Abstract:

Conservation of lava caves: Evaluating heritage significance and developing management techniques

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Lava caves are a subset of caves in general, and differ in often being high and wide, not very long, and simple in plan and elevation (I know this is a gross generalisation!). Lava caves often occur in groups, but are generally restricted to discrete localities such as valley flows, flanks of cones or shields, or associated with lava channels in stony rises. They are often approachable by car, and relatively easy to enter on foot.

Because of these general attributes, lava caves are ideal localities for making measurements and mapping features, and contrasting and theorising about processes of formation and subsequent development. A good example of a set of caves to do this is the Byaduk Caves, in the Harman Valley flow from Mt Napier.

Having a set of related caves also allows for management techniques which control visitor access, developing where necessary access to only one or several caves while limiting access to others.

Popular presentations using displays, field signage, leaflets, booklets and maps (for example as done over past years for the volcanic features and caves at Mt Eccles National Park), perhaps also with colour slide shows or multimedia presentations, can help generate interest, and direct and control visitor access.

So is this in any way different to what is done with other caves? The more direct relationship between surface landscape and landforms, including the general volcanic landscape, allows a ready appreciation of the past but rapid processes of volcanic activity, and involves visitors in a different way to the appreciation of limestone and other caves. I believe a methodology of lava caves conservation can be justified, and this paper will present some ideas for such a methodology.

Reference

Joyce, E.B. and Webb, J.A., 1993. Conservation of lava caves: Examples from Australia. Proceedings of the Third International Symposium on Vulcanology, Bend, Oregon 1982, pp 121-123.