

Geological profile and study of the Rio Grande do Norte caves - NE Brazil

¹Das Virgens, J.; ¹Petta, R. A.; ¹Departamento de Geologia UFRN- Natal-RN, Brazil

The speleology has found a wide popularization by the press in Brazil as well as in the exterior. Meantime in the state of Rio Grande do Norte, just began to have the speleological patrimony recognized starting from 1988 with some citations and few topographical survey.

Before 1997, when this work begin, there was 27 caves logged in Sociedade Brasileira de Espeleologia - SBE with 8 survey caves. Between 1997 and 1999, 18 caves has been topographed and 26 new ones discovered, which were included in the National cadaster of the SBE. The cadaster contains the hydrology, paleontology, archeological informations, dimensions, location (GPS) and topographical maps obtained by compass measurements, tape and with geological sketches.

Most of the caves of Rio Grande do Norte are related to faults and fractures in the calcareous rocks of the Potiguar Basin (65%), in marble of crystalline rocks (34%), and in granitic rocks (1%). Their lengths vary between 30m and 500m with high between 2m and 30m. Some caves are related to archeological and paleontological relics.

The caves in its majority are in good conditions of preservation but in some were found a lot of garbage and in some the walls are scratch in some caves. This becomes harmful in the environmental context because the existent faults in the cave work as water way for the underground aquifers that can be contaminated by toxical substances dumped in the cave, destroying the touristic potential of the caves.

The environmental education campaigns are reducing the level of pillaging of these caves.