

NWIFCA Annual Meeting
12th June 2015: 11:00 a.m.

AGENDA
ITEM NO.
15

SCIENCE REPORT
28TH FEBRUARY – 22ND MAY 2015

Science Team

Sadly today is Science Officer Abigail Leadbeater's last day with the IFCA. Ms Leadbeater has been successful in securing a post in Madagascar, working for the marine conservation organisation Blue Ventures. She will take up the position of Field Scientist and will be primarily tasked with the training of volunteers and carrying out dive surveys as well as taking part in the range of development projects that Blue Ventures undertakes. We wish her every success for her future and thank her for all her hard work during her three years with the NWIFCA. Recruitment for a replacement will begin as soon as possible.

BIVALVE MOLLUSC WORKING GROUP

The newly formed Bivalve Mollusc Working Group (BMWG) held its first meeting on 30th April 2015 to discuss and agree the Terms of Reference of the group, and to consider a first draft of a management plan for mussel resources in Morecambe Bay and the Duddon Estuary. A summary of the meeting has been posted on the website. There is representation from different sectors with an interest in the Bay / Estuary and the mussel resources found there. Stakeholders are asked to liaise with the following people if they wish to have an input / find out more regarding their own interests:

Byelaw 3 permit holders (3) Gary Pidduck, Tim Manning, Terry Davies
Seed mussel dredge fishery (3) Kim Mould, Graham Wood, Richard Henning
Natural England (1) Chris Lumb
Shellfish buyers (1) Robert Butler
Aquaculture (1) Kelsey Thompson
NGO representation – eg. RSPB, WLT (3) Calum Booth, Emily Baxter, David Harpley
Science expertise (2) vacant.

Representation was decided by the individual sectors. NWIFCA officers will facilitate and attend meetings.

Summary of Meeting:

- 1) Terms of Reference were agreed;
- 2) Current level of representation was agreed;
- 3) Call for science/academic representation;
- 4) Management Plan: a draft Management Plan was used as a basis for discussion. There are many points / issues within the Plan, and not everything could be considered in the one meeting.
Therefore certain points were prioritised for discussion and others will be dealt with at a later stage:
 - Management Plan needs to be re-drafted possibly in table format, with bulk of text / background as appendix (NWIFCA to action);
 - understanding that all mussel fishing activity, including size mussel fisheries, would be subject to Habitats Regulations Assessments to comply with Defra Revised Approach to Fisheries Management within European Marine Sites;

- management needs to be adaptive;
- hand-gathering access points table needs to be reviewed – discussion between NWIFCA, fishermen and Natural England re: environmental issues and any other issues;
- agreement that fishing (by dredge and by hand) does not mean all mussel is taken, but that it can have a thinning effect which can help to stabilise the bed;
- that in an effort to identify areas of ephemeral seed mussel beds which can be authorised as a dredge fishery the old Morecambe Bay Mussel Fishery Order 1978 area should be used as a starting point, if agreed after all have seen the maps. The maps for this need to be circulated prior to the next meeting to enable all to consider this point (NWIFCA to action);
- a general principle was agreed that what can be hand gathered is, and what can't is dredged, with a requirement for flexibility depending on stocks each year; it should be offered to hand gatherers first, but if no interest then authorise dredge fishing;
- if agreement can be reached (and stocks allow) it would be possible to authorise hand-gathering on spring tides and dredge fishing on neap tides on the same bed;
- spawning stock and sustainability are crucial in management decisions and better understanding is needed (science / academic / research input);
- in order to assess possible impacts on birds in the area Natural England will provide a paper on bird food requirements and bird habitat requirements.

The next meeting will be scheduled for the end of June / beginning of July.

Cockle and Mussel Fisheries in the NWIFCA District

Disappointingly there has generally been no sign of improvement in the cockle fisheries in the District (see Leven Island and Solway cockles in this report). IFCOs regularly report to the Science Team on the state of the beds and to date there has been no sign of any significant spatfall. These observations will continue throughout the year as the most likely time for seeing cockle recruitment is July onwards.

There is regular low level harvesting of size mussel in the Ribble Estuary. There has been no significant mussel recruitment on the West Kirby bed in the Dee or on the skears in the Solway. Morecambe Bay and Duddon mussels are covered in this report.

SURVEY AND FISHERIES WORK

This year does not see many large spring tides, which are needed to access some of the District's most important intertidal fisheries and therefore all days with decent tides are being used to the best advantage. Efforts to hire helicopter and hovercraft in order to inspect potential seed mussel at South America are on-going.

