

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* (= *Fasciculatus* Subzone) of the *Cranocephaloides* 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 *Kosmoceratidae* in the Upper Bathonian in Spitsbergen is indicative of the Subboreal province, whereas the presence of *Cardioceratidae* and the absence of *Kosmoceratidae* 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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