# THE NEWSLETTER OF THE AUSTRALIAN SPELEOLOGICAL FEDERATION

No.13

Published Quarterly

September 1961

Official publication of the Australian Speleological Federation Post Office Box 198, Broadway, Sydney, N.S.W., Australia.

Publications Officer:

Keith H. Clouten, Australasian Missionary College, Cooranbong. N.S.W.

#### Late News

News which arrives late is not news at all. No one is very interested in what happened six months ago, and it is frustrating indeed to receive notice of an event which took place a month ago. Yet this situation is frequently a reality as far as this Newsletter is concerned.

The A.S.F. executive has expressed alarm at the fact that some members of A.S.F. societies still had not yet received their copies of the June Newsletter by the middle of September. This is most unsatisfactory, and most of the value of the Newsletter as a medium of communication is lost. To be useful and effective, the Newsletter should reach every Australian speleologist within a week of the date of publication.

Under the present system of posting, the societies themselves constitute the main barrier, for the Newsletters are not forwarded on to society members as quickly as they should be. To remedy this situation, societies are asked to supply to the editor each quarter a set of addressed envelopes, 9 by 4 inches. The Newsletter can then be sent direct to each member, and delivery will be speedier.

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## - PAGE TWO PERSONALITIES -

Our President, Warren Peck, is still in the Northern Territory, and will remain there until the end of the year. He was able to spend a little time caving with members of the Territory Speleological Society in August, and made a flying visit to Melbourne and Sydney in September. For those who may still wish to communicate with him, his address is :- Fly. Off. W. Peck. (0211609), 5 ACS Quarry, R.A.A.F. DARWIN. N.T.

Gordon Bain, secretary of the Port Moresby S.S., is keen to spend his three-month leave actively caving right around Australia. He has published his timetable of movements, and requests societies to trip him around if possible. His projected itinerary is as follows :- Christmas, Canberra; Boxing Day to mid-January, Sydney & Canberra; late January, Melbourne; late January to mid-February, Tasmania; last half of February, Adelaide; March, West Australia. Gordon wants as many Australian cavers as possible to return to New Guinea with him in early April for a good long expedition to the Chuave Caves there. The Chuave area is full of tremendous caving potential, and Gordon hopes to spend a month there. If anyone would like to join him, he would be anxious to hear from you - write him C/o P.O. Box 2, Konedobu, Papua.

Your editor is heading for New Zealand in mid-December and will be there for a month, the main goal of the trip being to marry his fiancee. This means that the December issue of this Newsletter must be published by mid-December. Society secretaries and other communicants are requested to assist by forwarding information for publication before 1st. December.

On the more sober side, we are sad to record the deaths of three widely known Australian speleos. Shortly after the June A.S.F. Newsletter was distributed, we heard of the death of Mr. F. C. Brown, a foundation member of our oldest society, Tasmanian Caverneering Club. More recently, in August, two members of S.U.S.S. - Ted Faunce and Ross Frazer - were killed in a road accident when returning from a weekend caving trip. We give this information here, since these three speleos were known to members of societies other than their own.

# A.S.F. COMMITTEE MEETING, Jan. 1962

## Preliminary Details

The A.S.F. Committee Meeting will be held in Sydney, as agreed at the Canberra Conference. Each society is urged to send a delegate or make arrangements for representation at the Meetings. Here are the preliminary details :-

2-30 p.m. Saturday, 27th. Jan. 1962 Meeting commences

Sunday night (but may extend to Monday Meeting concludes morning if business requires this.)

This is yet to be finalised, but it Location : will be close to the centre of Sydney.

Who to notify if coming: Graham Wallis, 6 Mandolong Road, Mosman. N.S. W.

SUSS and SSS have been asked to billet Accommodation any interstate or N.S.W. country members. Anyone needing accommodation. notify Graham Wallis as soon as practicable.

One of the important items of business for this Meeting will be the possibility of publishing an A.S.F. Journal devoted to details of new discoveries and maps.

