

NWIFCA Technical, Science and Byelaw Committee

Sent Via Email 30th August 2022

NON-MORECAMBE BAY COCKLE BED 2022 MANAGEMENT DECISION

Purpose: To report survey and inspections since the August TSB meeting.

Recommendation: Approve the following:

a) Receive the report

Management of the Morecambe Bay cockle beds was agreed at the August TSB meeting.

b) For Southport implement a closure under NWIFCA Byelaw 3 flexible permit conditions until a further stock assessment and HRA has been completed. Any proposal for opening will be submitted to TSB with flexible permitting condition for approval.

c) Implement a closure under NWIFCA Byelaw 3 flexible permit conditions for all other cockle beds in the district until 1st September 2022 due to lack of stock.

Cockles

All cockle survey and inspection reports have previous provided other than Leasowe which has been provided in Annex A.

a) Ribble Estuary

The bed at Lytham was inspected in March with only small amounts of stock present this is unlikely to have changed since the inspection was completed. The stock previously identified on Foulness was inspected and is no longer present. There is a potential fishery at Southport which requires a further survey planned for September 1st.

b) Leasowe

A survey report has been provided in Annex A. Some stock persists and there has been a 2022 settlement which has grown to 5-10mm. Overall the stock remains low compared to previous years. Due to stock levels and previous TACs set on the fishery, a fishery on this bed would not be HRA compliant.

NWIFCA, 30th August 2022

Leasowe Cockle Survey 03-08-22

Tides: LW 10:00 1.9m (Liverpool tides)

Survey method - Jumbo and 0.5m²

74 survey stations were sampled from a 250m grid. Due to the location of the tide at low water several of the survey stations from the grid could not be sampled, but they were unlikely to hold stock as the main bed is located higher up the shore. Size cockle numbers are relatively low compared to previous year with the average size of the cockle being smaller. There is evidence of a 2022 settlement which has grown to 5-10mm in size.

Means

Means were calculated from all stations with zero counts on the edge of the bed removed. Less than 5mm cockle was not used in the undersize figures due to the high variable survivability of cockle at this small size but has been included as a separate figure. Due to the distance from the main bed, the area by the lighthouse is presented separately.

Main bed area

Mean number of size cockle	7 per m ²	(min 0, max 40)
Mean number of undersize cockle	62 per m ²	(min 0, max 520)
Mean number of 0-5mm cockle	6 per m ²	(min 0, max 100)

Maps

Maps were created showing the overall survey area, density of size cockle, density of undersize cockle (excluding cockles in the 0-5mm size range), and the frequency of size classes (pie charts show the frequency of different size classes, the size of the pie chart indicates the total density of cockles present). No map was created for density of 0-5mm size class as none were found on this survey.

Biomass

Biomass was calculated for each of the areas as identified by the means calculations.

	Area (ha)	Size Cockle (tonnes)¹	Undersize Cockle (tonnes)²
Leasowe	225	100-120	100

¹In regards to biomass size cockle defined as cockle which will not pass through a square gauge 20 x 20mm in size.

²The biomass of undersize cockle does not include any estimates of cockle less than 5mm due to the high variability of survival of this size class.

