

AUSTRALIAN CAVER

THE AUSTRALIAN
SPELEOLOGICAL QUARTERLY

No. 108

SPRING 1985



Entrance to THAM NAM LANG, THAILAND — By John Dunkley
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*All articles, reports, tests, photos
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These may be sent to:-

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DEADLINE FOR COPY

*All articles should be submitted to
the editor by the end of*

*FEBRUARY
MAY
AUGUST
NOVEMBER*

*If you find writing a chore, why not
phone the editor directly???*

COVER PHOTOGRAPH

*The opinions expressed in this
journal are not necessarily those of
the A.S.F. Inc. or the Editor.*

FURTHER UNDER THE GOLDEN TRIANGLE

by John Dunkley.

May 1984: The north-west corner of Thailand, near the border of Burma. Driven by the kind of obsession that grips you when you've made a really big discovery, the two of us are 3.5km from the entrance of Nam Lang Cave, the cave now filled with waist deep water and mud continuing into the darkness, still 10m high and 10m wide. Tending camp near the entrance, Diu was the only person who knew where we were. We were tired, short of time and didn't fancy risking even a minor accident so far from help. A larger party, a rubber boat and more time needed. For the second time in this cave John Spies and I decided to leave it for another day, another year.....

May 1985: The swimming pool at the Airport Hotel in Bangkok, getting our money's worth. A lot of talk, the six members of the sixth expedition hoping John and Diu will wait for us in Mae Hong Son, considering that the early flight on which we're expected has been cancelled. Strange, Thai customs curiously uninterested in yellow rubber boots, hundred metre lengths of rope, spools of polypropylene, a pack full of black garden plastic, or tins of grey powder. Keith is still talking about aeroplanes, having spent almost the entire leg from Sydney to Singapore, glued to the rear window of the 747 in a haze of smoke, this being his first plane trip of any kind.

A 737 to Chiang Mai, a 3 hour wait, then the little Shorts 330 across the mountains to Mae Hong Son, and fortunately John and Diu waiting, accompanied by pre-monsoon waves of heat. We couldn't see how the 20 year old short wheel base Land Rover could take 8 of us with gear, but it later did sterling service with 14 passengers and John assured us it had a capacity of 20 Shans. By 6pm we were in wilderness Asia, walking the track down the Nam Khong to the cave entrance, a whole world away from that swimming pool a few hours earlier.

Monday May 6: Into Tham Nam Lang, the whole day spent winding and unwinding the 130m measuring rope. There were several

stretches where that wasn't long enough, the longest line of slight reaching about 200m. Next day John Spies, John Dunkley and Keith Oliver continued surveying, photography and exploration of high side passages. Reaching the top of one 50m high rockfall (Doi Hin Yai - Big Rock Mountain), we found the rocks were coming from a vast shaft rising beyond the limits of strong torchlight. Meanwhile, John Taylor, Dorothy Nichterlein, Kevin Kiernan and Kerry Hamilton launched the rubber boat at 3.5km and paddled off. Exhilarated and exhausted they returned at 3am, having reluctantly turned back 5.4km along the main stream passage at King Khlong, and having discovered an enormous upper level (Tham Ban Khong Kwan - the Cave Home of Kwan) so superbly decorated as to affect Kerry and Kevin emotionally. A forest of stalagmites (Khan Thai) each rivalling the Khan in Kubla Khan. No end in sight in either case, just shortage of time once again.

A pleasant day was then spent floating the gear down the river on the boats, and a new camp established opposite some small waterfalls next to the Nam Khong (river). These have been built up in travertine deposited by spring water from Tham Susa, and provided delightful refreshment after a hot day as well as safe drinking water. Next morning we breakfasted to the sound of thunder. Pre-monsoon thunderstorms, eh John? Strange though, at 8 in the morning? Especially as there's not a cloud in the sky. Then John recalled 500 Chinese Kuo Min Tang troops filtering through Ban Tham a week or so earlier. Good grief, it's one of those perennial opium wars you read about; between rival private armies of drug traders. Later, we learnt that it was a mortar barrage involving a coalition of the KMT with the Shan United Army of Shan State (Burma) against the private army of Khun Sa. Soon a Thai army helicopter choppered overhead, presumably on a reconnaissance. So much for wilderness Asia.

The noise of battle continued to be audible in the entrance passages of Tham Susa, a large outflow cave which below its spring has formed a magnificent delta of travertine. Kevin located some pebble tools in the

impressive entrance chamber; this cave is only a few kilometres downstream from one of the seminal archaeological sites of South-East Asia, at Spirit Cave, where evidence for early agricultural communities was first found in 1965. The boat was launched and the cave stream followed about 700m to a series of waterfalls requiring climbing assistance for further exploration. Some interesting white (possibly blind) salamander-like creatures were captured trying to climb up the waterfall, adding to an impressive faunal variety of Tham Susa and Tham Nam Lang. Some other caves in the area were also incompletely explored. Visions of locally manufactured bamboo scaling poles or ladders now arise; these would be easy to find and construct and have the advantage that steps can be cut in the side.

