

Brachiopod assemblages in the Devonian Kowala Formation of the Holy Cross Mountains

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Brachiopod faunas from the Devonian stromatoporoid-coral series (Kowala Formation) of the southern Holy Cross Mts comprise at least 60 species, atrypids and ambocoeliid spiriferids being the most common. Largely monospecific bottom-level pioneer assemblages colonized intershoal and open shelf environments of the Late Givetian Sitkówka bank complex to the Frasnian Dyminy reef complex, and some lagoonal habitats of the older Givetian *Stringocephalus* bank. The associations dwelling organic buildups were more diverse and specialized. Faunal dynamics of the brachiopods were controlled primarily by eustatic cycles and the evolution of the carbonate shelf. Generally this was a four-step succession from the stringocephalid to the ambocoeliid, atrypid (or cyrtospiriferid), and rhynchonellid faunas. Twenty two species are reviewed . *Praewaagenoconcha*(?) *sobolevi* sp . n., *Desquamatia globosa aequiconvexa* subsp. n., and *D. g. sitkowkensis* ssp . n. are proposed. Two poorly-known species of Gurich (1896). *Tenticospirifer lagoviensis* and *Ilmenia*(?) *elatior*. are redescribed.

Key words: brachiopods, taxonomy, paleoecology, Devonian, Poland.

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