

# ASF NEWSLETTER

AUTUMN  
1974

63



The Australian Speleological Federation was founded in 1956 "to further speleology in all its aspects on a national level, to gather together Australian speleologists and formulate national policies in furtherance of these aims". Publications include ASF NEWSLETTER (quarterly), PROCEEDINGS (biennially), AUSTRALIAN SPELEOLOGY (annually — more or less), SPELEO HANDBOOK (an encyclopaedic work on speleology in Australia) and irregular reports on matters of timely concern, chiefly conservation matters.

The Federation is governed by a committee consisting of a delegate from each member society. Meetings are held annually, each second meeting being coupled with a convention open to any interested person. Continuing activities are administered by permanent commissions, while special aspects of policy are the subject of ad hoc study committees. The Federation represents Australia on the International Union of Speleology. Correspondents are requested, wherever possible, to direct enquiries to the relevant office-bearer or member society.

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Number 63 , Autumn 1974

C O N T E N T S

EDITORIAL . . . . .	1
NOTICES . . . . .	2
AN AIR-PHOTO INTERPRETATION OF THE KARST FEATURES OF THE QUEENSLAND PART OF THE BARKLY TABLELAND . . . . .	Ken Grimes . . . . . 3
SECOND NULLARBOR CAVE DIVING EXPEDITION . . . . .	Ian Lewis . . . . . 6
NEW MEMBER SOCIETIES OF THE FEDERATION :	
Bermagui Speleological Association . . . . .	Dennis Moore . . . . . 19
Northern Caverneers . . . . .	Andrew Skinner . . . . . 19
Peninsula Speleological Group . . . . .	Phil Toomer . . . . . 19
Speleological Research Group Western Australia . . . . .	Norm Poulter . . . . . 19
DOWN UNDER ALL OVER - News from around the Societies . . . . .	11
Letter to the Editor . . . . .	Jane & Roger Scott . . . . . 12
News from Western Australia . . . . .	Kerry Williamson . . . . . 12

## EDITORIAL

This is the 21st ASF Newsletter which I have edited, one-third of all there have been. Too many according to some, for inevitably editor's personal idiosyncrasies and prejudices bias reader's judgment of the newsletter. But the newsletter is produced by a team, the need for which was never more apparent now that I'm down here in Canberra and they're up there in Sydney. Co-editor Andrew Pavey arranges the covers and solicited the advertising revenue, Ian Wood

frustrates at subscription lists, Keith Oliver is tremendously reliable with sales items, Paul Murphy handles the thankless task of coordinating printing and distribution, Illawarra speleos slave under Lloyd Robinson to write out all the envelopes, while for this issue MUSIG did the collating. So by all means throw complaints at me (if you must), but how about joining me in commending sincerely those other individuals, and clubs, who really do most of the hard work?

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: (see back cover)

## NOTICES

## TENTH CONFERENCE OF THE A.S.F.

The Tenth Conference of the Australian Speleological Federation will be held in Brisbane at University of Queensland from 27 - 30 December 1974. The following information was culled from a preliminary letter circulated by the Conference Committee of UQSS:

Papers will be limited to 20 minutes, followed by up to 10 minutes discussion time. Audio-visual aids will be available, but only a limited number of photographs and maps will be reproduced in the Proceedings. The following topics will provide broad guidelines for papers to be presented:

TROPICAL KARST	ANTHROPOLOGY
GEOLOGY, GEOMORPHOLOGY, HYDROLOGY, PALEONTOLOGY	CONSERVATION
SURFACE AND SUBSURFACE FAUNA AND FLORA OF LIMESTONE AREAS	PSEUDO-KARST & LAVA TUNNELS
EXPEDITION REPORTS - LOCAL AND OVERSEAS	
TECHNIQUES - PHOTOGRAPHY, SURVEYING, CAVING, RESCUE	

One whole day will be devoted to conservation papers with an emphasis on forward planning rather than specific issues. If you are going to present a paper, please contact the Committee without delay. (The 74 ASF Conference Committee, University of Queensland Speleological Society, c/o The Union, University of Queensland, St Lucia, Qld. 4067)

FIELD TRIPS : It is anticipated that there will be a wide range of field trips to cave areas throughout Queensland and northern NSW.

EDITORS NOTE : And don't forget the superb attractions of Queensland's world-famous tourist traps. See limestone in the making along the Barrier Reef. Meet a meter maid at Surfers. Savour the good old fashioned home baked cooking up of Gerry Mander and his country party. There is plenty to see and do in Queensland - Australia's only State of emergency.

## CAVE DOCUMENTATION

At the recent Melbourne meeting, the convenor of the Documentation ad hoc Committee, Peter Matthews made a detailed presentation of the proposed ASF Cave Recording system. The system was accepted by the meeting and will be published in the form of an operating manual around the middle of the year. The system will provide both the forms and the methods whereby clubs can easily record their caving work, and in such a way that the information so gathered will be accessible to speleology in general, but at the same time maintaining the necessary security. The regular updating of the cave lists such as in Speleo Handbook will be one of the useful 'spin-offs' of this system.

## SPELEO HANDBOOK

With the recent issuing of a swag of documents explaining how to distribute, fill in, collate and return the various new forms needed to produce the cave map and reference lists for the forthcoming edition, work can finally get under way in earnest. Within 2 months of the issue of this material, clubs are expected to get all their information to their state coordinator, and one month thereafter he should have it all collated and sent on to the Handbook Commission. On this basis the Handbook will be on sale by the time of the Brisbane Conference in December this year. Further details and pre-ordering forms will be available shortly.

## ARTICLE ON NAMBUING NATIONAL PARK

A correspondent has asked me to point out that the article on Nambung National Park by Norm Poulter, in the last issue of the ASF Newsletter, omitted reference to a significant article on the of the South Hill River area, published in Western Caver 13 (1) : 7. - ed.

