THE JOURNAL OF THE FREELANCE CAVING GROUP.. ISSUE 5.

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FROM THE EDITOR:

I feel that I should say many thanks to members of the group for their many comments offered following last month's issue. It is most encouraging to hear some of these, and they all lead to a better and brighter magazine. Also many thanks to those people who have helped with material, some of which will appear in this issue. Keep it coming as it is very hard to find material which has universal appeal to all members, and my task is considerably eased with this type of co-operation.

Since the last issue, a general meeting has been held, - a report of which appears elsewhere. As a result of this, generally, it has been decided to arrange some other more convenient meeting place.

This should offer a chance to those many members, who have from time to time expressed a desire to see much more concrete activity taking place within the club. To those who are interested, I would suggest that you get to it! Don't worry about waiting for someone to ask you to do something. It is quite likely that you are the only person who has facilities to arrange what you have in mind, and remember, and this is most important, opportunity only knocks once.

Best of luck; and remember, even if other organisations may frown on our activities, the Youth Council of NEW SOUTH WALES and many other prominent people and groups in society are entirely with any new organisation which seeks to lower the juvenile delinquency rate by encouraging teenagers and otherwise to share in a common interest.

Till next month, cheerio!

NEWS and VIEWS.....

(NOT necessarily those of the Editor!)

A certain Hillman, or is it Austin (I can never remember) owner has been staging his own form of tribal warfare against motor fanatics, much to the discomfort of some people. I am told that it is not done with auto-inductors.

I hear that some shutter-bug has been doing very well at his chosen profession lately, and therefore the treasurer has a good chance of showing a good balance, soon.

I feel that it is fitting that a word of thanks should be given here to our hostess, Joan, who has always provided us with supper after each meeting. We all, I am sure, appreciate it very much, particularly this weather. But it would be very nice to see someone out in the kitchen after it is all over, to help with the washing-up.

They tell me that John Powell is still putting a scaling pole together but that at present he is having trouble getting 3" copper piping. Can anyone help, please?

News and Views continued

The splicing of the wire for our ladder is under way, and we should soon have another valuable asset ready to use.

The photo contest was a great success, but (Oh boy!) wasn't there a lot of Ferraniacolor used... The results appear elsewhere; if they arrive in time. Thanks are extended to all who took part in it, even if they didn't win a prize. Generally, the slides were of very high quality. Many thanks also to the Cumberland Camera Club, who also judged the competition. We hope to hold another one at some later date.

Just a gentle reminder, that Black and White Prints are now available from Ev, of your colour slides, at reasonable cost. Also, cassettes of 35mm B&W film are available at about 6/- per 36 exposure length.

That's all for this month.

Beginning, this month, a series entitled, CAVE SCIENCE.

1..... FOUL AIR.

The problem of foul air is one which we are inclined to strike in almost any cave, and therefore it is fitting that we should know something about its occurrence and cause.

Foul air is the name most Speleos give to the chemical compound or gas Carbon Dioxide. This gas is heavier than air and will therefore sink. It will not support combustion, and in sufficiently large quantities or over long periods, will cause death due to asphyxiation or suffocation. It is, however, used in small quantities as a treatment of unconciousness in the carbogen equipment used to revive the apparently drowned. It is also responsible in part for the curing of some asthmatics and other chest complaint sufferers, also rheumatics in some of the miracle "Grottoes" of the world.

In the above-earth atmosphere, it is found in varying concentrations of from .01 to .05% by volume, this being due to the carbon cycle and some forms of industry, but in some caves the percentage may be considerably higher, thus proving dangerous. Any quantity.

Although it is not poisonous, the presence of carbon dioxide in the air in any concentration above 0.2% causes a feeling of stifling, and a reflex quickening of the breathing; but any concentration above this should be considered detrimental, and avoided.

Foul air found in caves is the direct result of the formation of flowstone, etc. Rain, or water on the earth's surface absorbs Carbon Dioxide both from the atmosphere and from the soil and mulch through which it passes, forming carbonic acid. This when passing through limestone dissolves it and forms calcium carbonate which is subsequently precipitated as and on formations.

However, in the event of there being no limestone present or the solution otherwise failing to decompose, the solution decomposes into water and carbon dioxide. Other foul air is added in caves where thereis breathing by either animals or human beings. All of this sinks, and if the cave is poorly ventilated, remains fixed and gradually builds up.

The concentration of Carbon dioxide in caves is generally higher than on the surface, and this is the reason why caves have good medicinal properties.

In certain caves like the Grille at Bungonia, it is very wise to make constant checks. This is best done by means of lighting a match or candle. However, in some locations where the concentration is very gradually increasing, it is much better to go by the way you feel. The average reaction to Foul Air is to feel warm and comfortable but other signs are sleepiness, yawning, a general quickening of the breathing rate, acidic

If you find that you are in foul air, the following rules should be observed:

- 1. Don't Panic.
- 2. Proceed to quietly exit by the way you entered that part of the cave, or if this entails going to a lower altitude, proceed to a higher part of the cave, checking to make sure that the concentration there is not dangerous, inorder to rest. Then at some later time, exit the way you entered, unless some more logical choice is apparent. But be prepared for a headache.
- 3. Don't light any fires or do anything that might endanger your chances of survival.

