

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

Janusz Kopik and Andrzej Wierzbowski

Acta Palaeontologica Polonica 33 (2), 1988: 145-168

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 *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.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