## A PERSONAL EDITORIAL

During my recent move to Canberra, several contributions were misplaced and/or not properly attended to, and quite a few letters not answered. I wish to apologise to all disgruntled correspondents; if you did not receive a reply, please write again. Further innovations in newsletter appearance etc. are in hand, awaiting assessment of the financial situation. In the meantime, please note that, although thin, there is no less material than normal in this issue, because of the micro-face type used. This cuts printing and postage costs substantially, and we hope to pass on the savings to you in better quality photos, maps and presentation generally. Finally, a collective thank you to the many well-wishers who wrote after last year's minor crises of identity in the newsletter. Greatly appreciated it. - John Dunkley

# AN AIR-PHOTO INTERPRETATION OF THE KARST FEATURES OF THE QUEENSLAND PART OF THE BARKLY TABLELAND

*by Ken Grimes*

## SUMMARY

A study of the air photos of the Lawn Hill, Camooweal and Mt Isa 1 : 250000 sheet areas revealed the presence of 80 definite dolines and 69 possible dolines within an area of carbonate rocks covering about 17,000km<sup>2</sup>. Only dolines larger than about 50 metres across would have been visible at the scale of the photos used.

In addition to the dolines, large scale grike fields could be seen in parts of the northern dissected area, and the general area of springs feeding the permanent streams in the north could be delineated although the springs themselves could not be seen.

## INTRODUCTION

The main part of the area is a flat plateau (the Barkly Tableland) with a black soil cover and scattered outcrops of dolomite and dolomitic limestone. In the north the plateau has been strongly dissected to give an extremely rugged terrain.

The study was prompted by a reference in Down Under to large springs and caves in the Lawn Hill area, and it was later extended to include the Camooweal area to the south. The reference appears to derive from reports by Cameron (1901), Bell (1911) and Whitehouse (1940). Cameron refers to "numerous springs, which well out from under the limestone". These feed Lawn Hill and Louie Creeks in their lower reaches before they leave the limestone country. Cameron also refers to "caves which have been worn out and show rude rock paintings and tracks of animals"; this description is more indicative of rock shelters than true caves. Ball, who visited the area with Danes, comments that "the caves in the limestone (are) almost completely free from stalactite deposits" but he does not describe them further. Ball estimated the discharge from the spring fed Lawn Hill and Louie Cks as 16,000,000 gallons per day (21 cusecs). Whitehouse quotes a measurement of 113.5 cusecs for the spring fed Gregory River in 1931. He also found evidence that the rate of flow of the springs was decreasing.

Danes published two papers about his visit to the Queensland cave areas. The main paper (Danes 1916) is unfortunately in German but J.N. Jennings has translated the relevant parts. The other paper (Danes 1911) is in English and describes several caves near Camooweal but does not discuss the Lawn Hill area. Other more recent publications of interest are a geomorphological study of the region by Stewart (1954), and geological reports by Smith (1972) and De Keyser (1973); the latter has the most up to date stratigraphy. A comprehensive description of the caves near the Camooweal area has been given by Shannon (1970).

The air photographs examined during this study cover a strip of limestone country between Lawn Hill (latitude 18°35'S) and Bullecourt (lat. 21°00'S) - see map. The photographs used were the RC-9 series of 1:85,000 scales flown in 1966 (Lawn Hill, Mt Isa and Camooweal sheet areas). I also examined a set of 1:20,000 scale photos flown by Adastral in 1957 over part of the Lawn Hill area. The Northern Territory part of the carbonate belt was not examined.

## THE DOLINES

A total of 80 definite dolines and 69 possible dolines were identified. These represent depressions larger than about 50m across as smaller depressions would not be recognisable at the scale of the photographs used.

The locations have been plotted on a set of the three 1:250,000 map sheets for the area and this set will be placed in the UQSS library. The map with this report shows the approximate locations at a smaller scale.

The doline distribution is not uniform through the region and I have grouped them into five areas which together cover only half the total area of carbonate rocks (see map). The densities of the dolines within these areas are set out in the table below.

### DISTRIBUTION OF DOLINES BY AREAS

Area	definite dolines	possible dolines	Area (km <sup>2</sup> )	Density (no/km <sup>2</sup> )
1 MUSSELBROOK	10	2	250	0.048
2 LAWN HILL-GREGORY R.	19	19	3750	0.010
3 THORNTONIA	3	3	330	0.018
4 CAMOOWEAL	46	28	1,570	0.047
5 BARKLY DOWNS	1	16	1,010	0.017
Remaining Area	1	1	9,620	0.0002
T O T A L S	80	69	16,530	0.009

The main area of doline development is in the Camooweal area, and cave exploration so far has generally been limited to this area. The former Mt Isa caving group apparently visited several caves in the Barkly Downs area but the locations of these seem to have been lost (Shannon 1970). Henry Shannon tells me that of the 14 dolines he has visited in the Camooweal area 8 contained caves. Whether such a percentage will be maintained in the other areas is uncertain.

The size of the dolines varied from the minimum visible on the air photos up to about 250m diameter in the case of an unnamed doline 15.5km northeast of Camooweal. In most cases the area of centripetal drainage was limited to the sink itself; drainage channels beyond the rim uncommon and short, the longest was an exceptional 4 km. The few depressions with large external drainage systems a stream sinking at the base of a semicircular cliff and are better regarded as blind valleys. In the southern part of the region, northeast of Mt Michael, the black soil plains have shallow circular or elliptical depressions with central swamps. These could be due to subsidence over covered karst.

On the Barkly Tableland the dolines are scattered across the plains but are most common where black soil cover is thin or absent. In the dissected country in the north of the area the dolines are generally found on small residual plateaux and on ~~sm~~ or near the ridge tops.

