

## FOSSIL-RICH TSUNAMITES FROM A STORMY EPEIRIC SEA, PERMIAN CORUMBATAÍ FORMATION, PARANÁ BASIN, BRAZIL

JOÃO GUEDES BONDIOLI<sup>1,2</sup>, SUZANA APARECIDA MATOS<sup>1,2</sup>, LUCAS WARREN<sup>1</sup>, CLAUDIO RICCOMINI<sup>1</sup> & MARCELLO GUIMARÃES SIMÕES<sup>2</sup>

<sup>1</sup>Instituto de Geociências, USP, São Paulo, SP; <sup>2</sup>Laboratório de Paleozoologia Evolutiva, Instituto de Biociências, UNESP, Botucatu, SP, Brasil. joaobondoli@usp.br, sumatos.s@gmail.com, warren@usp.br, riccomin@usp.br, profmgsimoes@gmail.com.

In the northern/northeastern portion of the Paraná Basin, the Permian Corumbataí Formation is a > 100 m thick succession of siliciclastic (mudstones/sandstones) and subordinate-carbonatic rocks (micrites and oosparites), deposited in coastal plain settings occasionally affected by storms. Indeed, bivalve-rich shell-beds (coquines) and bioclastic sandstones are interpreted as proximal tempestites, which were particularly common in the interval of the *Pinzonella illusa* and *Pizonella neotropica* biozones (middle and upper portions of the Corumbataí Formation). Hence, for more than 20 years, storm-generated flows and waves were regarded as the main sedimentological process responsible for the genesis of those fossil-rich deposits. Herein, we describe for the first time, bivalve-rich concentrations that seems to be a sedimentary product of high-energy events rather than storms. In the Batalha river section (22°21'30.05"S/47°35'20.17"W), Rio Claro County, State of São Paulo, a silty shale succession with intercalated fine-grained sandstones, contains scattered intraclastic flat pebble conglomerates with silicified bivalve shells. This is a thin (7 cm), clast-supported intraclast conglomerate, showing sharp and erosive basal contact. In plan-view, the flat pebbles and shells are chaotically oriented, but in section, they are densely packed and clearly imbricated. The flat pebbles are of silicified mudstones, showing distinct degrees of roundness (subangular to rounded). This concentration is capped by massive reddish mudstones. The bivalves are all disarticulated shells, mainly fragmented (sharp, angular fractures). Whole, disarticulated shells are extremely rare, and represented only by thick shelled specimens of *Pinzonella illusa* and *Plesiocyprinella carinata*. These bivalves were slow, shallow burrowing, suspension-feeding organisms that thrived in sandy substrate. The sporadic vertical and lateral distribution of conglomerate, the high degree of scouring indicated by the intraclasts, sharp and erosive base, the densely packed, chaotically nature of matrix, including imbricated shells and intraclasts, and the presence of burrowing bivalves that are autochthonous in fine-grained sandstones, claim that, rather than storms, these unusual intraclastic conglomerates were generated by episodic tsunami event. Indeed, in coeval strata of the Corumbataí Formation clastic dikes were recently interpreted as seismic-induced features. Hence, fossil-rich tsunamites are herein firstly recorded in Permian deposits of the Paraná Basin, and can be potentially an important source of macroinvertebrate shells. [CNPq133053/2012-1]

## EVIDÊNCIA DE VIDA GREGÁRIA EM MYLODONTIDAE (MAMMALIA, XENARTHRA)

FRANCISCO SEKIGUCHI BUCHMANN<sup>1</sup>, HEINRICH THEODOR FRANK<sup>2</sup>, VITOR FERREIRA<sup>3</sup>, MARCO TULIO NAVES DE CARVALHO<sup>3</sup>, ERICK ANTAL CRUZ<sup>1</sup> & ANA CAROLINA GUIMARAES LEMES<sup>1</sup>

<sup>1</sup>Laboratório de Estratigrafia e Paleontologia, UNESP, São Vicente, SP; <sup>2</sup>Museu de Mineralogia "Luiz Englert", Instituto de Geociências, UFRGS, Porto Alegre, RS; <sup>3</sup>SAM - Sul Americana de Metais, Brasil. paleonchico@yahoo.com.br, heinrich.frank@ufrgs.br, vitor.ferreira@sammetais.com.br, marco.tulio@sammetais.com.br, erickantal@gmail.com, anaclemes@hotmail.com

A Megafauna Sul-Americana, que habitou o continente até cerca de 10.000 anos AP, é definida como integrada por grandes mamíferos extintos. As preguiças terrestres da Megafauna ocuparam a América e os indícios sobre seus hábitos de vida são escassos a ausentes. Entretanto, uma nova ocorrência de 12 paleotocas, encontrada na Bacia Hidrográfica do Rio Peixe Bravo (MG), sugere o gregarismo como um possível hábito. As dimensões e ornamentações das paredes das paleotocas são indicativas de sua escavação por preguiças terrestres. São salões com volumes entre 50 e 270 m<sup>3</sup>, entradas de 2 m de