

## A giant skull of the temnospondyl *Xenotosuchus africanus* from the Middle Triassic of South Africa and its ontogenetic implications

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A previously unreported large skull of the mastodonsaurid temnospondyl *Xenotosuchus africanus*, from the *Cynognathus* Assemblage Zone (Early to Middle Triassic) of the Beaufort Group, Karoo Basin of South Africa, is described. The species is plesiomorphic in most aspects of its cranial anatomy, and only one autapomorphy is tentatively identified herein, namely contact between the left and right exoccipitals posterior to the parasphenoid. The new specimen permits recognition of a growth series for *X. africanus* from sub-adult (all previously known specimens) to fully adult (new specimen) stages. Ontogenetic changes associated with this include changes in skull proportions, and changes in the morphology of the lacrimal flexure, frontal, postfrontal, cultriform process and body of the parasphenoid, and the transvomerine tooth row.

**Key words:** Temnospondyli, *Xenotosuchus africanus*, ontogeny, variation, Triassic, South Africa.

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