

Postcranial skeleton of multituberculate mammal *Catopsbaatar*

Jørn H. Hurum and Zofia Kielan-Jaworowska

Acta Palaeontologica Polonica 53 (4), 2008: 545-566 doi:<http://dx.doi.org/10.4202/app.2008.0401>

We describe an incomplete postcranial skeleton of *Catopsbaatar catopsaloides* from the ?late Campanian red beds of Hermin Tsav I, in the Gobi Desert, Mongolia. The skeleton is fragmentary and the preservation of bone surface does not permit reconstruction of the musculature. The studied skeleton contains some parts not preserved or incompletely known in other multituberculate genera, such as a long spinous process in a single lumbar vertebra, which together with long transverse processes preserved in *Nemegtbaatar*, might indicate that at least some multituberculates had jumping ability. The calcaneus of *Catopsbaatar* is unusual, differing from most other multituberculates (where known) and other mammals by having a short tuber calcanei, with a large proximal anvil-shaped process strongly bent laterally and ventrally, arranged obliquely with respect to the distal margin of the calcaneus, rather than arranged at 90° to it, as in other mammals. This suggests the presence of strong muscles that attached to the tuber calcanei, perhaps further attesting to jumping abilities in *Catopsbaatar*. We also describe an unfused pelvic girdle and the first extratarsal spur bone (os cornu calcaris) known in multituberculates.

Key words: Mammalia, Multituberculata, Djadochtatheriidae, *Catopsbaatar*, postcranial skeleton, sprawling posture, Cretaceous, Gobi Desert, Hermin Tsav.

Jørn H. Hurum [j.h.hurum@nhm.uio.no], Naturhistorisk Museum, University of Oslo, Boks 1172 Blindern, N-0318 Oslo, Norway; Zofia Kielan-Jaworowska [zkielan@twarda.pan.pl], Instytut Paleobiologii PAN, ul. Twarda 51/55, PL-00-818 Warszawa, Poland;

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.

 [Full text \(1,139.7 kB\)](#)