

A huge caseid pelycosaur from north-western Sardinia and its bearing on European Permian stratigraphy and palaeobiogeography

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Skeletal remains, some loose on the surface and others still embedded, have been recovered from the uppermost part of an outcrop of the Permian Cala del Vino Formation located near Torre del Porticciolo (Alghero, Nurra, NW Sardinia). Taphonomic analysis suggests that all the elements pertain to a single individual; ongoing studies indicate the fossil represents a large caseid close (or referable) to *Cotylorhynchus*; otherwise restricted to a narrow geographic and stratigraphic zone of the central USA. The new finding, the first of a caseid in Italy and one of few in Europe, enlarges the known distribution of the family and provides a significant and key chronostratigraphic constraint for the continental succession of this area and, in turn, helps establish a stratigraphic framework for the Permian units cropping out in Italy and southern France.

Key words: Synapsida, Pelycosauria, Caseidae, taphonomy, stratigraphy, Permian, Italy.

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