

A PRELIMINARY REPORT ON NEW VERTEBRATE FOSSILS FROM THE LATE
CRETACEOUS ALMOND FORMATION, WYOMING.

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Vertebrate fossils from the Upper Cretaceous of western North America generally are well studied but material from the latest Campanian to earliest Maastrichtian stages specifically are relatively scarce. The Almond Formation in southern Wyoming was deposited during this underrepresented interval (~73-70 MA). Compared to the broad geographic ranges of late Maastrichtian dinosaur faunas in Western North America, a high degree of regional endemism has been proposed for the preceding middle to early late Campanian. Being temporally intermediate between these two intervals, the Almond Formation is of critical importance in discerning patterns of Late Cretaceous biogeography. A favorable depositional environment, including shallow marine and floodplain settings, as well as the discovery of dinosaur specimens previously, suggested that this formation had a high potential for additional discoveries. Extant collections consist of a partial skull of an indeterminate chasmosaurine ceratopsid lacking the parietosquamosal frill, a partial parietal of an indeterminate chasmosaurine, and a partial hadrosaurid skull and skeleton referred to *Saurolophus* sp., all of which were discovered in 1937 by a team from the American Museum of Natural History. This material is insufficient to accurately characterize the fauna of the Almond Formation. Surveys in 2004 and 2005 by the Natural History Museum of Utah did not find additional vertebrate specimens. The Almond Formation has since been a biogeographic blank spot in reconstructions of Laramidia. We describe the preliminary findings of a recent successful expedition which recovered a diverse vertebrate assemblage. These include the first occurrences of turtles (*Adocus* cf. and *Basilemys* cf.), Crocodyliformes (indet.), and fish (Ichthyodectidae indet.) from the formation. Several partial dinosaurs were found including a partial skull of a hadrosaurid and the first ankylosaurian from the formation represented by a pair of large osteoderms. These new findings highlight the potential for future discoveries in the Almond Formation.

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