

TRAIL MARKING AND AREA DESIGNATION - A STANDARD APPROACH?

Norman Poulter

INTRODUCTION

Reflective signs have been used by several generations of cavers (for various reasons) so what is new about this lot and how can they be used to assist cave consevation. Well, read on.

As cavers become aware of the damage that they and those who come after them can do to the sensitive environment of a cave they try and work out means of minimising or preventing that damage.

This can be attempted in numerous ways such as;

1. permanent closure - not a popular move,
2. restricted access - not very popular either, but acceptable,
  - a. number of people allowed in at any one time and,
  - b. how often,
3. strict adherance to established, well defined trails,
4. construction of retaining walls, installation of pathways etc.

These innovations have been periodically documented from areas such as Jenolan, Buchan, Leeuwin-Naturaliste Ridge and more recently Tasmania and are usually the result of consideration by a few people in relation to time, materials and people available to carry out particular programs. Somewhere in all that the cave gets considered also.

However, there seems no indication of attempts to standardise the approach of damage prevention or minimisation throughout Australia. It is left mainly to the individuals on site and with what materials are available at that time.

One such approach however, is in the realm of trail marking and area designation - an area that this society has been interested for some time leading to much experimentation. The current format developed by SRGWA is detailed below.

DESCRIPTION

During the Tasmanian ASF Conference of 1984, Bob Woolhouse of the Northern Caverneers outlined a plan to restore damaged areas of Kubla Khan and take steps to minimise future damage by changing the method of exploring the cave by altering some of the existing tracks and introducing one-way trails. In order to achieve this he required numerous reflective markers - markers that were supplied by SRGWA. Bob was impressed by these markers and made mention of them in his article published recently in the Australian Caver.

These markers were 25mm diameter discs with a 4mm hole in the centre and were produced from damaged road signs, hence the term RRS, Recycled Road Signs.

The signs were 'acquired' from various parts of the country as the opportunity arose and Australia's bad drivers permitted.

As the idea of a standardised trail marking and area designation system formuated, it became evident that this unreliable method of acquisition was no longer tenable. To this end SRGWA approached the Main Roads Dept. of Western Australia for a supply of recyclable signs. The Department was very helpful and allowed us a trailer load of signs, signs that once had a purchase price of \$55 each.

Working on a theoretical output of 950 discs per sign we estimate that we have enough signs to yield 1,000,000 discs in the primary colours of white, yellow and red. However, due to damaged sections, black lettering etc., it is further estimated we can only realise only half that number - still enough to supply Australian caving clubs for many years to come - for a small fee thank you very much.

These discs can be utilised in various ways;

1. using the central hole they can be afixed to walls, rocks posts etc. with nails or screws (Figure 1)
2. rested or glued on or to small ledges,
3. glued to plastic price tags with Silastic (Figure 2) and stuck in cracks, earth floors etc., they can become trail markers and carry information. They then have the ability to be used as permanent survey markers - a useful navigation aid in long or complex passage-ways.

However, by virtue that various colours are available, the way is now open to establish area designation as well.

#### AREA DESIGNATION- what is it?

Reflective road signs come in five basic colours and SRGWA proposes that the first three be utilised in the following manner;

WHITE the most prevalent colour - to be used as route/survey markers.

YELLOW caution/hazard areas.

RED no go areas.

GREEN green sign generally occur on freeways but for some strange reason do not often get damaged, possibly because they are so large (too easy to hit?) This colour could denote unlimited access?

BLUE blue signs are usually found in country areas and therefore stay there when damaged. The new suburban route number signs have not yet been in place long enough to be attacked by motorists or vandals in sufficient numbers to start appearing on the MRD scrap heap. This colour could be used as a direction change (junction) or other instruction i.e. end of trail survey marker.

#### DISCUSSION

WHITE general route/survey marker

This will be the most numerous disc produced which is just as well as it it will most likely be the most widely used. This disc has already been used with success in Kubla Khan (Tas.), the Nullarbor and Leeuwin-Naturaliste Ridge. They stand out in stark contrast to their surroundings and according to Bob Woolhouse appear as crystal faces in photographs. When mounted on plastic price tags (or equivalent) with the ability to carry information, their versatility is greatly expanded.

