINE

Officers attended a meeting with West Cumbria Mining, the MMO and fishermen in Whitehaven to discuss the variation of the Marine Licence for the exploratory borehole surveys. This involved an increase from 12 hours a day drilling to 24 hours. The NWIFCA had expressed concerns over potential for cumulative impacts considering other developments in the area, and that there was a lack of evidence that there will be no significant impact on the marine environment. CEFAS had recommended monitoring if there was a shift to 24 hour drilling.

RAZOR CLAMS

Members will be aware that there are razor clam beds along our coastline, both sub-tidal and inter-tidal, and that there is great industry interest. Efforts have been made in the past to work with industry to seek funding to carry out research into the stock. Unfortunately these efforts have not borne fruit and there is currently little known about the distribution or ecology of the stock. The Authority took the decision previously not to authorise fishing without the ability to ensure sustainable management.

In order to provide the Authority and stakeholders with some clearer information on future options, Ms Aitken has been tasked with investigating approaches taken by other regulators – if and how individual population's distribution and ecology is studied, how sub-tidal razor fishery stock assessments are carried out, and if any fisheries are managed, how is this done to ensure sustainability of the stock. The intention is to produce a full report for TSB to consider in relation to razor clam stocks in NWIFCA District, and whether there are actions the Authority would need to take to manage a sustainable fishery.

RESEARCH PROJECTS

- a. Natural England – were asked for project ideas for some underspend money – with around 48 hours notice. They consulted with NWIFCA science and were successful in receiving small amounts of funding to carry out three fisheries focused projects:
 - i) Drone surveys of crab tiles in the Mersey Estuary and North Wirral Foreshore – to assess the benefits of using drones over foot survey – comparing time and accuracy.
 - ii) Investigation with fishermen into use of Nephrops creel pots in the West of Walney MCZ as an alternative to trawling.
 - iii) Use of NWIFCA sidescan sonar on Solway Protector to investigate the presence and distribution of subtidal mussel and scar ground in the Solway. Incorporating some training for NWIFCA officers on practical use of sidescan and post-survey processing of data from external surveyor. Sadly this project will not proceed due to internal issues regarding availability of SP and crew, and mal-functioning of sidescan necessitating its possible return to manufacturer for diagnostic testing of faults.
- b. Lobster Genetics

Manchester University PhD student Graeme Fox is carrying out research using genetics to assess the current stock units of the lobster fisheries around the UK and Ireland, and then looking at the potential effects of the restocking projects underway at the various hatcheries. He is collecting wild samples (30 specimens) from each geographical location. Each sample consists of removing a fingernail sized piece of the pleopod and examining them for genetic markers to determine if lobsters around the UK and Ireland are one large stock or if there are distinct locational variations and therefore regional stocks. NWIFCA have assisted with collecting samples and currently 35 samples have been collected from North Cumbria with plans to collect more samples from South Cumbria. NWIFCA have also sent

a sample of a non-native American lobster (*Hommarus americanus*) which had physical features of both American lobster and European lobster (*Hommarus gammarus*) to see if any work can be done to ascertain whether it is a possible hybrid.

- c. Lancaster University – officers have been assisting two Masters students with dissertation projects, the outcome of which is intended to aid understanding of cockle movements in Morecambe Bay.
- i) A desk study of cockle movements and influential factors.
- To assess the relationship between sediment dynamics and cockle movements.
 - To determine direction and rate of movement of cockles of different sizes/ages within the Morecambe Bay.
 - To inform future modelling/prediction possibilities.
- ii) An investigation into the temporal variations of Morecambe Bay channel movements and the relative influence of this upon cockle bed settlements.
- Examine temporal variations of channel movements in the Lune channel in relation to the cockle bed settlements at Pilling sands, Lune Island and Middleton Sands through the mapping of a time series of channel movements and known cockle bed locations.
 - Evaluate the influence of climatic variations on sediment movement within the ecosystem and thus channel movement due to the potential implications on cockle migration.
 - Determine the sediment type and elevation.

WEBSITE – Species Ecology

Science Officers are working to populate individual species ecology pages for the website, providing summary information on important fishery species in the District. These will be found via: <http://www.nw-ifca.gov.uk/managing-sustainable-fisheries/#>

MONTHLY SHELLFISH ACTIVITY RETURNS FORMS

Officers have been digitising Monthly Shellfish Activity Returns forms (MSARs) from 2006 to present which vessels with a shellfish permit fishing for lobster and crab are required to submit monthly. The forms detail data including amount of each species landed, the number of pots set and hauled and the area fished each day. The data will be analysed for spatial and temporal changes in both catch and effort to give officers a better understanding of the crab and lobster fisheries in the district.

OIL SPILL RESPONSE

Officers have been involved in the response to the oil spill from the Douglas Complex oil installation 15 miles off the coast of North Wales on 10th July. Small oil deposits and 'tar balls' have washed up on the shore extending from Bispham to Cockerham Sands. Braemar response are coordinating the clean-up effort, NWIFCA science officers have been part of an environment group providing support and information to the ongoing clean-up operation.

