

NEOGENE OF THE SOUTH MORAVIA (CZECH REPUBLIC)

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Neogene sediments in the South Moravia occur in two units of the Outer West Carpathians, namely in the Carpathian Foredeep and in the Vienna Basin. Paleogeographically, both basins belong to the Central Paratethys area and their evolution was influenced both by the course of the Alpine orogenesis itself, and by the eustatic movements of the World Ocean level. The sedimentary infill of the Carpathian Foredeep and Vienna Basin are represented by molasse sediments – marine, brackish and freshwater clays, sands and gravels, in places limestones, evaporites and coal sediments. Nowadays, only relics of the basins infilling remained due to the intensive Pliocene and Quaternary denudation.

The Carpathian Foredeep in Moravia belongs to the peripheral Alpine-Carpathian basins in the foreland of flysh units. It includes a system of Miocene basins that - in connection with the advancing nappes of the Flysh Carpathians - shifted towards the foreland represented by the margin of the Bohemian Massif. As the nappe movements coincided with the sedimentation, the sediments of the Carpathian Foredeep occur nowadays partly under the nappes, in front of them, even in their top, or they are incorporated in the nappe fronts.

The Vienna Basin is reaching Moravia only by its ne. part from Austria and Slovakia and its underlying rocks here are represented by the nappes of the flysh belt. It is an intramountain basin of the piggy-back character that originated on the system of deep fractures, and its infilling thickness reaches up to some thousands of meters.

In the lecture, Neogene of the Carpathian Foredeep will be characterized in detail, in particular the sediments of the Badenian age, that are of a great importance not only due to their preservation and paleontological contents, but also from the paleogeographical point of view.