

The hind limb skeleton and cursorial adaptations of the Plio-Pleistocene rabbit *Hypolagus beremendensis*

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Hypolagus beremendensis, a representative of the Archaeolaginae, was one of the most abundant and widespread leporids in the Plio-Pleistocene of Europe. The vast accumulations of skeletal remains from the Polish Pliocene sites (Węże 1, Rębiełice Królewskie 1 and 2, and Kadzielnia 1) yielded thousands of bones representing almost all skeletal regions. The detailed hind limb morphology of *Hypolagus beremendensis* is presented in comparison with five extant leporids (*Lepus europaeus*, *Oryctolagus cuniculus*, *Pentalagus furnessi*, *Sylvilagus floridanus*, and *S. brasiliensis*), which represent a wide range of locomotor adaptations. The UPGMA analysis of 98 metric characters places *Hypolagus beremendensis* next to the leporine rabbits. *Hypolagus beremendensis* has the os coxae, femur, and talus most similar to *P. furnessi*, tibia and calcaneus to the leporine rabbits, and the structure of foot to *Lepus*. The elongation of the foot and tibiofibular segment in relation to the femur indicates an advanced cursorial adaptation and a relatively steep jump. The similarities in the proximal segments (os coxae and femur) between *Hypolagus* and *Pentalagus* highlight the conservative morphology of this region in the Leporidae.

Key words: Lagomorpha, Leporidae, *Hypolagus beremendensis*, hind limb, functional morphology, cursorial adaptations, Neogene.

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