Science Team
24th July 2017

ANNEX A – Voluntary Code of Conduct for activity around St Bees Head

NORTH WESTERN INSHORE FISHERIES AND CONSERVATION AUTHORITY



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Fishing around St. Bees Headland Code of Practice

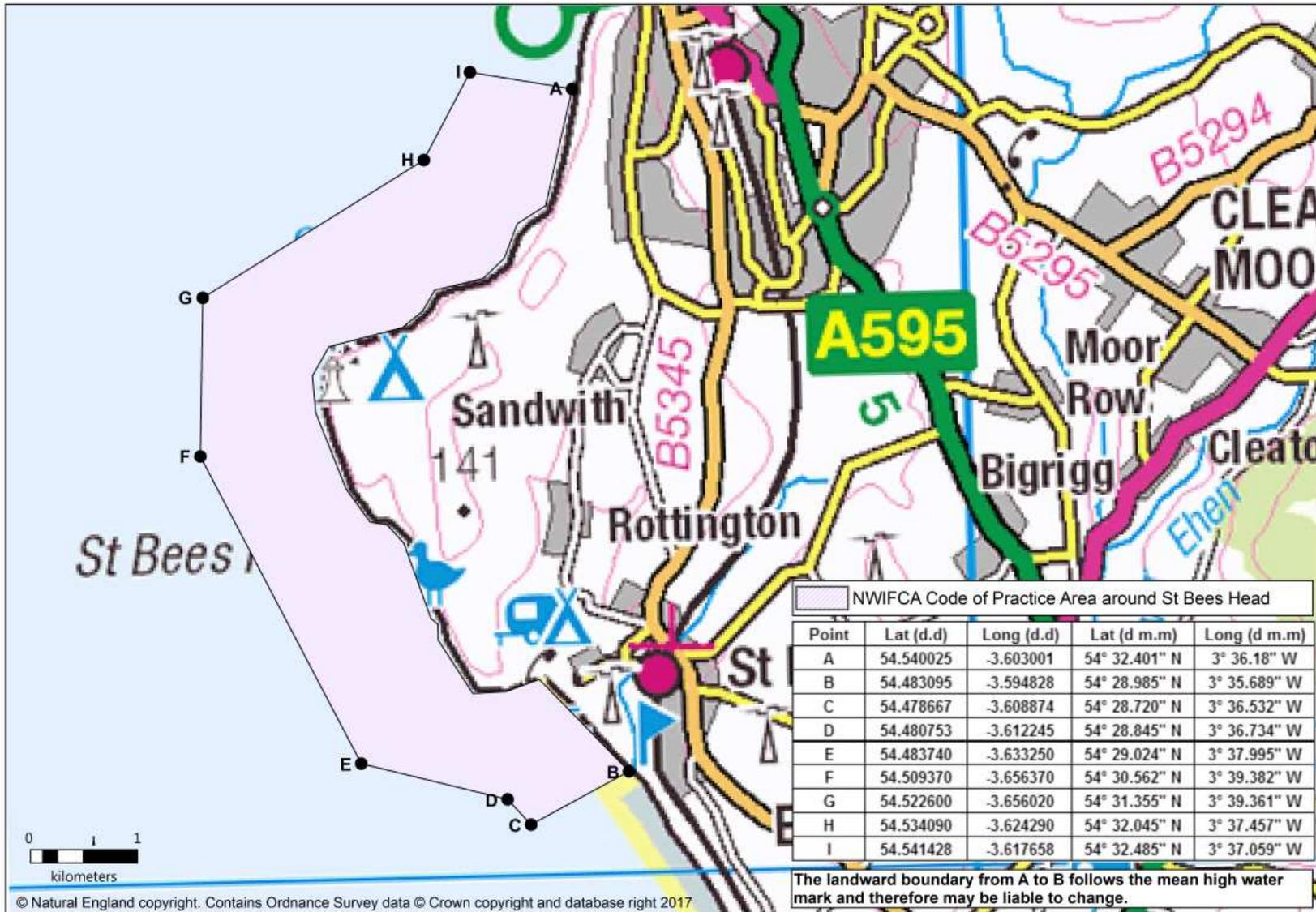
The sea around St. Bees Head is important for many species of birds which nest on the cliffs and feed on fish in the area. Some of the birds are susceptible to becoming accidentally entrapped by nets and disturbed by vessel movement. At particular times of year (around the breeding season) these birds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

To reduce the risk the NWIFCA recommends that the following Code of Practice should be followed:

- No netting of any type in the area highlighted in map below during the period 1st March to 15th July.
- If you do accidentally catch a bird in your net outside of the area or in any non-netting gear within the area ensure that you contact the NWIFCA on the details above with details of the capture including location, number of birds and species.

Note: St Bees Head is a Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981, and an RSPB Reserve



NWIFCA Code of Practice – Netting Box
 Map is for illustration only and should not be used for navigation