

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



**13<sup>th</sup> Oct 00:00 – 13<sup>th</sup> Oct 24:00 GMT**

**1. Location**

18° 15.268 E 58° 37.335' N

BSB-9 Landsort Deep

**2. Activity Summary**

Continue coring operations at BSB-9, Hole C.

**3. Science Report**

The piston corer for the first run was released 1.3 m above the seafloor, and it recovered a good core of very fluid, black gyttja-clay with an apparent recovery of 150% due to expansion of gas bubbles.

The following sediment recovered was a black, homogenous distinctly sulphide smelling gyttja-clay down to 16 mbsf. This sediment sequence was charged with methane gas, and frequent bubbles and cracks, visible through the core liners, occurred throughout. Foraminifers, pollen and diatoms were abundant. At some depths ostracods and bivalves were also present. From 18 to 27 mbsf the sediment was a greenish-grey, in some parts visibly laminated, gyttja-clay that had less abundant foraminifers, diatoms and pollen.

A distinct change in sediment type was recorded from 28 mbsf where bluish-grey clay was recovered in the upper part displaying some foraminifers, diatoms and bivalves but apart from this sequence had no microfossils. This type of clay is known from other parts of the Baltic Sea to have been deposited during the Ancyclus Lake stage. The occurrence of some fossils indicating a brackish environment in the upper part of the sequence may indicate a deposition during the initial Littorina stage with its gradually increasing salinity.

**4. Core Recovery Details**

<b>Hole</b>	M0063C
<b>Cores recovered</b>	22
<b>Drilled length (Coring)</b>	44m
<b>Drilled length (Open hole)</b>	0
<b>Recovered length</b>	65.09m
<b>Recovery</b>	147.93%
<b>Depth at Midnight</b>	44m

**5. Weather**

Fair becoming overcast towards the evening, wave heights of 0.4 – 1.1 m; winds NE, 9 - 16 kts, gusting to 20 kts; 15°C.

Next 24 hrs: Fair with risk of fog, wave heights of 0.2 – 0.5 m, winds variable from ESE, SE to WSW, 8 –12 kts, gusting 9 -15 kts. 16°C.

Winds will shift as high pressure moves east of the area, with prevailing winds becoming westerly.

**6. Planned Activity for the next 24 hours**

Continue coring operations at BSB-9, Hole C

7. Photo of the day



Nadine Quintana Krupinski ©ECORD\_IODP  
Laminated muds from the core catcher sample