

A new elasmosaurid plesiosaur from the lower Maastrichtian of North Canterbury, New Zealand

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A postcranial specimen from the lower Maastrichtian levels of the Conway Formation, Middle Waipara River, North Canterbury, New Zealand shows clear elasmosaurid affinities, based on the articular faces, with a ventral notch, of the centra of cervical vertebrae. The ilia have some distinctive features such as a gracile shaft divided into two parts by a posterior "knee", with the distal portion being longer than the proximal one, and the flattened distal end being slightly expanded and bearing an ovoid depression. These features differentiate this specimen from other elasmosaurids from the Weddellian Biogeographic Province, in which the ilia are known, but these are considered insufficient grounds on which to erect a new taxon. However, this specimen demonstrates a potentially greater elasmosaurid diversity in the lower Maastrichtian of the southern Hemisphere than previously appreciated. The gastrolith cluster associated with the bones has sedimentological features similar to those prev