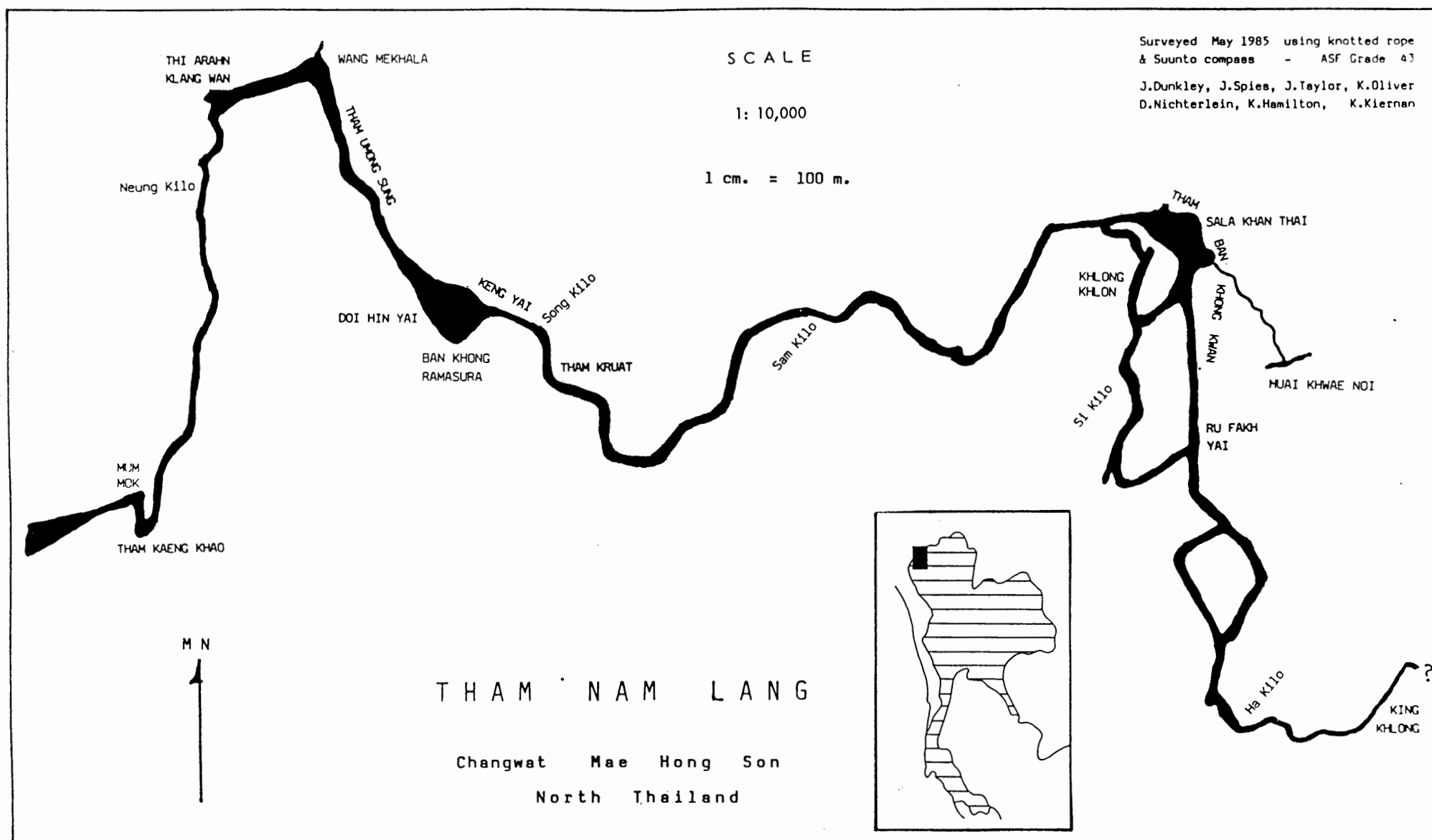
After a night in the comparative luxury of John and Diu's new house at Ban Tham we checked out the Spirit Well, a large collapse feature walled in on all sides, with a 100m high cave entrance visible on one side. Lying close to but 500m above the course of the cave, this had real promise. Kerry and Kevin abseiled down about 80m and demonstrated conclusively that large cave entrances can be disappointing.

Back at Ban Tham, 2 in the morning and Kerry is ill, very ill indeed. We waited until 7, then took him to a small clinic in the nearest village. There was nothing they could do so we took off across the mountains, 3 hours to the nearest hospital at Pai, where doctors correctly diagnosed cerebral thrombosis. Next day, another 4 hours and 4000 bends to Chiang Mai and a good hospital. Six days of anguish, telephone calls, putting on of the hard word, and despair in all before Kerry was delivered to an ambulance at Brisbane Airport. Exacerbated by dehydration and fatigue, something as serious as thrombosis is unlikely on a remote area expedition, but the possibility of evacuation has to be allowed for in planning. All the previous trips have used local buses for transport; how we'd have got by without John Spies and Diu Intikat and their Land Rover, I just don't know. Not to mention Ken Grimes, who was the only person we could reach to handle the Australian end of things. Thai International Airways was also very understanding.

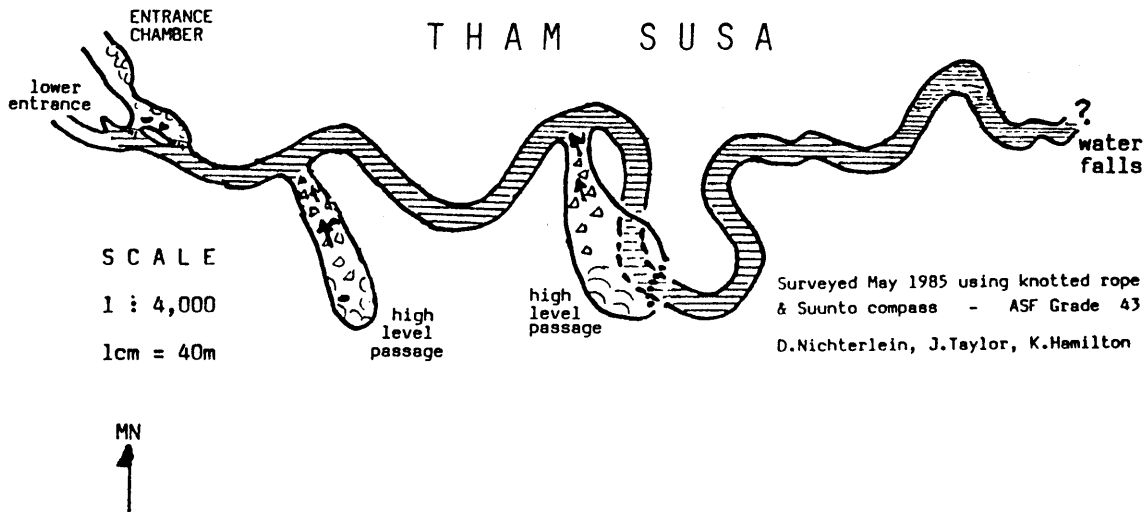
That was about the end of the trip, though there are other tales to tell. There was, for example, the cave deep in the forest with tracks of a tiger in the entrance chamber. Later we had a pleasant chug through the limestone on the River Kwai (Khwae) railway west of Bangkok. By looking at tourist caves at Chiang Dao and near Ratburi and Kanchanaburi, Keith was able to justify his 'onduty' status to the Tourism Commission of NSW and the tax man, and Kevin was able to contrast the Nam Lang karst with tower karst further south. On this trip sufficient work was done to justify a preliminary scientific paper (*Helictite* 23 (1), in press), and to establish an organizational pattern for a yet larger expedition. Exploration prospects are still excellent, there is a wealth of potential scientific work and there are about 1,000 dolines awaiting attention, ranging in size up to the massive Nam Lang polje which drains 425 sq.km. No less than 312 of these are at least 20m deep and the Nam Lang polje is about 400m deep! Susa Cave lies nearly 800m below the dolines on the plateau - there is a connection? Circumstances prevented the planned investigation of where the water sinking in Mae Lana polje goes; this promises another a large cave since the water is potentially highly aggressive and there's plenty of it. Finally, the whole area has a compelling beauty and a mystique heightened by the exotic environment and by the ubiquitous opium poppies.

