

Seed Mussel Survey Report for Rosslare – 22/06/2017 to 28/06/2017

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: South Shear in the front of Rosslare Europort Harbour, from the Calmines and South Holdens channel buoys in the south to the northwest tip of the Holdens bed.

Survey summary:

Rosslare's South Shear is a historical place for seed mussel settlement and an area of 72 hectares was fished in 2016. As part of the regular seed mussel survey, the zone was checked using the side scan sonar. A number of features were marked and investigated and a total of 10 tows of half-grown mussels were found in the similar area to the 2016 fishery. The mussels spread over approximately 34 hectares.

Table 1: Seed Mussel Settlement Coordinates (in Degrees, decimal minutes WGS84):

Latitude	Longitude
52° 15.084' N	6° 17.608' W
52° 15.043' N	6° 17.639' W
52° 15.261' N	6° 18.446' W
52° 15.533' N	6° 18.644' W
52° 15.696' N	6° 18.628' W
52° 15.720' N	6° 18.383' W
52° 15.421' N	6° 17.902' W

NOTE: The areas displayed on the attached map have been established following the side scan sonar data verified by ground truthing. These coordinates represent a simplified polygon of the area of the settlements identified.

The mussels are distributed in patches, 6 grabs were successful and density varied from 4.5 kg/ m² (on the northern end of the settlement) to 19 kg/m² near the Calmines buoy in the south. Over 400 individuals were measured from the 6 grabs samples. The average size is slightly over 44 mm (129 P/Kg) with over 70% of the sample population comprised between 40 and 48 mm. The average waste is 42%, ranging from 30 to 66%; this high waste content is only representing grab samples (higher waste content than the dredge samples).

A bit of 2017 seed has settled on the north side along the edge of the sand, the quantities were minimal both in the dredges and the grabs. The average size is around 14 mm but the range over the 100 individual measured, goes from 5 to 24 mm.

A large quantity of large starfish was observed in the middle of the settlement (TR4 on the map as well as the second part of the VR1 video transect), but the rest of the bed is clear of them.

Following all the data collected from the area, the estimated tonnage should be between 500 and 800 tonnes.

Other areas were checked for seed: the Bar Buoy, the northwest of the Long Bank and between the Lucifer Bank and the Long Bank but no seed or spat were found at the time of the survey.



Table 2: Snapshot of the seabed at the start of VR1

Bottom type: Mainly sand and stones, with hard ground towards the Calmines Buoy.

Bycatch observed: Spider crabs and starfish.

Recommendations:

Although starfish were found in the centre of the bed, the rest of the bed is clear of them. Following consultation with the local industry, it would be beneficial to leave this settlement until the scheduled opening of the fishery and until further surveys are carried out. In addition, at the time of the survey, the mussel looked ready for spawning.

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Notes for the map:

TR stands for Tow Rosslare

GR stands for Grab Rosslare

VR stands for Video Rosslare

Dgd stands for dredge in the legend

Gb stands for grab in the legend

All grab weight on the map are expressed in grams

