

Update Report on Seed Mussel Survey around the Wicklow Area- 20/08/2015 to 28/08/2015

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

Equipment: 1 meter dredge, 0.1 m² Day grab.

Area surveyed: 1.2 Nautical miles North-northwest of the North tip of the Arklow Bank around the 20 meter contour line.

Survey summary:

As part of the recommendations for the last report for the Wicklow bed, the seed mussels were monitored for growth. The last survey on this area dated of the July 15th and 16th, and at this time the seed was still very small but constant encouraging signs were found over 4 km long.

From the latest survey of the area, no seed was found in the southern end of the previous bed and the mussels seem to be in good density on the northern part though. The area for seed is therefore update to the following coordinates.

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

Latitude	longitude
52° 54.481' N	5° 57.268' W
52° 54.587' N	5° 57.510' W
52° 55.210' N	5° 57.239' W
52° 56.032' N	5° 56.830' W
52° 56.042' N	5° 56.534' W
52° 55.528' N	5° 56.525' 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 area now represents around 90 hectares, stretching approximately over 2.5 km in length and 350 m wide. The seed has settlement on rough seabed material and some waste was observed in the dredge and the grabs: up to 50%.

The seed is in good conditions and little sign of predation has been observed. The current size varies from 10 to 24 mm (few individuals above and below this too but in very small quantities) or from 1200 to 2000 pieces per kilogram. The highest population range is very broad: classes from 14 to 24 mm represent over 70% of the entire settlement.

Following the analysis of the data collected, the estimated tonnage for this area is approximately 1700 metric tons.

Bottom type:

As mentioned above, the seabed material is mainly coarse sand and stones.

Recommendations:

This seed settlement is in good condition despite the amounts of seabed material in each tow and grab. A large amount of waste has to be expected during the fishing. The seed size remains a little small but with hard shell. Modest growth has occurred since the last sample.

Nicolas Chopin
BIM Inshore Survey Officer
Aquaculture Technical Section

Notes for the map:

