

LATE CRETACEOUS MAMMALIAN FAUNA FROM THE HELL CREEK FORMATION, SOUTHEASTERN MONTANA

Yue Zhang and J. David Archibald, Department of Biology, San Diego State University, San Diego, California 92181-4614, U.S.A.

The richest known Late Cretaceous mammalian fauna from the Hell Creek Formation was discovered in southeastern Montana in the 1980's. Although a faunal list was included in a paleobiogeographic study, the taxa have never been described. This study describes and compares this important fauna to other Late Cretaceous mammalian faunas. There are some 20 mammal producing localities, but the richest are the four localities composing Claw Butte Anthills local fauna and the single richest locality composing the Spigot-Bottle local fauna. Over 1000 mammal specimens have been recovered by screen washed from an in situ channel fill composed of silty sand. The Hell Creek Formation is quite thick in this area, reaching 150m, with the two local faunas ranging from 65 to 61 m below the formational contact. Based on faunal content the two local faunas are not different. Spigot-Bottle local fauna includes the multituberculates *Mesodma formosa*, *M. hensleighi*, *M. thompsoni*, *Cimolodon nitidus*, *Cimolomys gracilis*, *Meniscoessus robustus*; the metatherians *Protalphadon lulli*, *Alphadon marshi*, *A. wilsoni*, *Pedionomys cooki*, *P. elegans*, *P. florencae*, *P. hatcheri*, *P. krejci*, *Turgidodon rhaister*, *Didelphodon vorax*; and the eutherians, *Batodon tenuis*, *Cimolestes incisus*, *C. propalaeoryctes*, *C. stirtoni*, *Gypsonictops* sp., cf. *Paranyctoides* sp. In addition, from the Claw Butte local fauna the multituberculate *Essonodon browni*, the metatherian *Glasbius twitchelli*, and the eutherian *Gypsonictops hypoconus* have been recovered. The eutherian *Cimolestes magnus* also has been reported elsewhere from the Hell Creek Formation in southeastern Montana.

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