

Survey Results from Foulnaze Bed May 2012

From the survey results an estimated - 2500-3000 tonnes of total cockle is currently available (Wet Weight) from a total bed area of 3.2 km². This includes an area of approx. 0.2 km² previously un-fished and un-surveyed. The main bed is separated from this smaller area by several deep channels; it is highly tidal and can only be accessed fully on very low tides. The cockles present on this area were found to be all of size and significantly larger than those on the main bed. See Tables Below.

Results from all samples from Foulnaze May Survey

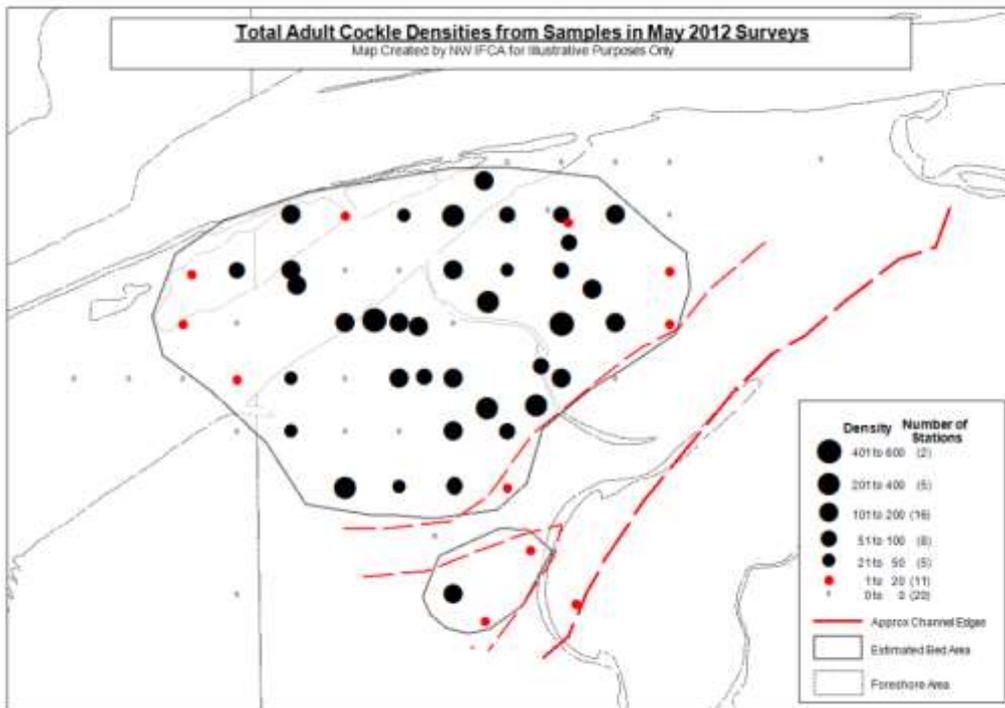
| | | Percentage % | Length (mm) | Weight (g) | Density m ² |
|-----------------|------------------|-----------------|----------------|------------|------------------------|
| Main Bed | Oversize | 82 | 27.49 | 7.96 | 90 |
| | Undersize | 18 | 24.18 | 5.38 | 25 |
| New Bed | Over Size | 98 | 31.08 | 11.2 | 67 |
| | Undersize | 2 | 24.74 | 5.90 | 3 |

Percentage of Samples with Defined Densities from Foulnaze May Survey

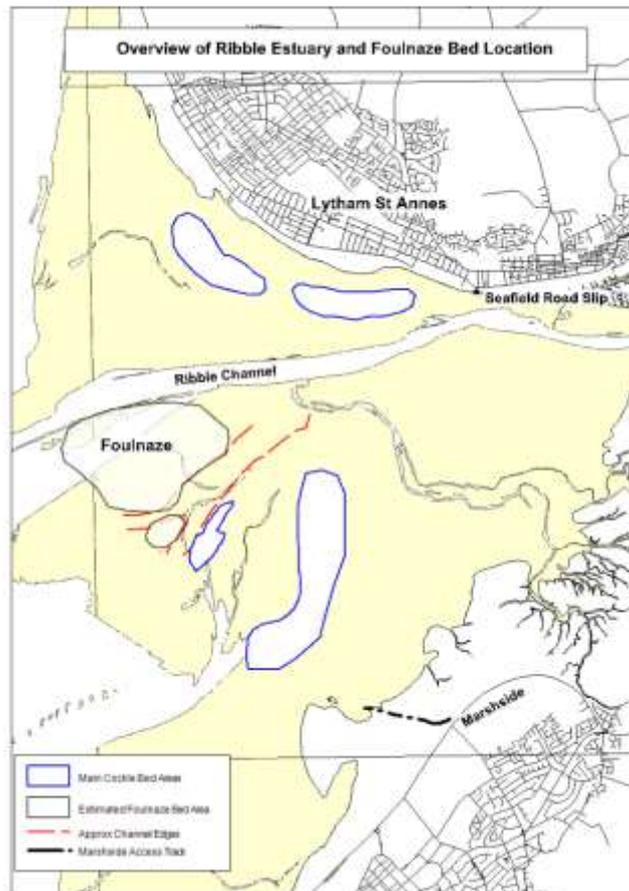
| | Total Area km ² | No Cockles Present | | 1-20 per m ² | | 21-100 per m ² | | 100+ per m ² | |
|-----------------|-------------------------------|-----------------------|-----|-------------------------|-----|------------------------------|-----|----------------------------|-----|
| | | n | % | n | % | n | % | n | % |
| Main Bed | 3.0 | 10 | 20% | 6 | 12% | 12 | 24% | 23 | 45% |
| New Bed | 0.2 | 0 | 0 | 2 | 66% | 0 | 0 | 1 | 34% |

Due to the size of the smaller bed we were able to walk around a large proportion of it to provide a bed area. The large bed area is an estimation taken from previous knowledge, sample results and visual surveys to define presence or absence of cockles.

Examination of the cockles showed that the majority still have a large amount of gametes present and it may be assumed that the main spawning event has not taken place. The bed would not be opened till the main spawning activity has occurred. Settlement of cockles varies with geographic location, year, season, reproductive condition of the adults and climatic variation. Main settlement may occur approximately 3 months after spawning.



Map 1. Total Adult Cockle Density from Surveyed Sites and Estimated Bed Area



Map 2. Overview of Ribble Estuary and Foulnaze Bed Location