

# CAILCITE

Newsletter of the Highland Caving Group.

ISSUE 14

P.O. BOX 154 LIVERPOOL. N.S.W. Whoopee! Our newsletter drought has broken at last!

And the reason? The collapse of the Grille Cave at Bungonia. Having previous experience of the avidity with which our editorial is read, the editorial was chosen as the ideal vehicle to broadcast our fears that there will be a major structural change around the entrance of the Grille Cave before the end of 1967.

To our many correspondents, it is hoped that a following article will provide all of the necessary information for their particular interests, and that they will forgive the use of a newsletter rather than personal correspondence.

To those not in direct contact, the situation can be simply and clearly stated. H.C.G. has been observing an accelerating collapse of the entrance chamber of the Grille Cave. We now consider that the rate has increased to a stage where complete collapse is imminent, that the collapse area is much wider than first envisaged, that a major hazard to cavers exists to the extent that a party entering the cave could precipitate a complete collapse.

Obviously, we need a competent organisation to provide confirmation or otherwise of our observations, to provide warning as widely as necessary through correct choice of media, and acting in such a manner that there is no limitation brought down on us on our rights of access to any area.

How about it, fellas?

E. Crabb.

# S. & R. PRACTICE.

The Cliefden search & rescue trip, organised by O.S.S., got under way on the morning of March 18. It was attended by members of most societies, approximately 30 people being present, including an A.B.C. film unit.

Surface communication was excellent; although no preliminary surface search of cave entrances was carried out, the value of this manoeuvre is somewhat doubtful.

The search of caves on Saturday was extensive but fruitless. During this time it was disappointing to note the apparent lack of medical supplies. As far as I know, H.C.G. had the only comprehensive medical kit...

The actual rescue started early on Sunday morning. This is where the value of the whole weekend fell apart.

The search was concentrated onto the Taplow Cave, as it had been entered by a ladder. Two other cavers and myself spent more than 2 hours searching side passages while the main party continued on into the main maze system. After completing our search of the passages we made our way back to the surface. We had no more gained the surface when a searcher came up to announce that the missing persons had been found and that one had concussion, the other a broken leg. s I had been made Medical Officer, I immediately descended in company with another caver.

We were directed through the early part of the maze to a caver acting as a "Traffic cop". He directed us up a passage but after that he could not help us as this was the furthest he had been. It was here that the communications set—up collapsed, for with the injured were at least four searchers who should have set up markers to guide the other rescuers in. The other caver and myself were forced to wait in the passage for more than half an hour after searching numerous passages. After finally reaching the injured, the passage became blocked with recue personnel.

The first victim with concussion was taken out, so I took charge of the one with a broken leg, which I secured to his other leg by means of triangular bandages. We then started to move him out by means of a hessian stretcher. Serious delays were caused by unwanted personnel not vacating the cave when they were asked to do so. The most serious delay was created at the ladder itself; unwanted personnel again being the cause.

It was here, I feel, that the rescue itself failed. No stretcher was made and it was decided by majority to put a rope around his shoulders, and rescue personnel supported him as he was lifted out. They lifted, shoved, and pushed his legs in a manner that no victim suffering a broken leg could endure.

In conclusion it would seem that although surface communication is more or less perfected the emphasis in future S. & R. operations should be on underground communications and underground transport of injured persons, rather than on surface frivolity.

N. Poulter

FOOTNOTE.

The major lesson that I learned from this trip was that my medical kit in its present state was totally unsuitable for general cave rescue, for the following reasons:— The design of the kit is such that although it carries a comprehensive range of supplies, it is too bulky and hard to carry for any great distance from the car; The weight of the kit (261bs) draws too much energy out of a person carrying it and therefore in a genuine rescue he could place a rescue unit in jeopardy. The final reason is that due to its size and fragility in construction it is impossible to take it into a cave where its use is initially needed.

With the above in mind I therefore created another medical kit, a Field First Aid which can and has been successfully used in caves. The design and contents will be described in a later edition of Calcite.

## BUNGONIA AND ALL THAT.

For the past 12 months, the activities of H.C.G. have centred on Bungonia. Trip reports, field notes, etc. have merged into a homogeneous glob. Here, then, is an account of the activity: an activity restricted by our universal use of wet cell lamps, with no reasonable access to a battery charger.

Much of the time has been spent in adding detail to the surface survey started by S.S.S. Where disparities in the numbering system have appeared, original 'B' series numbers have been used; in the case of new discoveries, these have been indicated with a 100 series number on our master map, until some corelation is achieved. During this programme, over 30 new locations were added, providing some evidence for our "way out" theory on the water drainage patterns of the area. We now expect that if the efflux diggers are successful, they should emerge at either the Frog or Arab caves.

The collapse of the Grille Cave entrance has been kept under surveillance, and these observations are detailed in another article.

Perhaps the greatest achievement has been the successful excavation of B11. Orignally shown on Trickett's map as a deep hole, this was filled by the Dept. of Mines because of its danger to tourists. In Oct.66 we broke through to a hole which proved to be a danger to speleos. Apparently, in our excavation, the drainage pattern had changed, resulting in some loose cementation being washed out. This resulted in the first 50' becoming an extremely unstable rock pile, which will only become safe after considerable weathering occurs. In the worst incident, two members were down about 30' when aslab about 6'across by 2' thick subsided, with a consequent collapsing extending to near the surface. Efforts are now being made to gain access through the adjacent "Letterbox".