Mersey mussels

The mussel bed in the Mersey is classified as 'Prohibited' due to level of contaminants in the Mersey, and it is unlikely that they will be classified for human consumption. However an inspection was carried out by Science Officers to gain an idea of the food resource available here to birds. The mussel present was a mix of size mussel and dead shell, at the end of two groynes. The two exposed patches of mussels covered an estimated area of 0.688 hectares and 0.348 hectares but it is believed parts of the bed are sub-tidal.

Marshside – Penfold Inspection

Science Officers and an IFCO carried out an inspection in the Marshside-Penfold area on 23rd April 2015. Very few cockles were seen over several beds inspected (including Penfold North, South Gut and Foulnaze), with no signs of spat. Birds were also observed feeding, presumably on tellins and

worms, and roosting on the sands. Officers will keep an eye on the area and notify the Science Team if any spat is sighted.

Ribble Estuary Undersize Mussels

Following requests from industry for authorisation to remove undersize mussel from a small area adjacent to the Seafield Road slipway at Lytham, the Senior Scientist inspected the bed and carried out a Habitats Regulations Assessment in discussion with Natural England. The proposal was for a limited fishery removing a set amount of undersize mussel (max. 20 tonnes) which normally does not persist to size due to wash out or mortality in summer heat, and to trial the relocation of one tonne of mussel on to the training wall in the Ribble – an area that is regularly fished for size mussel by a small group of Byelaw 3 permit holders. Due to the fact the fishery would occur in spring and summer following the departure of the majority of overwintering birds and that the resource was deemed to be short-lived, issues around bird prey resource were minimal. Also the low level of fishing activity predicted resulted in few concerns around bird disturbance issues.

An inspection on 26th March 2015 provided GPS tracking which when incorporated into MapInfo software allowed an estimate of the area to be made giving a main area to the east of the slip measuring approx. 480 x 20m (3 ha) and a smaller area to the west of the slip which had already partially scoured out, measuring 100 x 20m (0.46ha) (Fig. 1).

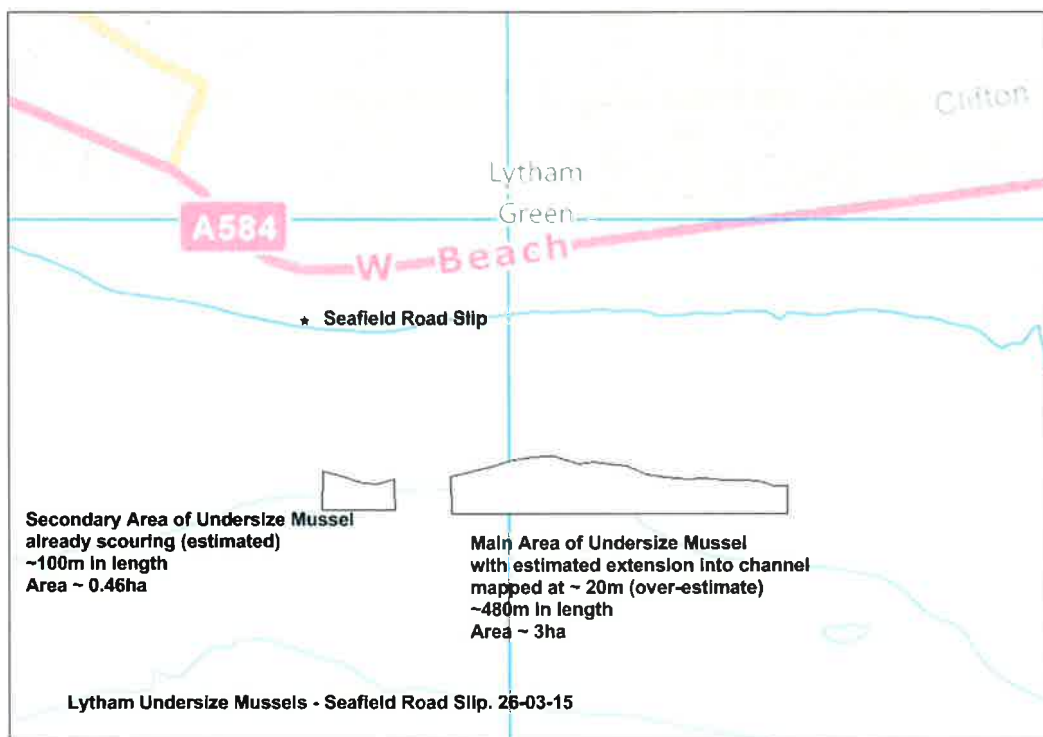


Fig 1. Map showing the distribution of the undersize mussels at Lytham 26-03-15

The stock was estimated at a maximum of 150 – 200 tonnes. Authorisations were to be issued to individual gatherers on request, who are required under byelaw to submit weekly landings returns. As the area has not been fished in recent years it was proposed to set a TAC as a precautionary measure and to require the gatherers to fish it in a 'thinning out' fashion rather than from one concentrated area. This may have a beneficial impact on the remaining mussel and provide improved conditions for survivability.

