

GLASS PARTITIONING – IS IT THE ANSWER?

- Kent Henderson

The traditional Australasian method of protecting decoration in tourist caves has long since been the use of chicken wire. This mechanism for separating the public from speleothems was first pioneered at Jenolan Caves well over century ago. While this method certainly had the effect of protecting the cave, in many instances the visual aesthetics was far from appealing, often leaving visitors with a good view of the wires and little else. Modern management thought, in recognizing this problem, has been towards the removal of chicken wire from caves, or at least its significant reduction. Significant examples of this of this trend towards removal can be seen at Yarrangobilly Caves in New South Wales, where all wire has been removed, to The Fairy Cave at Buchan in Victoria, where a substantial amount has gone.

While its imposition in tourist caves was, historically, overdone, the trend to removal of wire from caves, or at least restoring some *balance*, still leaves open the vexed question of decoration protection. For example, in recent years all the wire, a large amount, was removed from Aranui Cave at Waitomo. However, the subsequent problem of visitor interference with speleothems in particularly sensitive areas of the cave led to a modicum of wire protection being renewed.

In discussing the management of Crag Cave in Ireland (ACKMA Jnl. 29. p10-11), I drew attention to the glass partitioning used as its decoration protection method. The prevailing wisdom on glass partitioning in Australasia, as I understand it, runs to its cost (chicken wire is cheaper to install) and doubts about its usefulness in humid cave environments (glass fogging up). With respect to the

latter, the Crag Cave experience suggests that while this is a minor problem (guides wipe the glass every morning with newspaper - the effect of which generally lasts the day), glass partitioning does dually offer enhanced decoration protection while at the same time offering maximum visitor viewing.

Chester Shaw has recently (1997) installed a glass partition around the *Tuning Fork* in Marakoopa Cave at Mole Creek. Being right next the track, this significant speleothem was clearly vulnerable to even unwitting tourist damage, and was historically encased in chicken wire. His solution was to fit 5 mm non-reflective (and hardened) glass panels to three exposed sides (each panel 1m x 2m). Certainly, this method has solved the protection problem and offers visitors uninterrupted viewing of the feature. The non-reflective glass (unlike in Crag Cave where the glass is reflective) also poses no photographic uncertainties. Chester also reports no fogging problems.

On the down side, the cost of the glass and installation in Marakoopa Cave was \$2500 – a not inconsiderable sum. Clearly, the cost of widespread use of glass partitioning in many caves is unlikely on funding grounds. Nonetheless, its selective use for particularly vulnerable areas may be the best option in specific instances, even given budgetary restraints. As for fogging, this will vary from cave to cave, and even within a cave, depending on air flows and attendant environmental and seasonal factors. This would suggest that monitoring a sheet of removable glass, *in-situ*, would be appropriate prior to final installation.