

NWIFCA Technical, Science and Byelaw Committee

12th May 2020: 10:00 a.m.

**AGENDA
ITEM NO.
5**

SURVEY AND INSPECTION REPORT

COCKLE AND MUSSEL FISHERIES

Purpose: To provide an update to members on the survey and inspections of the Science Team in the last quarter

Recommendation: That Members approve the report that is provided for information only.

i. MUSSELS

a) Morecambe Bay Mussels

i. The Chinese Mitten Crab surveys planned for February were cancelled due to the heavy storms. They were re-scheduled for March when both Heysham Flat and Foulney mussel beds were surveyed. No Chinese Mitten Crabs were found. The report produced is provided as Annex A and was sent out to regulators and BMWG.

The survey did reveal that Heysham Flat main skew was bare of mussel and mussel mud and had reverted to bare cobble and boulder. There were signs of early settlement. Foulney had received a significant mussel recruitment, unlike 2019 when this area was devoid of settlement.

ii. South America and Falklands Mussel Inspection (Quad) 13/03/20

LW: 08:10 0.7m (Liverpool tides)

Falklands

The area previously mapped in 2019 as shown in Figure 1 in blue was inaccessible by quad. There was a large channel that could not be crossed and the sandbank previously used to access the bed appeared to be much smaller. Officers were approximately 1.2km away from the area. Officers observed that the area was still showing and that there was gull activity around it indicating possibility of a food resource there for them. It was not possible to determine whether any mussel was present.

An area previously not observed by officers was exposed at low water as shown in Figure 1 in red oval. Only a thin strip was uncovered and it was in the middle of a deep channel and could not be accessed. There was gull activity and area looked black in colour.

South America

An area of cobble had been exposed in the South America area. The area was approximately 1km north of the area authorised for an undersized hand-gathered fishery in May 2018. The area was mapped and estimated at 5.8 hectares in size. The area had received a significant 2020 mussel settlement as shown in Figures 2 to 4. Figure 5 shows an area to the south west of the exposed ground that had live *Sabellaria alveolata* which had mussel settlement on it.



Fig 3 – Overview of the area of mussel on S. America looking south 13/03/20



Fig. 4 – 2020 Mussel Settlement on low lying *Sabellaria alveolata* on S. America 13/03/20



Fig. 5 – Live *Sabellaria alveolata* on the south west of the exposed ground 13/03/20

iii. Once COVID restrictions took hold the SS sent the inspection note to BMWG and notified them of the limitations this would put on survey this year. Industry were asked to supply any data that they might gain should they be out in these areas. One response was received from James Wilson at Deepdock who offered to bring their vessel *Mare Gratia* to the Bay to carry out some ground discrimination work over high water, and to dry her out so that a walking inspection could be carried out. Officers were also informed that Trevor Jones intended on bringing his hovercraft up and could co-ordinate with them areas to be covered.

This offer was accepted and the SS requested that any photos should be geo-referenced and date and time stamped, that GPS tracking was supplied back to officers, and that a description was given of areas covered. A report from information provided by industry has been compiled at Annex B.

b) Dee Mussels inspection - West Kirby 23-04-20

LW: 19:07 1.4 m (Liverpool Tides)

Officers were able to walk the full perimeter of the mussel bed which covered 7.9 hectares, which is approximately 5 hectares smaller than when last surveyed in October 2019. The bed has been reduced at the patchier nearshore edge, and is likely to have been due to the action of the winter storms.

Overall the density of mussel on the bed had decreased since October 2019, although a 30m x 30m patch of denser mussel was present on the NW corner of the area. Only very occasional size mussel was present on the bed; most of the mussel was between 25-40mm. No mass spat settlement was observed, although very occasional <5mm mussel could be observed within the mud.