#### OTHER KARST FEATURES

Most other karst forms in the area are of a scales too small to be visible on the air photos. The springs feeding Lawn Hill and Louie Cks and the Gregory River and O'Shannassy River cannot be seen on the photos however their general extent can be deduced from the long permanent reaches of water found in these streams in the last few miles before they leave the limestone area.

The highly dissected country of the northern area corresponds with the drainage basins of these streams. The main features here are the very close dendritic drainage pattern and the high local relief. The dissection has probably resulted from Pliocene (?) upwarping of the tableland relative to the Gulf Country, with a consequent rejuvenation of the streams. Apart from scattered dolines in higher areas the only karst features visible are belts of strongly jointed limestone which have developed large scale grikes. The main belt of these is shown on the map.

In a visit to the Riversleigh area I saw numerous small scale sculpturing forms. The limestone in this area tends to form conical and turreted blocks with solutional runnels and flutes. Cameron (1901) figures two photographs of these forms.

#### IN CONCLUSION

The main area of dolines is adjacent to Camooweal itself and this may well remain the main cave area. Exploration further afield will be hampered by long distances and poor access, especially in the north. However the transport problems are no greater than in the Nullarbor karst and the cave potential could be as great, as the collapse doline densities of the Nullarbor are even lower than this apart of the Barkly Tableland karst. However the differences in geology and hydrology forbid too close a comparison at this stage.

BALL, L.C. (1911) : The Burketown Mineral Field. Geol. surv. Qld Publ. 232 : 12-14.

CAMERON, W.E. (1901) : Geological observations in northwest Queensland. Geol. surv. Qld. Publ. 159 : 10-15.

DANES, J.V. (1911) : Physiography of some limestone areas in Queensland. Proc. Roy. Soc. Qld. 23 (1) : 75-83

DANES, J.V. (1916) : Karststudien in Australien. Sber. K. Bohm. Ges. Wiss. 7 : 1-75

De KEYSER, F. (1973) : A review of the Middle Cambrian stratigraphy in the Queensland portion of the Georgina Basin. Bur. Miner. Resour. Aust. Bull. 139 : 13-27.

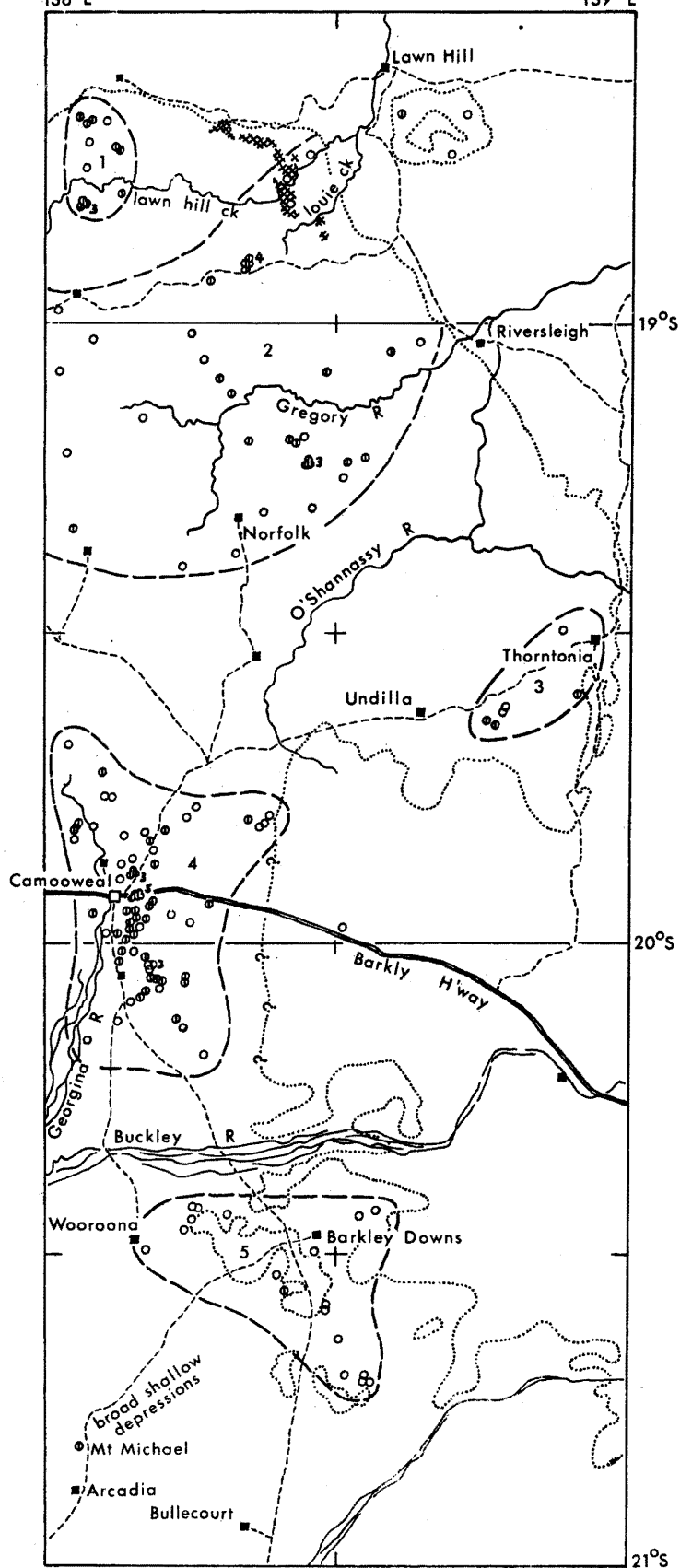
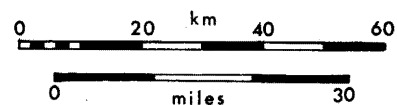
SHANNON, C.H.C. (1970) : Revised cave list, Camooweal Caves, Barkly Tableland. Down Under 9 (2) : 37-44.

