

Seed Mussel Survey Report for Cahore Point and the Rusk Channel Area –28/05/13 to 6/06/13 and 15/07/13 to 18/07/13

Vessel: MV T'Burke (BIM), Skipper John Murphy, Survey Officer Nicolas Chopin and Ben Dallaghan for the May/June survey

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

Area surveyed: From the shore (Kilmuckridge) to the Money Weights Bank including the Rusk Channel and Cahore Point itself.

Survey summary: (see map 1 for survey extent)

The May/June survey:

The 2012 seed settlement areas were checked for any overwintering seed but nothing was found on any of the 2012 locations. A few small signs of seed (1 to 5 mm) were observed on white/brown weed (hornwrack) on two tows, but quantities were very low. The side scan sonar was deployed between the shore and the Rusk Bank but no apparent features were observed. The grab was deployed in the Rusk Channel but no seed was found. Cahore Point patch was checked as well but nothing was found.

The July survey:

The side scan sonar was deployed in the Rusk channel, few marks were investigated but no seed was found. It was then deployed where the few signs were found earlier in the year (on the southwest side of the Rusk Bank). Another few marks were checked but again no seed was found. The sonar was finally deployed close the shore between Kilmuckridge and Ballynamona Hill. Small seed was found on the few marks logged. A small bed has found following the data processing (see the map of the settlement around Cahore Point).

Table 1: Area coordinates (in Degrees, decimal minutes WGS84):

Latitude	Longitude
52° 29.074' N	6° 14.458' W
52° 28.825' N	6° 14.696' W
52° 28.695' N	6° 14.956' W
52° 28.925' N	6° 15.005' W
52° 29.218' N	6° 14.703' W
52° 29.274' N	6° 14.433' W

NOTE: The area displayed on the map of the settlement around Cahore Point has been established following the side scan sonar data verified by ground truthing. These coordinates represent a simplified polygon of the area of the settlement identified.

This small settlement is just under 20 hectares and is split into two (one large and one small). At present the seed is very small and mixed with coarse sand, the average length is 11 mm and the sample processed contained over 50% of waste (mainly coarse sand and small gravel), the average pieces per kilogram is over 7000. Approximately 50% of the population from the sample is comprised between 10 and 14 mm, the smallest is 4.45 mm and the largest 20.12 mm. There is no apparent threat from starfish at the moment. The seed is well packed with sand and looks in good condition. No density has been established yet, the seed being still too scattered on the seabed. More small seed was found further north but no features were observed on the side scan sonar data.

Bottom type:

Coarse sand and small gravel with few small stones.

Recommendations:

This is only a very small settlement and it is not currently viable; it should produce only a few hundred tons if the seed continues to grow. There is no direct threat from starfish; this bed will be checked later in the season for growth.

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Notes for the map:

TC stands for Tow Cahore

GC stands for Grab Cahore

In the legend dgd stands for Dredge

In the legend gb stands for grab



