

# AN EXTENSION OF UPPER CRETACEOUS ROCKS TO THE SWEDISH WEST COAST AT SÄRDAL

JAN BERGSTRÖM, WALTER KEGEL CHRISTENSEN, CHRISTER JOHANSSON  
AND ERIK NORLING

With an appendix on *Pseudopuzosia* sp. by TOVE BIRKELUND

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A temporary exposure of conglomeratic limestone and calcareous sandstone yielded a rich fauna which, except for the cephalopods, is only preliminarily treated. The reworked phosphatised rock fragments found in the limestone and the sandstone contain a large fauna which, based on the presence of *Actinocamax* ex gr. *primus/plenus*, can be assigned to the late Cenomanian and/or the *A. plenus* Zone between the Cenomanian and the Turonian. A varied and abundant fauna of hexactinellid sponges indicates that the transgression in the late Cenomanian and/or the *A. plenus* Zone involved a rise in the water level of about 100 m.

Dating with the aid of foraminifera and belemnites gives an age around the Early/Middle Santonian boundary for the limestone and the sandstone, and despite the short time interval, two transgressions are recorded.

The Santonian sequence contains the following belemnites: *Belemnitella propinqua propinqua*, *Goniot euthis westfalica westfalica*, *G. lundgreni*, and *Actinocamax verus*. Monovariate and bivariate biometric analyses of *B. p. propinqua* and *G. w. westfalica* were carried out and comparisons with the belemnite fauna from the Bavnodde Greensand performed.

Särdal is situated in a belt along the border of the Fennoscandian Shield with Mesozoic sediments, and some aspects of the general geological framework are discussed.

J. Bergström, *Geologiska Institutionen, Sölvegatan 13, S-223 62 Lund, Sweden*. W. Kegel Christensen, *Mineralogisk-Geologisk Museum, Københavns Universitet, Øster Voldgade 5–7, DK 1350 København K, Denmark*. C. Johansson, *Åsgatan 11, S-31035 Åled, Sweden*. E. Norling, *Sveriges Geologiska Undersökning, S-104 05 Stockholm 50, Sweden*. T. Birkelund, *Institut for historisk geologi og paleontologi, Østervoldgade 10, DK 1350 København K, Denmark*.

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