The Senior Scientist discussed the potential fishery with some other key individual Byelaw 3 permit holders to gauge the level of interest prior to the HRA being carried out. There was no interest other

than that initially expressed. Four authorisations (and one support worker) were issued, and then a subsequent request resulted in six more authorisations being issued in time for the fishery opening. Only the initial four have been worked and no further interest has been shown. However TSB directed that in the future Officers should inform all Byelaw 3 permit holders by text and website notices of any fisheries that were opening.

For the relocation trial it is proposed for up to four Byelaw 3 permit holders and one support worker to harvest up to one tonne of mussel and move it on to the training wall in the river. NWIFCA Science and Enforcement Officers will observe and oversee the removal and relaying, and return to assess whether the trial has been successful.

Heysham Flat mussel

A foot inspection was carried out on 19th May – 0.9m tide across all of the main skear down to Dallam Dyke. There is evidence of a spat settlement although the skear is not blanketed and coverage is patchy. The majority of the settlement is on the *Sabellaria* (honeycomb womb), particularly on the southern side of the skear, which has taken a battering since last spring, from both the mussels that dominated it last year, and presumably the wind and the weather. The mussel is small for this time of year and it is understood that the settlement has been later than most recent years, and also the colder weather may be slowing down the growth. There is a relatively large amount of nearly size 2014 mussel remaining on the *Sabellaria* reef area that was in the exclusion zone and not fished last year.

It is not possible to predict at this stage whether a seed mussel fishery will develop and the skear will be monitored monthly to inform its management, as well as dialogue with industry over interest in the stock.

The mussels on the lowest skears at Heysham Flat surprisingly persisted over the winter and have now reached size, or just under size. It is expected that a low level of fishing activity by Byelaw 3 permit holders may take place, although these skears are only accessible on the biggest tides. The condition to maintain the exclusion zone around the *Sabellaria alveolata* reef remains in place.

A helicopter flight was carried out over the skears beyond Dallam Dyke on 20th and revealed two skears of mixed mussel. The skears were dominated by remaining 2014 mussel with 2015 settled seed mussel. An interesting development was an area of crisp new *Sabellaria* off the skears, apparently on the sand, which appeared to have no mussel on it. At this time in 2014 the edges of Dallam Dyke and the southern side of the main skear had this type of *Sabellaria* growing on it – these areas are now severely worn. – NB. the southern side of the skear was in the exclusion zone and not infringed on by the 2014 fishery, so the erosion of the reef is due to natural causes NOT fishing activity. This is a relatively regular occurrence and the reef regenerates when environmental factors are in its favour.

Foulney Mussels

The skear was inspected on 22nd April. There was a mix of mussel sizes across the bed, with no major sign of new spat but a fair amount of small mussel ~10mm growing in amongst larger mussels. The 'stunted' area at the top of the skear had mussel back on it suggesting that mussel had moved into the scoured out area after it had been washed away over winter. This mussel was around 35 – 40mm in length. There was some size mussel at the bottom end of the main bed. On the 'island' there was a large area of good size mussel. Meat content looked fair, and the sample taken did not appear to be pearled although it was in spawning condition. An abundance of seagulls revealed what was suspected - a large number of adult starfish feeding on the mussels.

The area between Foulney and the oyster frames was inspected and mapped for the low water line. There was no sign of any significant spat settlement. Most of the area is bare of mussel. The area

back toward the 'Ditch' holds stunted mussel. At this time of year when there is not such an issue of bird prey resource and disturbance the Authority may consider authorising removal of a proportion of stunted mussel. This question will be brought up at the Bivalve Mollusc Working group (BMWVG).

South America Mussel

A helicopter inspection was carried out on 20th May. As had been seen during the foot inspection in April, there are large swarms of adult starfish on the bottom end of Foulney and the island to the east of Foulney, gorging on 2014 mussel. A number of eiders were seen in the area. The northern extent of South America is sanded over as it was last year and accessible from the shore. The skears and cobble substrate heading south and southwest (Falklands beds) are either devoid of mussel all together, or have some patchy remains of 2014 mussel. There was no evidence of any 2015 recruitment. There were very few starfish on these beds. Assistance is requested from industry to monitor the skears in case of a late settlement.

