

Ammonites and stratigraphy of the Bathonian and Callovian at Janusfjellet and Wimanfjellet, Sassenfjorden, Spitsbergen

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Three ammonite faunas in the lower part of the Janusfjellet Fm., in the southern Sassenfjorden area have been recognized. The first fauna is correlated with the *Stephanoides* (= *Fascitculatus* Subzone) of the *Cranocephalooides* Zone Upper Bathonian, the second one - with the *Calyx* Zone of the uppermost Bathonian, and probably also with the *Apertum* Zone of the lowermost Callovian, and the third one-with the upper part of the Middle Callovian and/or the lower part of the Upper Callovian. The co-occurrence of Cardioceratidae and Kosmocerotidae in the Upper Bathonian in Spitsbergen is indicative of the Subboreal province, whereas the presence of Cardioceratidae and the absence of Kosmocerotidae found in the Middle/Upper Callovian characterize the Boreal province. Thus, within the Boreal Realm the boundaries of the Boreal and the Subboreal provinces shifted through the Spitsbergen area during the Early/Middle Callovian time. In the paleontological part are described the representatives of *Kepplerites* (subgenera: *Seymourites*, *Toricellites*), *Costacadoceras*, *Cadoceras* (*Paracadoceras*), *Stenocadoceras*, *Pseudocadoceras* and ?*Longaeviceras*; a new species, *Kepplerites* (*Toricellites*) *birkelundae* Kopik, has been established.

Key words: biostratigraphy, biogeography, ammonites, Middle Jurassic, Bathonian, Callovian, Boreal Realm.

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