TOOTH PUNCTURE MARKS ON A SKULL OF *DINICTIS* (NIMRAVIDAE) FROM THE OLIGOCENE BRULE FORMATION OF NORTH DAKOTA ATTRIBUTED TO PREDATION BY *HYAENODON* (HYAENODONTIDAE)

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A complete skull of *Dinictis felina* Leidy, 1854, (Mammalia: Carnivora: Nimravidae) (NDGS 59) was recovered from a clayey siltstone in the lower part of the Oligocene Brule Formation, from a North Dakota registered natural area in Stark County. The right P2-M1 and left M1 are present, all other teeth are broken or have been sheared off at the bone line, and the right zygomatic arch was broken and distorted. The mandible was not recovered. This fossil occurred 5.55 meters above the contact with the South Heart Member of the Chadron Formation, and 3.15 meters below the Antelope Creek tuff of the Brule Formation. Associated vertebrate fossils including *Mesohippus bairdii* and *Palaeolagus burkei* indicate a latest Orellan (Or4) interval zone (32.5-32.0 Ma). Other associated vertebrates include *Stylemys* sp., ?*Subhyracodon* sp., *Ischyromys* sp., *Hesperocyon gregarius*, *Eumys elegans*, *Leptictis dakotensis*, *Leptomeryx evansi*, and a small eomyid (possibly *Paradjidaumo*). Also associated were the gastropod *Skinnerelix leidyi*, the trace fossil *Pallichus* sp., and seeds from *Celtis* sp. During preparation of the *Dinictis* skull, distinct and well defined tooth puncture marks were noted on the right temporal and parietal bones, with another possible bite mark present on the left parietal, although this latter mark is less distinct because of missing and fractured bone. Two possible gnaw marks are present on the left maxilla, near the orbit and suture with the frontal. No evidence of healing was observed around the puncture marks. Comparisons with other puncture marked specimens are made. Measurements of the geometry of the punctures, spacing between the punctures, and comparison to skulls and dentaries of potential predators indicate that *Hyaenodon* (Mammalia: Creodonta: Hyaenodontidae) was the likely attacker of this *Dinictis*. Although not recovered from this locality *Hyaenodon* is known from the Brule Formation and has been recovered from Stark County.