

**THE TYRANT KING OF MUD BUTTE:  
NOTES ON A *TYRANNOSAURUS REX* SPECIMEN  
FROM BUTTE COUNTY, SOUTH DAKOTA**

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ABSTRACT

SDSM 12047 is an approximately 40% complete skeleton of a *Tyrannosaurus rex* collected by the South Dakota School of Mines & Technology's Museum of Geology in the early 1980s. This study represents the first osteological description of this specimen, reinforcing its diagnosis and detailing unique and useful information in comparison to other tyrannosaurid specimens. Unique features of SDSM 12047 include pronounced rugosity of the posterior cranium, potential pathology of the left maxilla, and unusual tooth counts in the dentaries. SDSM 12047 preserves features absent or poorly preserved in other *T. rex* specimens, including the "intercoronoid"/ "supradentary", and a nearly complete series of cervical vertebrae. Cranial characteristics were scored and compared to those of other *T. rex* specimens to establish an adult age for SDSM 12047. Establishing skeletal characteristics and an ontogenetic stage for this individual adds data to further our understanding of this popular yet poorly represented taxon.