

## ANNEX A

### South America Seed Mussel 2014 – Further Background Information

#### The area in question – Box 1:

Members may recall that Byelaw 3 permit holders started asking the NWIFCA to consider different ways of managing the mussel resource on Foulney and the intertidal area between Foulney and the oyster frames in 2012 (report to TSB December 2012). Despite best intentions no progress was made with this work as the timing co-incided with the Defra Review of Fisheries in EMS and resources, which were limited by staff resignations and changes, were diverted to this work. However in an effort to rekindle this work Officers met with permit holders on 19<sup>th</sup> August 2014 and agreed to investigate this further, due to what was considered a wasted resource on certain higher levels of the bed, where mussel becomes stunted.

Parts of the area in question have been fished by some local permit holders for size mussel during the past 12 months, and they have also requested that Officers consider partial removal of mussel of all sizes, or zoning, from this area.

Officers surveyed the main Foulney bed on 11<sup>th</sup> September with the intention of returning to the area between the main Foulney bed and the oyster frames, and were drawing up some recommendations on changes to management to be taken to TSB.

This work has been overtaken by the amount of work generated by the beds at Heysham and Perch Scar and the dredge fishery and requests from the industry to open up alternative areas to them.

Members will recall that Mr Robert Butler requested authorisation to dredge for size mussel in the channel just north of Box 1 in winter 2013. This was referred to TSB but no further action was taken as Mr Butler did not provide information to the science team as required and so no survey work or stock assessments were carried out there.

During the meeting If Members require a brief presentation will be given on the changes to the authorised area between 2011 and 2014. In 2011 the authorised area for seed dredging extended further north than the current area. There were concerns at the time that this was too close to the intertidal area and the oyster frames and in subsequent years this has been omitted from the authorisation. It was also considered that this area was changing and it was decided to leave some mussel unfished to see if it persisted through the winter. This is the area now under question that has now sanded over in parts – where the channel has filled in and is now accessible intertidally, albeit only on certain tides. If tractors and snowcats are used there is more time available than ATVs.

## **Background:**

Inspections of South America were carried out from April 2014 onwards by heli-flight, hovercraft (Welsh industry provided) and foot (via dried out RIB - NWIFCA).

Although in April the ground looked good from the central South America area southwards, a large swathe of sand covered the central to northern area which was a development from 2013 when part of the northern bed was sanded over. There was a large cohort of predatory starfish on the southwest end devouring 2013 mussel.

Inspections via hovercraft in May and July with Trevor Jones indicated mussel settlement with best densities on the far southern end – two tongues – which were heavily covered in starfish. The July inspection showed these were smaller starfish than in April. Heavy predation was occurring. The mussel was very small and on loose mud and there was already some scour.

An illustration of the inspection findings is provided in Fig. 1 below.

Mr Jones considered that from the hovercraft inspection findings there was not likely to be a fishery. This was communicated to other interested parties via email to all 2013 authorised companies including Kingfisher, Deepdock, Myti Mussel and the Northern Irish companies, along with the suggestion that they investigate other sources of seed mussel this year. Ms Knott also contacted DARD (NI) and Southern Ireland Fisheries to ascertain what stocks were available there. They indicated there would be minor fisheries in both Northern Ireland and Eire, and that some of the Northern Irish boats that had been authorised in Morecambe Bay in 2012 and 13 would potentially be fishing those beds.

Mr Wilson and Mr Wood requested that the Authority open beds early to give them the chance to take the small mussels before more predation occurred. Ms Knott considered that the mussel was too small and weak shelled to be taken (squeeze it and it breaks). Mr Wilson asked to be given the chance. However Officers did not agree to this request considering that there was a risk stock would be wasted through high breakage and mortality rates.

