

Seed Mussel Survey report for the Wexford Rosslare Area – 23/05/2012 too 12/06/2012

Vessel: MV T'Burke (BIM), Skipper John Murphy, Survey Officer Nicolas

Chopin

Equipment: 400 kHz side scan sonar, 1 meter dredge, 0.1 m² Day Grab

Area surveyed: Long Bank and surroundings, mainly the east channel from the Calmines buoys in the South to the North Long cardinal buoy and between the Long Bank and the Lucifer Bank.

Survey summary:

Acoustic data was collected on last year's bed location, but no indications of settlement were observed. The area was checked with the dredge and the only thing found was starfish and empty shells (tow mark TR3 on Map 1). There are some early signs of a very recent spatfall in the area. The southern part of the channel between the Long Bank and the Lucifer Bank was not checked due its depth.

The area from the North Long cardinal buoy and the West Long buoy was searched with the dredge and the grab, the side scan sonar could not be deployed due to whelk pots lines in the location. Both the dredges and the grabs contents showed nothing but shells and gravel, no signs of seed or recent spatfall.

The side scan sonar was deployed from the West Long buoy to the West Holden buoy where a few features were investigated. Small amounts of seed was found in two tows (marked in yellow on Map 1), but there was not a large amount and it was of a very small size; reaching 9 mm in average. The other tows only showed razor shells.

Finally the last area checked was between the West Holden Buoy and the Calmines Buoy. Following a number of promising tows with the dredge, the side scan was deployed and confirmed the extent of the seed bed.

Bed coordinates (in WGS 84 degrees, decimal minutes):

Latitude	Longitude
52° 15.783' N	6° 18.654' W
52° 15.336' N	6° 17.807' W
52° 14.891' N	6° 17.158' W
52° 14.876' N	6° 17.221' W
52° 15.200' N	6° 18.400' W
52° 15.636′ N	6° 18.749' W

NOTE: The area displayed on Map 2 has been established following the side scan sonar data verified using the dredge. These coordinates represents a simplified polygon of the possible settlement.

The bed is located between the Holden sand bank to the East and rocky reefs to the South and west. It is covering approximately 74 Hectares, and the current estimated tonnage is 1250 tons of seed, knowing that the average size, at the moment, is around 12.5 mm (varying from 4 to 21 mm). The current number of pieces per kilo in average is above 5000. The current amount of waste varies from 25 to 50%.

The general condition of the bed at depth seems good, the seed is well set and heavily byssed. Nevertheless, the current resistance of the mussels out of the water is poor. A lot of starfish were found in the southern part of the bed, (up to 220 individuals for a 3 minutes tow covering 188 meters on the ground with a 1 meter wide dredge).

Bottom Type: sand and mud mixed with shell debris and gravel.

Recommendations:

Although the density of starfish in the southern part of the bed is high, the seed is currently too small and too fragile to be fished at the moment. The bed should be the subject of ongoing monitored to estimate the growth rate.

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Notes for the maps:

TR stands for Tow Rosslare DGD in the legend stands for dredge GX stand for Grab Wexford Gb in the legend stands for grab