Tham Nam Lang, at 7km already the longest cave reported on the mainland of South-east Asia, is hopefully ready to reveal another 5 or 10km to a well organized assault. Of course, the Lahu and even the Thais would say that assaulting the Spirit Well, we have incurred the displeasure of the phi (spirit) of the cave. In particular, we may have offended Kwan, the spirit in the head responsible for health, wealth and general comfort. Kwan has attacked Kerry. Personally, I think Kwan lives in the newly discovered upper levels of Tham Nam Lang (at Tham Ban Khong Kwan - the Cave Home of Kwan), and will be appeased by finding that the cave and all the features in it have received Thai names rather than the conventional allusions to western speleological mythology. What's more, perhaps Kwan tempers his capriciousness; he seems to be helping Keith give up smoking.

May 1986: Bangkok again. An expedition of 10 or 12 including all the 1985 contingent.



twice as much time, twice as many people
twice the length of cave. But be warned.
Kwan is waiting.



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KUBLA KHAN

by Bob Woolhouse.

A.S.F. has given \$100 of your money to Northern Caverneers to help with our construction of a mud free route to the Forbidden City.

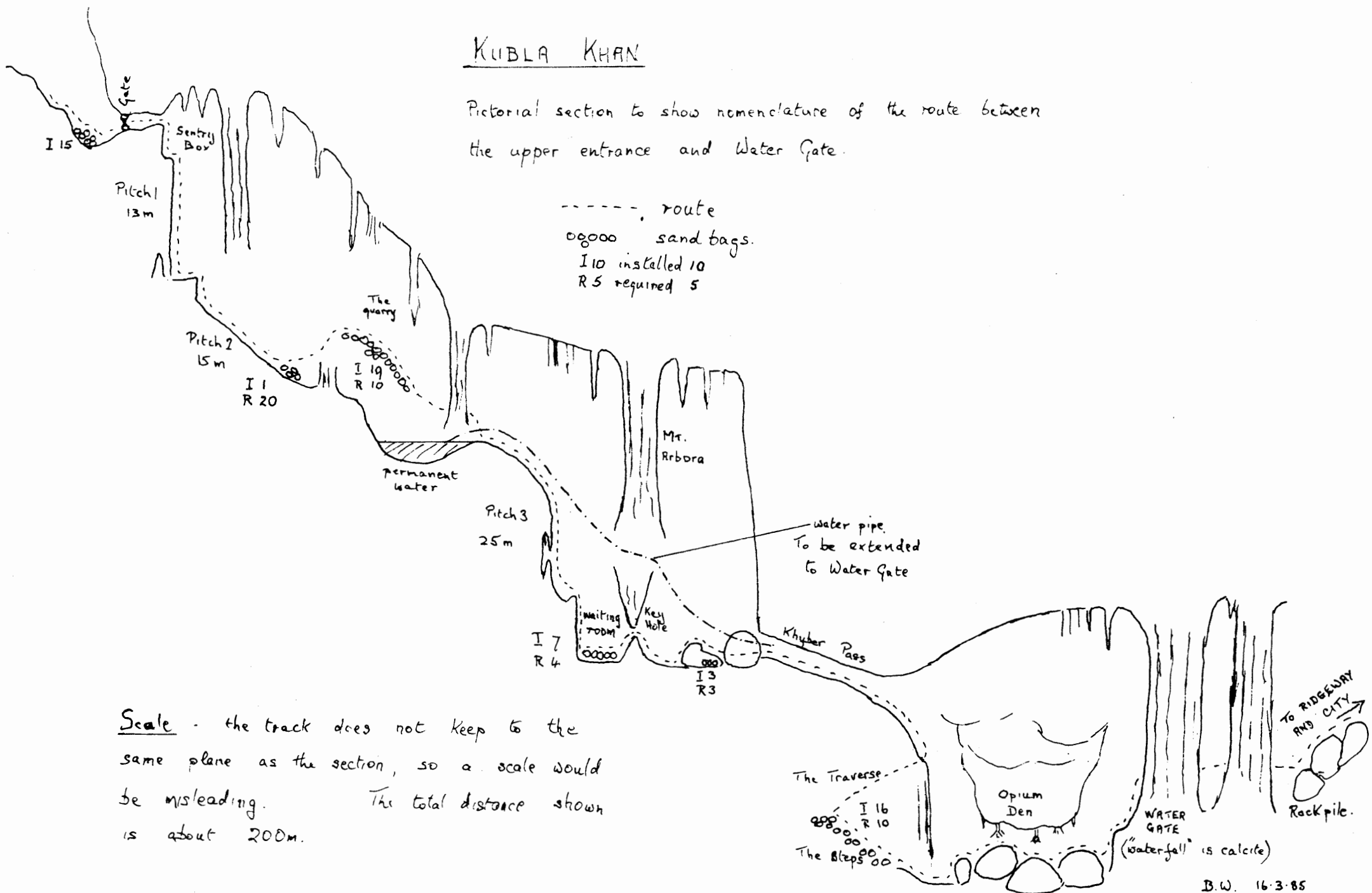
The following shows what we have done with it up to March '85.