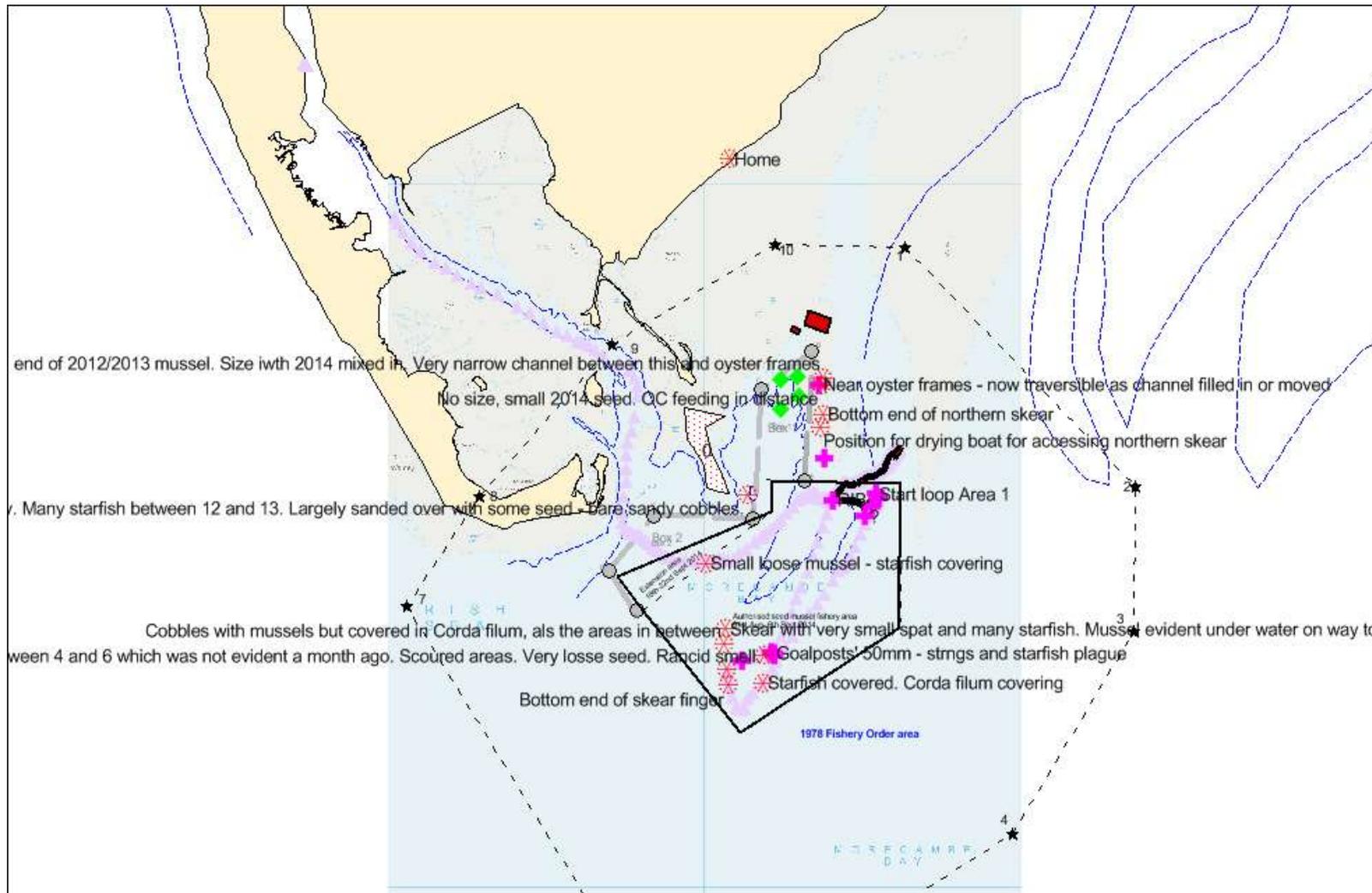


Fig. 1. Illustration of seed mussel inspection findings – South America 2014.

Officers were taking phone calls from the Welsh industry regarding mussel in the Solway and at Perch Scar, Fleetwood and it was evident they were looking for an alternative resource. Ms Knott attended a further helicopter over the Bay and up to the Solway in mid August with Graham Wood and Kim Mould. At every opportunity Officers have worked with them to explore other resources but have always been clear that if a bed is accessible from the intertidal it is very unlikely the Authority would approve for it to be dredged. Reports were provided to TSB in August on these.

In August Officers informed the industry that due to the limited resource only four authorisations would be issued this year based on track record. Three were taken up and issued. Please note that the area authorised was not only based on past fisheries but also on the mapping from this year's surveys and inspections (Fig. 1), plus a buffer for any missed mussel. It was considered that any areas outside of this box (to the west, south and east) would not hold any mussel. The area to the north which had been authorised in previous years (but not 2012 or 13) was now accessible from the intertidal. Three boats started fishing – but reported a poor catch covered in starfish and crabs and dying off.

On 4<sup>th</sup> September Officers received strongly worded emails requesting the opening of the northern area extending from between the oyster frames and Foulney. Mr Wilson and Mr Jones provided co-ordinates for two small boxes, Mr Wilson's on the edge of the intertidal zone and Mr Jones's on the northern bed (now accessible across the sanded in channel).

Ms Knott sent an email to Members of the TSB asking for their opinions on allowing dredge fishing of this northern area. Although delegated powers had been granted to Officers she considered that this would be a contentious issue in view of the previous meetings and dialogue with Byelaw 3 permit holders and therefore referred it back to committee. Responses were received from Members by email and phone with no overall consensus. Some Members expressed the opinion that it seemed a sensible course of action that if Heysham Flat fishery were open to hand-gatherers that resources in other parts of the Bay could be opened to boats. However other Members expressed the opposite view and that the NWIFCA should stay with the policy it has.

Ms Knott was informed by Mr Wilson and Mr Wood that they intended to inspect the northern area of South America on the morning of 10<sup>th</sup> September (0.3 m tide) and she agreed to accompany them. However, she found out that they were only intending to walk along the low water mark and not cross over onto the northern bed (and will subsequently be inspected on 10<sup>th</sup> September). She discussed this with Mr Wood and considered the priorities of her work load. She asked him to record the GPS positions of the low water line and invited him into the office to then obtain these from him and to discuss his requests. He came to the office and provided two more co-ordinates marked by the red asterisks on the map in Fig. 2 and asked the NWIFCA to issue further authorisations including this area. It was explained to him that the most northern of the two points (red asterisk A) would cut right across the bottom of Foulney and that it would not be possible to extend in that direction. It was agreed to extend out to the more southern asterisk point (B), which was done and authorisations issued that day for the next set of tides.

