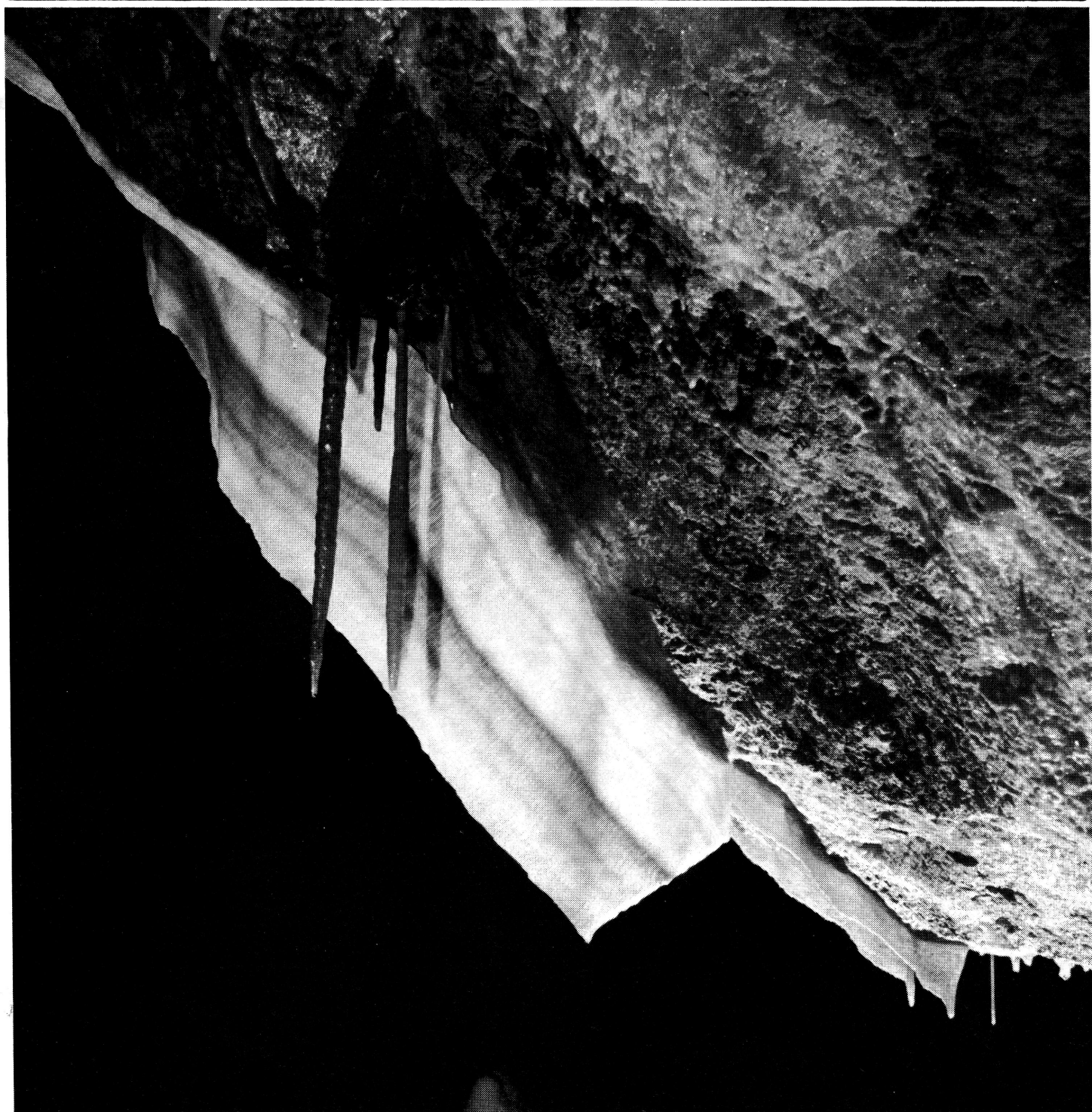


AUSTRALIAN CAVER

THE AUSTRALIAN
SPELEOLOGICAL QUARTERLY

No. 125

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AUSTRALIAN SPELEOLOGICAL FEDERATION INC.

