

Immature skulls of the theropod dinosaur *Coelophysis bauri* from Ghost Ranch, New Mexico

Jeb E. Bugos and Skye N. McDavid


Acta Palaeontologica Polonica 69 (4), 2024: 549-564 doi:10.4202/app.01085.2023

The theropod dinosaur *Coelophysis bauri* is well known from the famous Rhaetian, Late Triassic mass death assemblage from the *Coelophysis* Quarry at Ghost Ranch, New Mexico. This research describes the skulls of two small individuals of *C. bauri*. Both skulls are mostly complete, though they are missing premaxillae, and most posterior skull bones are either missing or badly damaged. Both specimens preserve hyoids, making them excellent candidates for hyoid histology. These two skulls have different proportions from other *Coelophysis* skulls from Ghost Ranch, especially in the large size of the orbit, short and flat triangular teeth, and thinner bones. These differences are interpreted as representing ontogenetic variation, with these skulls representing skeletally immature, partially developed individuals.

Key words: Theropoda, Triassic, *Coelophysis*, ontogeny, Chinle Formation.

Jeb E. Bugos [jbugos@cmnh.org; ORCID: <https://orcid.org/0000-0003-2336-1442>], Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106 USA; current address: Cleveland Museum of Natural History, 1 Wade Oval Drive, Cleveland, Ohio 44106 USA. Skye N. McDavid [mail@skyemcdavid.com; ORCID: <https://orcid.org/0000-0003-2529-1812>] corresponding author, Delaware Valley Paleontological Society, PO Box 686, Plymouth Meeting, Pennsylvania 19462 USA.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(1,216.0 kB\)](#)