Duddon Estuary Mussels

Science officers and an IFCO carried out an inspection on the Duddon mussel bed on 22nd April 2015. Size mussels ~ 55-60mm remain spread over the bed after a year of fishing activity, mixed in with large quantities of shell. About 20 hand-gatherers were working the bed on that day, although the number varies on a day to day basis. Gatherers report that the bed changes on a weekly basis with some parts that had been sanded two weeks ago now uncovered and workable giving an indication that the mussels are surviving under short-term burial in sand. It does appear that perhaps the thinning of harvesting activity may have assisted mussels to persist. All gatherers were using net bags to riddle out the shell. At present there is only one year class (and no spat) so no issues with enforcing the minimum landing size. About 20 eiders were seen loafing around, waiting for the tide to flood back in and feeding on the mussels to resume.

There was a small amount of rubbish in the car park, and Officers witnessed some gatherers sleeping in their vehicles. National Trust informs us that they will be putting a height barrier up on the car-park soon. A dog walker complained to Officers prior to us going on to the beach that (green) net bags were strewn all along the high water mark. They seem to have been spilled from a trailer on the drive out or back. Officers watched while on the bed but there was no evidence of bags getting lost while the men were fishing. The bags were collected by Officers on the way back and fishermen were asked to spread the word about being more careful, and that this kind of littering is not acceptable and not only can it harm wildlife, it brings the fishery into disrepute.

As ever on an occasion like this, Science Officers also engaged in PR with members of the public who were confusing activity with cockle fishing, and also making assumptions that it was damaging and not sustainable. It must be added that National Trust staff were also seen and heard to be getting across the correct message about the fishery.

As with mussels taken from the Foulney bed, the Duddon mussels are presently in spawning condition and therefore signs of recruitment can be expected over the coming weeks. Officers are not suggesting any closure needs to be enforced due to the low level of activity and the size of the bed and the distribution of the mussels over it.

Leven Island Cockles

Following reports from the industry of a stock of cockles on the Leven Island bed in north Morecambe Bay the Senior Scientist and IFCO Dixon accompanied local shrimp fishermen on to the bed on 11th May to inspect the stock. It was evident that although not in mass quantity, there is a greater abundance of cockles there of all age classes than has been seen in the Bay for many years and a full survey was organised for three days later to provide data for the Habitats Regulations Assessment

that is necessary before consideration of opening a fishery can be given, and to ensure accurate information is brought to the Authority.

However due to high winds, when the survey was conducted results were extremely poor and not considered to be representative of what had been seen on the bed three days earlier. The shrimp fishermen had commented on the probability that the cockles would be difficult to find if the winds persisted and this proved to be the case. A repeat survey is therefore planned for as soon as possible (when the winds have abated). This information has also been posted on the website to ensure Byelaw 3 permit holders have up to date information on cockle stocks in the area which may have a bearing regarding their permit renewals (due by end of August).

It must be emphasised that if stocks are sufficient to open a fishery, it will only be low level. The stock on this bed, which as far as is known is the only bed in the Bay in this condition, is improved on past years, but it is not as abundant as in the large fishery years in the 2000s and must be kept in perspective.

Solway Firth Cockles

Officers have continued to research into the possibility of a suction dredge cockle fishery in the Solway Firth operating this year. Local shrimp fishermen have reported that they are still catching cockle in their nets when fishing in an area in the centre of the Solway known as Middle Bank.

