

Redescription of *Tuarangisaurus keyesi* (Sauropterygia; Elasmosauridae), a key species from the uppermost Cretaceous of the Weddellian Province: Internal skull anatomy and phylogenetic position

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© 2016 Elsevier Ltd The systematics of elasmosaurids are not well resolved partially because of the scarcity of well-preserved skull material. Among Weddellian elasmosaurids, one exception to this is the holotype of *Tuarangisaurus keyesi* from upper Campanian?lower Maastrichtian levels of the Maungataniwha Sandstone Member of the Tahora Formation, Mangahouanga Stream, inland Hawke's Bay, New Zealand. The material preserves an almost complete cranium and mandible. This material is re-described here, based on new observations and digital reconstruction of the internal anatomy. The result adds one new autapomorphy to the diagnosis of the taxon: ectopterygoid with large boss on the ventral surface and a posteriorly directed process. Additionally new features are recorded: presence of stapes; pterygoid overlapping the vomer, medial sulcus on the dorsal surface of the vomer, parasphenoid?basisphenoid complex covering the ventral surface of the body of the basioccipital. The presence of stapes