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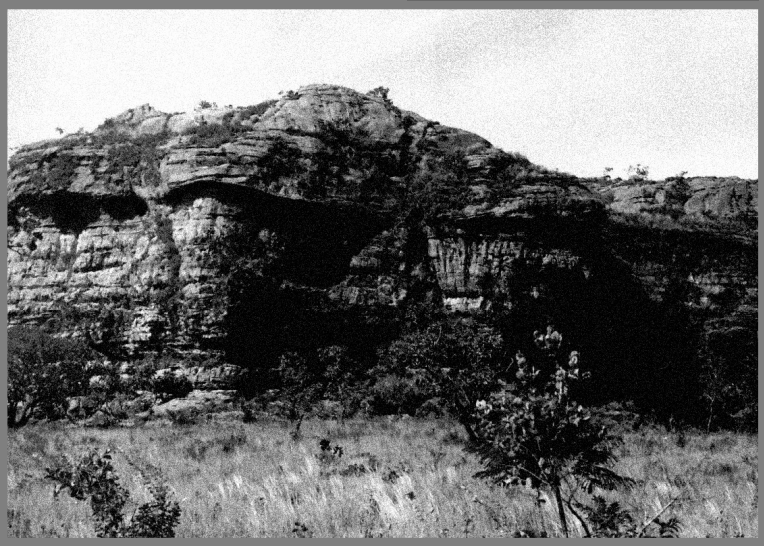