# A.S.F. PLANS FOR CAVE RESEARCH ORGANIZATION

The A.S.F. executive has appointed Dr. Aola Richards, a lecturer in zoology at the University of New South Wales, as convenor of a planning committee to prepare a scheme for an A.S.F. Cave Research Organization. One of the objects of this proposed body would be to supervise and carry out work of real scientific worth in our caves, and it would publish an Australian journal of cave science, in which scientists investigating Australian caves and their fauna can publish scientific papers. Dr. Richards is investigating the possibilities of raising the necessary finance by donations and advance subscriptions from scientists and interested organizations. The planning committee consists of Dr. Richards, two scientists, and an A.S.F. representative. It is expected to have a report for the A.S.F. Committee Meeting in January.

## ROUND-UP OF SOCIETY ACTIVITIES

- \* New Guinea. Port Moresby S.S. has not been actively lately, but a large expedition to the Eastern Highlands is planned in early April 1962, led by Gordon Bain. The trip will confine itself to the Chuave-Mt. Elimbari region, where there is a vast potential for real caving. Transport into the area is perhaps the major problem, but if some Australian cavers plan to go, a private plane might be chartered.
- \* Northern Territory. As might be imagined, the Northern Territory S.S. is a small society, and its membership is scattered, so that organization of frequent trips is difficult. However, A.S.F. President Warren Peck has been in the Territory in recent months, and N.T.S.S. took advantage of his visit to conduct a trip to their biggest known system the Sixteen Mile Cave (not 16 miles long, but 16 miles south of Katherine). Warren reports that the size of this system is quite impressive, though much of the formation is very dry and dusty.
- \* Kempsey, N.S.W. Much of Kempsey's caving activities in recent months has occurred in the area in and around Stockyard Creek, which is one of the tributaries of the upper Macleay River. During the past quarter, considerable time has been spent in the "Windy Gap" section of the creek and here, for the first time in the Kempsey area, an underground river has been discovered. Several attempts have been made to follow the river upstream along a low and narrow channel, and members have been able to proceed more than 80 feet before having to retreat and reheat.

Where the river emerges from the cave, it has built up an impress sive terrace of flowstone many feet thick and many yards wide over the hillside for 200 yards before joining Windy Gap Creek. This, combined with the fact that the stream flows from a large area of high land containing numerous limestone outcrops, gives hope that the stream tunnel may drain a large cave system. Three other caves have already been located in the immediate area, two of them over 300 feet in length, but repeated visits have failed to find any extensions large enough for humans to negotiate.

The activities of K.S.S. will be of special interest to Australian speleos, since the 1962-63 Conference will convene there.

\* Newcastle, N.S.W. Members of Newcastle University S.S. have been trogging at many places, particularly Wombeyan. Here a party recently re-discovered the old Glass Cave, and apparently considers it worthwhile to visit again. The party reported that no one had entered this cave for a long time.

While investigating limestone outcrops on the mining leases and near the southern and western boundaries of the Wombeyan Reserve, the society entered a new cave, which contained a fairly well decorated cavern and about 500 feet of passageway. The cavern has a pool of water and a syphon, which the society intends to investigate. This may be quite within their realm, since the society is now working in conjunction with the Underwater Research Group at Newcastle.

- \* Cooranbong, N.S.W. The society at Cooranbong is receiving quite a large influx of new members this year, and in recent months the society has had to concentrate on a series of trips geared to train prospective members. A successful expedition to Wombeyan Caves in September is reported, and further trips are proposed to this area.
- \* Sydney. In the June issue of Newsletter, we reported that Sydney S.S. had been investigating new outcrops on the Hollanders River. During August, the society conducted a trip to investigate reports of limestone and caves in another area -- Tugalong, near the Wollondilly River, south-east of Wombeyan. Members explored the area, but found no limestone.
- S.S.S. has commenced cave numbering systems at Yarrangobilly and Bungenia. At both of these area, approximately 40 cave entrances have been marked and plotted on a map. At both caves, the cave numbering has been carried out with the knowledge and authority of responsible authorities at Yarrangobilly with the permission of the Tourist Department, and at Bungonia with the knowledge of the Bungonia Park Trust.
- \* Jenolan, N.S.W. This has been the main centre of activity of the Sydney University explorers during the past quarter. The interest has naturally followed on from the extensive new discoveries in the Mammoth Cave, reported in the June Newsletter.

