

A NEW ?ORNITHISCHIAN DINOSAUR FROM THE BULL CANYON FORMATION
(UPPER TRIASSIC) OF EAST-CENTRAL NEW MEXICO

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Abstract - Revueltosaurus callenderi is a new ?ornithischian dinosaur from the Bull Canyon Formation (Upper Triassic) of eastern New Mexico. It is distinguished by having denticulated premaxillary teeth twice the size of dentary/maxillary teeth and in having incisiform (?anterior) teeth. Anterior teeth are lacking in all ornithischians.

INTRODUCTION

Ornithischian dinosaurs were the most abundant and diverse group of large terrestrial vertebrates during the late Mesozoic, yet the origin and early diversification of this group are poorly understood. Undoubtedly, the Ornithischia evolved during the Late Triassic, but the dinosaur record for this time interval is poor (Chatterjee, 1984; Galton, 1986). In the extensive and well-studied faunas of the Late Triassic of the American Southwest, only one ornithischian dinosaur has been described (Chatterjee, 1984). However, there are also reports of unpublished material (Murry, 1986, 1989). This paper presents a brief description of a new dinosaur taxon which may possibly represent a sister group to the Ornithischia. NMMNH refers to the New Mexico Museum of Natural History, Albuquerque.

SYSTEMATIC PALEONTOLOGY

Class Reptilia

Order ?Ornithischia Seeley, 1887

Genus Revueltosaurus, new genus

Type Species: Revueltosaurus callenderi.

Derivation of Name: From Revuelto Creek, Quay County, New Mexico where the specimen was collected. Revuelto is Spanish for "revolution" (revolt) which is appropriate for an animal from the Late Triassic during which there was a revolution in terrestrial vertebrate evolution.

Distribution: Bull Canyon Formation (Late Triassic, Norian) of Quay County, New Mexico.

Diagnosis: Herbivorous dinosaur of small size which shares with the Ornithischia teeth that are low and triangular-shaped in lateral view, no recurvature in maxilla/dentary teeth and the fact that teeth have well-developed necks separating the crown from the roots (Serenó, 1986). Revueltosaurus differs from most ornithischians, except advanced heterodontosaurs, in having premaxillary teeth twice as tall as maxillary/dentary teeth