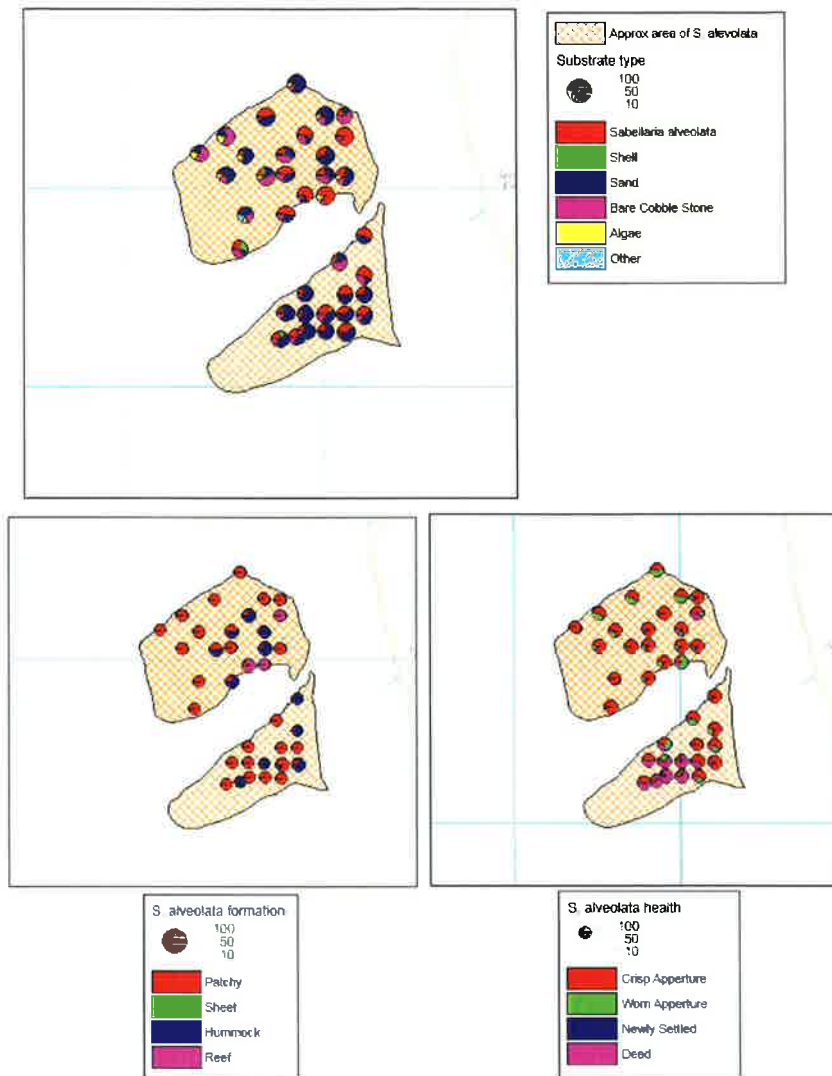
Literature reviews into the impact of this type of fishing on both cockle stocks and the wider environment have been completed in order to inform any future management and Habitats Regulations Assessments. Surveys of the bed using a local vessel fitted with suction dredge equipment have been planned for spring but have been hampered by equipment problems and unsuitable weather conditions. Officers now hope to carry out this survey at the end of May. The results from this survey will indicate whether cockles have survived the winter and whether there is sufficient stock to continue with investigating the possibility of a fishery opening this year.

Officers have also been in contact with Allerdale Borough Council in regard to the classification of these beds and the problems with sampling when the bed is not accessible with a quad from the shore. We await comment from Cefas and Allerdale on how classification may proceed.

Allonby Sabellaria

Officers surveyed the *Sabellaria alveolata* at Dubmill point on 24th March and 22nd April. This Sabellaria reef is protected from bottom towed gear by NWIFCA Byelaw 6 and also lies within the proposed Allonby Bay MCZ. Officers combined quadrat surveys (at 37 stations) with mapping of the extent of the Sabellaria. The area of Sabellaria here is extensive and in good health. Although much of the area has patchy coverage of small hummocks, a main area of reef is present in the north west. The Sabellaria to the south of the main reef was also surveyed. This area has not been surveyed previously. The Sabellaria in this area is also patchy and also of worse health, with a higher percentage of worn and dead tubes.

Dubmill Point Sabellaria alveolata Survey
24-03-15 & 22-04-15



Assessment of Fishing Activities in European Marine Sites

The science team is continuing to carry out assessments of fishing activities in European Marine Sites. Officers are currently making the last changes for the final “Light” TLSE assessments following feedback from Natural England. Literature reviews are underway for several activity types, and IFCOs are collecting activity information for their different patches to inform the assessments, including netting activity in the Dee and Mersey and Solway Firth.

Mersey Crab Tiles

On 20th April 2015 Science Officers surveyed the crab tiles on the Mersey and North Wirral foreshore with IFCOs. The survey gave the Science Team a good picture of the level of tiling activity occurring there, and mapping of the sites which we can now use to undertake the EMS Review assessment (Fig. 2). Crab tiles in this area consisted of lengths of guttering and halved pipes inserted into the foreshore in rows. These areas provide a refuge for moulting shore crabs (*Carcinus maenas*), which

are then collected and used as angling bait. We will continue to carry out surveys on this and other activities across the district in coming months.



Fig. 2. One of the Mersey crab tile sites, with rows of tiles on either side of the groyne.

Walney and Foulney Crab Tiles

On 18th May 2015 Science Officers carried out a survey mapping the Walney and Foulney crab tiles (Fig.3). These areas also use lengths of guttering as refuges for shore crabs. Again this information can now be used to inform the EMS review assessment for these fishing activities in the area.