138°E

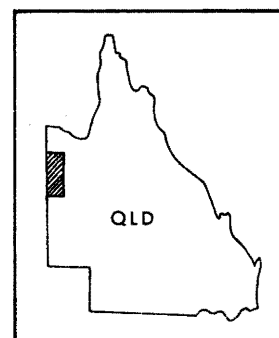
139°E

# CAMOOWEAL KARST

distribution of sinkholes  
and other karst features



- Definite sinkhole
- Possible sinkhole
- ⊙ Cluster of sinks (number indicated)
- Boundary of main sinkhole areas
- ⊞ Areas of large grikefields
- Boundary of limestone





# THE SECOND NULLARBOR CAVE DIVING EXPEDITION 1973-4

by Ian Lewis

. . . as pointed out in the previous report on the first Nullarbor diving expedition, the great potential of the Nullarbor caves now appears to lie underwater, with hopes that this will lead to further dry caves-  
-ed.

The expedition was intended as a broad exploration of as many of the Nullarbor wet caves as possible that had not been examined on the 1972 Expedition. We achieved just that, and only one wet cave on the Plain (Winbirra, N45) has not been investigated because it could not be found - the unsuccessful location trip claimed 3 staked tyres on one vehicle!

After incredible last-minute hassling and phone calls all over the country, the diving team finally contained only two, instead of the original five divers. The divers were Keith Dekkers (via NZSS), fresh from his participation in the Niugini Expedition, and myself from CEGSA. Despite this small number, I am convinced that we achieved much more than the original five (from SA) would have done, as the other four were non-speleos - this makes a big difference especially in performance and general attitude.

The 17 speleos who came from all states except Tasmania (provincials!) were packed into 8 cars. We all assembled at Weebubbie Cave for a couple of days to acclimatise to Nullarbor diving and to collect weed samples (preserved in formalin and now at Adelaide University). The opportunity was taken to put into use the original diprotodon, a monster magnesium blaster made from a fire extinguisher, bike pump and 6-inch wide jet, kindly loaned by Captain J.M. Thomson, the original Nullarbor Caves explorer. Results as seen on the slides are truly staggering - the entire 150m lake was lit up like broad daylight. Fearless leader then demonstrated how a Diprotodon Hillii behaves when it blows up, igniting his magnesium powder covered trogsuit and transforming himself into a human fireball, to the delight of all spectators.

From Weebubbie, in which another 30m of underwater passage was found by chance, the party split for 3 days with half going to Abrakurrie Cave for photography and to locate Winbirra Cave, and the others going to Warbla and Koonalda Caves for diving exploration.

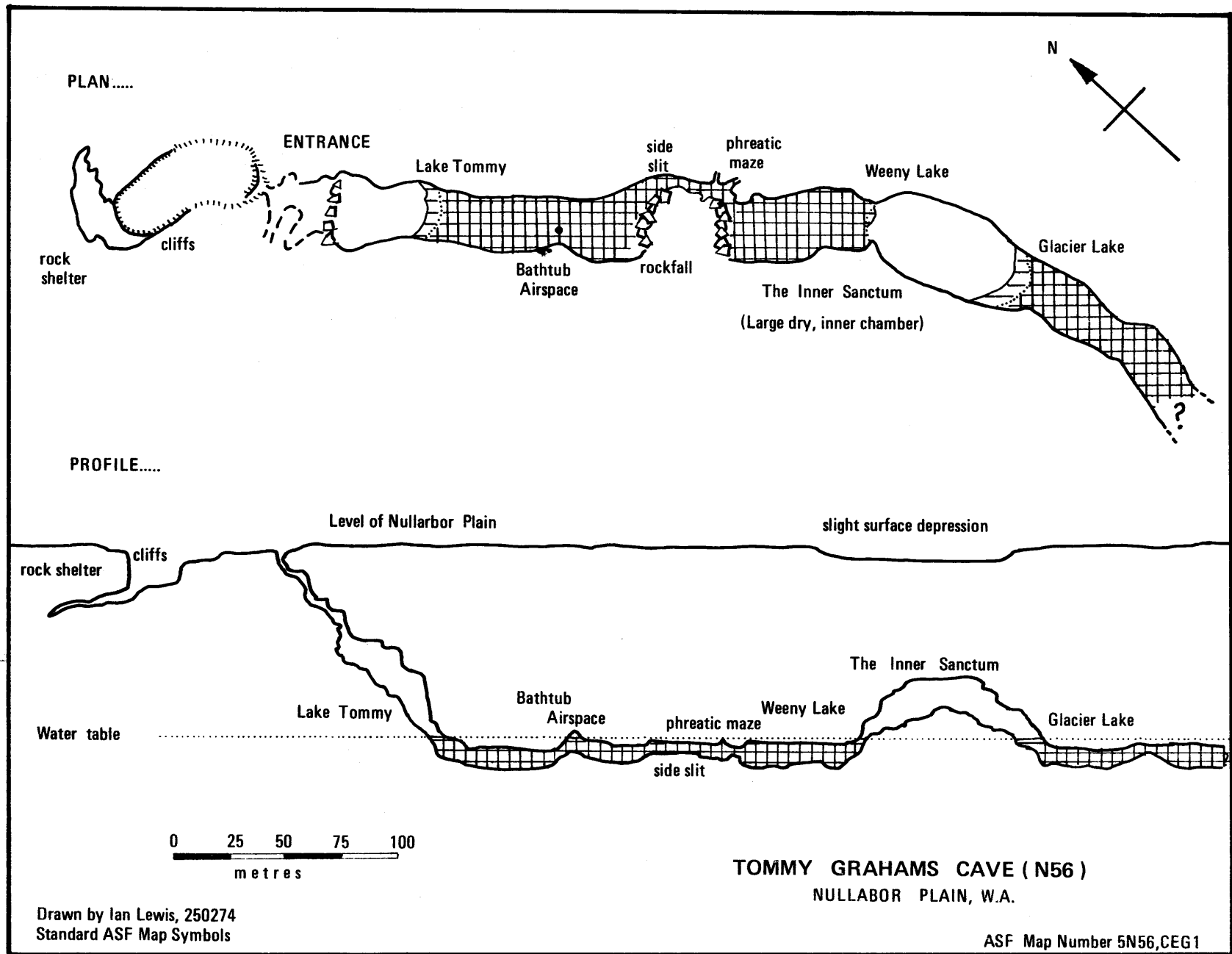
The sheer sided sinkhole of Warbla Cave provided a photogenic 45m abseil but the efforts were rewarded with a disappointing dive. The very small lake, full of bat guano and dirt, ducked under a wall and reached a maximum depth of 12m in a chamber about 15m across. A tunnel 3m in diameter off the end of this chamber was only entered a short way due to thick silting and consequent zero visibility, and although it is expected to end, we didn't go quite far enough to be certain. Total length of wet passage discovered was 45m.