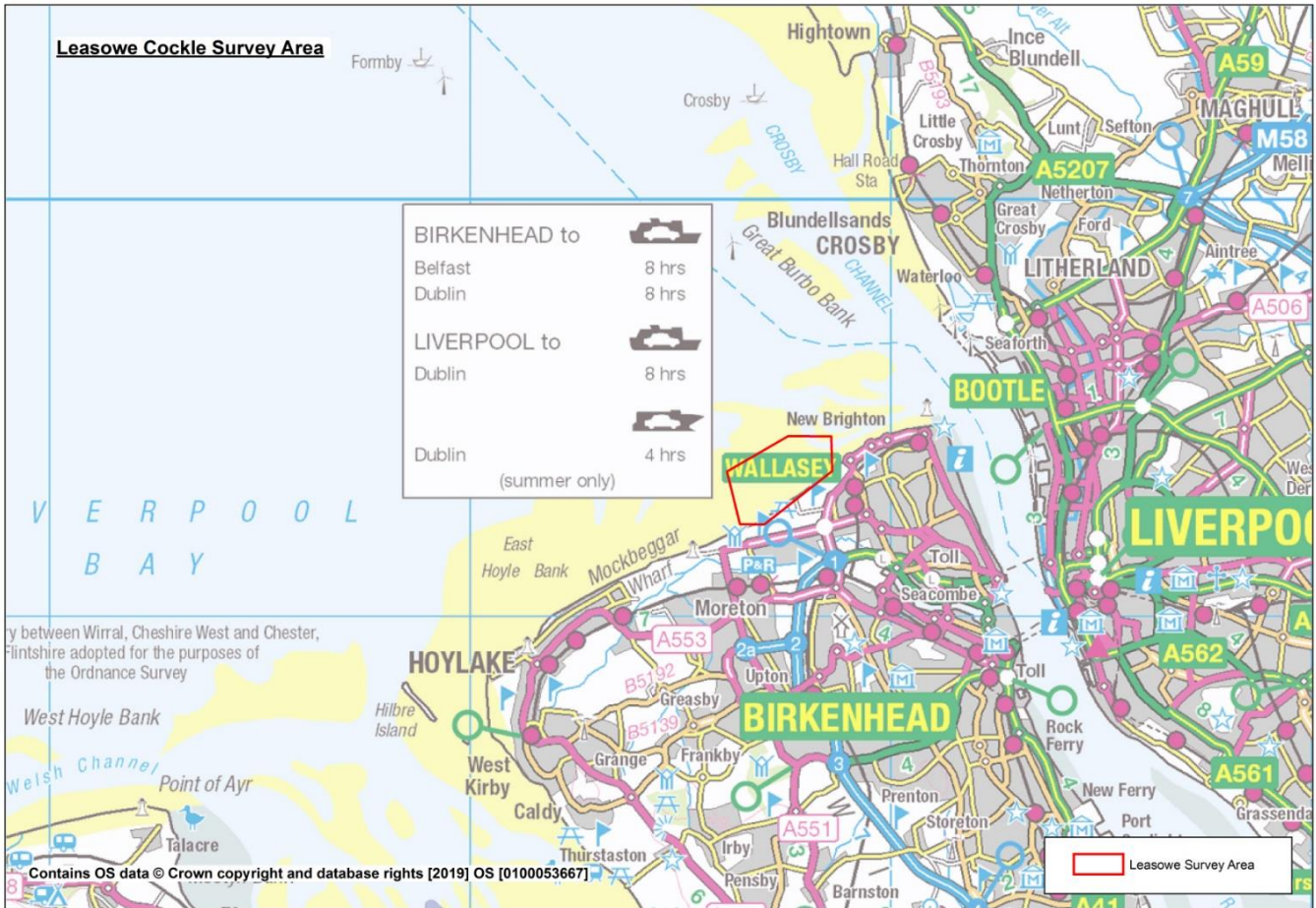
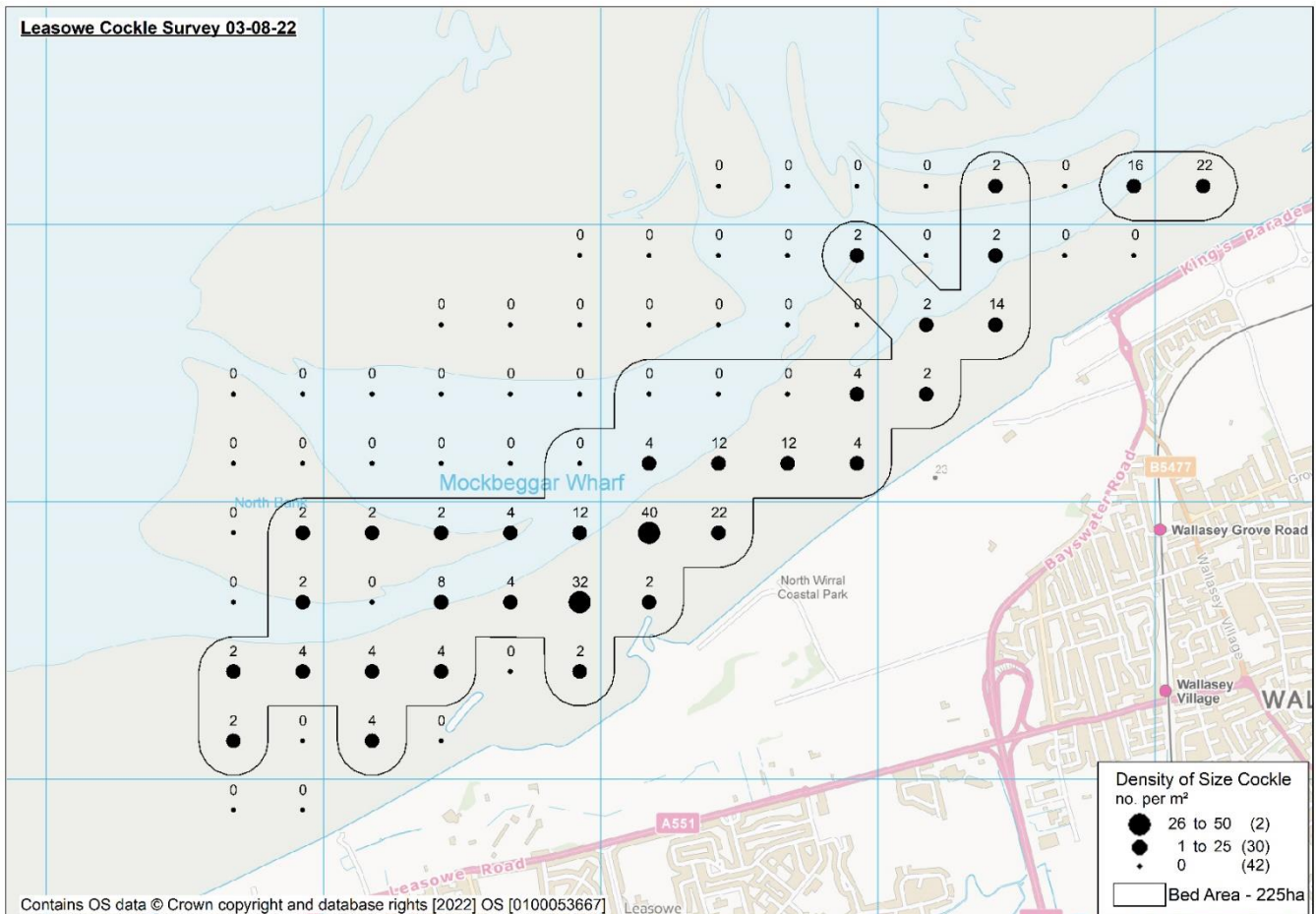