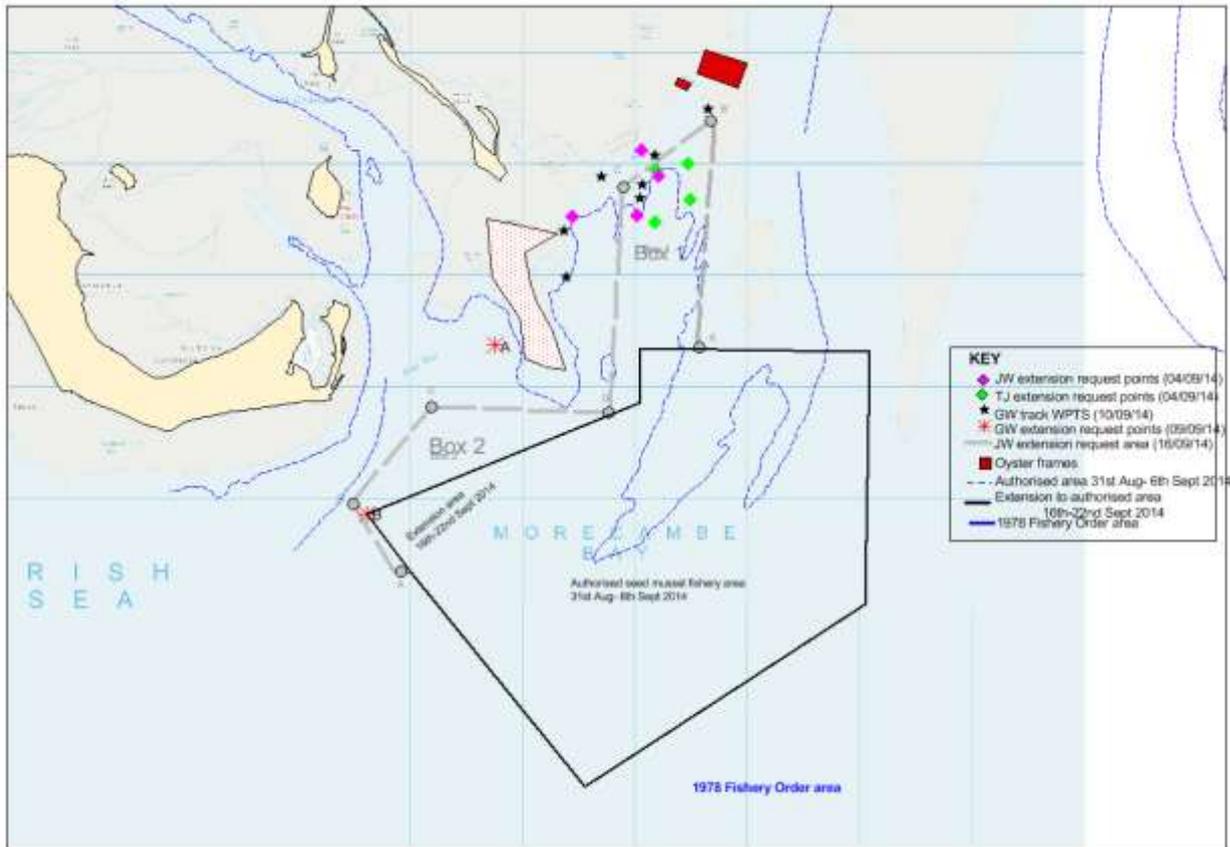


Fig. 2. Illustration to show the two points Graham Wood requested in relation to Foulney mussel bed (shown as red shaded polygon).

Ms Knott explained again that the issue of Box 1 would have to be taken to TSB as this would constitute a change in policy. Mr Wood described the mussel he had observed along the low water line as being extremely dense and lying on loose mud and in danger of being scoured. This has been observed by the Senior Scientist in previous years and described similarly by hand-gatherers and was not unexpected. He expressed the opinion that there would be very few tides when this mussel would be accessible to hand-gatherers due to low tidal height and available daylight.

Mr Wood gave Officers some information he had brought in about when this (and other areas) had been dredged for seed in the past, and he was asked to provide any other relevant information that could be included into a report to be tabled at TSB.

Further work was undertaken to authorise another extension which was granted. This lay around 200m off the bottom end of Foulney. Poor weather curtailed this fishery, but reports from the three tides that were fished were that there was very little mussel. In fact one of the boats returned to dredge the most southern (starfish infested) area of the original box and harvested the majority of their catch from this area. Officers agreed to re-issue the same authorisation for the next set of tides due to abandonment of fishing against the weather.

**Mandy Knott**  
**Senior Scientist**  
**9<sup>th</sup> October 2014**