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DEADLINES FOR FUTURE ISSUES:

No. 126: end Dec 1990

No. 127: end March 1991

All articles, reports, photos and reviews are welcome for publication and should be sent to Ian Mann, 28 Stephen Street, LAWSON NSW 2783.

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Cover Photograph: Shawls in Galadriels' Gift Extension, Fairy Cave (B5) by P Ackroyd

DOWN UNDER ALL OVER:

Metropolitan Speleological Society: By David Stuckey

Our society has been quite active since you last heard from us. We have visited Tasmania 3 times, caving at Ida Bay, Junee-Florentine and Mole Creek. As our SRT expertise has improved we have progressed to more demanding caves with descents of the major vertical systems of Ida Bay. A rockfall incident in "Big Tree Pot", which nearly claimed one of our members, has taught valuable lessons. The co-operation and assistance received from the Tassie Cavers has been outstanding. Our activities at Yarrangobilly have not been restricted to the caves. Major repairs to the roof and walls of Cottrills Cottage were completed together with new window panes and floorboards. Underground, our members removed all the wire netting in "Castle Cave" restoring this cave to a more natural state. Other objectives have been the cleaning of decoration, and location and subsequent blockage of numerous bypasses to the many gates. At Jenolan, we have been digging in "Winch Cave" J290. This cave continues to impress with its potential. Our links with Sydney Stereo Camera Club has 2 of our members photographing in 3-D with spectacular results, particularly from "Kubla Khan". Other trips undertaken by our members have been mountaineering in N.Z. and walking in Nepal. Closer to home, our members have removed left-over materials from the bottom of the 110m "Big Hole" near Wyanbene, thrown down by tourists following construction of a viewing platform by N.P.W.S. Cave rescue weekends have been well attended as have many climbing and canyoning trips undertaken during the summer months. The society is assisting financially the production of a book by Ken Keck and Barry Cubitt on the local history of the Trunkey Creek, Abercrombie area. Within the next 2-3 months, our society will proceed with incorporation following an arduous re-write of our constitution.

Speleological Research Group Western Australia: By Norm Poulter

The restoration project carried out in the Calcified Tree Root Chamber of Calgardup Cave in the Leeuwin-Naturaliste National Park south of Perth during July was 60% funded by CALM and 40% by SRGWA. In an effort to direct visitors away from soil cones, fauna, decoration and the tendency to continuously explore short distance dead-ends that eventually led to all sorts of damage, 40m of yellow PVC chain was strung between 50mm PVC stormwater pipe. The work was carried out during the course of one rainy day by members of CALM, WASG, 7th Day Adventist and SRGWA. A small explanatory sign was placed in the chamber detailing the necessity of such action. One month later it was pleasing to note that except for a couple of inquisitive people, all visitors respected the logic of the work and kept to the pathway. Continued monitoring of the restoration will be essential to make sure any subsequent footprints are brushed away before they attract others to follow. If the project is successful then further restoration work incorporating this barrier method will be undertaken in other caves.

The 2nd Kununurra Expedition was as successful as the first. Camp life was made more bearable by resident member Ian Riley had managed to procure a generator, lights and gas barbecue. The passage length of KJ-8 in the Jeremiah Hill has now been extended to 5km. Areas of white decorated sections were noted, most of which were protected by bypasses. The cave contained a greater variety of fauna than last year including frogs, bats, spiders, several insects and the occasional snake. Apart from all that, the cave is highly photogenic. The terrain took its toll on clothing but it was found that Silastic can be used to make reasonable repairs to overalls and footwear. Several new caves in the Ningbing Range were explored, mapped, numbered and numerous faunal collections made on behalf of the WA Museum. A large water sample from a cave in each area was collected and packed off to Julia James for analysis. There are now 17 numbered entrances in the Jeremiah Hills and 28 in the nearby Ningbing Range. The potential for more is high. At the behest of Mike Gray at the Australian Museum, SRG will shortly be organising another Nullarbor trip for next July.

