

Study of impact on caves caused by intensive tourist visitation using carbide-based illumination

José Antonio Basso SCALEANTE

Av. Oscar Pedroso Horta, 144 – Campinas/SP – Brasil
E-mail: floresta@correionet.com.br

Abstract

This paper provides an analysis for the determination of the most adequate use of limestone caves, which are a source of mineral resources utilized in civil construction and agriculture. Caves are also exploited for their tourist potential and for the conduction of scientific research. The present research was designed to offer a basis for the legal regulation of the use of caves, thus contributing to the protection of natural cavities in Brazil. The research will involve the measurement of the temperature, atmospheric humidity, and carbon dioxide and oxygen content of the air, using sensitive equipment developed and operated in partnership with the National Institute of Information Technology (ITI) of Campinas. The results will be correlated with the number of individuals present at that location during the four months of the study. Studies will be made of two caves: Santana and Laboratório II, both located in the Valley of the Ribeira River in the south of the state of São Paulo. The former is located within the boundaries of the State Tourist Park of the Upper Ribeira (PETAR), while the latter is located some 2 km outside these boundaries, although well within its area of influence.