

The Cretaceous of Northeast Greenland – A new regional lithostratigraphy.

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Cretaceous strata exposed from Traill Ø to Store Koldewey in Northeast Greenland range from Ryazanian to Campanian in age, and they form a combined succession up to several km in thickness. Although the Cretaceous is extensively distributed in the region only a few published studies have dealt with the lithostratigraphic subdivision of the succession. The Jurassic–Cretaceous boundary strata of the Wollaston Forland Group were described by Surlyk (1978) and local lithostratigraphic subdivisions are known from Hold with Hope (Kelly et al. 1998) and Traill Ø (Surlyk & Noe-Nygaard 2001). In this study, lithostratigraphic data were systematically collected during extensive fieldwork in 2008–2011, with the aim to erect a lithostratigraphic framework that can be applied for the Cretaceous strata in a regional coherent context in Northeast Greenland. The nature of the lithostratigraphic scheme follows ideally a modern genetic approach, and the subdivision accordingly reflects the main tectonostratigraphic phases of the basin-fill history, and thus forms a robust reference to the offshore Cretaceous deposits of the Greenland – Norway conjugate margins.

The new lithostratigraphic subdivision of Northeast Greenland is provisional and will be submitted for publication in the near future.

Kelly, S.R.A., Whitham, A.G., Koraini, M.A. & Price, S.P. 1998: Lithostratigraphy of the Cretaceous (Barremian - Santonian) Hold with Hope Group, North East Greenland. *Journal of the Geological Society*, London **155**, 993–1008.

Surlyk, F. 1978: Submarine fan sedimentation along fault scarps on tilted fault blocks (Jurassic–Cretaceous boundary, East Greenland). *Bulletin Grønlands Geologiske Undersøgelse* **128**, 108 pp.

Surlyk, F. & Noe-Nygaard, N. 2001: Cretaceous faulting and associated coarse-grained marine gravity flow sedimentation, Traill Ø, East Greenland. In: Martinsen, O.J. & Dreyer, T. (eds): *Sedimentary Environments Offshore Norway – Palaeozoic to Recent*. NPF Special Publication **10**, 293–319.