NOTICES AND NEWS

ACCIDENT REPORT: Brides Cave Leeuwin-Naturaliste Ridge April 15, 1990

During the course of the 1990 Easter long weekend two mixed parties of casual cavers, some known to each other, combined for the purpose of abseiling and caving. Due to his caving and abseiling experience a member of one party, Robert Masters (an SRGWA member) became the de-facto leader although one other member of the party, Nicholas Robinson, was generally acknowledged to be more experienced in abseiling. The injured person, Alicia Smith, a friend of Masters, strained her arms the previous day when she slipped and fell on a scree slope in Nannup Cave.

On Sunday April 15 the party decided to abseil into Brides Cave setting two lines on the northern face and a ladder on the south face.

All members of the party abseiled into the large cave entrance, several laddered out to make another descent, Masters requesting Robinson to instruct a third person how to act as top belay using a Stitch Plate for persons climbing the ladder. The belay point was some distance from the edge of the pitch making communication difficult. Masters then "locked off" midway down one of the abseil ropes for the purpose of photography.

At this point Smith prepared to ladder to the surface and other members of the party became acquainted with the fact that she had no ladder climbing experience.

Basic climbing instruction was given to her by Robinson and a dynamic lifeline attached to her abseiling harness. The height of the climb was some 15m. She commenced climbing at approximately 12:15pm experiencing difficulty even though Robinson was holding the ladder taut. When about 5m off the ground she encountered more difficulties, complained of very sore arms and attempted to rest by ceasing to climb - she had no means of attaching herself to the ladder. Smith then called out she was descending back into the cave and proceeded to do so. Robinson ceased to hold the ladder taut and apparently moved away from the base of the ladder. When Smith's feet were approximately 1m from the ground she called that she was "going to fall" and promptly did so - landing on her side with her hip hitting a slightly protruding rock.

Some tourists who witnessed the fall left to raise the alarm while Robinson carried out basic first aid and cut Smith's harness from her and made her as comfortable as possible prior to the arrival of medical aid. Although in great pain, her condition did not look too serious. The tourists returned saying that help was on the way but left shortly afterwards.

A short time later a doctor, Ranger Rob Klok, local members of the SES and various WASG and SRGWA members arrived, the latter stopping as they were driving by and noticing an ambulance in the carpark.

Smith was strapped into a basket stretcher and lifted vertically from the cave and spent that night in Augusta Hospital under observation. She was released the next day, her injuries being restricted to extensive bruising - a condition that she took several weeks to recover from. The evidence of bruising indicated that the dynamic rope used for the safety line had only started to check her fall an instant before she impacted the ground.

Events that led to the incident:

1. The belayer had no previous belaying experience and was remote from the edge of the pitch.
2. At the time of the fall the lifeline was slack.
3. Smith had suffered a fall the previous day which affected her arms.
4. Smith had no previous laddering experience and was tired.
5. Communications between Smith and the belayer were poor.

Recommendations:

Apart from stating the obvious - all participants should be well versed in the techniques of abseiling and laddering safely.

Where a belay point is located some distance from the edge of a pitch and communication difficult, an observer should be safety positioned to relay instructions in both directions.

Any person who is acting as a belay should be experienced - not the product of minimal on-the-spot instruction.

Any rope used for belay, be it dynamic or static, should be kept taut at all times.

Ladder climbing and abseiling should be taught under relaxed and controlled conditions, not as-you-go-along.

Leaders should be more aware of the physical condition and experience of their party and not place them in life threatening situations.

This incident should not have happened.

This summary was compiled from reports submitted to SRG by Nicholas Robinson and Robert Masters coupled with personal observations made during and after the rescue of Alicia Smith.

N. Poulter

LETTERS:

The following letter was received by Northern Caverneers from the Department of Parks, Wildlife and Heritage (Tasmania). It is reproduced for the information of members.



Department of Parks, Wildlife and Heritage

134 Macquarie Street, Hobart, Tasmania

Address correspondence to: GPO Box 44A, Hobart, 7001 Fax (002) 23 8765

The Secretary
Northern Caverneers
P O Box 315
LAUNCESTON TAS 7250

30 August 1990

Dear Sir

KUBLA KHAN CAVE - MOLE CREEK - TASMANIA

Kubla Khan Cave is recognised by speleologists and others as being of international significance. It is also apparent that there are very many problems arising from its use. Users and managers would agree that a proper balance must be struck between use and preservation. A number of options for the future use of this important cave have been advanced over the last few decades. These range from development as a fully blown tourist cave to complete closure.