			<u>Cost:</u>
<u>Sandbags:</u>	- Filled and positioned	61	scrounged
	in stock.	50	from D.M.R.
			-
<u>Spades:</u>	-	4	scrounged
			-
<u>Notices:</u>	- Felt-pen on A4 paper		
(temporary)	laminated in plastic.	12	5 paid for
			7 scrounged
			\$11.80
			-
<u>Markers:</u>	- The rock is brittle. All		
	permanent fixtures go		
	into drilled holes.		
	Reflective tape	1 roll	bought
			\$ 4.25
	Al strip, Al nails		scrounged
			-
	1/8" masonry drills		borrowed
			-
	19mm reflective discs	135	source best
	received 15.3.85 from		not enquired
	Norm Poulter		into
			-
25mm pressure hose, lengths 15m,			
10m, 25m			scrounged
			-
Fittings for joining above, tap etc.			bought
			\$16.50
Stiff garden hose to siphon into above			scrounged
			-
20m flexible hose with jet, to fit tap			borrowed
			-
Scrubbing brushes - bill not presented	4		(Kendal)
			-
Wine casks. 10 cost \$50. (For small			
washing jobs away from hose)			Presented by N.C.
			-
		<u>Total:</u>	<u>\$32.55</u>

We anticipate no problems with spending the rest.
 Wine casks need frequent replacement, but N.C. are working on this. We haven't completed bagging the track, and we've done little permanent marking yet. After that comes the major formation clean up. Maintenance, of course, will be a permanent chore.

KUBLA KHAN

Pictorial section to show nomenclature of the route between the upper entrance and Water Gate.



OPEN LETTER TO KUBLA HELPERS

OPEN LETTER TO KUBLA HELPERS

Particularly to Andrew Pavey, Nicholas White and Jim Campbell, who have offered to make notices, maps and markers. Up to now, Norm Poulter is the only person we've needed to call on in this respect.

May 1985.

Dear Andrew et al.,

As you know, we were experimenting with felt-pen notices on A4 paper laminated in plastic, to test audience reaction and find exactly what we needed for permanent notices. Where possible we tried to judge the success of the system by having cavers unfamiliar with the route attempting to lead us through. Much to our surprise, we found that many parts we thought were obvious and not worth marking, were in fact not obvious at all. Our rerouting over flowstone between pitches 2 and 3 (see diagram) is marked with flagging tape, and gives no trouble. However, without both precise

instructions and markers, pitch 3 goes into a muddy area and misses the Waiting Room completely. Ken Boland decided (quite correctly) that Khyber Pass was about to develop into an overhang like that on pitch 3, and traversed up to the left into an impossible position well above The Traverse. Ken will be interested to hear that the marker he fixed at the true start of The Traverse was seen by the next visitor, but the crack of The Traverse was not recognised as a route. Apparently, a descending traverse was made towards the sandbags which were visible half way down the Steps. This was described as "rather hairy". It's a slow business drilling to fix markers, and we still haven't got any partway along the Traverse.

Someone suggested hammering in masonry nails. These give an unpleasant vibration to the fingers holding them, and eventually the rock splits and the nail drops out. The present system is to drill a 3mm hole about a cm deep and use a 4mm fluted aluminium nail. Ordinary adhesive tape reflectors stuck to aluminium strip were tried, but Norm's reflective discs (with a hole in the centre for the nail) had a better visi-

bility. Also being white, they are indistinguishable on photos (but not to the naked eye) from reflective calcite crystals.

We had hoped that the authority to issue permits, which was given to Mole Creek NPWS for the ASF Conference period, would be quietly allowed to continue indefinitely. When it was suddenly withdrawn, I took the opportunity to write a carefully phrased letter to the Director to the effect that N.C. were prepared to continue with the work in Kubla and requested help with some of our problems. In a helpful reply we were given an open permit for 1985 and offered the services of the Operation Officer in Hobart in making and laminating notices. We also have the loan of Mole Creek's cordless drill, although the service is so hard up it can't buy us masonry drill bits in the size we use.

We may have set a useful precedent in that the Director is allowing an ASF member club to control conservation measures in a restricted access cave. It is very important, however, that the NPWS, not the club, should control the issue of permits.

Coming back to the notices, The Service Operations Officer (Tony Blanks) turned out to be very co-operative. He photocopied my sectional sketch of Kubla and double laminated a copy (his suggestion to make it stiffer) which I intend fixing with a brief explanatory notice at the upper entrance to the cave.

After a lot of messing about, we now know what we are trying to do, and we would be able to offer specific projects for which a club or group could take responsibility. For example, no complete survey exists for the whole cave and the plan in "Vertical Caves Guide - Tasmania" is positively misleading.

Finally, thanks everybody -

Bob Woolhouse (003) 947326

for

Northern Caverneers.



David Stirling in the Mole Creek Below Eldorada.
By Bob Woolhouse.

WHAT OTHERS DON'T KNOW COULD BE MINE

by Graham Pilkington, CEGSA.

The ASF and its member clubs are a major source of speleological, and hence karst, information within Australia. The geological organizations have finally realized the fact.

If we are to influence the geological and mining people, we must show that we know what we are talking about. Most of these people can be influenced into our way of thinking (such as mining for limestone in caveless areas!) If we are an input to the geologists reference works. We need minerals to continue our lifestyle, but can direct the search away from caves and avoid conflicts of interest by influencing the mineral search before the miners become \$ committed.

One of the major contributors to a geologist's and miner's selection of reference material is the AUSTRALIAN EARTH SCIENCES INFORMATION SYSTEM (AESIS). This national earth sciences data base of all geological material relevant to Australia is severely lacking in information on karst and caves. It encoura-

ges workers and organisations in Australia to contribute to the natural information resource by sending a copy to the SOUTH AUSTRALIAN DEPARTMENT OF MINES AND ENERGY (SADME) or send entry forms (as per sample shown; they use 1610 SURFICIAL GEOLOGY for karst and caves) to the coordinating body, the AUSTRALIAN MINERAL FOUNDATION (AMF).

The organisations entering most data for the collection, and referencing the world's literature to onto AESIS are the state and Territory Government bodies, universities, societies, companies and the AMF. Does YOUR society contribute?