In the Grille Cave, it was noticed that due to the subsidence a large boulder at the entrance was in an unstable position, and this was "eased" down. However, once again access past this rock is becoming hazardous. It is pleasing to note that since H.C.G. removed the ladder providing access to the Crystal Palace, the decoration is regenerating, new growth on some straws being up to \frac{3}{4}" long over a period of about 4 years. In June 67, two new minor extensions were entered; one at a relatively high level, the other well below the normal gassy level. Some excavation at the bottom of the muddy slope has effected a much more rapid draining of this area, with consequent drying out.

Quite a few caves outside the reserve have been visited, but the only real effort has gone into the Dinasaur Cave, where Norm Poulter is currently doing a dig through the gravel and silt floor.

A visit to B34 revealed that a major collapse had occured at the entrance, which is now jealously gaurded by spiders, centipedes, and leeches. As far as we are concerned, they found the new entrance first, so they're welcome to it. (B34 is on the programme for the next trip. Ed.)
Future plans? We'd rather not say.

Other Places.

Traditionally, Easter was spent at Cooleman Plain. An enormous doline was investigated, and access was gained into about 30' of mud passage. Although this swowed good potential, we were not yet wet and dirty enough to push on. Due to the drought condition, we were able to extend New Year cave by a couple of hundred feet. An impression gained was that the downstream section ran back along the ridge, under the upstream passage, ie. away from the river. A survey would be desirable in this area.

A little time was spent in surface exploration high above the Main & Right Cooleman caves; 3 caves were entered, a fourth found but not entered as the undergrowth-clearing fire filled the entrance area with smoke.

As usual, we extended Main Cooleman by 10', met friends from I.S.S., U.N.S.W.S.S. M.S.S.; were disgusted by gibberology, etc., by a party from ?.?.?.P., and suffered the inevitable vehicle damage.

### SAFETY NOTE!

C.S.S. have sent information about a major collapse in Dip Cave at Wee Jasper. Cavers planning to visit this area are warned to seek futher information.

### GRILLE CAVE COLLAPSE

To briefly summarise the observations; in mid 1965 it was noticed that the position of certain rocks immediately inside the entrance appeared to be slightly changed, so these were kept under observation for a few subsequent trips. It became apparent that a slight change was occurring, so some fixed points were established for dimensional checks. Measurements between floor and roof in the entrance chamber were taken with a steel tape, the most noticable difference being a closure of 1" in approx. 6 weeks. his was considered too inaccurate a method, particularly when coupled to such random observations as "There's some cracks in the surface above the chamber."

Accordingly, a steel rod was cemented between the floor and roof, and it was intended to cut the middle out of the rod, using the gap measurement as a base dimension. The rod was left uncut when it was realised how prone such an object would be to vandalism. This steel rod was installed in October 1966. By January 1967, there was a  $\frac{1}{2}$ " bow in the rod.

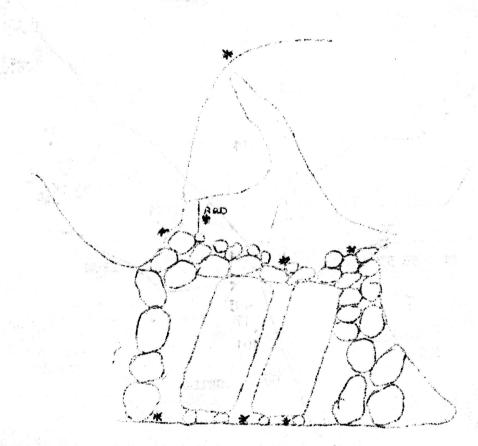
At the same time, several sketches were made, photographs taken, and some floor clearing done, at the floor level below the second ladder, i.e., directly below the entrance.

At the end of May 1967, there was a bow of 3" in the steel rod, with a vertical displacement between top and bottom of 1"; an adjacent hole in the floor had enlarged considerably, and newly shattered rock found on the floor directly below this hole.

Further observations were made during the long weekend in JUNE 1967. Over a period of two weeks the bow in the rod had increased, and the vertical displacement between top and bottom was measured at 3" in the opposite direction to the previous check. In other words, a transverse movement of 4" in two weeks. Other points were—meracks and holes appearing in a soil-filled bank in the chamber directly opposite to the entrance, a further settling of rocks on the hillside a few yards north of the entrance, and very recent fracturing of the rocks supporting the floor of the entrance chamber—in one case a major fracture through one rock. In the space of three hours there had been a detectable but unfortunately unmeasured change in one area.

The conclusions that have been reached after observations made on approx. 15 trips are: (1) That a definite change is occurring. (2) That the floor of the entrance chamber is loosening, with some rock falling to a lower level, the area involved being about 20' diameter. (3) That the roof of the cave is causing, or becoming involved in, this collapse. (4) That the total depth involved in this change is about 70', i.e., it is not localised to just the floor of the entrance. (5) From the rapidity with which the changes are occurring, that it would be reasonable to assume the maximum effect to occur within about 6 months.

E. Crabb



SECTION ACROSS ENTRANCE TO GRILLE CAVE, LOOKING SOUTH. Section C.R.G. Gr.2, related to Gr.5 plan held by H.C.G. Scale 1"=20' (approx.)

Positive observations made at these points

E.C. 6/7367

