

The postcranial skeleton of the Early Triassic parareptile *Sauropareion anoplus*, with a discussion of possible life history

Mark J. MacDougall, Sean P. Modesto, and Jennifer Botha-Brink Acta Palaeontologica Polonica 58 (4), 2013: 737-749 doi: http://dx.doi.org/10.4202/app.2011.0099

The skeletal anatomy of the Early Triassic (Induan) procolophonid reptile *Sauropareion anoplus* is described on the basis of three partial skeletons from Vangfontein, Middelburg District, South Africa. Together these three specimens preserve the large majority of the pectoral and pelvic girdles, articulated forelimbs and hindlimbs, and all but the caudal portion of the vertebral column, elements hitherto undescribed. Our phylogenetic analysis of the Procolophonoidea is consonant with previous work, positing *S. anoplus* as the sister taxon to a clade composed of all other procolophonids exclusive of *Coletta seca*. Previous studies have suggested that procolophonids were burrowers, and this seems to have been the case for *S. anoplus*, based on comparisons with characteristic skeletal anatomy of living digging animals, such as the presence of a spade–shaped skull, robust phalanges, and large unguals.

Key words: Parareptilia, Procolophonidae, phylogenetic analysis, burrowing, Induan, Triassic, South Africa.

Mark J. MacDougall [mark.macdougall@utoronto.ca], Department of Biology, Cape Breton University, Sydney, Nova Scotia, B1P 6L2, Canada, and Department of Biology, University of Toronto at Mississauga, 3359 Mississauga Road, Ontario, L5L 1C6, Canada; Sean P. Modesto [sean_modesto@cbu.ca], Department of Biology, Cape Breton University, Sydney, Nova Scotia, B1P 6L2, Canada; Jennifer Botha-Brink [jbotha@nasmus.co.za], Karoo Palaeontology, National Museum, P.O. Box 266 and Department of Zoology and Entomology, University of the Free State, Bloemfontein, 9300, South Africa.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 Full text (935.6 kB)
 I

 Supplementary file (148.8 kB)