Please don't complain about your caves being enlarged into the great outdoors if you haven't sent relevant information to AESIS! The relevant addresses are:

Librarian	Information Services
SADME	Manager.
P.O. Box 151	AMF
EASTWOOD SA 5063	Private Bag 97
(08) 274 7500	GLENSIDE SA 5065
	(08) 79 7821

SAMPLE ENTRY

1550 SEDIMENTARY GEOLOGY

ENTRY NO.	Q79-10	TITLE	The Proterozoic Barney Creek Formation and some associated carbonate units of the McArthur Group, Northern Territory.
AUTHORS	Brown, M C Claxton, C W Plumb, K A		
SOURCE	Bureau of Mineral Resources, Geology and Geophysics. Record 1969/145, 59 pages; 12 fig, 15 plates, 40 ref, 5 tables (1969)		
*NOTE/AVAILABILITY	[Available at all open file centres]	ANNOTATION	The stratigraphic setting and depositional environment of a massive sulphide deposit - the HYC.
SUBJECT DESCRIPTORS	Syngenetic deposits/ Sedimentary environments/ Stratigraphy - NT/ Proterozoic/ HYC deposit/ McArthur Group/ Barney Creek Formation/ Northern Territory: McArthur River/ SE5303		
MINE/DEPOSIT/WELL NAME	LOCALITY	MAP SHEET	

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- Where there is no such indication the document is available either from the source shown in the citation, or through conventional library sources or AMF.

WEEBUBBIE - A CHRISTMAS CLEANUP

by Norm Poulter.
S.R.G.W.A.

Weebubbie Cave 6N2, a declared water reserve (19713) and aboriginal site is one of the most widely known of the Nullarbor caves and has had a couple of cleanups over its history as a water reserve for the nearby Eucla Roadhouse. The last was apparently in 1978 involving members of the Western Australian Museum.

Sometime between late 1982 and December 1984, the pump and active piping was removed from the cave when the roadhouse sank a bore closer to their complex, thus leaving a view of the main lake free of unsightly pipe.

However - there are lots of unsightly pipes, drums, timbers and other associated junk about 5-10m below the surface of the lake in full view of the cave's many visitors. This junk is a relic of previous generations of administrators of the Eucla roadhouse. There is apparently no provision in the terms of the water reserve agreement that compels the roadhouse management to clean their junk from the cave.

Since May, when members of WASG deposited visitors books in several Nullarbor caves, Weebubbie has had 147 visitors (May-Sept. 1985), an enormous numbers

by Nullarbor standards. Despite the number of visitors there is surprisingly little fresh rubbish in the dry part of the cave - but rubbish there is and everyone knows that rubbish breeds rubbish.

SRGWA is co-ordinating a cleanup of the cave over the Christmas, New Year period (Dec.28 - Jan.4) in an effort to remove all the rubbish from the cave, both wet and dry. Negotiations are in progress with the Water Authority of W.A., the cave managers, for the loan of equipment to make it easier to haul junk out of the doline.

The SRGWA Navy in the form of Norm Poulter's 5m Canadian canoe will be assisting in salvage operations (top that VSA).

In order to accomplish the cleanup, SRG is calling for volunteers including dry cavers, snorkellers and SCUBA divers to assist and for those wishing to participate to contact Norm at 18 Hammersley Ave, Morley 6062 (H 09 2762495 W 09 380 2770) before the end of November. It will be a great chance to socialize and go canoeing on the spectacular Weebubbie Lake.

* * * * *



Would You Like to Ride in my
Nullabor Canoe?

NULLARBOR REFLECTIONS

N. Poulter

S.R.G.W.A.

It was once thought that the main security of the Nullarbor caves lay in their remoteness from the principle points of habitation and the highway.

With todays mobility and wide diversity of cave location information, this is sadly no longer the case. As a result, damage to the caves is increasing. In May 1985 members of WASG installed visitors book in several caves namely,

Cocklebidy
Murra-El-Elevyn
Nurina
Mullamullang
Abrakurrie
Weebubbie

Needless to say, the only data obtainable is from those who chose to write in the books. Visitation data between May and September 1985 is listed below;

Cocklebidy	45	20kgs of rubbish removed from surface and cave environment. Three fires have been lit at various times by the lake's foreshore.
Murra-El-Elevyn	20	No new rubbish noted.
Nurina	29	The Tararus Mullamullangensis has now been found in this cave. It is recommended that this spider and the amphipods be left undisturbed.
Mullamullang	no data.	The visitors book is traditionally at the Dome. If there is one near the entrance we didn't find it. See below.
Abrakurrie	61	People from all over the place including the Ceduna Police have been here. The The Eucla Police came by on a "routine" patrol!
Weebubbie	147	A potential? tourist cave?

The main thrust of this article is in relation to Mullamullang. This author has been to the cave on several occasions between 1972 and 1985. The damage to the Coffee and Cream section of the Easter Extension (in particular) between 1972 and 1976 was negligible. In 1981 however several carefully placed hand and footprints were noted, possibly for the purpose of photography or simply curiosity.

By 1985, the first section of the Coffee and Cream must be considered at least 30 -40% destroyed - caused by the widening of the access tracks to 'highway' status, damage to the new shoulders of the tracks by footprints and 'baggage' and unnecessary side tracks.

Strangely enough - the Salt Cellars appear relatively un-damaged.

Who is doing the damage and what can be done about it?

There has been a lot of publicity given to Mullamullang (magazines, maps etc.) in recent years and judging by the type of junk removed from the first 'mile' of the cave since 1981 leads one to assume that thoughtless members of the public are responsible - but are they?

The manager of Madura Station maintains that staff (and visitors) of the Madura Roadhouse rarely venture beyond the Southerly Buster as they don't want to tire themselves before the hard climb back up the entrance doline. He also maintains that the Roadhouse staff always notify the Station before and after visiting the cave and that there are no un-authorised visitors although he was critical of those who check in but infuriatingly do not check out - wasting Station staff's time in unnecessary searches. So where does that leave the caving fraternity, the Nullarbor and Mullamullang?

In the long term we should agitate for better protection of the Nullarbor as a whole, but in the short term perhaps we should refrain from referring in public (magazines, talks, etc.) to sensitive and significant caves such as Mullamullang, Nurina and Thampanna by name and disclosing their approximate location (N of Madura) while at the same time smartening up our own act in seeking written entry permission from the

various land managers (to be found in the CEGSA Nullarbor Atlas) and making sure all participants comply with accepted cave and surface practises and encouraging local

managers to permit access only to those who have sought written permission through recognised caving or scientific organisations.

