

## ***Megacnemus* – a forgotten reptile, presumably from the Triassic of Poland**

**Tomasz Skawiński<sup>1,\*</sup>, Mateusz Talanda<sup>2</sup> and Sven Sachs<sup>3</sup>**

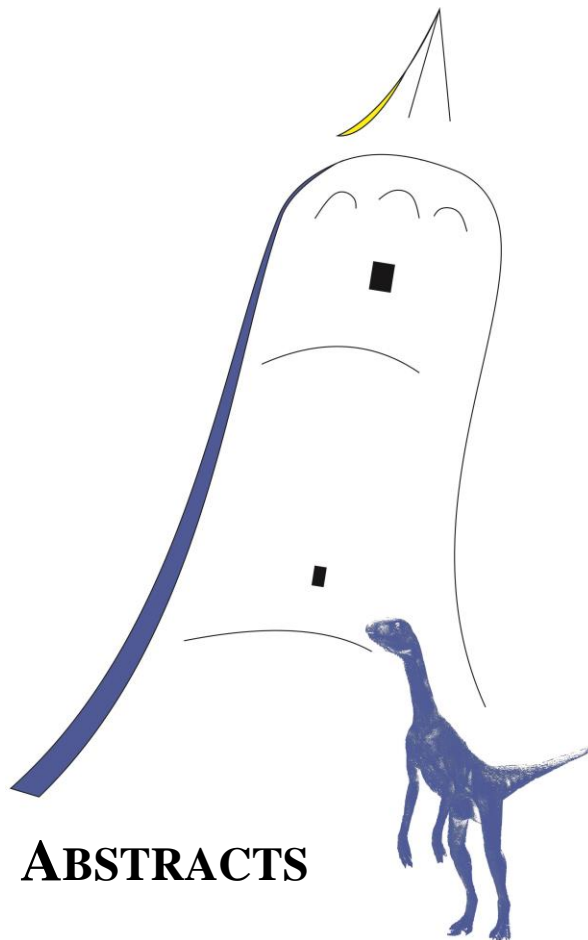
<sup>1</sup>Department of Evolutionary Biology and Conservation of Vertebrates, Faculty of Biological Sciences, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland, e-mail: tomasz.skawinski@o2.pl (\*corresponding author); <sup>2</sup>Department of Palaeobiology and Evolution, Faculty of Biology, University of Warsaw, Żwirki i Wigury 101, 02-089 Warszawa, Poland; <sup>3</sup>Im Hof 9, 51766 Engelskirchen, Germany

Protorosaurs were important components of many Permian and Triassic ecosystems. Some of the known protorosaurian taxa have been established on the basis of fragmentary material. One of these is *Megacnemus grandis* von Huene, 1954, of which only a single complete, yet distorted propodial – originally interpreted as a femur – is known. Although exact locality data are missing, von Huene (1954) pointed out that the specimen had most probably been found in the Middle Triassic deposits near Gogolin (southwest Poland). Since its initial description the genus *Megacnemus* has received very little attention. Our attempt is to redescribe the type specimen and assess the phylogenetic position of the taxon. The protorosaurian affinities of *Megacnemus* proposed by von Huene (1954) have been accepted in later publications; however, the bone differs from femora of most ‘traditional’ protorosaurs, such as *Protorosaurus*, *Macrocnemus* and tanystropheids, by its robustness and the lack of a sigmoidally curved shaft (however, the latter might have been affected by the distortion of the bone). Yet, *Megacnemus* does share some traits with the humeri and femora of *Dinocephalosaurus* from the Middle Triassic of China, and the humeri of *Macrocnemus* from the Middle Triassic of Italy, Switzerland and China. These are large expansions of the proximal and distal ends, as well as a strongly concave postaxial margin and a near-straight preaxial margin of the shaft. Despite these similarities, the bone of *Megacnemus* is much longer and has less rounded margins of the proximal and distal ends. However, should the similarities between *Megacnemus*, *Macrocnemus* and *Dinocephalosaurus* indeed be indicators of true affinity between those taxa, then this would be another case for a link between closely related Triassic protorosaurs from localities in Europe and China.

**EUROPEAN ASSOCIATION OF VERTEBRATE PALAEONTOLOGISTS**



**XIII ANNUAL MEETING**  
OPOLE, POLAND, 8-12 JULY 2015



**EDITORS**

JOHN W.M. JAGT, GRZEGORZ HEBDA, SŁAWOMIR MITRUS,

ELENA A. JAGT-YAZYKOVA, ADAM BODZIOCH,

DOROTA KONIETZKO-MEIER, KLAUDIA KARDYNAL

AND KAMIL GRUNTMEJER