YELLOW caution/hazard area

Why yellow? We have been conditioned to recognise amber as caution so yellow, being similar could denote the same condition. To make the colour more useful, a number 'key' system could be instituted to designate why the discs were put in place.

such a 'key' could be:

1. unstable area
2. delicate decoration requiring special precautions
3. cave fauna ahead
4. area only to be entered seasonally

A sub-key function could also be utilised ie  
1a unstable area, ceiling

RED no go area

Again we have been conditioned to stop at red and again the colour could be used with a standardised number 'key' such as;

1. passage already explored - no chance of extension
2. scientific area
3. high mortality rate caused to fauna if disturbed
4. no through way unless carrying special dirt-free clothing

A sub-key function could be used with this colour as well.

#### CONCLUSION

This society feels that these discs are more aesthetic than other types of track markers and would be quicker to put in place than custom built signs or marker. Due to standardisation they would be more likely heeded by the general caver.

If a suitable 'key' was formulated then such a key could be published in society magazines and the Australian Cavers on a regular basis ie once a year. This key would need to be 'standard' throughout Australia.

Early in 1987, SRGWA intends to go into the production of these discs following construction of a more efficient punch and die set than is currently available. To offset tooling and other associated costs, it is intended to charge 2 cents per disc plus postage. Larger or custom sizes will be available subject to negotiation.

It is hoped that there will be widespread acceptance of these reflective discs, our major wild caves have suffered from over-use - especially where poorly designed trails exist.

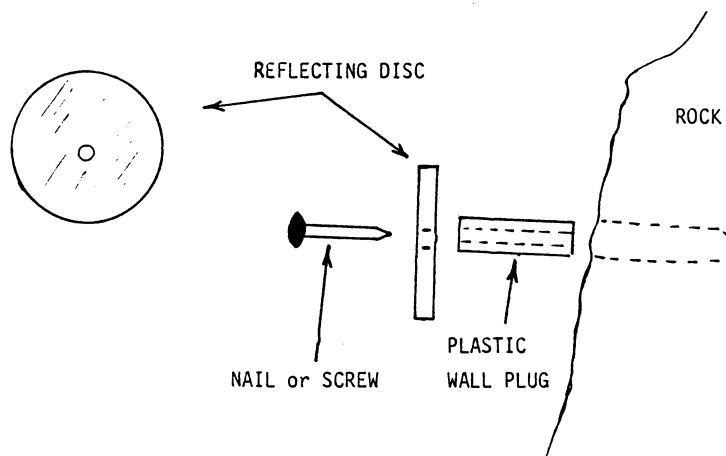


Figure 1  
not to scale

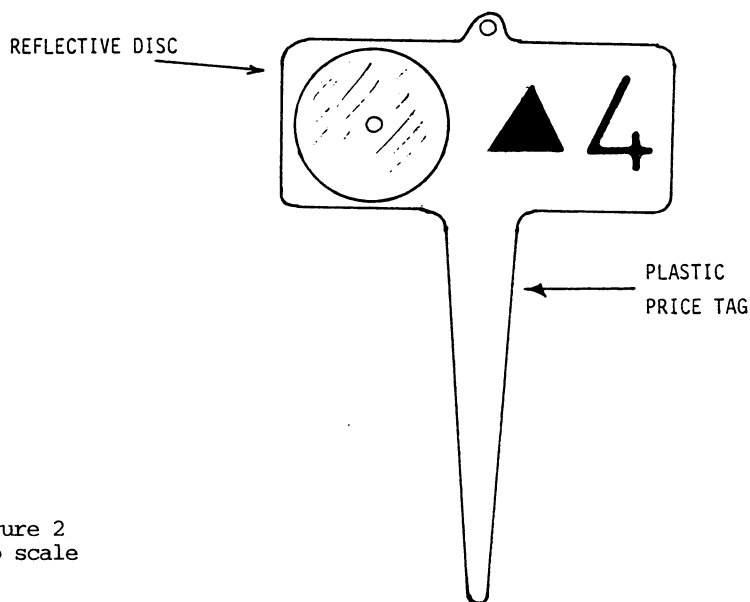


Figure 2  
not to scale