

New data on the age of the bone breccia from the locality Czatkowice 1 (Cracow Upland, Poland)

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Acta Palaeontologica Polonica 48 (1), 2003: 153-155

Fissure deposits are notoriously difficult to date. But, determination of the age of assemblages they contain is crucial for the evolutionary conclusions based on them. The early Mesozoic karst infillings within the Lower Carboniferous limestone of the locality Czatkowice 1 (Southern Poland) containing a diverse terrestrial microvertebrate assemblage (see Borsuk-Białynicka et al. 1999 for review) were originally thought to be most likely Late Permian to Early Triassic in age. Subsequent study of the assemblage containing procolophonids, prolacertiforms, basal lepidosauromorphs, a basal archosaur and small amphibians (including a pre-frog) showed that it is Early Triassic, most probably Late Olenekian, in age because of the advanced dentition pattern of the procolophonids. The discovery of tooth plates of the lungfish *Gnathorhiza*, known to range from the Induan into early Late Olenekian (Vetlugian Superhorizon to Fedorovskian Horizon of the regional scheme) in Eastern Europe, has further enhanced the dating. The combination of procolophonid and dipnoan evidence now appears to restrict the age of the Czatkowice 1 assemblage to the Early Olenekian.

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