Koonalda Cave, visited a few days earlier to assess the water conditions, provided a most memorable part of the trip, and is a cave with real character. Its passages at two points are 60m across by 27m high and although for sheer volume they don't beat Abrakurrie, their effect is mind-boggling. The cave contains three large lakes, the first two of which are shallow (1-2m) but full of glutinous stinking organic mud, with a stench like a peat bog. Through a total of 250m of this guck we had to lug tanks, wetsuits, weightbelts and sundry gear to a third lake which was separated from other two by a 30m high rockfall called 'The Mountain'. The third lake being clear and 15m deep was the diving proposition.

Water temperature was a damned cold 15.5°, so the so-called 'dry' cavers,, now quite soaked, cooked up soup on a choofer while the divers paddled off for a 2-hour survey of the lake and sump. There has been a drought on the Plain for the last five years, broken only a few months ago, and this must account for the drop in the level of the third lake, since Keith and I were just able to snorkel through a 15mm high air space (7m wide) for 18m into a further lake chamber, hitherto undiscovered, which we called 'The Bulb'.

'The Bulb' was 45m in diameter and a good 8-10m high above the water. Its shallowest depth was about 8m and on the north-west wall the entrance to a large submerged tunnel began at depth of 14m. This passage headed roughly north for 60m, and gradually downwards to a maximum depth of 25m to the floor where a small tunnel 2-3m in diameter was not explored due to silting. The sump was on average 20m across and 10m high.





Drawn by Ian Lewis, 250274  
Standard ASF Map Symbols

The cave was indeed a memorable experience for which we can thank Grant Gartrell of CEGSA, whose efforts to obtain access permission for us from the SA Museum were wholeheartedly appreciated. The cave is strictly off limits to anyone, speleos included, without this permission.

We moved out on New Years Day. En route, 16m of ladder as insufficient to investigate the Albala Karoo bore shaft, an enlarged blowhole 3m square and estimated at 26m deep with the customary Nullarbor gale belting out - next trip perhaps! The expedition reunited at Pannikin Plain where we camped for 7 days.

Pannikin Plain Cave was surveyed to Grade 4 from the entrance doline down to both lakes. (north-west and south-east ends) while each lake was dived. The NW lake extended beyond the wall for 100 m through three sizeable connected chambers, the last of which swung back on itself somewhat. Maximum depth was a most respectable 30m and water temperature a luxurious 23°. The SE lake was a real squib, with 15m of passage beyond the lake closing off into two impenetrable vertical joints (with distinct phreatic characteristics) 20m and 30m long respectively. The sump reached a depth of 15m. Swimming back through the lake, we saw more than a dozen drowned bats in water 8m deep. 75m of dry rock-pile passage was also discovered and partly mapped by a dry caving team during the overall survey of the cave.

On the other days dry cavers explored and pushed the new maze (discovered by the 1972 party) in Murra-el-elevyn Cave, and before they knew it they had found 300m of new walk/crawl passage with shallow lakes (up to 3 m deep) and an abundance of gypsum decoration. This included flowers on walls and roof and a whole floor of fine needles, featuring two specimens 25cm long. Pushing will almost certainly increase the length of this maze, which closely resembles Mullahmullang's 'Ezam'. The rest of the main cave inwards from the lake was surveyed to Grade 5.2 to complete the map that appears in 'Caves of the Nullarbor' (fig. 1-5), and the lake was snorkeled with little result.

However, while the dry cavers had a real field day in Murra-el-elevyn, the divers scored a bullseye in Tommy Grahams Cave, which had been located a day previously by some of our cavers who trekked all over the bush searching for it. A small dirty lake (Lake Tommy) at the bottom of a 'meta-stable' rockpile didn't close off at all as we naively thought. Instead it led through clear water (60m visibility!) for 90m past a bathtub sized air pocket to 15 m of phreatic maze (NOT a jumble of broken rock) which when pushed through, vanished into a large submerged chamber 60m long with a small lake surface (3x1m) at its far end.

On the following day, Keith and I again negotiated the 175m sump, climbed out of the water and found ourselves in a huge dry chamber 60m long, 27m high and 30m wide - real Nullarbor stuff! Leaving out tanks we hiked up to the top of the rockpile and saw on the other side . . . another lake, 10m long and 30m wide.

The rock in this far lake was so clean and white it was like swimming through a glacier, and we didn't resist the temptation to explore it. Result? 120m of large submerged passage with a small constriction halfway along, and the 'end' vanishing into infinite darkness. A diving bonanza of the highest order and the fulfilment of a personal ambition, to discover dry passage after a sump.

