

INTRODUCTION

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The extension of Cretaceous transgressions and the distribution of loose blocks of Cretaceous (here taken to include the Danian) flint and limestone along the west coast of Sweden have been subject to much debate in the past. The debate has been hampered by the absence of known occurrences of Cretaceous rocks in situ north of the Båstad area (except possibly in Varberg, see Hägg, 1946). This circumstance has led several writers to believe that all Cretaceous blocks were transported to the west coast from outcrops in Skåne (Scania), Denmark, or the sea bottom. The occurrence at Särödal shows that the Cretaceous sea actually transgressed far beyond the Fennoscandian border (or Tornquist Line) in the middle of Kattegat. It also shows that thin patches of Cretaceous rocks may be preserved to the east of this border despite the fact that echo soundings indicate that Proterozoic rocks form the surface or come very close to the surface over wide areas.

The temporary outcrop at Särödal was first exposed in the summer of 1970 when diggings began for a purification plant. In the fear that the work would have to be stopped or delayed if the find became known, the work was continued in silence. Fortunately the exposure was spotted by Mr. Edvin Gustavsson, Halmstad, who is a retired telephone worker with wide interests in the past, particularly in archaeology. Gustavsson alerted the geologist Christer Johansson at the County administration in Halmstad, and with the addition of three palaeontologists and stratigraphers the work began in the autumn of 1970. Early in the spring of 1971 the locality was finally closed.

Some material was collected at the site by Christer Johansson, Jan Bergström, and Erik Norling. Much material was also obtained by Mr. Östen Rinaldo, owner of the farm at which the purification plant was built. By far the most material, however, was collected by Mr. Ernst Wennerholm, a farmer in Särödal, who happened to have a sick leave during the work on the purification plant and spent much of his time collecting fossils. We are greatly indebted to Rinaldo and Wennerholm for their willingness to put their material at our disposal.

The illustrated material is deposited at the Geological Survey of Sweden (foraminifera EN SEM 107-110, 115, 120-121, 124), the Mineralogical

Museum in Copenhagen (belemnites, registration numbers MMH 12730–12751), and the Geological Institute in Lund (other fossils, LO 4446–4451). Additional material is deposited at the above institutes and in the homes of Östen Rinaldo and Ernst Wennerholm in Särödal.