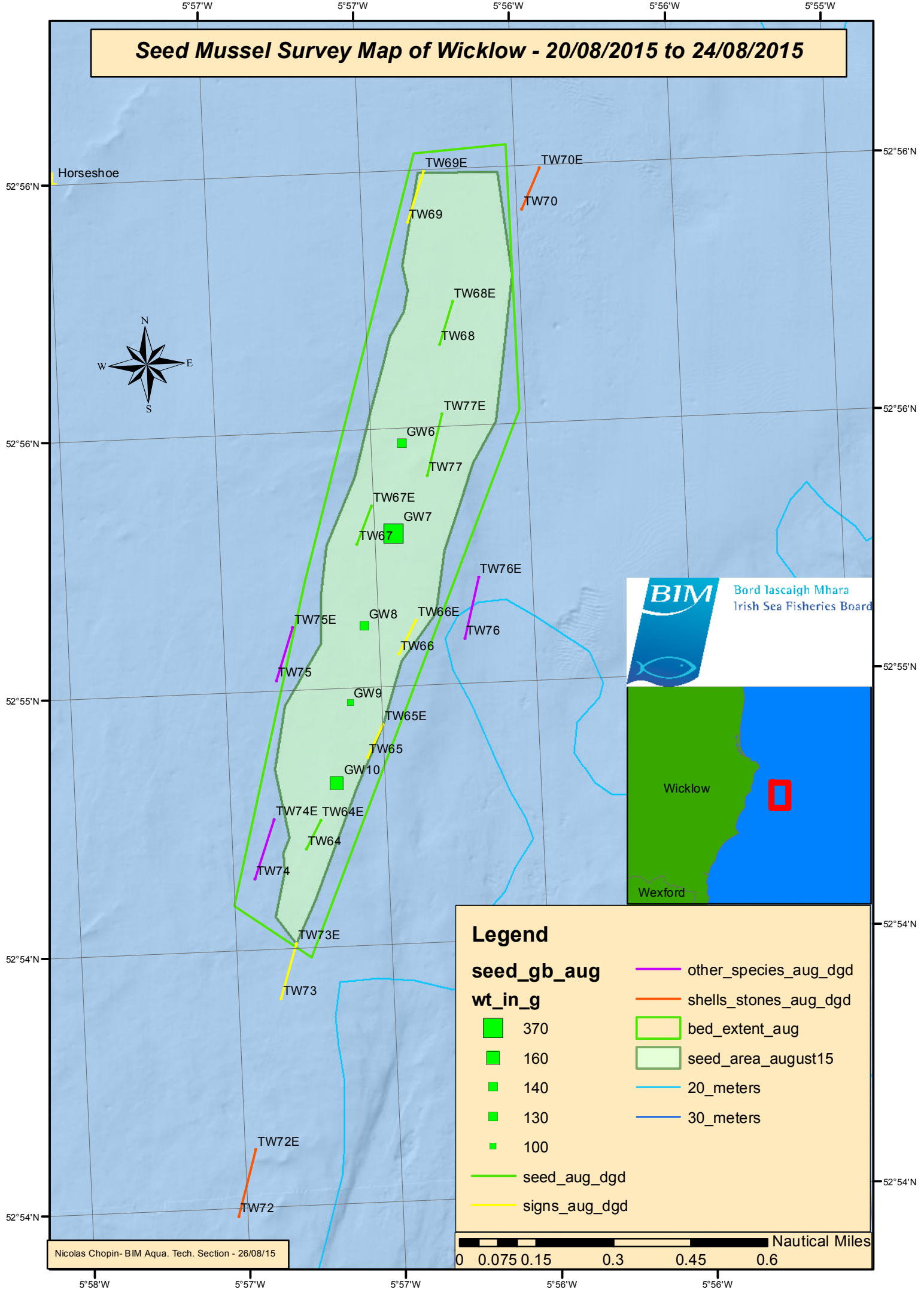
TW stands for Tow Wicklow

GW stands for Grab Wicklow

In the legend dgd_aug stands for Dredge August

In the legend gb_aug stands for Grab August

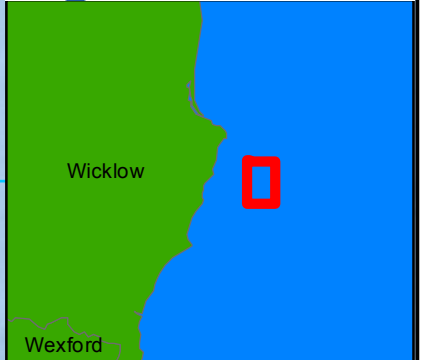
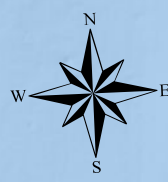
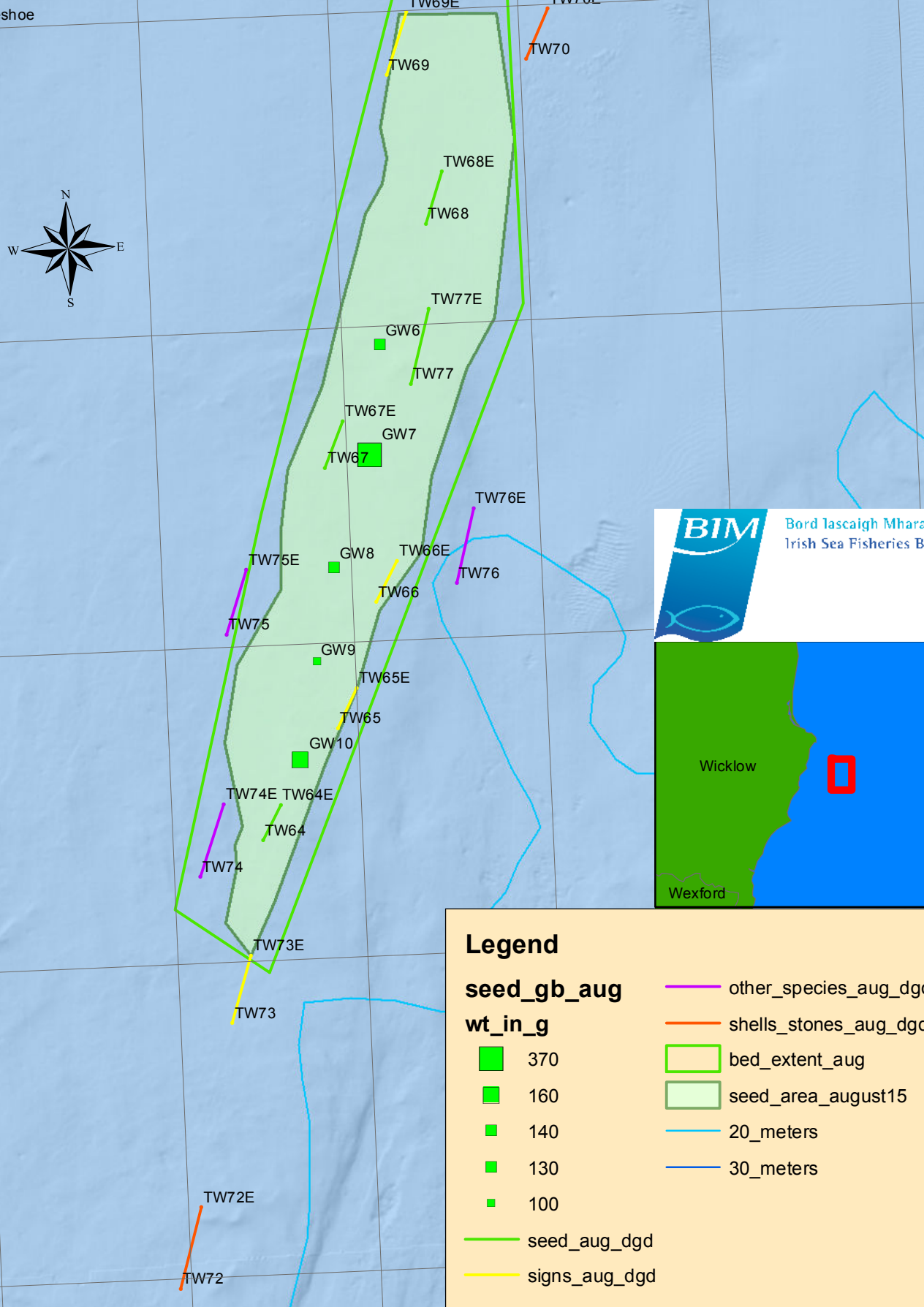
Seed Mussel Survey Map of Wicklow - 20/08/2015 to 24/08/2015



5°57'W 5°57'W 5°56'W 5°56'W 5°55'W

52°56'N
52°56'N
52°55'N
52°55'N
52°54'N
52°54'N

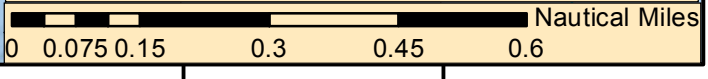
52°56'N
52°56'N
52°55'N
52°55'N
52°54'N
52°54'N



Legend

seed_gb_aug wt_in_g	— other_species_aug_dgd
■ 370	— shells_stones_aug_dgd
■ 160	▭ bed_extent_aug
■ 140	▭ seed_area_august15
■ 130	— 20_meters
■ 100	— 30_meters
— seed_aug_dgd	
— signs_aug_dgd	

Nicolas Chopin- BIM Aqua. Tech. Section - 26/08/15



5°58'W 5°57'W 5°57'W 5°56'W 5°56'W