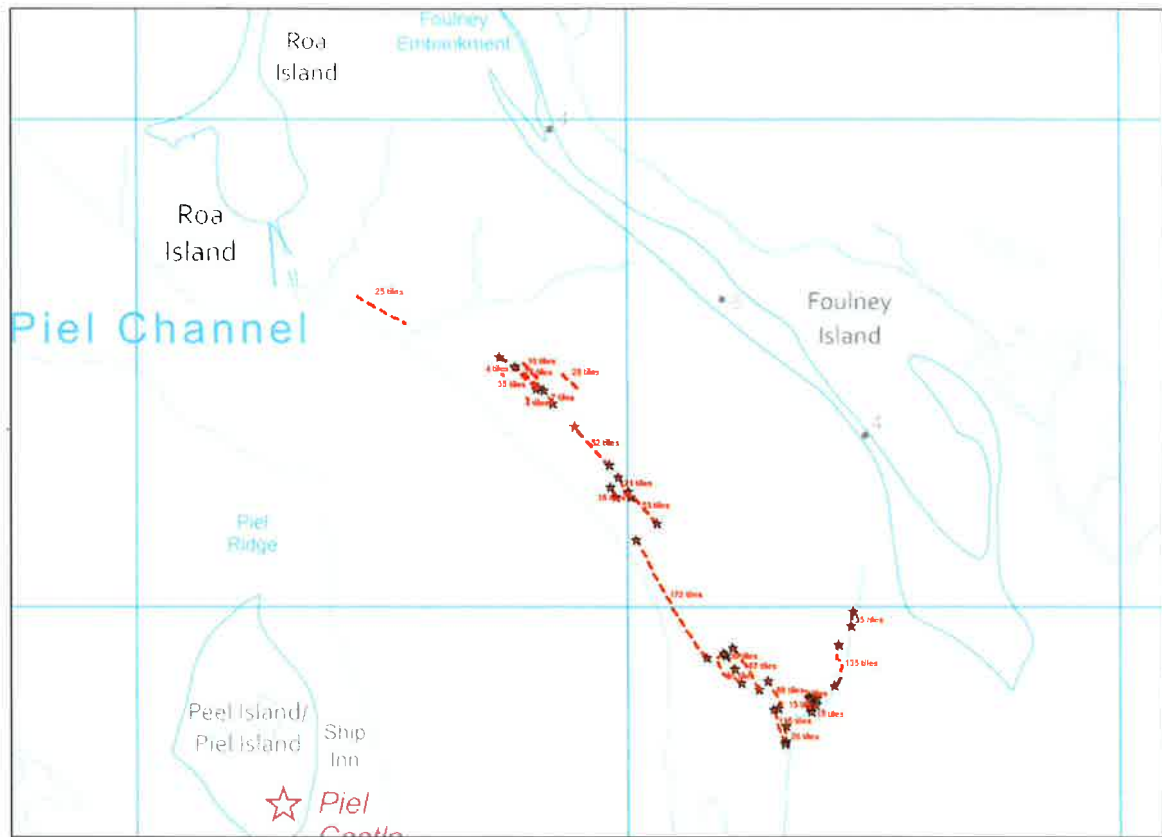


Fig. 3. Mapping of the crab tiles near Foulney island.

MCZ Tranche 2

Defra's three months consultation on Tranche 2 MCZ sites began in January. Two sites within the NWIFCA District are being taken forward – Allonby Bay and West of Walney. Allonby Bay is an inshore site that stretches for approximately 9 km along the coast on the English side of the Solway Firth. It extends from Dubmill Point in the north to just north of Maryport in the south. The site extends from the intertidal zone to approximately 5.5 km off the coast to a depth of 6 metres. The total area of the site is approximately 40 km². The site has a 'maintain in favorable status' objective and therefore fits in to the 'low' priority work in terms of NWIFCA's Marine Protected Areas taskload. There are no management measures required at this present time.

West of Walney spans the 6 – 12nm MMO / IFCA jurisdiction and is co-located with the windfarm. Measuring 388 km², the majority of the site is inshore, but a small section crosses the 12 nm boundary. The depth range of the site is 15–33 metres, with muddy habitats, nephrops and associated communities (eg. seapens and burrowing megafauna) and is the first MCZ within the NWIFCA District with a 'restore to favourable condition' objective and will likely require some fisheries management.

A third site in the Eastern Irish Sea, Mud Hole which lies outside the 6nm, is not considered suitable for designation at this time. Further work will be carried out with local stakeholders to enable consideration of this or an alternative Irish Sea site for subsequent designation. There remains a regional gap in the network for mud habitats. However, this and other sites not going forward in Tranche Two are important nephrops fishing grounds and designation could have a significant impact on the fishing sector, particularly in Northern Ireland. Further work is being carried out with the fishing industry and other interested parties to review options to protect subtidal mud in the region, with the aim that any suitable sites will be considered in the third tranche.