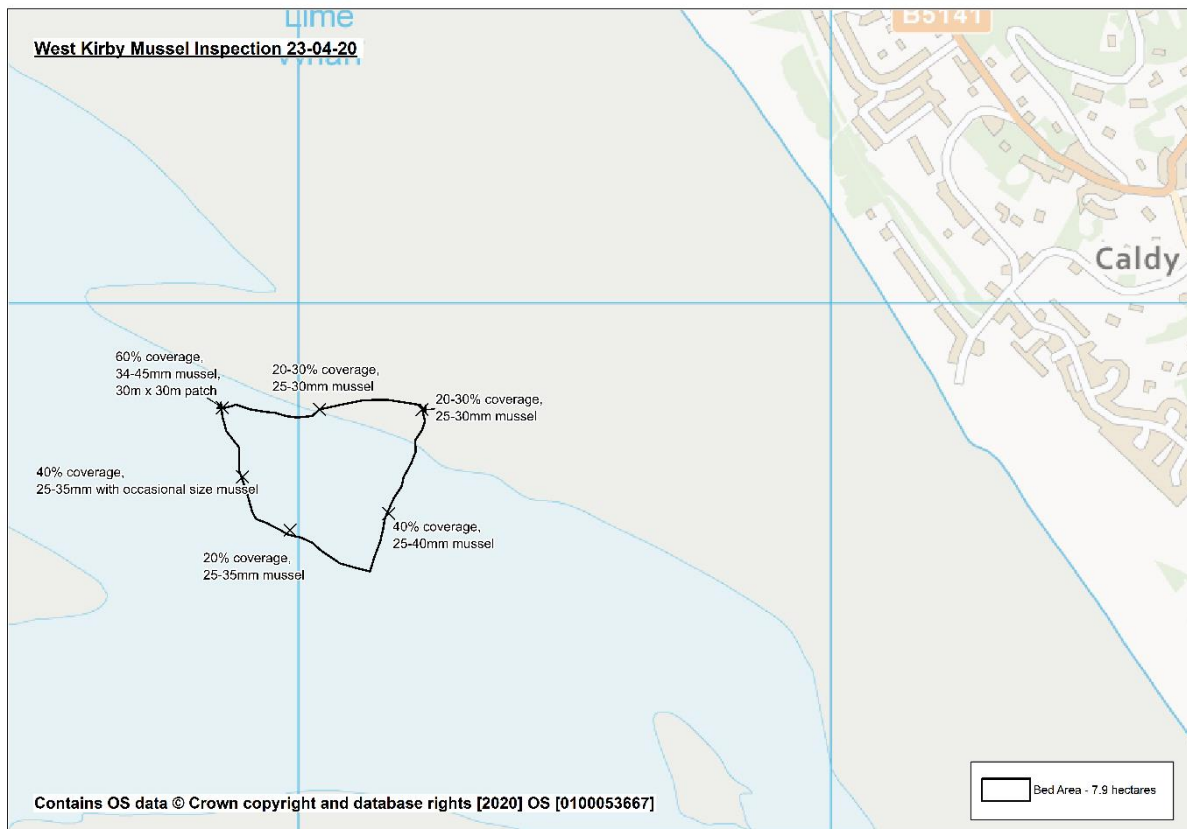


Fig. 6 Map showing the area of West Kirby mussel bed 23-04-20



Fig. 7 - Patchier mussel at the north eastern edge of West Kirby mussel bed 23-04-20



Fig. 8 - Denser mussel across the southern side of West Kirby mussel bed 23-04-20

c) **Solway Subtidal Mussels**

NWIFCA purchased a mini Hamon grab at the beginning of March and this was used in a survey on the 4th and 5th March to trial it for ground-truthing side scan sonar data that was captured on the same voyage on board NWP (Fig. 9). There are some logistical issues to iron out which NWP crew are dealing with. Data from the side scan is being analysed and results will be presented to TSB when a full report has been compiled.



Fig. 9 - mini Hamon grab being deployed from NWP 4th / 5th March 2020.

ii. **COCKLES**

ALL NWIFCA COCKLE BEDS CLOSED FROM 00:00 1ST MAY FOR SEASONAL CLOSURE

Surveys are planned for all cockle beds through the late spring and summer to provide stock status to the Authority for management decisions to be taken for the end of the seasonal closure.

a) **Morecambe Bay - Warton Sands**

Officers had been monitoring the cockle stock on Warton Sands during sampling for shellfish health testing. Cockle was still dense in areas but well below MLS. Lancaster City Council has suspended sampling during COVID restrictions. Officers will inspect the bed again in the coming weeks and report back to the Local Authority on the stock.

b) **North Penfold, South Gut, South and West Penfold cockle inspection 28.04.20**

LW 09:33 2.1m (Liverpool tides)

Officers conducted an inspection of the Marshside and Southport Cockle Beds.

The soft muddy area at North Penfold was still present but had dried significantly, possibly due to the very hot and dry weather of the past few weeks. There were occasional cockles lying on the surface of the mud. There was no sign of any spat or significant numbers of cockles of any size.

A large flock of dunlins (tens of thousand) in summer plumage were seen feeding on the eastern edge of this bed, and officers gained closer ground to inspect what they were feeding on. Again no sign of cockles and it can be inferred they were feeding on infauna buried in the mud.

At South Gut there was a very low density of cockles and no sign of spat. There was no sign of cockles along the rest of the shore running down to West Penfold (beyond Southport). The conclusion is there will be no commercial fishery on this area in 2020.

c) **Wirral - Leasowe**

Fishers were observed cockling while officers were carrying out the razor clam study with Liverpool University. A low number of Byelaw 3 permit holders had consistently fished this bed of sustainable amounts. The TAC of 400 tonnes is still not reached. A full survey is scheduled for the coming months.

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1st May 2020