

NWIFCA Annual Meeting: 28th June 2018: 11.00 a.m.

AGENDA ITEM 13

SCIENCE AND SURVEY QUARTERLY REPORT TO 31ST MAY 2018

Purpose: To provide an update on science and related work

1. MARINE PROTECTED AREAS IN THE NWIFCA DISTRICT

a) Marine Conservation Zones

- i. Tranche 2 - West of Walney MCZ – Recover Objective. Cross-boundary site from 4.3nm to beyond 12nm. MMO carried out an informal consultation to decide what management option to take forward. They are now consulting on *Management Option 1* – Prohibition of all bottom towed fishing gear in the inshore section of the site. This option will involve prohibiting bottom towed fishing in the whole of the site inshore of 12 nm.

The consultation runs 8th May – 13th July. The full documentation including the measures, the Regulatory Impact Assessment and the Environmental Assessment are available to view in MMO offices in Preston and Whitehaven. The weblink to consultation documents and response portal is:

<https://www.gov.uk/government/consultations/west-of-walney-marine-conservation-zone-mcz>

- ii. Tranche 3 Consultation Open – Forty-one sites are proposed for designation in the third tranche including the three within the NWIFCA District. Two others lie outside our boundaries but are likely to have some impact on NWIFCA stakeholders. T1 site Cumbria Coast MCZ has extensions to boundary and species proposed. Details are provided in Annex A.

Three estuarine sites have been taken forward for consultation. All sites would be designated for the recovery of smelt. No management measures are anticipated for fishery activities. However, improvements in water quality as a possible requirement following designation could assist fishery interests, such as bivalve shellfish in the Ribble, where poor water quality persistently affects the hygiene classification of the stocks there. Physical structures such as weirs in each of the rivers are also thought to create barriers to migration.

The consultation documents are available along with the response portal at:

<https://consult.defra.gov.uk/marine/consultation-on-the-third-tranche-of-marine-conser/>

b) NWIFCA MPA Monitoring and Control Plan

The NWIFCA MPA M&C Plan is a working document which sets out what MPAs and fisheries have gone through assessment, provides a summary of fishing activity in terms of effort, target species, seasonality and spatial extent, what habitats or species may be impacted, and what regulation is in place. It also details a timeframe for review of each individual assessment and triggers for re-assessment. The M&C Plan is required to ensure fisheries continue to be Habitats Regulations compliant and has been approved by TSB.

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

The Voluntary Code of Practice to suspend all netting activity around St Bees Head began on 1st March. A press release was distributed around ten days before it came in. Officers have been monitoring for any non-compliance and to date there appear to be no issues. As Members will be aware BBC Countryfile became interested in the story and filmed NWIFCA officers on-board “Solway Protector” carrying out a monitoring patrol, as well as RSPB colleagues on the clifftops. The programme was aired on 15th April.

2. **NWIFCA NEW VESSEL**

Science Officers have made several visits to the Holyhead boatyard to inspect work on wet and dry labs and installation of electronics for sub-tidal survey equipment.

3. **NWIFCA RESEARCH PROJECTS**

- a) Nephrops creel potting – Members will recall that Natural England were able to secure a small grant to explore using creels for *Nephrops* fishing around the West of Walney windfarm. A fisherman from Barrow is contracted to test the use of the creels and gear has been purchased. Weather delayed the start of the project, and during this time Emily Baxter from Cumbria Wildlife Trust agreed to take over the project while Natural England staff changes occur. She submitted a larger bid to the West of Morecambe Fisheries Fund to extend the project, but sadly this was not successful. It is hoped that results from the initial project will bolster a further bid for European Maritime and Fisheries Fund (EMFF) funding. NWIFCA will accompany some fishing trips to observe the deployment of the gear, and record catches.
- b) Bass populations tagging study – Cefas has obtained 3 years EMFF funding for a project with IFCA's and fishermen, and other agencies, for a further bass research project. Cefas scientists will work with science team and fishermen to deploy data storage and T-bar tags in bass in the District. The project outcomes should provide greater understanding and evidence of the stocks, their movements and the connectedness of populations.
- c) Razor Clam collaborative research – following the February TSB meeting a call for industry interest from industry in collaborative razor clam research. Three companies expressed interest and a meeting was fixed for 4th May for an initial discussion.
- d) NW Whelk Fisheries: as previously reported IFCA officers nationwide have been watching UK whelk fishing trends. Industry interest in whelks is increasing. Baseline stock data is essential to inform future management. Science team visited Bangor University School of Ocean Sciences PhD student Phillip Hollyman who is researching ‘Age, growth and reproductive assessment of the whelk, *Buccinum undatum*, in coastal shelf seas’.