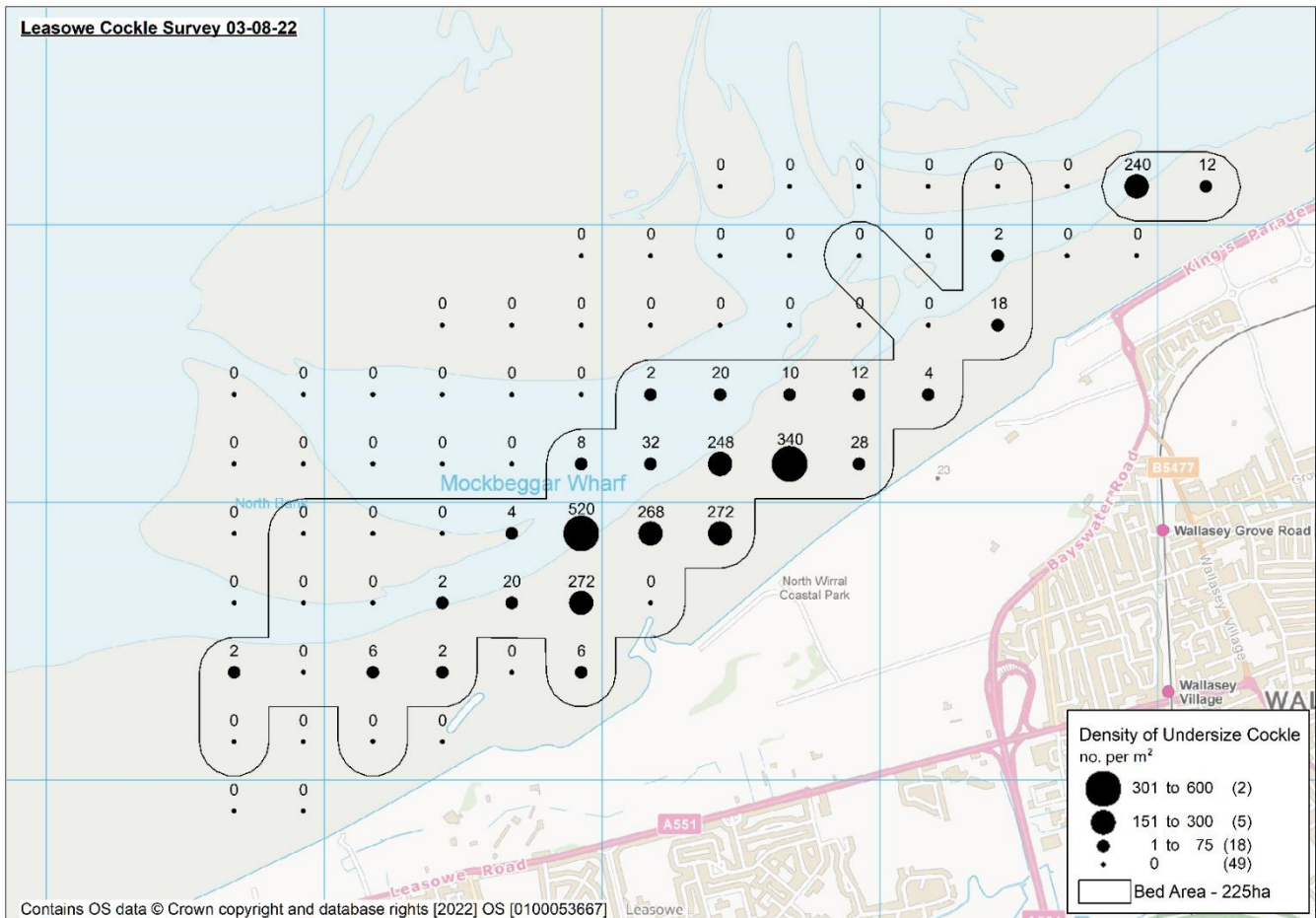


