Mammalian Faunal Succession in the Cretaceous of the Kyzylkum Desert

J. David Archibald, Department of Biology, San Diego State University, San Diego, California 92181-4614, U.S.A. & Alexander P. Averianov, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, Saint Petersburg 199034, Russia

Both metatherians and eutherians are known from the Early Cretaceous (Barremian, 125 mya) of China, while eutherian-dominated mammalian faunas appeared in Asia at least by the earliest Late Cretaceous (Cenomanian, 95 mya). The approximately 99-93 my old (Cenomanian) Sheikhdzheili l. f. from western Uzbekistan is a small sample of only eutherians, including three zhelestids and a possible zalambdalestoid. The much better known 90 my old (Turonian) Bissekty l. f. at Dzharakuduk in the central Uzbekistan includes 15 named and unnamed species, based on ongoing analyses. Of these, 12 are eutherians represented by at least the three groups – asioryctitheres, zalambdalestids, and zhelestids – plus an eutherian of uncertain position – *Paranyctoides*. Zalambdalestids and zhelestids have been argued to be related to the origin of the placental gliriforms (Euarchontoglires) and ferungulates (Laurasiatheria), respectively, although recent analyses cast doubt on the first relationship. Although there are four previously recognized metatherians, we believe three are referable to the deltatheroid *Sulestes karakshi* and the fourth, *Sailestes quadrans*, may belong to *Paranyctoides*. There is one multituberculate and one symmetrodont in the Bissekty l. f. While comparably aged (Turonian) localities in North America have somewhat similar non-therians, they have more metatherians and no eutherians. The next younger localities (early Campanian, ~80 mya) in North America have both a zhelestid and *Paranyctoides*, suggesting dispersal of eutherians from Asia. At Dzharakuduk, the approximately 85 my old (late Turonian /Coniacian) Aitym l. f. is much less well known than the Bissekty l. f., but yields nearly identical taxa, with two non-therians, one metatherian, and six eutherians.

Journal of Vertebrate Paleontology **25(supplement. to no. 3):32A.**