WEEBUBBIE

'Weebubbie Project'
81 Hammersley Ave.
Morley 6062

Dear Speleos.

If you members are at a loss for something constructive to do over the Christmas period then we may have the answer.

We are organizing the cleanup of Weebubbie Cave, located a few kilometres west of the WA border on the Nullarbor Plain, about 14 kilometres north of Eucla.

To undertake this project in the timespan (Dec 28 - Jan 4 excluding travel time) we obviously need help.

As most of the rubbish is under water (5-10m open water) we require the assistance of snorkellers and SCUBA divers. The rubbish consists of

PVC and steel water pipe, oil drums, electric cables and timbers. It is envisaged that the steel pipes will be cut into manageable lengths once it is out of the water.

We are arranging the loan of hauling equipment from the WA Water Authority to make it easier to get the rubbish out of the cave.

We acknowledge that this notification does not give people much time to organize their holidays but that could not be helped. We only received the go-ahead recently.

Weebubbie needs your help NOW. Many hands make light work. Indicate your intention to attend, immediately.

ARE YOU A POTENTIAL CONSULTANT?

by Guy McKanna.

The Australian Speleological Federation Incorporated invites members who have detailed knowledge of specific aspects of karst utilization and management, to register as karst consultants for publication in the Federation's DIRECTORY OF KARST CONSULTANTS.

This DIRECTORY will be distributed to selected Government departments and corporate organisations.

So if you are an:--

Archaeologist, engineer,
biologist, international explorer,
botanist, geologist,
builder, historian,
chemist, photographer,
or someone else who knows lots about some aspect karsts, write to the SECRETARY P.O. BOX 338 BROADWAY N.S.W. 2007, for further details and a form to fill in... you could get some work from it and go caving at the same time.

BOOK REVIEW

Caving Practice and Equipment - edited by David Judson; published by David & Charles Ltd, Newton Abbot, Devon; 238 pp. Cost approx. \$30.00

Reviewed by John Webb, Brian Finlayson and Peter Ackroyd, Victorian Speleological Association.

The dust jacket of this book claims that it is "a guide to all aspects of the exciting sport and science of caving", with "everything that the practitioner needs to know covered in detail". However, the book falls short of these ideals because it suffers from two major weaknesses. The most glaring of these is that the book was written by British cavers for cavers in Britain. Despite the general title, large sections of the book have no relevance to anyone outside Britain. Secondly, the book attempts to cover absolutely every aspect of caving. As a result, many of the chapters are short to the point of being skeletal, and some even lack references.

Nevertheless, "Caving Practice and Equipment" does cover many topics which are relevant to Australian cavers, and the black and white photographs are in general excellent.

As the book has such a broad scope, individual chapters are reviewed separately (initials after each chapter title refer to the reviewer of that chapter).

1 - Clothing and personal equipment (JW)

This chapter gives a broad general coverage of the topic, but is rather brief. There is little discussion of battery charging, sealed lead-acid cells do not rate a mention, and British cavers do not seem to bother about carrying three independent sources of light (even carrying spares for cap lamps is regarded as unnecessary). Amazingly, paper-mache helmets are mentioned almost approvingly, whereas climbing helmets are "too warm and clumsy".

2 to 4 - Ladders and lifelines; SRT equipment; SRT techniques (JW).

These chapters contain a good deal of useful information, including a number of handy hints that everyone can use. Reading this section of the book is an excellent way of revising your ladder and SRT knowledge; there are good sec-

by John Webb.

tions on belay anchors, bolts and cow's tails.

However, some things have been omitted or covered only briefly (eg. whale tails, rope-walking), and there is no discussion of the strength of bolts or their deterioration with time. In my opinion the rescue section overemphasizes complicated mid-rope rescue techniques at the expense of simple hauling systems which can enable a caving party to carry out a self-rescue.

5 - Discovering caves (PJA)

This chapter could be better titled "Digging for caves", as it assumes that the potential cave site has already been discovered. Given this limitation, the chapter covers digging thoroughly, with constant reference to safety.

6 - Cave diving (PJA)

Written by Martyn Farr, one of the best known cave divers in the world, this brief chapter comprehensively reviews the basics of cave diving, at all times reminding the reader of the inherent dangers of this activity and how best to minimize them.

7 - Exploration of abandoned mine workings (PJA)

This chapter has little relevance for Australian cavers, as the majority of abandoned Australian mines are best avoided.

8 - Water tracing and flow recording (BLF)

Despite the fact that this chapter should be of interest to cavers everywhere, it is one of the least useful sections in the book, as much of the information presented is out of date and inaccurate.

A great variety of tracing techniques are mentioned (even dog biscuits), most of the information being drawn from Drew & Smith (1969), which is now seriously out of date. The dyes recommended are fluorescein and pyranine (consistently misspelt pyramine), whereas Rhodamine WT is now the most widely used recommended dye, with lissamine dyes and the optical brighteners coming into more widespread use. The chapter does not mention quantitative detection of fluorescent dyes using a fluorimeter, although this is how most dye tracing in limestone aquifers is now carried out.

The section on flow recording contains a jumble of confused ideas and very little useful practical information. For measurement of stream discharge any interested reader would do better to consult a good engineering hydrology textbook.

9 - Instructed caving in Britain (PJA)

After starting, quite correctly, that caves are vulnerable resources which would be quickly destroyed if overused, this chapter then ignores this warning by telling us how to take large school groups caving, and how to become a 90-day wonder caver by attending an instructor's course. It ends, predictably, with a free plug for the Whernside Cave and Fell Centre.

10- Photographing caves (PJA)

This subject is one which cannot really be learnt from a book, but the author, J.J. Rowland, points out the usual mistakes made by novice cave photographers. His description of lighting methods and techniques is sound, as demonstrated by his own excellent plates spread liberally throughout the whole book.

11- Surveying a cave (PJA)

This chapter only describes grades 1 and 3 cave surveys in any detail. Although the little information given is very sound, you will need to refer to "Surveying caves" (Ellis, 1976, B.C.R.A.) for the finer points of surveying.

12- Communications (PJA)

The author of this chapter, Bob Mackin, is famous as the inventor of the "Molefone", however, he's not revealing any of its secrets here. Apart from a little on the use of inductive loops for cave surveying (note the error on p.179- for "signal minimum" read "signal maximum") there is not much practical information in this chapter.