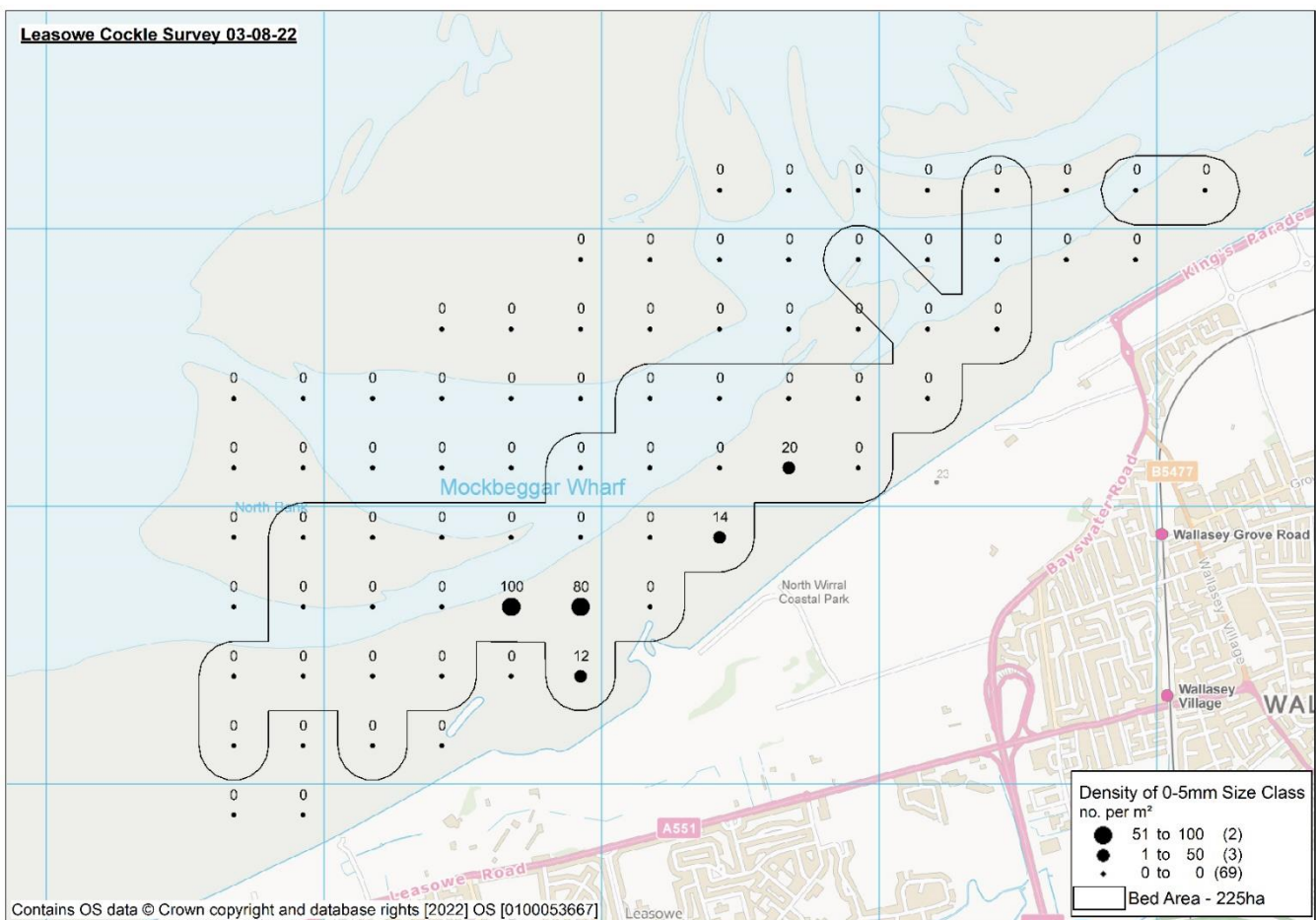
Illustration of position of Leasowe cockle bed.



