

A SMALL CAVE RESTORATION PROJECT

- Steve Bourne

Before (bottom) and after (top) photos of the latex removal in Alexandra Cave



Naracoorte Caves has a strong protection policy in place for several of its caves that have significant fossil values or are in a relatively pristine state as a result of “recent” discovery.

Management of caves, however not only involves protection, but also involves reversing past practices and restoration of damaged features as far as is practical (Watson *et al* 1997).

Like many other show cave systems, Naracoorte Caves has a legacy of the past (White 1997), with infrastructure we would not implement now, nor would we develop the caves in the same manner if starting today.

Research, improved technologies and the availability of inert products have all improved the way we manage and present caves, especially show caves. We should not be so ignorant to think the current materials and management strategies will not evolve in the future as some practices have changed within the career span of modern managers (see Hamilton-Smith *et al* 1997).

We have embarked on a program of restoring caves impacted by previous developments in an attempt to remove infrastructure that is harmful to the caves and return areas not used as pathways to as close as a natural state as possible. Some fine

examples of restorative work exist in Australia, Moondyne Cave in Western Australia for example.

It is worth noting that a majority of the suggested readings and references in the new *Encyclopedia of Caves and Karst* (Gunn 2004) are Australian examples and achievements. Blanche and Wet Caves received probably the heaviest visitor impact through relatively open access for over 100 years and both have had large amounts of graffiti removed.

White (1997) suggested the removal of rubble from Victoria Fossil Cave left in the cave after the cutting of a pathway. This has been an enormous project, with approximately 100 cubic metres of rubble hauled out to date by two Green Corps teams (Bourne & Bradford *in press*).

Cathedral Cave has also seen an enormous amount of work with graffiti and rubbish removal, restrictions to how the cave is used recreationally, alterations to the safety fences and the removal of the adjacent pine forest and subsequent replacement with native vegetation (Bourne 2001).

The change in this cave has been spectacular with the restored hydrology allowing mosses and now ferns to regenerate on the floor. In heavy rain, water now flows into the cave entrance creating a small waterfall – something quite spectacular and unusual at Naracoorte!!

The most recent project has been a small section of pathway in Alexandra Cave, constructed before the cave was open to the public, as shown in early photographs of the site. This ten metre long section of path has not been used for many years and is protected by a handrail. The path was constructed over a large stalagmite and close to a flowstone feature.

Again, we have used a Green Corps team to complete this project, under the supervision of a Naracoorte Caves’ staff member. The removal of concrete and sediment to reveal the natural rock fall and subsequent cleaning of the rocks took about two weeks, demonstrating the value of using such groups as it would not be financially possible to achieve with paid staff.

Brushes were used to clean the rocks with all material removed from the cave. Hopefully, the onset of winter will see the flowstone active again and further natural cleaning of this feature will take place.

The Green Corps team also worked on two other areas in Alexandra Cave concurrently with the pathway restoration. In the 1970s a small interpretive centre was constructed at Naracoorte to showcase the recent fossil discoveries. In constructing the displays for this centre, two latex moulds of limestone walls were taken, inside Alexandra Cave!

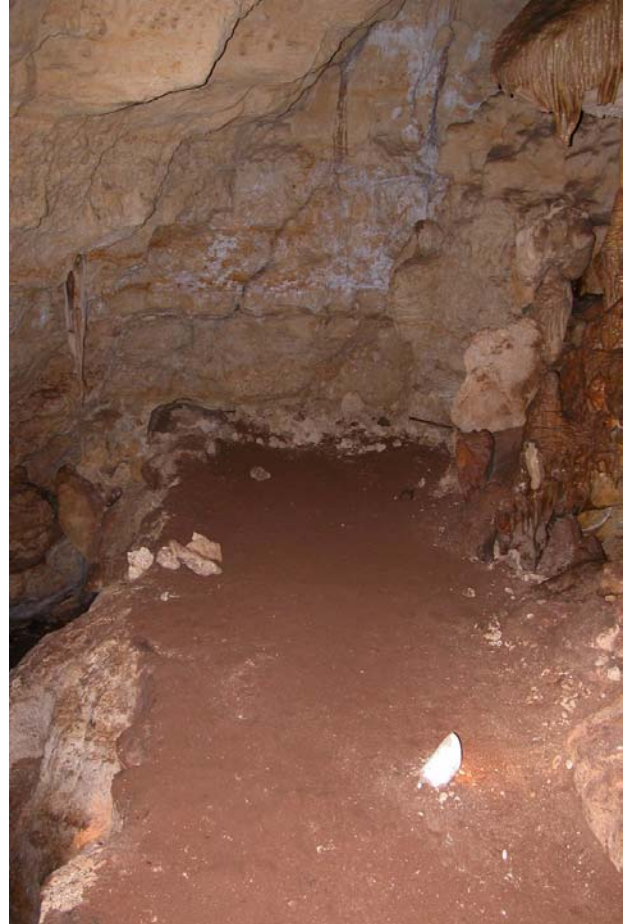
The resulting white/grey stain on the wall has been a source of annoyance for myself for many

years, as I am sure it has been for previous managers. The white colour appears to be the original latex while the grey is a mould growing on it. Lighting has been placed to avoid bringing visitor's attention to it, but occasionally a sharp-eyed visitor enquires as to what the staining is.

Despite searches of literature, I could find no easy remedy for latex rubber removal from a cave and would suggest it is perhaps not a common material to be found in a cave. Our Green Corps

team worked diligently on the two sites for two weeks, carefully picking latex from the ceiling and scraping back to a natural look. While we have managed to reduce the intensity of the staining, it is still quite visible as the latex penetrated quite a distance into the porous limestone.

I think we can be satisfied most of the latex and associated mould has been removed, but we will have to concede that the staining will always remain. Don't ever use it in a cave!



Before (right) and after (left) photos of path restoration in Alexandra Cave

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