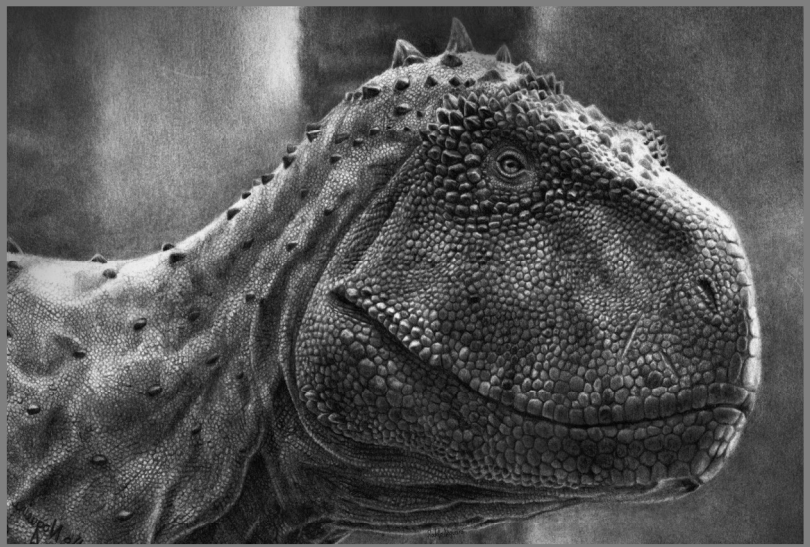

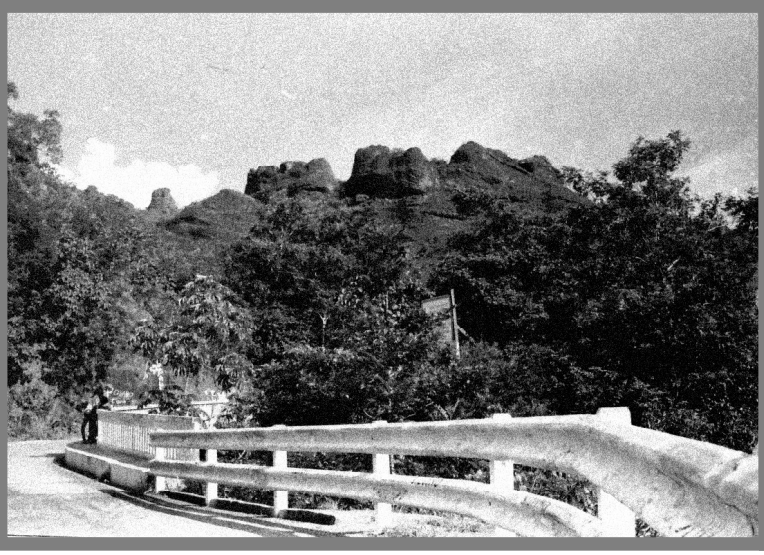

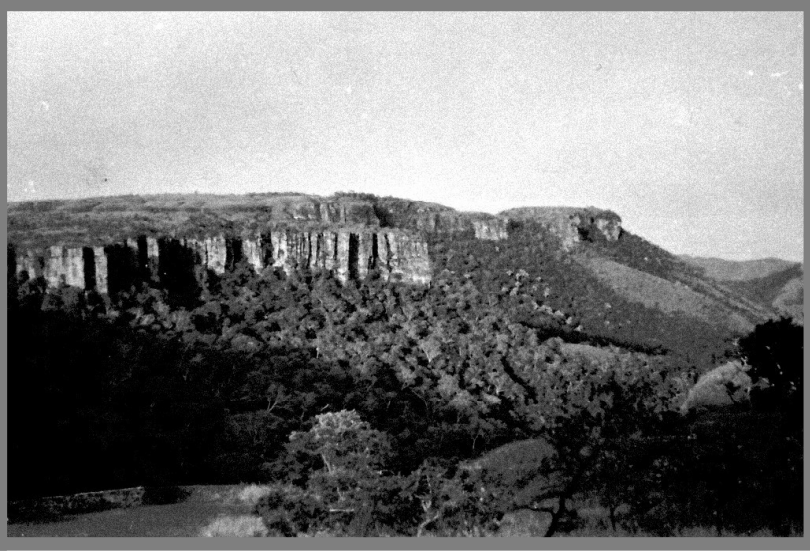

PEREIROS THEROPOD TRACKS: A NEW ICHNOSITE FROM TRIUNFO BASIN (BRAZIL)

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The dinosaur tracks in the Rio do Peixe basins comprise at least 37 individual tracksites throughout approximately 96 stratigraphic levels. Located in the west of the State of Paraíba in the counties of Uiraúna, Poço, Brejo das Freiras, Triunfo, and Santa Helena, the Triunfo basin (one of the four Rio do Peixe basins) is a 480-km^2 asymmetric graben controlled by a NE transcurrent fault system. Besides the breccias, conglomerates and coarse sandstones near the faulted margins (Antenor Navarro and Rio Piranhas Formations), there are sandstones, siltstones, shales, mudstones and rare marls occurring as nodules or as centimeter-thick levels (Sousa Formation). To date, only 4 isolated footprints and 2 incomplete trackways have been identified in the Antenor Navarro Formation. Among the isolated footprints, 3 probably belong to theropods. One incomplete trackway consists of just 2 digitigrade rounded digits suggesting they were made by a small ornithopod. In this study we describe a new ichnosite, located at Sítio Pereiros, Antenor Navarro county, Paraíba State. The one meter succession of fine grained sandstones, siltstones and shales with ripple marks, climbing ripples and mud cracks of Sousa Formation presents a bedding plane with three trackways, with a total of 17 tridactyl, mesaxonic footprints. Two trackways are subparallel (NE-SW directed) and one cross them in a EW direction. The two NE-SW trackways have tridactyl footprints, with pointed digits, ~25,00 cm in length and ~20,00 cm in width. The other trackway shows 5 smaller tridactyl footprints (~17,00 cm in length and ~12,00 cm in width) with pointed digits. These trackways are interpreted as produced by two large theropods and a smaller one. In these beds there are also ostracods, conchostracans, and fragments of microvertebrates (scales, teeth and bones). The age of this deposit probably dates from Rio da Serra-Aratu stages (Lower Cretaceous) by analogy with the sediments dated by palynology in the Sousa Basin, and the similarities among the ichnofaunas. The Pereiros ichnosite register a deposition in a floodplain area, with temporary aerial exposition of the superficial sediments in which was possible the track impressions. The ichnofauna from this locality enhances the knowledge of the theropod fauna from Triunfo basin and the distribution of the dinosaur tracks throughout the interior basins of Northeastern Brazil [FAPERJ E-26/202.910/2017 and CNPq 303596/2016-3].