

Therian femora from the Late Cretaceous of Uzbekistan

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Femora referable to metatherians and eutherians recovered from the Bissekty Formation, Dzharakuduk, Kyzylkum Desert, Uzbekistan (90 Mya), are described. Fourteen isolated specimens were sorted based on size and morphology into groups that likely correspond to the species level or higher. Groups were then tentatively assigned to taxa known from teeth, petrosals, and/or other postcrania at these localities. One distal femur of a small arboreal metatherian, and several eutherian distal femora that probably represent zhelestids and/or zalambdalestids were identified. With the exception of one proximal femur that is similar in some aspects to the zalambdalestid *Barunlestes*, and a previously described multituberculate specimen, all other proximal femora from the Bissekty Formation exhibit a metatherian-like morphology. The dental record currently suggests the presence of twelve eutherian species and only one metatherian at Dzharakuduk, whereas the humeral and crurotarsal evidence supports the presence of at least two or four metatherian species, respectively. Given the sample size of the proximal femora, the morphological diversity present, and the overwhelming presence of eutherians at these localities, it is highly unlikely that the overwhelming majority of proximal femora actually represent metatherians. Therefore, this sample may suggest that the metatherian proximal femoral condition is primitive for Theria and that some eutherian taxa (probably including Zhelestidae, which are dentally most abundant at these localities) retain this condition.

Key words: Theria, Metatheria, Eutheria, Zhelestidae, Zalambdalestidae, femur, Cretaceous, Uzbekistan.

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