This guide provides a major revision and update of the stratigraphy of the Cromer Knoll, Shetland and Chalk Groups for the UK and Norwegian sectors in the North Sea, and of the Cromer Knoll and Shetland Groups in the Norwegian Sea. The first chapters deal with the paleoceanographic and geologic settings and updated biostratigraphy, followed by the chapters with the new and improved lithostratigraphy. The Cretaceous biostratigraphy calculated for the microfossil record in 37 Norwegian wells integrates over 100 foraminifer, dinoflagellate cyst, diatom and miscellaneous events in nineteen zones, numbered from NCF 1 through NCF 19 (North Sea Cretaceous Micro Fossil Zones 1–19). A literature based Dinoflagellate Cyst Zonation (DCZ), linked to the NCF zones, is also presented with eleven zones and thirty-nine subzones for Cretaceous marine strata in the North Sea. Both zonations are optimized for industrial applications with ditch cuttings samples. The lithostratigraphy of the North Sea, unified for the UK and Norwegian sectors describes 3 groups, 30 formation units and one member. The Cretaceous lithostratigraphy for the Norwegian Sea describes 2 groups, 17 formations and 14 members. This (long overdue) update alleviates misnaming and incidental use of unique names for reservoir units, without documentation and lack of biostratigraphic and correlative insight. The internet site www.nhm2.uio.no/norlex and the CD inserted with this publication provide core archives for the lithostratigraphic units.