Officers were trained in techniques for:

- i. sexing of whelks;
- ii. determining sexual maturity;
- iii. determining spawning condition;
- iv. use of dissection and microscopy to age whelks using miniature otoliths embedded in their flesh.

Data is being gathered on whelk fishing within and outside the 6nm and contact made with fishers and processors to collaborate on stock assessments in the District. Views from Members and stakeholders would be welcomed to improve understanding of current fisheries and identify options for future management. In particular the issue of the whelk MLS (set at 45mm) needs addressing.

4. **POTTING PERMIT BYELAW:** The Senior Scientist has made progress with the Potting Permit Byelaw. A draft is to be submitted for approval to TSB before further consultation is carried out.
5. **MARINE PLASTICS IN MUSSELS:** Following publicity around plastics polluting the marine environment Science Officer Huw James wrote a short report on the impacts of ingestion of micro-plastics by marine organisms which was circulated to members and posted on the website.
6. **TAG CONFERENCE – IFCA TECHNICAL ADVISORY GROUP:** Despite forecasts of blizzards Science Officers braved the motorway network to attend the TAG Conference in Poole at the end of February. Attendance was reduced due to the weather and the second day had to be cut short but it was time well spent on crab, lobster, whelk, cephalopods and bivalve fisheries. Following concerns raised by NWIFCA and EIFCA over effects of electro-magnetic fields, discussion also revolved around elasmobranchs with a summary of existing evidence and discussion of data gaps to be filled.

IFCAs shared their research, management and future workstreams. TAG has developed substantially over the years and serves the IFCA science community well, with a commitment to share and collaborate whenever possible. Monthly emails are circulated with contributions, advice, reports etc posted with an overarching objective of enhancing our work across the board, and mesh IFCA research with that of other UK bodies.

7. **HALITE GAS STORAGE (PREESALL) AND MARINE MONITORING GROUP**

The start of construction on the Halite gas storage brine wells and the brine discharge pipeline has been held up for 6 – 12 months. This has enabled the Marine Monitoring Group to convene for its first meeting held on 27th March. A useful discussion was held which established the Terms of Reference of the group. A point to note is that all representatives on the group agreed that it was important that a public statement should be produced after each meeting that could be sent to stakeholders on request. The second meeting has been postponed twice which has led the Senior Scientist to raise the point that this has also delayed the agreement for the survey protocols during the prime season for enabling surveys to proceed – weather and seasonality of ecology. If the window for gaining sufficient baseline data is missed then there would be major concerns over the project construction timelines.

8. **WYRE POWER STATION**

It has come to light that there is a proposal for a further power development on the Wyre Estuary, namely the Hillhouse Enterprise Zone Power Station by Wyre Power Ltd, on land previously owned by ICI.

According to the Infrastructure Planning Inspectorates website:

“Up to 900MW Megawatt electrical (MWe) Power Plant primarily using combined cycle gas turbine (CCGT) technology with optional additional open cycle gas turbine (OCGT) technology to help address the fluctuating energy demands of UK power consumption. The project will include a new gas pipeline, Above Ground Installations at St Michael’s on Wyre and Hillhouse, and an electrical cable to Stanah substation”.

<https://infrastructure.planninginspectorate.gov.uk/projects/north-west/hillhouse-enterprise-zone-power-station/> (accessed 20-04-18).

It is not known at this stage whether or not the project will require a MMO Marine Licence at which stage the NWIFCA would normally be consulted. It may not require one and be dealt with by local authority planning, in which case NWIFCA may find itself outside of the loop.

Efforts will be made to contact Wyre Borough Council's planning department to ask to be included in any planning consultation in case of likely impact to marine or coastal resources.

9. INSTITUTE OF FISHERIES MANAGEMENT (IFM) SPECIALIST CONFERENCE – Lancaster University

The Senior Scientist gave a presentation on 'Challenges of Marine Fisheries Management' at the IFM Specialist Conference attended by estuarine fisheries scientists from around the UK. Places were also taken by other science officers and the Communications Officer who all reported on how interesting the two day conference had been covering estuarine and coastal fisheries, with a good opportunity to network. All the presentations are available as pdfs here: <https://ifm.org.uk/ifm-specialist-conference-2018-presentations/>

10. COCKLE AND MUSSEL FISHERIES

Surveys have been targeted at priority cockle and mussel stocks, and a full report provided to TSB. Below is a summary of the work and findings.

i. Wirral - Leasowe Cockle Fishery

The stock was re-surveyed just prior to the seasonal closure. Estimated biomass remaining provided confidence in the TAC that was set for the fishery to ensure bird prey resource availability overwinter. Observations of oystercatchers and gulls still making good use of remaining cockles. Officers continue to keep watch for signs of any new recruitment. There is currently no sign and therefore there is not likely to be a fishery in autumn.