The inner dry chamber, with water at both ends and thus no ability to circulate air, was excessively humid and made life out of the water very uncomfortable. However, we did find a small mat of fine tree roots in a dry chamber that must have fallen from the roof (which is still at least 55m below the surface of the Plain). After two hours we returned to find the support team designing wreaths for the presumed departed dead. Their relief was as infinite as the second sump.

What could the result of the trip be but something of an anticlimax after the discoveries in these two caves? The investigation of the water in Nurina Cave revealed 3m deep terminating joints (very thin) and Mullahmullang Cave still goes on and on. The two lateral tunnels off the side of the main passage near Smoko Junction yielded gobs of halite decoration, and breezes, and tunnels to the tune of 220m with some possibilities remaining. An attempt to map more of Easter Extension, systematically, ran out of steam after 100m of salt-encrusted crawlways were surveyed from only the first turn on the right (the first of a hundred) and we didn't reach even the end of this . . . no hum.

We left the Plain with 1300m (4250ft) of new cave to our credit, and 600m of existing cave also surveyed, in which everyone had a share. There is a strange feeling that there is more to be found! Future diving activity will have to concentrate on extending the Weebubbie, Cocklebidy and Tommy Graham long distance sumps - a much more involved process than the two Expeditions so far - and locating and checking unknown dolines (of which there are plenty) possibly using a gyrocopter. The next Expedition would best be a dry trip to concentrate on pushing the Easter Extension and locating Winbirra Cave for diving exploration. Beyond this, Nullarbor diving is fairly well wrapped up.

Special thanks to Keith Dekkers for bringing the compressor and being a most reliable partner, and to John Kersey (CQSS) and Nick White (VSA) for their sterling surveying work, a large contribution to a work trip that brought back results.

## NEW MEMBER SOCIETIES OF FEDERATION

At the last ASF Committee Meeting in Melbourne, the Federation welcomed one new full member (Northern Caverneers), and 3 Associate Members (BSA, PSG & SRGWA). Here is an introduction to them.

## BERMAGUI SPELEOLOGICAL ASSOCIATION

by Dennis Moore

On 14 January 1972, John Robinson, Chris Franks, Greg Cooper and Dennis Moore held a meeting to inaugurate the Bermagui Speleological Association. Meetings were held sporadically during the next 18 months but several trips were organized to Wyanbene, Buchan, Bendethera and Kybean. We gained affiliate membership of the Victorian Speleological Association and received a considerable amount of greatly appreciated assistance from that fine group of fellows. We also welcomed John Taylor as a member and owe him much for his knowledge, advice, and for use of his equipment.

Since our AGM on 16 August 1973 we have held regular monthly meetings, a constitution and by-laws have been thrashed out and membership has grown. Association and personal collections of caving gear continue to grow steadily. We look forward to continued healthy development, and I would like to thank all members and friends for their assistance in the past and in the future.

## NORTHERN CAVERNEERS

by Andrew Skinner

Based in Launceston, Northern Caverneers started in 1961 as Tasmanian Caverneering Club Northern Branch. One of the foundation members was Bob Woolhouse, who is to this day a guiding influence in the club. Another early member, Frank C. Brown Jnr, was recently elected the first life member of Northern Caverneers.

The group continues mainly in the Mole Creek area and over the years has amassed a great deal of valuable information on the area's caves. In 1966 a magazine Troglodyte Topics published but was discontinued after about a year. After the Eighth Biennial Conference of ASF in Hobart in 1970, Northern Caverneers (then TCCNB) helped organize field trips in the Mole Creek area.

Due mainly to the enthusiasm and initiative of President Dr Richard Smith (ex-VSA) whose stated aims were to make TCCNB into a 'real' club, Northern Caverneers became a separate group in 1973 and were subsequently accepted into the Tasmanian Council of Speleology and ASF.

At present the group has about 20 members almost all of whom are active. With the Mole Creek area only an hour's drive from Launceston, their speleological future is assured.

## PENINSULA SPELEOLOGICAL GROUP

by Phil Toomer

PSG had its inaugural meeting on 17 October 1971, when the proposed constitution was ratified. The Group started life with 17 members and now has 30. The first PSG Bulletin was published in February 1972 and has been produced regularly on a monthly basis since.

The Groups first area of major activity was Bungonia, with surveying in Hollands Hole (B35), Acoustic Pot (B22) and B3, and digging in B34 and B126. Another area for intensive exploration was the limestone around Lake Burrinjuck now named Warroo. Systematic exploration was undertaken, entrances located and tagged, caves surveyed and a surface map prepared. This work was done in liaison with NUCC who were investigating the Narrangullen side of the Lake.

Concurrently PSG commenced an investigation of non-limestone caves, particularly sea caves. A PSG proposal for numbering of sea caves is still being considered by the NSW Liaison Council. The Group has also worked in the Mudgee area and surveyed and recorded the caves at Queens Pinch, Cudgegong and some small nearby outcrops.

Other activities have included cave safety; the Group has attempted to instigate at Bungonia a system whereby trip leaders from any club notify the local police on arrival. The Group prompted revision of the Police Rescue Squad callout list for NSW, and has purchased a GQ Paraguard Rescue Stretcher which is stored at Goulburn Ambulance Station, to be available at cave areas in SE NSW. Practice rescues have been held at Bungonia, and the State Emergency Service, Goulburn Ambulance and St John Ambulance have participated.

In the past year PSG contact with ASF has increased, members attending NIBICON and sending observers to the NSW Liaison Council meetings, and participated in the First Australasian Conference on Cave Tourism. It is with pleasure that the members look forward to improving the relationship already established with the Australian Speleological Federation and its member societies.

