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A NEW LATE PALEOCENE MAMMAL LOCAL FAUNA FROM THE SENTINEL BUTTE FORMATION OF NORTH DAKOTA

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The Red Spring Locality (L3236) occurs in badlands exposures west of the Missouri River and south of Garrison Dam (in Mercer County), near the town of Riverdale, North Dakota. The locality is approximately 36 m above the Bullion Creek-Sentinel Butte formational contact. The Red Spring (historic) area was first investigated by F.V. Hayden in 1856. A mammal-bearing locality and numerous molluscan localities were subsequently discovered and first sampled in 1980. The Red Spring Locality is a small deposit (0.3 m³) that has produced about 40 identifiable teeth. The locality is notable in that it represents 1) the stratigraphically highest reported occurrence of Paleocene mammals in central North Dakota, 2) the stratigraphically highest Paleocene locality in the state that has produced more than a single species, and 3) the most diverse mammalian local fauna from the Sentinel Butte Formation. The fauna consists of four species of multituberculates (*Ptilodus kummae*, *Prochetodon* sp., *Neoplagiaulax* cf. *N. hazeni*, and *Mimetodon silberlingi*) and five species of eutherians (*Prodiacodon* sp., ?paleoryctid, *Diacocherus minutus*, cf. *Bisonalveus* sp., and *Ectocion* sp.). These taxa indicate a Tiffanian age of either Ti3 or Ti4. On the basis of the stratigraphic interpretation of the other late Paleocene mammalian local faunas in North Dakota, the Red Spring local fauna is probably of Ti4 age.