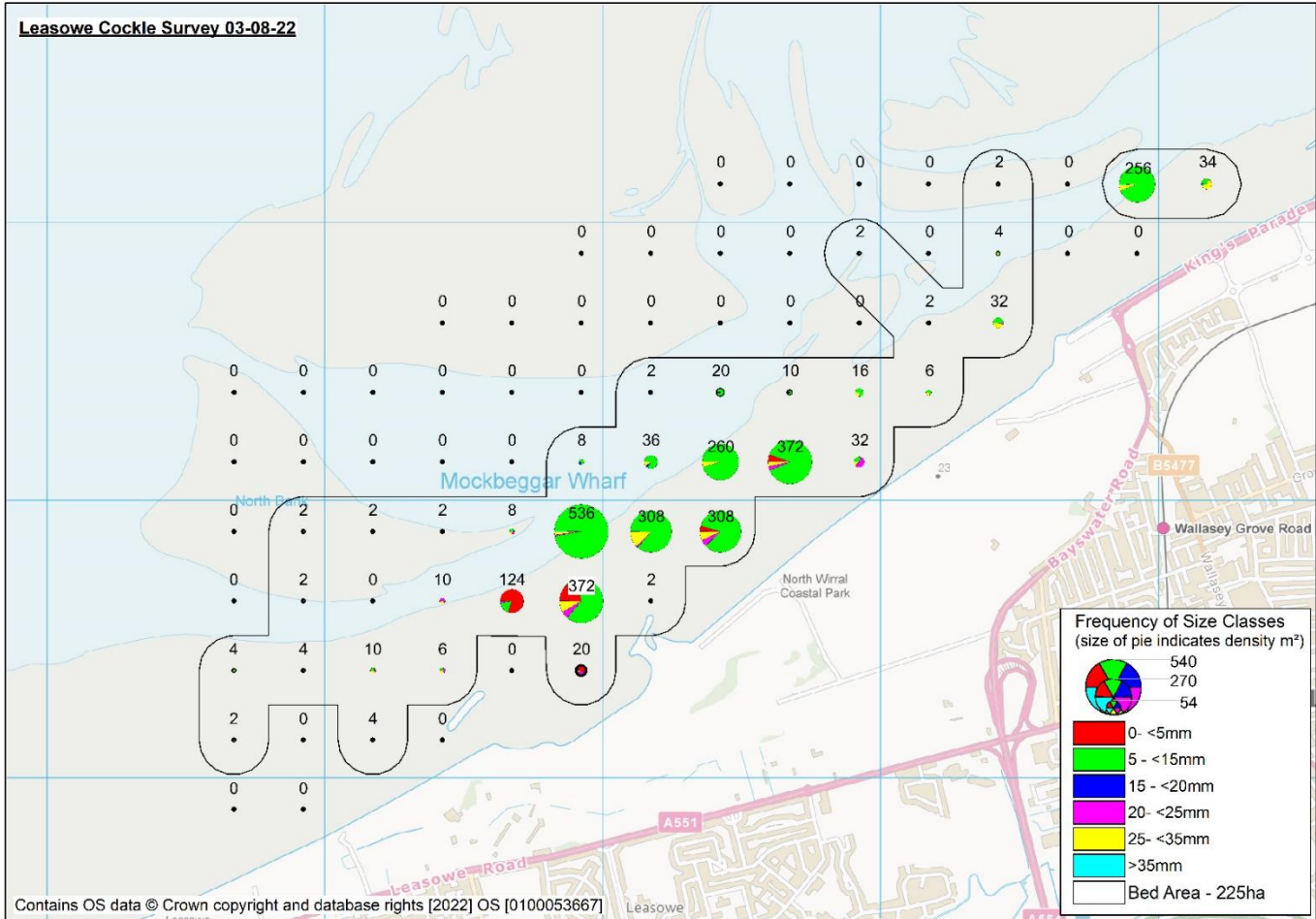
Density of size cockle per m² Leasowe August 2022.



Density of undersize cockle per m² Leasowe August 2022.



Density of 0-5mm cockle per m² Leasowe August 2022



Frequency of size classes of cockle per m² Leasowe August 2022.