ii. Ribble Estuary - Penfold North

Officers have returned to this bed and observed how these slow growing cockles and the ground they lie in are changing. A very rough estimate of biomass gives 500-600 tonnes of three year old cockles lying on the surface of sloppy mud, in what has been very hot sun, the likelihood of the majority of them persisting through the summer is slight, and therefore following discussion at BMWG officers visited the area with representatives from industry and are progressing the possibility of a fishery authorised for undersize cockles during the seasonal closure.

iii. Morecambe Bay – Pilling Sands & Flookburgh / Leven Sands

Pilling Sands cockles: Gathering continued until the start of the seasonal closure. The stock was resurveyed just prior to the fishery closing showing some cockle remaining.

Mean number of size cockle: 25 per m² (min. 0, max 180)

Mean number of undersize cockle: ~ 19 per m² (min 0, max 234)

There is no evidence of 2017 or early 2018 settlement.

Flookburgh / Leven Sands cockles: Fishing activity has continued right through to the seasonal closure. There is no evidence of 2017 or early 2018 settlement.

iv. All other cockle beds: There are no other commercial stocks at present, but Officers and IFCOs will monitor for spat settlement in spring.

v. Dee Estuary – size mussel

This mussel stock has seen a low level of gathering activity throughout the spring with about 200 tonnes removed from Thurstaston. Industry report signs of a new settlement around the outside of the mussel bed on dead mussel and cockle shell but not in with the main extent of mussel. Mussel is growing quickly and there is more size on the bed, giving work through the

year and into spring next year. The mussel is going for relaying. Science Officers are monitoring for signs of Chinese Mitten Crab which is known to have populated the estuary.

vi. Morecambe Bay - Heysham Flat seed mussel

The skear has received a widespread covering of spat which is growing fast on the lower reaches. Officers have notified relevant bodies that a seed mussel fishery is highly likely and monthly monitoring is occurring to be able to assess when it is ready for fishing. Two representatives from Natural England accompanied officers on the most recent inspection, and could see the lack of any underlying live *Sabellaria alveolata*. This has now shifted northwards and is forming healthy mounds away from the main mussel skear. Officers will assess the area nearer the time and implement an exclusion zone to all fishing activity around the live worm colonies.

vii. Morecambe Bay – South America / Falklands seed mussel

Officers assessed both of these mussel beds on separate tides and had received industry reports and photographic evidence of the mussel on them. The Falklands bed in particular lies around 6 miles offshore and needs the right tides and weather to be able to get out to it by quad bike.

In short, both beds had remaining 2017 mussel on them which was mainly undersize with some just around 45mm. It had not scoured out as had been predicted. Byelaw 3 permit holders asked to be able to fish it, and this was discussed at BMWG. There was no opposition, and an email was sent to TSB Members for approval. An authorisation was issued for one week of tides and around 30 tonnes was taken off with 6-10 fishers present each day.

Officers observed a new spatfall in various densities across both areas. These will be monitored whenever it is possible to access them, along with industry reports and geo-referenced photographs and reported back to TSB.

viii. Morecambe Bay – Foulney and Low Bottom

Surveys have been carried out on these beds showing recruitment at Low Bottom and a stock of just undersize mussel at Foulney. These will be re-surveyed as the summer progresses.

iv. All other mussel beds

Beds at Fleetwood have been inspected and there is a spat settlement on Perch and Black Scars which may be of interest to the dredge fishery. There are no other commercial stocks at present, but Officers and IFCOs will monitor for spat settlement in spring.

11. MMO Marine Licence and other consultations this quarter:

MMO Marine Licence consultations

Deployment bird deterrents Burbo Bank Extension OWF
Foxfield Water Main Reinstatement

Byelaw 1 dispensations

Mersey Gateway - Runcorn Bridge Ecology Surveys 2018
EA Wyre River Intertidal Surveys 2018
Wyre Rivers Trust BioBlitz surveys

Meetings and Training attended this quarter

Dee Estuary Cockle Fishery Advisory Group
MMO North West Marine Plan workshop – Whitehaven

National IFCA TAG Conference – Poole
Shellfish Liaison Group – Kendal
Solway Firth Partnership – Carlisle
Peel Ports Sediment Management Meeting – Liverpool
Halite Marine Monitoring Group – Wyre
Peel Ports INNS Workshop – Liverpool
Liverpool City Region Visitor Planning Strategy Workshop - Crosby
Natural England MPA Monitoring survey planning
Cefas Bass Research meeting – Westminster
Lancaster University joint research potential
Personal Survival Techniques – Fleetwood Nautical College
First Aid + Defibrillator Training – Glasson Sea School
Towing training

Science Officers
12th June 2018