

Cave Restoration and Conservation: Topics, Methods, and Discussion

*Val Hildreth-Werker and Jim C. Werker
National Speleological Society*

Abstract

From prevention of cave damage to formation repair, we will cover low-impact strategies and proven techniques for cave conservation and restoration. An interactive format for discussing methods and concerns will begin with a five-minute slide show to summarize issues and stimulate discourse. Ample time will be allowed for questions and open discussion. Topics will include cave-safe materials, trail marking, erasing footprints, cave-safe graffiti removal, Leave No Trace ethics, new techniques in speleothem cleaning, gypsum cleaning, formation repair, and preserving microbes. We will emphasize ethics used in various parts of the country for different cave systems. We are actively identifying methods to lessen caver impact, preserve natural features, avoid contamination, and minimize disturbance of cave biota. Jim and Val are editing work for a book, *On Cave Conservation and Restoration*, to be published by the NSS in 2000. Pre-publication order information will be available during the symposium.

Cave Softly . . . and Leave No Trace

*Val Hildreth-Werker and Jim C. Werker
NSS Resource Protection and Preservation
The Guadalupe Ranger District of the Lincoln National Forest*

Poster Session

The Guadalupe caves of southeastern New Mexico are featured in this museum-quality display. For the joint Forest Service/NSS project, we coordinated educational conservation add-on pieces for the existing Guadalupe exhibit. Visitor impacts and restoration efforts in undeveloped caves are illustrated. Emphasizing the ethic of cave softly . . . and leave no trace, the caption on each conservation board describes an aspect of destruction along with the restoration efforts required to repair or remediate the damage.

Formation Repair Techniques

*Val Hildreth-Werker and Jim C. Werker
National Speleological Society*

Poster Session

An automated slide show will give updated information on methods and materials for cave-safe formation repair. Proven techniques for repairing and reconstructing stalagmites, stalactites, draperies, rimstone dams, gypsum crust, soda straws, helictites, and the like will be presented. Technical information on epoxies and stainless steel pins is included. Information packets will be available on request.