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In July of this year, a party of twelve entered the new northern extensions (now known as the North Passage of the Mammoth Cave), and made some further discoveries. A lead from the top of a mudslope was investigated, and members found a respectable extension of about 600 feet. Other members of the same party had less success, for after much effort in removing rocks from a blocked passage leading from the Great North Cavern, they discovered an extension only twelve feet long. Further discoveries in this new portion of the Mammoth are likely in coming months.

Other S.U.S.S. members have recently excavated a hole near the Playing Fields at Jenolan, and explored a small cave leading downwards about 100 feet. The leader of the party warned that this cave has plenty of loose rocks not yet knocked down, and might be dangerous for the first few trips into it.

\* Orange, N.S.W. During September, Orange S.S. made trips to Walli (near Cliefden Caves) and Coolamatong (S.W. of Mount Canoblas near Orange). At Walli, members searched for a second entrance to the Stovepipe Cave, and found one with good possibilities, but with a lot of stones to be cleared from the entrance. Also at Walli, five members descended the Deep Hole to investigate a new lead previously reported. The new section was located and partially explored. Plentiful formation was found, and several new leads for fluture examination.

At Goolamatong, a reconnaissance trip was made to a newly located limestone outcrop, and three sinkholes were pinpointed. A lava cave was found less than two miles away. Further trips will be made to the area.

- O.S.S. has received a request from the Molong Chamber of Commerce for assistance in investigating the possibilities of opening caves in the Molong district to tourist inspection. The society has promised cooperation and will spend some time examining known caves in the district.
- \* Bungonia, N.S.W. This cave system continues to be the chief interest of the University of N.S.W. spelcos. Recently, a trip was planned with the intention of finishing the survey of Cave B-31, but this was hampered by rain outside and foggy conditions

inside. However, a survey to the 320 feet level is complete except for a small upper section. A complete report on the society's work at Bungonia is being prepared at present.

U.N.S.W.S.S. has also conducted recent trips to Jenolan and Wombeyan. The Jonolan Trip was the first official trip to these caves by the society, and most of the time was spent in the Mammoth system, and in becoming familiar with the area. At Wombeyan a party went in search of bat flies, collecting them for Peter Aitken of the South Australian Museum.

\* Canberra. Trips from Canberra have taken place to Wee Jasper (on a recent weekend, 215 bats were banded, and 70 recoveries made - the highest recovery rate so far). The Braidwood region has been visited too. South of Braidwood, the Cheitmore Caves were explored, and another party investigated the Marble Arch in the same general region, but without any major discovery.

\* Victoria. In recent months, almost all activity of the Sub-Aqua S.S. has been concentrated on the cave system numbered M-49 behind the Scrubby Creek resurgence near Buchan (see notes in the June newsletter). Immediately after the difficult surface resurgence had been successfully widened for the divers by the judicious application of gelignite, an alternative dry route into the cave was discovered after excavation nearby. At present the cave along this underground river has been explored for several hundred feet, and an earth-return telephone wire has been laid up to a sump, where progress has been temporarily suspended.

Further difficulty in M-49 has been experienced since it has been found that severe magnetic disturbances in the immediate area upset the survey being carried out. It is generally felt that this system may well prove of major significance in Buchan hydrology.

Sub-Aqua has also carried out further surface surveying in the so-called "pot-hole area" near Buchan, and another nineteen new entrances have been added to the list.

The card index of Victoria's caves, including the numerous lava caves in the Western District, is now almost right up to date and work is progressing on the much-need master map of Buchan area.

