



Shenzhoupterus chaoyangensis

A toothless pterosaur from the Jiufotang Formation of China



Lü J., Undin D.M., Xu L. and Zhang X., **2008**, A new azhdarchoid pterosaur from the Lower Cretaceous of China and its implications for pterosaur phylogeny and evolution. *Naturwissenschaften*, Volume 95, Issue 9, pp.891-897

Abstract

Toothless pterosaurs played a key role in broadening the taxonomic, morphological and ecological diversity of Cretaceous pterosaurs. Here we report a complete, articulated skeleton of a 1.4-m-wingspan pterosaur from the Lower Cretaceous Jiufotang Formation of Liaoning Province, China which is identified as a new genus and species, *Shenzhoupterus chaoyangensis* gen. et sp. nov. The new taxon is edentulous, with a relatively large skull and a remarkably large, tall nasoantorbital fenestra that extends well above the main part of the braincase. Phylogenetic analysis shows that *Shenzhoupterus* gen. nov. belongs in a distinct clade of azhdarchoid pterosaurs, formally recognised here as a new family, Chaoyangopteridae, that also includes *Chaoyangopterus*, *Jidapterus* and *Eoazhdarcho* from the Jiufotang Formation and *Eopteranodon* from the Yixian Formation. These new data clarify recent confusion surrounding the systematics of these Lower Cretaceous taxa and provide new insights into the evolutionary history of pterosaurs.