## **Leasowe Cockle Survey 11-08-2017**

Officers present: JH, MK, AB, PC

LW 08:51 1.3m (Liverpool tides)

Survey – Jumbo and 0.5m<sup>2</sup> quadrat / 0.1m<sup>2</sup> quadrat and sieve depending on substrate and density of cockle.

38 survey stations were sampled from a grid 250m apart with an extra point added between some points. The bed can be split into two distinct areas, one area high up the beach and relatively muddy that has a high density of cockle, and an outer area where the cockle has spread out from the dense and is in lower densities. This outer area consists of sand waves with muddy patches in between and the majority of the cockle lies in the muddy patches.

## Means

Means were calculated from all survey stations with the defined bed area (zero counts on the edge of the bed have been removed).

## Dense Area

Mean number of size cockle: 396 per m² (min. 8, max 1430)

Mean number of undersize cockle: 102 per m<sup>2</sup> (min 0, max 510)

**Outer Area** 

Mean number of size cockle: 34 per m<sup>2</sup> (min. 0, max 266)

Mean number of undersize cockle: 3 per m<sup>2</sup> (min 0, max 30)

## Maps

Maps were created showing the overall survey area, density of size cockle, density of undersize cockle 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).

**Biomass** (Size cockle defined as cockle ≥ 27mm shell length).

	Area (ha)	Size Cockle (tonnes)	Undersize Cockle (tonnes)
Dense Area	77.24	3007.9	271.9
Outer Area	135.20	515.6	20.9
<u>Total</u>	212.4	<u>3523.5</u>	292.8

Percentage of cockle in 20 – 30mm size range (from sub-sample of 100 cockles) just under size (ie. 24 – 26.99mm) = 32%.