Slipper Limpets and Biosecurity

Following a joint enforcement action at Liverpool fish market where IFCOs found slipper limpets (*Crepidula fornicata*) attached to live whelks being sold and also a sign advertising slipper limpets for sale as angling bait (though none actually available for sale at that time), Officers have investigated what is occurring in relation to this Invasive Non-Native Species in the angling community, other IFCAs and the MMO. Currently absent as far as known in the NWIFCA District, the Science and Enforcement teams consider it important to adopt measures to prevent its introduction in line with the 'prevention' measures in the NWIFCA Biosecurity Plan. The issue was brought to TAG in March and the MMO took forward an action to establish the current legal position. They subsequently posted a notice on their website prior to government purdah shut-down, and work has been on-going to communicate the position to anglers, angling retailers and others.

There is no (legal) order in place for the sale of slipper limpets and therefore it is not an offence to sell or advertise for sale. An offence would occur if the species was released into the environment. It would be difficult to prove either way that the use of fresh limpet resulted in the release of the species (as eggs/larva) resulted in a release. However as it is a possibility the MMO would advise not to.

The release of live limpets definitely would constitute a release. MMO officers can enforce, although it may be difficult to prove that the release resulted in the introduction of the species into the area for it to be considered detrimental.

POWER AND ENERGY

NORTH WEST COAST CONNECTIONS - NATIONAL GRID work on routing options for 400KV cables from Moorside nuclear power station

The Senior Scientist facilitated a well-attended meeting between fishers in Morecambe Bay and the National Grid team to discuss potential impacts on fishing activities before, during and post construction of the proposed tunnel under the Bay.

National Grid have not fully finalised their preferred options yet for the cable routing and there is always the possibility that the regulators will question the tunnel option over routing around the Bay due to its cost. A further meeting was attended where the over-riding constraints on locating it on land was examined further and the Senior Scientist feels it is vital that the NWIFCA keeps abreast of these issues in case it – or pylons or cabling across the Bay – come back on to the table.

A case in point is that the routing options around the Duddon Estuary are proving particularly problematic with again enormous constraints from environmental, heritage and landscape. While initial discussions were underway to inform a way forward, it became evident that the whole of the route from Moorside down the Cumbria Coast via Ravenglass and across the Duddon to the Furness Peninsula needs further in-depth examination, and some land-focused agencies are calling for the offshore option. The National Grid team is working hard to find an acceptable solution where realistic mitigation will keep impacts to a minimum, for a task that has to be completed.

Moorside Power Station

Moorside, on the west coast of Cumbria, has been identified as a site for the potential to develop a new nuclear power station. Nugen along with various technical partners plan to construct two Westinghouse AP1000® reactors to be online by 2024. As this is a Nationally Significant Infrastructure Project, Nugen will have to go through the formal Planning Inspectorate process in order to obtain a Development Consent Order. Consultation before an application is made in April 2017 will go through several informal stages. The first focuses on strategic issues and will include very general site plans, EIA scoping and a HRA evidence plan. This first report is due in May 2015.

Ms Leadbeater attended the first Moorside Technical Group meeting on 11th March. This group brings together all agencies and organisations with a stake in the development in order for them to feed into the wider consultation process. This meeting had a very broad remit (considering issues ranging from the suitability of the West Coast train line for transport to skills availability issues). Therefore, Officers have decided that the best way to input into this process is via more specialist technical groups. Ms Leadbeater will attend an EIA technical meeting for Biodiversity, Commercial Fisheries and Physical Marine Environment on 5th May. The main issues that will be of interest to the NWIFCA are the effect of warm water discharge to sea on the surrounding environment and the destination of spoil coming from the construction site.

West Cumbria Tidal Lagoon

After initial discussions in regard to the Tidal Lagoon project, Officers have continued to liaise with Tidal Lagoon Power in regard to the proposals to construct a Tidal Lagoon on the North West coast of Cumbria. Ms Leadbeater attended an Evidence Plan meeting which brings together statutory and knowledgeable bodies (e.g. Natural England, EA, MMO and Scottish equivalents) in order to agree the evidence required to carry out a Habitats Regulations Assessment for the project. This initial meeting defined how this group would operate and suggested more specialist technical groups. Tidal Lagoon Power are currently carrying out coastal process modelling in order to better define exactly where a proposed lagoon will be situated and further meetings will be held when this is completed (later in the summer). TSB asked Officers to invite a representative of Tidal Lagoon Power to make a presentation to the Authority at the September meeting.

Wyre Estuary Tidal Barrage

A further tidal energy project proposal has been put forward and a meeting took place between the Senior Scientist and Bob Long, the Managing Director of Natural Energy Wyre. Although Mr Long stated that the proposal has wide-ranging support from Wyre BC and academics in Lancaster University there were no firm technical specifications available at the present time. The Science Team will remain engaged with this and other tidal energy schemes and report to Members on developments.

