

Seed Mussel Survey Report for Cromane / Castlemaine Harbour – 8/05/12 to 11/05/12

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

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

Area Surveyed: The channel between Inch Point and Rossbehy Point up to western Cromane Point (see Map 1).

Survey Summary:

Due to last year late seed settlement, it was expected to find mussels in the Rossbehy area. In 2011, it had been observed that the sand banks on each side of the channel had shifted since the previous year; it is the case as well for 2012. The western sand bank known as The Bank, has moved eastward covering a major part of the 2009 and 2010 seed locations. The middle of the channel remains the same with a lot of rough ground with stones.

Very recent spatfall has been spotted on the stones over 25 hectares. The spat is 1 millimetre and under. Following previous estimation from 2009, 2010 and 2011, it can be estimated that this present settlement could produce up to 1500 tonnes when the seed will reach 10 to 15 mm.

No signs were found further East/North in the channel; the side scan sonar data showed very hard ground with boulders, making dredging too hazardous.

Bed coordinates (WGS 84 degrees, decimal minutes):

Latitude	Longitude
52° 5.595' N	9° 58.737' W
52° 5.610' N	9° 58.142' W
52° 5.575' N	9° 57.083' W
52° 5.478' N	9° 57.156' W
52° 5.511' N	9° 58.202' W
52° 5.563' N	9° 58.744' W

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

A little bit of small starfish were found in the dredges (2 to 3 cm diameters and 5 individuals maximum per dredges).

Due to the size of the spat observed in the area and the time of the year (the area is usually surveyed at the start of July), it is possible to expect a larger seed area and other settlements later in the season.

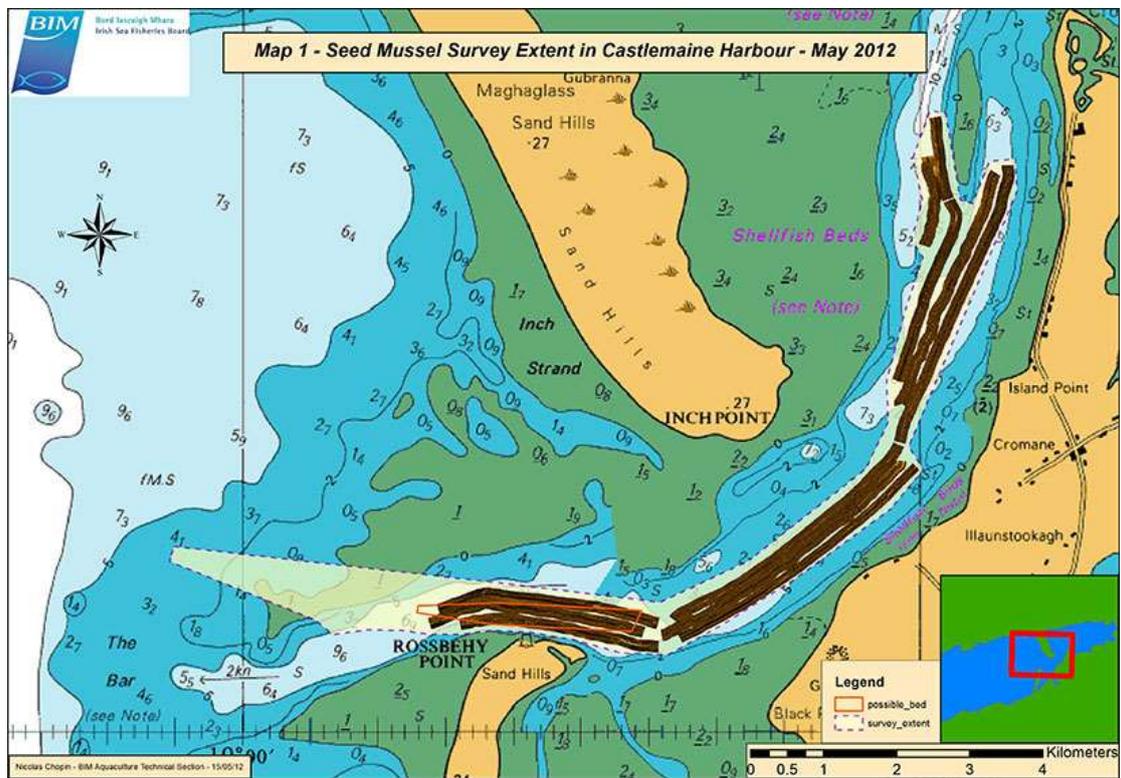
Bottom type:

Hard ground with stones and patches of coarse sand with shells.

Recommendations:

This settlement should be locally monitored for growth and predators, especially if there is low amount of rain (starfish are known to migrate on seed beds following the rise of salinity in the channel). This would be the key factor to decide or not the start of the fishery.

Nicolas Chopin
BIM Inshore Survey Officer
Aquaculture Technical Section



Notes for the legend in Map 2:

TD: Tows Dingle (with the 1 meter dredge)

GD: Grab Dingle (with the Day Grab)

