

REVIEW OF PLESIOSAURIANS (REPTILIA: SAUROPTERYGIA) FROM THE UPPER CRETACEOUS HORSESHOE CANYON FORMATION IN ALBERTA, CANADA

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ABSTRACT

The taxonomic status of three previously reported plesiosaurian specimens from the non-marine Horseshoe Canyon Formation (Campanian-Maastrichtian, Upper Cretaceous) is reassessed. The holotype of *Leurospondylus ultimus* and a previously undescribed partial skeleton from Red Deer River Valley represent indeterminate elasmosaurids, whereas the “plesiosaurian” vertebra from Edmonton is actually an ornithopod caudal. The two plesiosaurian specimens came from different horizons for which different environments are inferred. The larger individual may be closely related to *Elasmosaurus*. This study supports the hypothesized decline of polycotyloid plesiosaurs in the North American during the Late Campanian and suggests small adults and juveniles of elasmosaurids existed in both marine and non-marine environments whereas large adults were limited to the latter.