## SPELEOLOGICAL RESEARCH GROUP WESTERN AUSTRALIA

by Norman Poulter

SRGWA was formed at Christmas 1972 to promote and encourage the many aspects of speleology in W.A. The group now has 31 members with 4 associates and 4 prospective members in addition. During 1973 activities centered on construction, surveying and electronic research. From March to October members undertook a 300 man-hour project in Crystal Cave (WI62) to protect the entrance to Christmas Extension from collapsing and to contain damage caused by visitors. At the request of Augusta-Margaret River Tourist Bureau, a new gate was installed over the entrance to Easter Cave (AU14), the most highly decorated cave in the state.

At Yanchep Caves National Park, Cabaret Cave was surveyed at the request of the Parks Board who wish to re-open it for cabarets after being closed after 1968 earthquake damage. Research is continuing into improving a compact radio direction finder. Upon completion, voice communication may be an added feature to this unit which already has a surface range of 1 km. Another unit constructed can be employed to locate caves by a seismic process. The club has provided a rescue medical kit and work is under way to provide a general purpose medical kit. The British Petroleum Company has donated a GQ Paraguard rescue stretcher to the Group.

## D O W N      U N D E R      A L L      O V E R

. . . . . News from around the societies

The paucity of news on society activities here reflects not any lack of activity, but rather the fact that the Editor has not received many club newsletters due to the change in address. More news next time.

**B S A** have ranged widely over southern NSW and into Victoria, with trips to Buchan, Bendethera, Wyanbene, sea caves at Bermagui and further south near Eden, and to some old mines. In the latter, bats were reported - about 200 in Knights Creek Road mine, about equally Horseshoe and Bent-winged, and perhaps 500 - 1000 in Vimy Ridge mine, where it was not possible to take a species count. Several maps of sea caves are included in Bermagui Caver 1 (1) & (2).

**C E G S A** is dangling leather medals in an effort to encourage more digging, the chief pastime of South Australian cavers it seems. The ABC has made a colour film ("Buried Treasure") of the Victoria Cave fossil deposits. The group assisted in moving gear through the cave and reports that the 8-minute film took 8½ hours to obtain - a typical ration. An aboriginal skeleton has been located in Wombat Cave at Naracoorte, and appears to have fallen in accidentally. Digging and chipping has continued in Sellicks Hill Cave, near Adelaide . . . "It's a bit hairy, and seems to be basically composed of rocks seemingly not held up by other rocks, the removal of any one of which would more than likely result in the sudden disappearance of Sellicks Hill."

**K S S** have been renumbering all the Macleay River Caves, although no field work has yet been done to tag them. A checklist of 101 entrances with brief descriptions is published in Trog for February 1973.

**P S G** seem to be the most safety conscious group around, judging from recent issues of the Bulletin. A practical article on "A personal first aid kit for cavers" is in the PSG Bull. 3 (8), and the same issue has information on the Blue Water Rope II & III. There is a description of the scheme whereby the Group will subsidise a member's purchase of ropes to encourage proper care - it is a system with much to recommend it for other small clubs faced with this dilemma. PSG also is interested in cave rescue and to raise money for a rescue stretcher, recently organized the PSG Annual Luncheon. Before an incredulous crowd of tourists, formal luncheon including wine was served to some appropriately attired cavers on top of the first of the Three Sisters at Katoomba. Meanwhile, other members circulating not too discreetly in the crowd managed to collect some \$100 in donations towards the stretcher, which will be made available for cave rescue work throughout southern NSW.

**S S S** Journal has reverted to a monthly front cover photo, a popular feature of its predecessor Stop Press which had been rather sadly missed for several years. January issue of the Journal has an interesting article on an early reference to bone caves in Australia, and reports trips to Jenolan (meteorological work in Serpentine, Wiburds Lake and Little Canyon Caves), the Big Hole, and Tasmania.

**T C C** In Speleo Spiel 87, reports that 1973 was a "depression" year after the solid activity of the previous year when the bottoming of Khazad-Dum and Cauldron Pot captured the headlines. Even so, an impressive list of accomplishments was chalked up in exploration, exploration, surveying, photography, conservation action and interclub relations. Conservation action has been particularly evident, ranging from track-marking in Exit, Croesus, Kubla Khan and Welcome Stranger Caves, to efforts to have areas declared Reserves, such as Croesus (successful) and Exit (unsuccessful so far). Rubbish has been removed from several caves as part of this programme.

**U Q S S** have had two pleasant walking/swimming trips to Silent Pool, near Dorrigo, NSW, which turned out to be a very narrow slit river canyon with 50ft high walls 3ft apart - good practice for a fierce river cave. Down Under 12 (8) for December 1973 has several very practical articles. "Electronic Slave Unit" by Malcolm Pound describes an indispensable and inexpensive aid to effective cave photography. Designed to fire off an electronic or other flash remotely, and can be activated from some distance by flashing a torch. "A Battery Charger" by John Toop describes experiments to develop a cheap (\$8.23) charger operating from a battery charger on a car. This issue also has material on North Queensland Lava Caves from Bureau of Mineral Resources publications. The January 1974 issue, which arrived just as this being written. This issue also contains material on a comprehensive review of cave safety and safety techniques. Apparently intended for new members, this is a lucid, comprehensive review purchasing separately from UQSS

**V S A** has been active again in Scrubby Creek Cave, where radio tests were undertaken, and Glenelg River area. Two previously unrecorded outflow caves were located, one of which (G29) was pushed 26m to a strongly flowing sump.

