

## The scapulocoracoid of an Early Triassic stem-frog from Poland

Magdalena Borsuk-Białynicka and Susan E. Evans

*Acta Palaeontologica Polonica* 47 (1), 2002: 79-96

The scapulocoracoid of *Czatkobatrachus polonicus* Evans and Borsuk-Białynicka, 1998, a stem-frog from the Early Triassic karst locality of Czatkowice (Southern Poland), is described. The overall type of scapulocoracoid is plesiomorphic, but the subcircular shape and laterally oriented glenoid is considered synapomorphic of Salientia. The supraglenoid foramen is considered homologous to the scapular cleft of the Anura. In *Czatkobatrachus*, the supraglenoid foramen occupies an intermediate position between that of the early tetrapod foramen and the scapular cleft of Anura. The cleft scapula is probably synapomorphic for the Anura. In early salientian phylogeny, the shift in position of the supraglenoid foramen may have been associated with an anterior rotation of the forelimb. This change in position of the forelimb may reflect an evolutionary shift from a mainly locomotory function to static functions (support, balance, eventually shock-absorption). Laterally extended limbs may have been more effective than posterolateral ones in absorbing landing stresses, until the specialised shock-absorption pectoral mechanism of crown-group Anura had developed. The glenoid shape and position, and the slender scapular blade, of *Czatkobatrachus*, in combination with the well-ossified joint surfaces on the humerus and ulna, all support a primarily terrestrial rather than aquatic mode of life. The new Polish material also permits clarification of the pectoral anatomy of the contemporaneous Madagascan genus *Triadobatrachus*.

**Key words:** Anura, Salientia, Triadobatrachus, Czatkobatrachus, pectoral girdle, Triassic, Poland.

Magdalena Borsuk-Białynicka [[borsuk.b@twarda.pan.pl](mailto:borsuk.b@twarda.pan.pl)], Instytut Paleobiologii PAN, ul. Twarda 51/55, PL-00-818 Warszawa, Poland; Susan E. Evans [[ucgasue@ucl.ac.uk](mailto:ucgasue@ucl.ac.uk)], Department of Anatomy and Developmental Biology, University College London, Gower Street, London, WC1E 6BT, England.

distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(5,243.6 kB\)](#)