According to the present legislation (Constitution of the Federal Republic of Brazil, 1988; Federal Decree 99.556/90; Conama Resolution 10/88; Law number 9.605/98 and Decree number 3.179/99) environmental crimes against underground natural cavities and their surroundings are established. However, Forensic Research is necessary in order to characterize such actions. Forensic Research in the area of Speleology involves only a subsection of the recently created Environmental Forensic Research area involved with the identification of crimes against the environment in general. Effective co-operation between the Civil Police and Speleology Groups will be crucial for the identification of places where crimes against caves are taking place. Knowledge about the importance of Forensic Research as an effective means for the protection of the national speleology patrimony is thus necessary. Speleological Environmental Research should be a useful means for curtailing the misuse of caves and their surroundings, by providing proof of crimes being committed there. On the other hand, Speleological Environmental Research will provide elements to clarify other crimes taking place in caves (murders, rapes, kidnappings, etc).