## LETTER TO THE EDITOR

Dear Sir,

In reply to Mr Shaw's letter (ASF Newsletter 62), we should like to make the following points:

1. The large number of easily accessible and ungated caves which now exist, certainly in WA, provide ample opportunity for introductory trips and for non-club cavers. Surely most presently gated caves are of the type which Mr Shaw suggests should be controlled i.e. dangerous caves and caves of special scientific interest.
2. The philosophy behind the gating of caves is (or should be) not prevention but control of access by limiting this to small parties and to genuinely interested members of the community.
3. Allowing free access to presently gated caves would inevitably result in the heaviest damage occurring in these caves, as they would be visited most frequently. It would be interesting to hear how Mr Shaw proposes to educate the public sufficiently to cut vandalism to a minimum, as attempts up till now appear to have failed dismally.
4. Concealment of information on the location of caves is difficult, since they are there for anyone with sufficient energy and interest to discover. It is hardly the caver's responsibility to publish lists and locations of all known caves in the local newspaper for the benefit of the general public.
5. Anyone with sufficient interest in speleology is surely willing to pay a small fee in return for the benefits of club membership. Though 'petty politics' certainly exist in speleo clubs, as in most organizations they do not have to indulged in. A more positive function of a club is to act as a 'voice' on behalf of its members on such matters as the creation of National Parks and the protection of caving areas from industrial interests viz Texas, Mt Etna, Bungonia etc. Without this voice, the future of the resources which Mr Shaw is so anxious for the community to enjoy would be a lot less certain. Why, one asks, is he himself a member of an organized club?
6. If caves are "the property" of the community for its use", Mr Shaw should perhaps knock not the ASF but the people making money from 'tourist' caves e.g. the NSW Government.

Yours faithfully,

Jane &amp; Roger Scott, WASG

## NEWS FROM WESTERN AUSTRALIA

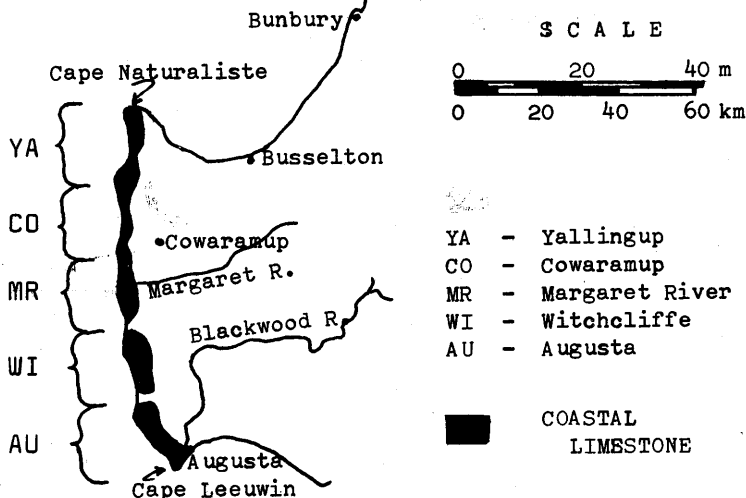
BY Kerry Williamson

**NULLARBOR** : Late December saw a trip to the Nullarbor. Blowholes near Balladonia were surveyed, Dingo Donga Cave was surveyed to Gr 6 and mineral crusts collected for the WA Gov't Chem. Labs. A new cave was found, explored and surveyed on Mundrabilla station. A very windy, sand-in-eyes blowhole gave access to a fairly extensive cave containing many interesting calcite, halite and gypsum speleothems and also interesting mammal fossils including Tasmanian wolf, brush-tailed possums and a crescent nail tailed wallaby. In Mulla Mullang a light~~ly~~ laden, non-camping party went to the Dome and back in nine hours.

**WITCHCLIFFE** : Calgardup Cave has been surveyed to CRG Gr 5D, the survey of Golgotha Cave begun and sections completed in Brides Cave. An extremely well attended Cavemans Dinner was held at the Boranup Motel. The gate in Crystal Cave was found to be damaged and repairs effected.

**AUGUSTA** : Here water table levels in the water table caves have been rising slowly, turning leading into the Gondolin extension of Easter Cave back into sumps.

Unfortunately the map of the W.A. Nomenclature areas, published in ASF Newsl. 61 (Spring 1973), p. 18 omitted THE Augusta area in the south-west. Hopefully the map opposite will redress any confusion. The five areas of the south-west are principally aeolian limestones overlying unconformably the impermeable banded gneisses, granite gneisses and granulites of the Leeuwin tectonic block. This basement is met in quite a few of the caves e.g. gneiss waterfall in Conference Cave, Witchcliffe.



## ASF NEWSLETTER

Copies of many back issues are still available, but earlier issues are scarce and becoming collectors' items; some are already out of print. Later issues are larger, glossier and many have maps and photographs and are printed offset. In the last three years, typical size is 20 pages.

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—	—	Nambung and The Pinnacles, W.A.

### OTHER PUBLICATIONS OF THE AUSTRALIAN SPELEOLOGICAL FEDERATION:

*Proceedings of 7th Biennial Conference 1968* — \$1.35 from CEGSA

*Proceedings of 8th Biennial Conference 1970* — \$3.00 from TCC or SCS

*Proceedings of 9th Biennial Conference 1972* — in preparation. Watch for announcement on page 2.

*CONSERVATION OF AUSTRALIAN CAVES* — Report of the ad hoc Committee on Conservation. Convenor Andrew Spate. Offset printed, with photographs 30c. (Sales Manager)

*AUSTRALIAN SPELEOLOGY 1971* — 184 pages of the best Australian speleo writings of 1971, edited by Andrew J. Pavey, including numerous maps, photos and diagrams. By far the greatest bargain of the year. Only \$2 (barely a cent a page). (Sales Manager)

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*SPELEO HANDBOOK* — The first edition is OUT OF PRINT. Please watch page 2 for announcement of new edition, expected towards end of 1974.

*PROCEEDINGS FIRST AUSTRALASIAN CONFERENCE ON CAVE TOURISM* — Anticipated publication April 1974. Watch page 2 for announcement.