13- Expedition planning and organisation (PJA)

This chapter contains much valuable information for prospective organisers of large expeditions; the author, Andy Eavis, has organised enough major trips to know what he is talking about.

14- Food for cavers (PJA)

Trips into British caves rarely exceed 15 hours, so the suggestion that only sugar-rich snacks be taken into the

cave may be valid.

15- Cave conservation (BLF)

This chapter discusses both internal threats to caves (arising from the activity of cavers themselves), and external threats (due to quarrying, etc.)

The responsibility for protection of caves against internal threats is considered to lie with the original discoverers. Restricting access by locked gates is specifically discouraged in favour of setting up marked pathways with explanatory notices. Where restrictions are necessary, these should not be on the total number of cavers permitted to enter, but rather on the size of any individual party (preferably six or less). Approved leaders may be needed for sensitive caves. The author quite rightly deplores the practice of arbitrary restrictions on access except in the most extreme circumstances.

The sections on external threats and statutory protection contain little of interest to non-UK cavers, although it should be noted that the legislative protection available in Britain is considerably greater than that in many Australian states.

16- Access to caves (BLF)

This chapter is largely devoted to access conditions in the main caving areas of Britain (caves in the Republic of Ireland are omitted). It is interesting to note that many landowners in the UK charge a "small fee" for access to caves on their property, and some require indemnity forms to be signed.

17- Accidents to cavers (JW)

This extremely interesting chapter contains a statistical breakdown of caving accidents in Britain. In an average year (eg. 1980) there were 41 incidents involving 94 cavers and including 4 deaths. Most call-outs are for novices, and about half involve injury or death. Of the call-outs in the latter categories, 61% result from falls with falls from a ladder whilst not protected by a lifeline being by far the most common. Only 6.5% of rescues involve SRT in some respect. Deaths from exposure appear to be a thing of the past (the last was in 1969), due to the advent of wet-suits and fibrepile.

The chapter also contains a very helpful up-to-date list of rescue gear, eg. industrial safety harness, neoprene exposure bag, airway rewarmer. Much of this equipment would be useful for rescues in the colder, wetter Australian caves (suppliers

are listed in an appendix).

18 to 20 - Cave biology, geology and Archaeology (BLF)

These three very important subjects are covered in a total of 6 pages (including one page of uninformative photographs), and the geology chapter even lacks references. If you need detailed

information on any of these topics, you will have to look elsewhere.

To sum up, "Caving practice and equipment" contains a good deal of useful information, but this is interspersed with sub-standard material. The book is probably worth buying for your club library, but don't bother about a personal copy.

EDITORIAL

NOTES ON NEWSLETTER DISTRIBUTION:

Over the past year I have heard many grumblings by members in regard to the non-appearance of the "ASF Newsletter" so I thought I would write a few words to explain briefly what the problems have been, current problems and possible ways of overcoming these problems.

As you are probably aware by now the name has changed from "ASF Newsletter" to "Australian Caver". This is not a new magazine but a continuation of the old, under a new name. It will continue to be published in the same sequence as the "ASF Newsletter", as decided at the last committee meeting.

Recent problems pertaining to the production of the newsletter have been:-

Editorial Delays - previous editors have had a lack of material to print and although we now have some articles, the usual teething problems which can happen with a change in editorship have occurred.

Distribution - Issue #106 was the last under the "ASF Newsletter" heading and also the last issue for 1984 and as such was sent to those on the 1984 address list. Issue #107 was the first issue for 1985, and the first under the "Australian Caver" heading. It was sent to those on the 1985 list.

Address Lists - Some clubs are organized and send me an updated list early in the year. However, many don't seem to be able to handle this and send the lists to previous editors as well as being many months late. Also we no longer have easy access to the computer our address lists are on, so this has caused a delay in making changes.

As a result of my observations I propose to implement the following changes which in my view will benefit all clubs and their members.

1. The Newsletter year will run in line with the financial year ie. 1st July to 30th June during which time 4 issues will appear.
2. Club address lists should be sent to me (not the ASF letter box) by the 30th June each year. Any received after this date will not be updated. Minor updating will occur in December each year, mainly consisting of address changes.
3. Copy deadlines have been set by the editor and these will be adhered to. Any article received after this date will go in the next issue as far as possible.

If there is no strong objection to these changes they will be implemented immediately as I feel it is the only way of getting "Australian Caver" to members on time.

by Ian Mann.

ACKNOWLEDGEMENT

I would like to acknowledge the author of the article on Hypothermia published in Australian Caver No. 107. Thanks must go to the author, Rick Pinnock, for his permission to reprint his article.

My apologies for the lateness of Issue No. 108. Hopefully we will have our typing problems settled by the time you read this issue.

Kerrie bennett

DOWN UNDER ALL OVER

SRGWA:

The Group has again been quiet but fairly active over the last few months.

A one day Nullabor Station trip, aided by three international hitchhikers, failed to find a spider that Mike Gray of the Australian Museum had asked Norm Poulter and Robert Poulter to look for. A new small cave, apparently unknown was found in the search area.

The cleanup of Yallingup tourist cave was completed during May - a report should be available for publication later in the year.

The Group is staging a two week Nullabor trip during September to assist the UWA zoologist Dr. Brenton Knott collect the final bits of data necessary to finish off the description of the amphipods that SRG found in Nurina Cave in 1982. A search for aquatic life will also be made in most of the other water table caves of the western Nullabor.

An active interest in the restoration of Tasmania's Kubla Khan Cave has led to the Group supplying the Northern Caverneers with reflective trail markers. The Group now plans to manufacture these markers as a fund raising venture. Made from RRS, the markers will be in 25mm disc form with a 3.5mm hole in the centre. Available in white, red blue and yellow and combinations of white and red as well as blue and white, with white predominating, the discs will be available for 10¢ each. Larger diameters can be produced subject to negotiation.

N. Poulter.

SUSS:

Sydney University Speleological Society has been busy caving as usual.

Some members attended the Spel-eomania Conference, but little caving was engaged in on this occasion. Though the socialising with friends, old and new, was enjoyed by all.

Meanwhile on the mainland, other members went caving on the

Nullabor, S.E. South Australia and various parts of N.S.W.

