

Two new stegosaur specimens from the Upper Jurassic Morrison Formation of Montana, USA

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Two partial skeletons from Montana represent the northernmost occurrences of Stegosauria within North America. One of these specimens represents the northernmost dinosaur fossil ever recovered from the Morrison Formation. Consisting of fragmentary cranial and postcranial remains, these specimens are contributing to our knowledge of the record and distribution of dinosaurs within the Morrison Formation from Montana. While the stegosaurs of the Morrison Formation consist of *Alcovasaurus*, *Hesperosaurus*, and *Stegosaurus*, the only positively identified stegosaur from Montana thus far is *Hesperosaurus*. Unfortunately, neither of these new specimens exhibit diagnostic autapomorphies. Nonetheless, these specimens are important data points due to their geographic significance, and some aspects of their morphologies are striking. In one specimen, the teeth express a high degree of wear usually unobserved within this clade—potentially illuminating the progression of the chewing motion in derived stegosaurs. Other morphologies, though not histologically examined in this analysis, have the potential to be important indicators for maturational inferences. In suite with other specimens from the northern extent of the formation, these specimens contribute to the ongoing discussion that body size may be latitudinally significant for stegosaurs—an intriguing geographical hypothesis which further emphasizes that size is not an undeviating proxy for maturity in dinosaurs.

Key words: Dinosauria, Thyreophora, Stegosauria, Jurassic, Morrison Formation, USA, Montana.

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