A carbide lamp will not keep burning at any concentration above 3%, and a match or candle will go out or fsil to ignite at a concentration of about 1%. A cigarette lighter (flint type) will not normally burn at much above 0.5%. In foul air, the flame of most objects tends to rise from its source, thereby extinguishing itself.

If you are unfortunate to have some member of your party collapse due to foul air, immediately remove him to some place where the concentration is not dangerous, and proceed to apply artificial resuscitation until he regains conciousness. However, this need never happen if you are reasonably careful, but please, if you strike air which is bad; don't press on in the hopes that it may thin out, as you may end up the way that a man who lit a fire in a poorly ventilated cave did ..."not just stunned, but moribund!"

Next month	• • • • • • •	The	theories	on	the	formation	ı of	caves.			
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THINKING PHOTOGRAPHICALLY(2) with Evalt Crabb											
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With the varied nature of caves, we find that we have either too little or just enough, or too much space for photography. The main problems exist under conditions of too much or too little space. With the in-between category, good lighting can be arranged easily.

With too little space, the problems are: (1) You don't seem to be able to get everything in. (2) There isn't enough space behind the camera for your head. (3) The lens can't be closed down enough to suit the flash guide number. (4) The closeness of the flash produces very deep, sharpedged shadows, with burnt-out highlights.

Numbers 1 and 2 are really the same problem, and the only answer here is to ignore the viewfinder and just aim the camera, guessing the area of view and the direction, holding the camera and flash as far into the recess as is physically possible. This is a common candid technique and can lead to some surprisingly good results.

Problems 3 and 4 are also tied in together. One solution here is to diffuse the flash using a white handkerchief, or better still Kleenex tissues - they're constant. The diffuser can be attached to the flash head with tape, preferably with the material bulging. Exposure determination is largely a matter of experience, but a rough starting point is to open the lens two stops for three layers of Kleenex.

An alternative to diffusing the flash is to bounce the direct light but this is only possible where there is an area of live calcite deposit in the area. Use the calcite as a mirror for the flash, with the gun about 72" to 18" from the wall. Again the lens could probably be opened up two stops.

The other awkward situation is when the cave is too big, the flash too small.

Open the lens, the back of the cave is nicely exposed, but the foreground burnt out. Close the aperture and the foreground is OK but the background is black. This is where multiple flash is needed. Either a string of guns synchronised to the shutter, or the gun popped off at different parts of the cave - remember that the flash guide number applies to the distance between flash and subject. With multiple flash, it is possible to close down the lens to give depth of field, arranging lighting to suit. Interested? Here is one way of doing it. Set up the camera on a tripod, and use a locking cable release to hold the shutter open. Have a mate hold something in front of the lens except when the flash occurs, as this will prevent headlamps, etc, being recorded on the film. (That's if you have that sort of mate!) Now walk around and fire the flash at a portion of the cave at a time, making sure that your body is not between the flash and the camera. Repeat this on different parts of the cave then close the shutter.

There is, however, one thing to remember; that is, until you have gained experience at this sort of thing, all the light should come from one main direction. Don't use frontal, side and back-lighting together in the one shot, unless you want a horribly confusing picture.

Next month:.... "The nature of light."

-x-x-x-x- THOUGHT FOR THE MONTH -x-x-x-x-x-

SOMETIMES THE PHOTOS WORK OUT; BUT GENERALLY, DON'T ROOF-LESS STALACTITES LOOK SILLY?

HOW'S YOUR CAVING I.Q.?

Here is a small quiz to test your caving know-how. There are no prizes but the answers will be published next month, if you need them.

- 1. What is the science of caving known as?
- 2. An activity which is currently being enjoyed by several members is -?
- 3. What is the scientific name for "mysteries"?
- 4. Limestone is the material where most of the caves are found; name three other rocks where caves can exist.
- 5. Name the two main geological periods to which most limestone caves in New South Wales belong.
- 6. Where are the Naracoorte Caves found?
- 7. Which were the first caves which were known to exist in New South Wales?
- 8. Who was the man responsible for the early mapping and surveying of most NSW caves?
- 9. What are the names given (a) to formations which hang from the ceiling of caves; (b) the formations which grow up from the floor; (c) the excretion sometimes found issuing from cracks of cave walls?

 10. What is the chemical name for foul air?

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A small caption in one of the morning newspapers last week stated that the Sydney University Speleological Society were planning to go to the Wee Jasper region during Queen's Birthday weekend to explore new caves recently discovered in the region.