February saw an influx of new members with the beginning of the student year. Subsequent instructional field days ensued while beginner trips to the more popular areas followed throughout March and April.

Easter saw many S.U.S.S. members at Cooleman where a few as yet untagged caves were noted. CP10 was pushed towards an untagged resurgence on the river, but because of imposing storm clouds threatening to flood the area this was abandoned.

Whilst at Jenolan, a bolt traverse was established to a promising hole, high in Spider Cave. However, this hole led to only 20m of muddy passage. S.U.S.S. has pushed virtually all the "possibles" at Spider in Jenolan overall; with the exception of some nasty digs. The underground river still evades us. The camping issue has not helped those wishing to do "extended pushes", and I would say little else will be discovered at Jenolan, till (if ever) camping here becomes more practical.

G. McKanna.

WASG:

Yes we are alive and! and kicking!

Not a lot has been heard from the 'West' in the recent past but things are about to change. There have been a few 'glitches' in the Committee department but it is running smoothly now.

Several new initiatives are developing; the most exciting (for us) is the proposed Nullabor Expedition to be held next Easter. (Interested persons are most welcome to contact the organizers via the Club).

Rauleigh Webb has obtained funding from the 'Bicentennial people' for a project called "CAVCARE" which aims to establish ongoing conservation and management strategies for West Australian caves.

The "WESTERN CAVER", our official quarterly publication has evolved into

an annual to be published in April each year, starting in 1986. A Newsletter called the "W.A.S.G. INFORMER" spreads gossip on a monthly basis.

Several new caves have been discovered: Ken Boland was responsible for the exploration and surveying of a new cave called "OOPS!THURT" (now gated). The W.A.S.G. have also been actively exploring recent discoveries. Connely's Cave has now been gated.

The new land management authority, Department of Conservation and Land Management (C.A.L.M.) has appointed a W.A.S.G. member (Rob Klok) as a Caves Ranger. This represents a major step forward in cave conservation and management in this state.

Clyde Graham.

TESS:

The onslaught of 1985 has induced much reluctance among members of TESS. With the new financial year, has come the horrendous reality that yet more caves would be discovered.

Negotiations with the Conservation Commission N.T., early this year opened the Kintore Reserve to our prying eyes. Initial investigations revealed several caves of immediate interest. One is previously recorded and known to the ASF. 8K2 - otherwise known as Kintore Cave. Overall assessment would indicate cave numbers in the vicinity of 100-200. The definition of cave being a cavity which reaches beyond the penetration of natural light. This excludes wombat burrows in clay loam!

Oolites, with approximate dimensions of golf and baseballs, were found in one such cave on the Reserve. The weight of one such oolite was 500grams, rather large by any standard. Dissection of samples taken revealed that one oolite was formed around a small shell and the other around a sand grain. Both specimens are being dated in Melbourne. More information may be obtained from Rimstone No.3 (Society Newsletter).

Work on 8K26 on the Cutta Cutta Reserve is continuing. The survey on the L.H.S. is now complete and

recommendations will be forwarded to the Conservation Commission. A recent trip to the watertable (loc11) revealed a level drop of one metre. The level drop exposed a new passage. The passage was followed for approximately 150 metres before the air space reduced to 20millimetres. The water level is expected to drop even further towards the end of the dry season. This should allow further penetration. If not, the possibilities of diving will be explored.

The numbers of blind shrimp (*parisia unguis*/*Parisia gracilis*) in the water at the time of exploration would indicate the breeding cycle had just completed the hatching phase. The juvenile content in the population outnumbered the adult content by 10:1. The average adult size was 14mm, whilst the average juvenile size was 6mm. It would appear that patterns of seasonal movement within 8K26, of *Macroderma gigas*, are emerging, although this has only been observed over a two year period. It would also seem that *Macroderma* individuals within the system have a particular area set aside in which to die. This has only been assumed by the larger numbers of complete skeletons in one particular roost. It may be coincidence but only future observation will conclude satisfactorily.

KREMMEN.

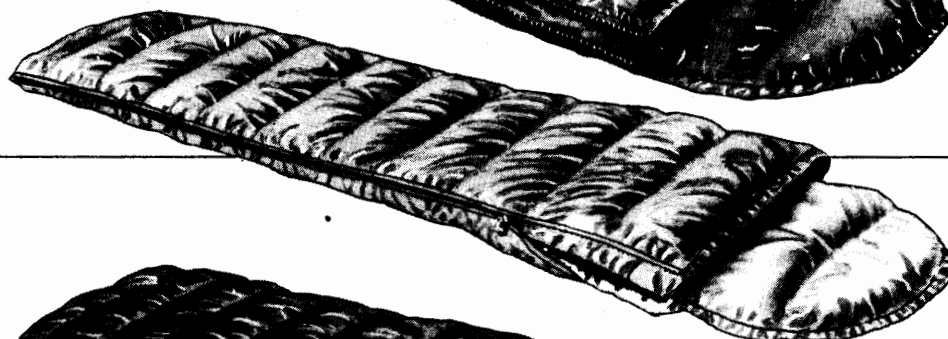
N.C.:

We have done other things besides working in Kubla, but none of our exploration has turned up any new caves in the Mole Creek area, so the Kubla report can stand as our contribution to this issue.

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HIGH PLAINS	1.80 kg	Box Wall	1100 g	Featherdown	-5°C	Full Zip	34 x 23
HOTHAM	1.60 kg	Box Wall	700 g	550 Loft Down	-5°C	Full Zip	34 x 23
MELALEUCA	1.55 kg	Box Wall	800 g	550 Loft Down	-15°C	Side Zip	34 x 23
BOGONG	1.60 kg	Box Wall	900 g	550 Loft Down	-15°C	Full Zip	34 x 23
SNOWLORD	2.00 kg	Slant Wall	1100 g	550 Loft Down	-25°C	Side Zip	37 x 27

All bags fit people to 190 cm (6ft 3in) tall; bags to fit people 205 cm (6ft 9in) are available in most models.

*Temperature Ratings are a soft measurement — they represent an average expected performance level for a standard person although individuals will differ by up to $\pm 10^{\circ}\text{C}$. Paddymade reserves the right to alter these specifications without notice.



Paddy Pallin

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