Cumbria Wildlife Trust Marine Trainees Partnership

Partnership work continues into its fourth year, with a new group of trainees to start at the end of May. The standard of report for the *Sabellaria alveolata* reef at Heysham improves year on year, and the latest has been published on the NWIFCA and Wildlife Trust websites (<http://www.nwifca.gov.uk/contents/images/NEWS/Heysham%20Flat%20Sabellaria%20alveolata%20Report%202014.pdf>)

The scheme is proving successful in relation to providing high quality candidates for IFCA positions, with two of our own IFCOs having passed through it, and two other IFCAs having recruited staff from the pool of 12 who have completed the traineeship.

TAG – 2nd March – London

The Senior Scientist attended the IFCA Technical Advisory Group meeting and can supply details to Members on request.

Project Inshore

The final Stage Three reports were due for publishing at the end of March. Concerns were raised by officers and members about some of the remaining content of the NWIFCA report despite numerous amendments. It was agreed that the publication of our report should be delayed until these amendments had been incorporated. The launch of the overall reports and the other IFCA's Stage Three documents went live, although it appears to have received very little media coverage. The documents can be found here:

<http://www.seafish.org/industry-support/fishing/project-inshore/projectreports/stage-three-reports>

Morecambe Bay EMS Management Group

Morecambe Bay has had an EMS Management Group for many years, supported heavily by Morecambe Bay Partnership and with key agencies, including NW&NWSFC and NWIFCA Science Team, sitting on the group. Recent cuts in funding along with other pressures have resulted in a vacant chair. The Senior Scientist had agreed to take on this role for six months on a trial basis to assess whether it is possible to give it the time it requires in light of her existing workload. However it is clear that time is at a premium and it will not be possible for her to service the group in this way, especially in light of staff changes within the Science Team.

Side Scan Sonar Training

Ms Knott and IFCO Sparks attended a two day training course on the use of, and analysis of data of, side scan sonar survey equipment set up for the IFCA's and subsidised by the Association. The equipment that was demonstrated was the shared IFCA equipment purchased with Defra underspend money last year and housed by Southern IFCA. It was a useful course, and provided an opportunity for better understanding and also contacts with other IFCA's with experience of side-scan in general and the equipment owned by NWIFCA in particular. It is hoped that in the coming months our own side-scan can be tested and used.

Multi-Beam Training

Ms Knott and Ms Temple attended a two day course in Barrow in the use of, processing and analysis of data of multi-beam surveying in conjunction with Natural England and Chris Heptonstall and his team of marine surveyors from AB Ports. AB Ports' vessel was used to steam out to Lune Deep in Morecambe Bay and collect multi-beam data. The issues around deployment, data acquisition, analysis and interpretation were investigated in depth. It is not envisaged that this is work the NWIFCA should aspire to undertake. It requires highly specialised (and costly) equipment and personnel. The Science Team have however benefitted from a deeper understanding of what the constraints in using this kind of data is, and how to assess confidence levels in data supplied to us, particularly in relation to the EMS review work. It was an excellent example of partnership working, and thanks are extended to AB Ports and Natural England.

Shale Gas Developments

Ms Leadbeater again contacted Lancashire County Council in regard to Shale Gas developments in the area, impacts on the marine environment and consultation with NWIFCA. Jo Turton (Chief Executive) reiterated that the Council only directly contacts statutory consultees and those that they consider to be materially affected by any planning application. In the case of the current applications for shale gas exploration, the Council did not consider there to be any adverse impact on the marine

environment due to the position of the development and the EA licensing conditions for contaminated water. If members are interested in this type of development they are encouraged to look out for local publicity. The new decision date for the current planning applications is 30th April.

AUTHORISATIONS AND CONSULTATIONS

Runcorn Viaduct North Spans
URS Authorisation for Mersey Gateway project
Bangor University dispensation
West Cumbria Coal Exploratory Boreholes
EA WFD Fish Surveys
UU Outfall Maintenance
West of Duddon Sands Fish Monitoring Surveys
Morecambe Waste Water Treatment Works Exploratory Drilling
Cefas Nephrops Catch Sampling

MEETINGS, WORKSHOPS AND COURSES ATTENDED

Common Fisheries Policy – Demersal Landings Obligations meeting
Shellfish Liaison Meeting
Byelaw Review meetings (internal)
Sustainability Studentship Meeting – Liverpool University
Irish Sea Evidence Meeting – Natural England
Defra Bass Management conference call
Defra Demersal Landings Obligations conference call
Tidal Dee Catchment Steering Group
Multibeam Training course
Burbo Bank extension meeting
North West Coast Connections EIA Scoping
Moorside Technical Group inception meeting
Solway Firth Partnership Working Group
Tidal Lagoon West Cumbria – Evidence Meeting
Moorside EIA Technical Meeting (Biodiversity, marine physical processes & commercial fisheries)

Science Officers
22nd May 2015