## ODD SPOTS IN THE CAVE WORLD

#### RAAF SEARCHING FOR CAVES

We quote portion of a letter from Warren Peck, at present stationed in the Territory ... "In August, I was in Katherine for three weeks investigating a proposed airfield site. The bedrock was cavernous limestone with 10 to 30 feet of soil cover. I did a reconnaissance geophysical survey over the site in an attempt to establish whether subsurface cavities existed under the site. If they were there, the site would be rendered unsuitable. I used the electrical resistivity method (briefly described in the Chapter on Cave Physics in BRITISH CAVING) and it gave excellent results. A number of subsurface anomalies (which most likely are caves) were detected and the site is regarded as unsuitable. I must surely be the only person in the country to be employed searching for caves!"

#### ELECTRIC TRAIN IN AUSTRALIAN CAVE

Members of the Tasmanian Caverneering Club have been busy lately fitting a gate to the entrance of a new tourist cave — no less than the extensive Croesus Cave, which lies on the banks of the Mersey River, about two miles south of Liena, in Lake St. Clair National Park. This cave has a total length of over 5,000 feet, of which the first 4,000 will be opened to tourist access.

Because of the long distance involved in inspecting the inner recesses of the cave, a novel plan has been proposed. This includes the operation of a small electric railway to convey tourists the first half-mile into the cave. Then boats would be used in an underground river for a further 300 yards, and the final 400 yards could be inspected on foot. It is believed that the novelty of the train would prove a great draw for tourists, since this mode of travel is not used in any other tourist cave in the world.

#### CITY STORE DISPLAYS SPELEO EQUIPMENT

A well known department store in Sydney and Newcastle, David Jones Ltd., presented a speleo window display at their Newcastle store recently. Newcastle University Speleo. Society helped to organize the display, which featured a collection of flint tools found in

the Nullarbor Caves by Professor Gallus, as well as a collection of maps, photographs, and items of speleo equipment. The display is reported to have attracted a good deal of interest.

#### BAT BOMBERS

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The August issue of S.S.S. "Communications" refers briefly to an article in the Journal of the American Medical Association recently. The article tells the story of Dr. L. S. Adams, who developed the idea, during the Second World War, of equipping bats with small thermite bombs and releasing them over enemy cities in daylight. According to the theory, the bats would immediately seek buildings as hiding places, would chew through the string holding the bomb, and this would start fires. It was believed that the scheme would be practicable if millions of bats were used, but the war ended before the idea could be tried.

\* \* \* \*

## VICTORIA'S CAVE RECORDING SYSTEM

(This description is taken from an "Information Folder" published jointly by VCES and SASS. It is given here because of its value as an example of cave numbering which could be applied elsewhere.)

## Cave Numbers

Known Victorian caves are given individual numbers prefixed by a letter (or letters) to denote the location concerned. As a new cave is recorded in a report by either club, a number is allocated to it by the Cave Recorder, and then this number should be neatly chiselfed at the cave entrance as soon as possible. Victorian cave letter coding to date is as follows:

B - Buchan

W - South of Warrnambool-Geelong.

M - Murrindal

G - Glenelg River; north-west of Port Fairy to S.A. Border.

EB - East Buchan LC - Limostone Creek

H - West of Melbourne, south of

I - Indi

Ararat, north of G and W.

Thus "EB-9" refers to cave number nine in the East Buchan area.

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## Report Numbers

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After a trip report has been handed to the club Record Keeper. he gives it a report number. So that a reference to certain information in a report might be written:

> (For VCES reports) V.19 p.10 S.19 p.10 (or for SASS reports)

the V or S prefix indicating the club concerned, followed by the report number and page number.

## Map Numbers

After a map has been drafted, so that it can be reproduced (e.g. on tracing paper or linen), it is given a map number by the club Record Keeper :

MV.10 (For VCES maps) (or for SASS maps) MS.10

where M indicates that a map (as opposed to report) is referred to. Official or printed maps (e.g. Lands Dept., Mines Dept., Broadbants) are given plain numbers with no letter prefixes.

#### Card Index.

Three identical cards are made for each recorded cave summarising all available information on that cave. Each of the two Record Keepers has a set of these cards and the third set is held by the Cave Recorder.

