

## Seed Mussel Survey Report for Howth and the Lambay Sound- 1/09/2014 to 4/09/2014

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

**Equipment:** 400 kHz side scan sonar, 1 m dredge.

**Area surveyed:** Northeast of Malahide up to the Cable Rock, around Rush Point for the Lambay sound, the Nose of Howth and between the Baily Lighthouse and Drumleck Point and finally east and north of Dunany Point.

### Survey summary:

➤ **Howth:** Following previous survey plans, the shore around Howth was checked for seed. Fishing took place south of the Baily lighthouse prior to survey. The seed remaining is scattered over approximately 13 hectares. The seed is small with an average size around 16 mm (1120 Pieces/kilograms). Some open shell was observed in the dredges probably due to predation. Some starfish were found at the location, the waste is above 30%.

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

latitude	longitude
53° 21.546' N	6° 4.023' W
53° 21.462' N	6° 4.103' W
53° 21.386' N	6° 4.682' W
53° 21.493' N	6° 4.856' W
53° 21.554' N	6° 4.417' W

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

The eastern shore was checked as well (from the lighthouse to the Nose of Howth), but no seed was found.

➤ **Lambay:** Earlier in the year, the industry reported some signs of settlement on the west side of the sound, but that starfish were already damaging the seed. The side scan was deployed along the shore from the north of Malahide to the Cable Rock. The ground appears flat and soft on the southern part and rough with stones for the main bulk of the

surveyed area. Deployed static gear limited the extent of the survey to the south and east. No sign of relevant seed density was observed but a few marks were investigated. Scattered seed was found in 2 tows, a lot of mortality has been observed and a lot of starfish was found in the dredge. Despite the heavy predation, the seed left seems healthy and smaller individuals were observed on the stones. The average size is 21.7 mm (780 pieces/kilograms) and the waste in the sample was 30% (excluded starfish from the dredge).

*Table 2: Area coordinates (in Degrees, decimal minutes WGS84):*

Latitude	Longitude
53° 28.563' N	6° 5.846' W
53° 28.540' N	6° 5.647' W
53° 28.235' N	6° 5.892' W
53° 28.356' N	6° 6.020' W

NOTE: Those are not the coordinates of a bed; it only represents a general area where scattered seed was observed.

➤**Dunany Point:** a short survey has been undertaken around the head, but only very rough ground or very soft seabed was observed on the side scan sonar data. Due to shallow depth and the presence of static fishing gear, the survey area was very limited and no seed was found.

**Conclusion:**

No tonnage could be estimated for the bed south of Howth because fishing took place before the area was surveyed, but from the amount observed in the dredges there is probably a maximum of 100 tons left on the seabed.

The seed is also too scattered in Lambay for any estimation.

Nicolas Chopin  
 Inshore Survey Officer  
 BIM Aquaculture Technical Section

Notes for the maps:

For Howth: - TH stands for Tow Howth  
 For Lambay: -TL stands for Tow Lambay  
 For both maps in the legend, dgd stand for dredge.

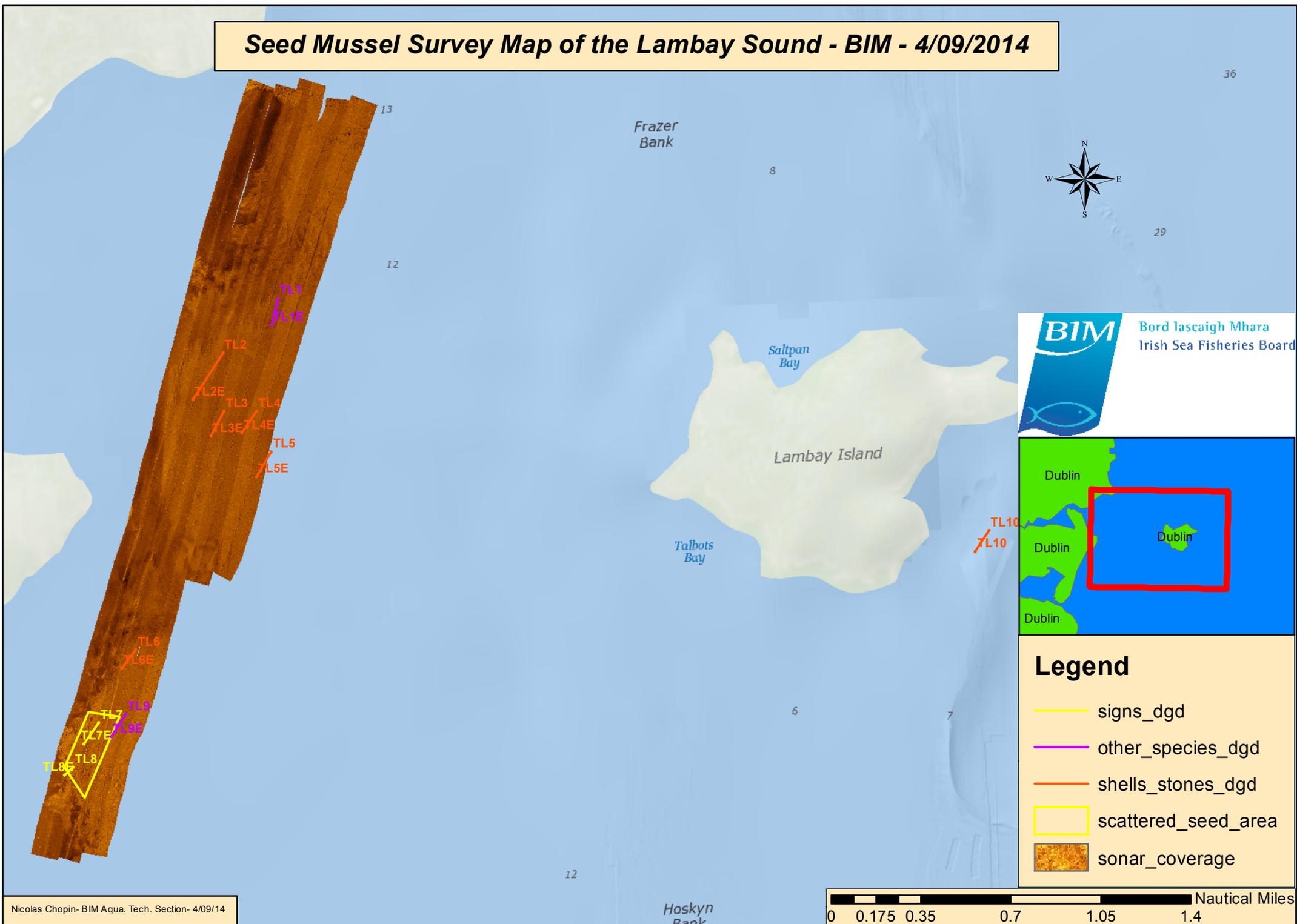
# Seed Mussel Survey Map of Howth - BIM - 3/09/2014



## Legend

- seed\_dgd
- shells\_stones\_dgd
- - - possible\_beds14
- bed\_extent
- sonar\_coverage

# Seed Mussel Survey Map of the Lambay Sound - BIM - 4/09/2014



### Legend

- signs\_dgd
- other\_species\_dgd
- shells\_stones\_dgd
- scattered\_seed\_area
- sonar\_coverage