

**Daily Drilling and Scientific Report for IODP Expedition 347,
Baltic Sea Paleoenvironment**



28th Sep 00:00 – 28th Sep 24:00 GMT

1. Location

11° 40.243' E 56° 37.211' N (M0060A)

BSB-1 – Anholt

Water Depth: 31.2 m

2. Activity Summary

Continue coring operations at M0060A.

3. Science Report

Piston coring continued in hard clayey sand at 189 mbsf. In the first core at 192 mbsf pieces of plant material were discovered. The material consisted of several amorphous and thin sheets, 5-10 mm wide, black and probably sulfidized and partially pyritized. There were 0.1-0.4 mm wide fibrous imprints of cellular plant structure in the amorphous material. Several pieces were picked by forceps into a sterile Whirl-Pak bag and frozen at -80°C for DNA analysis. At 195 mbsf many shell fragments were found of shallow-water marine bivalves such as *Cardium*. OSL samples were taken at 199 mbsf and at regular intervals below that depth. The sediment became increasingly hard below 195 mbsf. Starting at 198 mbsf coring was mostly by push corer and by hammer coring alternating with 2 m open holing intervals. At 211 mbsf the push core returned pure sand.

Below this level coring returned silty sand and pure sand alternating with a rather reduced foraminifera fauna displaying only few species and individuals. Charcoal was abundant at all sampled depths and at 215 mbsf one sample of the bivalve *Chamelea striatula* was found indicating a moderate water depth at the time of deposition.

4. Core Recovery Details

Hole	M0060A
Cores recovered	14
Drilled length (Coring)	8.81 m
Drilled length (Open hole)	28.89 m
Recovered length	8.07 m
Recovery	91.6%
Depth at Midnight	229.6 m

5. Weather

Fair, wave heights of 0.7 - 0.8 m; winds NNE - E, 13 - 16 kts, gusting 16 - 20 kts; 7°C.

Next 24 hrs: Fair, wave heights of 0.5 – 0.9 m, winds E, 12 – 14 kts, gusting 15 - 22 kts. 8°C.

Winds increasing by Thursday and Friday as high pressure interacts with a low passing west of the British Isles.

6. Planned Activity for the next 24 hours

Continue work to release drill string. Move to M0060B and commence operations.

7. Photo of the day



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