As new information comes to hand in Trip reports, the Cave Recorder writes up any new cards or alters existing ones and then informs the two Record Keepers of the new data. In this way all sets of cards will be kept up to date. Index cards may not be borrowed under any circumstances.

## LIGHTING MISCELLANY

(Abstract of an article by Antony Knibs, Journal of the Mendip Caving Group, No.2, Feb. 1960. Prepared by G. Wallis)

"Lighting Miscellany deals in an extremely complete manner with all types of lighting equipment which may be employed by speleologists

in underground exploration. In some parts it suffers, for the Australian reader, from the excusable error that many lamp battery types are not available in this country.

Sections I, II, & III list the specifications, light output and prices of locally marketed equipment under the headings of: Acetylene Lamps, Battery Lamps and Accumulator Lamps. In Section III much valuable information, such as Burning Time, Charging Rate, and bulb types for Nife and Oldham Cells, both of which are available in Australia, is listed.

Section IV - Components for Home Construction Lamps.

(A) Power supply. - commences with a brief discussion of the merits of Dry and Wet Cells; and also an explanation of the term ampere/hours. Output figures are listed for various combinations of dry batteries, e.g. Ever-Ready, G.E.C., Ray-O-Vac, etc., under varying load conditions. Graphs of Voltage against Time in Hours are used to illustrate such combinations as : twin cell batteries; two pairs of Ever-Ready cells in parallel; three U2 cells in parallel; and of special note, the use of one Ever-Ready No.126 Bell Battery with a bulb of 3.5 volts, 0.3 amps for 52 hours, then a 2.5 volt, 0.3 amp bulb for the remainder of the time. Except in the latter case discharge was through either 3.5. volt, 0.3 amp, or 4.0 volt, 0.3 amp bulbs, dependent on the battery output of the setup being tested.

A test to determine the minimum voltage through a bulb to illuminate objects at a distance of 10 feet in a completely dark room, using a polished metal reflector behind the bulb, gave the following results :

(i) a 3.5 volt bulb operating at 1.75 volts;

(ii) a 2.5 volt bulb operating at 1.30 volts; both bulbs being rated at 0.3 amps.

Kalium and Mallory Cells are dealt with briefly; output figures and optimum operating conditions are listed.

Under the headings of Rechargable Accumulator Cells, specifications, output data, recommended current drain, charging rate, applicability and prices are listed for such products as: Venner Silver-Zinc Accumulators, DEAC Perma-Seal Accumulators, and Voltabloc Accumulators (Cadmium-Nickel types).

(B) Bulbs.

Data such as type, output, dimensions, cap type and prices are listed for OSRAM Bulbs and CEAG (Mining type) Bulbs. A graph showing the variation in Watts, Lumens and Life of Lamps with variation in voltage is included.

Section V: General Notes on Lamp Construction.

Recommendations for construction of head-piece, cable, plugs, switches and battery boxes are dealt with thoroughly.

## REQUEST FOR BAT FLIES

Peter Aitken, the Assistant Curator of Insects at the South Australian Museum, and a member of the Cave Research Group, is at present engaged in a preparatory study for a revision of the Australian parasitic Bat-flies of the families Nycteribiidae and Streblidae. The scope of such a revision is to a large extent governed by the amount of material available for study, and so Peter has contacted many of the speleo societies, asking for assistance if possible in collecting the flies. He needs them from cave systems all over the Continent.

The flies may be removed from the live bat by means of tweezers or a fine-toothed comb, without any ill effects for the bat. The flies should be placed in 70% spirit, and forwarded to Peter, c/o the South Australian Museum, North Terrace, Adelaide. A label should be attached giving the details of locality of capture, date of capture, and the name of the collector. This type of work does not require a science training, so anyone can participate.

For Club Secretaries: If you are not receiving a sufficient number of A.S.F. Newsletter, or if you are getting more than you need, kindly advise the Publications Officer. ... And while you are writing the note, don't forgets to include some news as well!