

Abstract:

In 1997 an orientated profile column was excavated from the Hunsrück slate of the Eschenbach-Bocksberg quarry and a borehole was sunk that provided a 153 m thick section. By lithology 5 members can be distinguished. Fossil content, fossil distribution, taphonomy and changes of the fossil associations over the column were investigated. The palaeoecological interpretation indicates the presence of an oxygen-rich water column above the sediment. Sedimentary structures indicate proximal turbidites. The taphonomy of crinoids and Chondrites verify the presence of hydrogen sulphide or absence of oxygen in the sediment. Arthropods with eyes and light-requiring organisms such as (tropical) corals and green algae show the presence of sufficient light levels at the sea bed. Filter feeders are dominant, indicating the presence of nutrient-rich water.