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REPORT ON WEE JASPEREaster Weekend 1961

On this weekend a party of twelve people in three cars left for a weekend of caving at Wee Jasper, an old sheep and shearing settlement in the Yass district. Wee Jasper (cont'd)

General exploration work was carried out; the main known caves being thoroughly and ambitiously explored, on Friday. John P. and Roger explored the surface looking for new potholes, but their search was generally disappointing - "they all seem to go about twenty feet and stop."

Unfortunately, over the weekend, the group seemed to be very prone to accidents, and many narrow escapes were encountered, including Dave nearly drowning in six feet of guano! Science has also remarked how dangerous it is to throw guano. Ken also took some photos, which have subsequently been enjoyed by all, and the shutter-bugs were there in force.

I also hear that our group was material in assisting a group of the weaker sex in one portion of the caves while one of our members was himself in need of assistance.

Unfortunately space does not permit any fuller details about this trip, but it suffices to say that it was a success and well worth another look at a later date.

LETTERS TO THE EDITOR....

in which correspondents express opinions and ideas for your comment.

To the Editor,

Dear Sir,

We recently came across an ancient, yellowed manuscript, which is reprinted here; it may interest readers.

There once lived in the ancient city of Lunigiana, two married persons; Filomena and Dionos, who had their own dwelling. They had very many acquaintances, who visited this dwelling every moon and more. Their coming was seldom, if ever, announced, and was even encouraged by writers of scripts. The desires of the couple were never considered, their approval never saught.

Now Filomena and Dionos were proud of their little dwelling and constantly sought to improve it, but alas much time was spent after receiving visitors. Spent tobacco dust was always found on the floor and furniture; and even the ends of smoking sticks in these and less accessible places. Non-smoking visitors deposited the ragged remains of betel nut in various places. Articles belonging to the dwelling were often dropped anywhere, regardless of their storage place. In all this, various furniture and even the walls of the little dwelling became damaged, with burns, scratches, smears and stains; and even as Dionos rebuked, so this damage was being done, sometimes by those seated on easily damaged belongings.

A folding structure used by Filomena was often taken by these visitors without asking if it might be used; yea, indeed, on some occasions she requested this object, yet could not obtain it until the visitor had finished. This made Filomena very angry, as she was always very busy and could not afford time to be wasted; also this object was soft and easily damaged by sharp, heavy objects and careless hands.

Whenever these visitations occurred, the many people were hungry, and expected to be fed, leaving the preparation of such foods to their hosts. After partaking of these foods, nary a one would lift a finger to restore the pots and pans; the advent of this task triggering a noisy mass departure without ever a word of thanks to their hosts.

Letters to the Editor (cont'd)

All this made Filomena and Dionos very angry, and they beat their breasts and tore out their hair, because they wanted so to improve their humble dwelling but were frightened of further damage. Then, one day, Dionos said to Filomena, "I Shall cut myself away from these strange people, for our love is more important to me than the games that I share with these who appear so wanton. From now on our doors shall be closed to all except personal visitors, whom we both appreciate."

But later that evening, Dionos was reading a horoscope given him by the wizard, and he was pleased, for he read that soon he would be reborn in a country not yet known, which would be called "Australia," where everybody would be given a strange gift called - "A Fair Go."

Signed......Anon (name supplied)

PHOTO COMPETITION (SLIDES) RESULTS.....

CLASS 1. Cave Activity (inside) 1. R.Ellis 2. K.Fisher

CLASS 2. Formations: 1. D. Thompson; 2. K. Fisher; 3. K. Fisher

CLASS 3. Campsite: 1. E.Crabb; 2. R.Ellis; 3. K.Fisher.

CLASS 4. Landscape: 1. K.Fisher; 2. D.Thompson; 3. L.Lewis.

CLASS %. General: 1. K.Fisher; 2. R.Ellis; 3. insufficient entries.

There were 39 entries altogether, and all first place-getters were awarded a cash prize of 10/- each.

Many thanks to all those who entered, and congratulations to those who got places. To those who did not, best of luck next time.

Speaking in General.....

Trips were made to Tuglow by two parties under the leadership of Ross Ellis and Ken Fisher during the Queen's Birthday Weekend. A full report on these will appear in next month's "Caverneer".

Also, starting next month; "FAMOUS LAST WORDS". Watch for it, and send in YOUR suggestion, if possible, accompanied by a rough sketch depicting it.

The trip planned for Bungonia has again been postponed until a more suitable date.

MISSING PERSONS BUREAU. KEITH WOODS, who is currently trying out or being tried out on - New Guinea Parks and Gardens. Last seen walking from Sydney to Darwin in order to catch the plane that he missed. Best of luck, Keith, wherever you are.

ROGER O'GRADY, who has been transferred to New Zealand.... or somewhere, so my spies tell me. Best of luck to you also, Roger.

NEW SECTIONS DEPARTMENT. Next month, we hope to be starting a series, if space permits, in which the characters, etc..., of members will be brought out....so watch out, IT COULD BE YOU!!!!!