

CHINESE/AMERICAN COOPERATION IN CAVE MANAGEMENT AND STUDY AT WANHUA CAVE, HUNAN PROVINCE, CHINA

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Abstract

The Hoffman Environmental Research Institute of Western Kentucky University, and the Karst Geology Institute of China, have cooperated for more than ten years in studies in the karst regions of China. In 2004, the Wanhua Show Cave Company requested assistance from the Karst Geology Institute of China to address some of their cave management concerns. These included delineating the recharge area of Wanhua Cave, exploring new passages, determining the relationship of caves adjacent to Wanhua Cave, and outlining the significance of cave features within the show cave. In this effort to aid Wanhua Cave staff in the management of their cave, the Karst Geology Institute and Wanhua Cave Company provided transportation and logistical support and Hoffman Institute provided personnel to continue cave exploration and documentation, conduct dye tracing, geologic reconnaissance, and basin delineation. Two kilometers of the show cave were remapped and photo-documented. Two dye traces were conducted that established the relationship of Wanhua Cave to two other significant caves in the area. The dye traces and geologic and hydrologic reconnaissance helped establish the boundaries of the Wanhua Cave drainage basin. Hoffman Institute personnel worked with the Wanhua Show Cave staff to improve the content of their interpretive tours and to produce a new map. As a side benefit, Chinese media coverage of the project provided an opportunity for the people of Hunan to increase their awareness of various caves in their province.