The Department of Parks, Wildlife and Heritage has obtained the services of Andy Spate, the Investigations Officer Karst of the NSW National Parks and Wildlife Service, to develop a "Kubla Khan Pilot Study". This study will address the resources, values and uses of the cave in an attempt to reconcile the various viewpoints advanced to date. The Pilot Study will be produced with as much consultation with users and other interest groups as is possible. Public meetings will be held in Hobart, Sydney, Melbourne and Mole Creek (and elsewhere if necessary and possible) so that the broadest range of opinions can be canvassed. Obviously such meetings cannot be conducted until later in the Pilot Study production process. However, if you or your organisation has an interest in this cave we are interested in your comments now so that we can properly schedule the meetings and introduce your views into the discussions. Your early comments will not prejudice later input - but will add breadth to the discussions.

This letter is to ensure that a) you are informed as to what is going on and b) you can provide an input early on in the planning process. Accordingly, you and/or your organisation are invited to put your views on the future of Kubla Khan Cave now so that the widest possible range of views can be discussed.

We await your input. Please address these to me at the above address marked Kubla Khan Study.

Yours faithfully

A handwritten signature in dark ink, appearing to read 'John Burgess'.

John Burgess
PLANNING OFFICER (NATURAL AREAS)

SUCCESSFUL PROJECT COMPLETED BY FRIENDS OF BUCHAN CAVES

By P. Ackroyd

Fairy Cave, at Buchan in East Gippsland, was discovered in 1907. In June of that year, experienced Jenolan caves manager, Frederick Wilson, was appointed Manager of the new cave at Buchan, with instructions to develop it as a tourist showpiece. This he proceeded to do, using the then current show cave technology - pathways shrouded in wire mesh to prevent wandering fingers from damaging the fragile calcite decoration. One of the first sections of cave to be developed was probably the Eastern Chamber. This section is close to the entrance and is well decorated with extensive calcite flowstone. However the Eastern Chamber had some drawbacks as a show cave route. It had an intermittent stream as a pathway, and had low headroom - about 1.5 m average with 1.3 m minimum - even after excavation of the floor. Moreover, the wire netting enclosing the path served to remove much of the Eastern Chamber's charm, depending as it did on the sweeping views of flowstone, and distinctive flat roof festooned with pure white stalactite clusters.

Frederick Wilson went on to discover the Royal Cave to the north of Fairy Cave, and this large and well decorated cave was developed and opened to the public in 1913. The discovery of Royal Cave took the pressure off Fairy Cave and reduced the need to include the more difficult Eastern Chamber on a tour. The records are unclear, but the Eastern Chamber was probably permanently removed from the tourist route in 1946, with the appointment of a new superintendent, George Weston.

Thus the Eastern Chamber probably remained unused for 50 years, save for occasional forays by new cave guides and managers, and even rarer visits by cavers. These latter visits culminated, in October 1987, with the discovery of the 300 metres long Galadriel's Gift Extension to the south of the Eastern Chamber.

The Friends of Buchan Caves group, under the direction of the present Senior Ranger, Graham Parkes, commenced removal of Wilson's wire netting in September 1988. This was the first step in Graham's long term project to re-open the Eastern Chamber as part of a special 'extended tour' for small tourist parties. The 32 volt lighting system was repaired by Technical Officer, Jack Lewendon, in 1989 in readiness for another 'Friends' weekend in November of that year. During this weekend 'Friends' member, Peter Ackroyd, directed the draining of the Eastern Chamber. This was done by deepening critical sections of stream channel as far as the 'Spaniel's Ears', near the commencement of the King's Chamber. As a result of this work, 80% of the water in the Eastern Chamber drained. On the same weekend the remaining wire netting was removed. In early 1990, Peter Ackroyd, nearing the end of an engineering contract, offered Graham Parkes two weeks of his time, to be donated to any project Graham felt was most worthwhile. The Eastern Chamber Project was the obvious choice and so in the middle of June 1990 Peter headed for Buchan.

-Scope of work

The work which had to be undertaken was the removal of 80 years' accumulation of silt and mud, the accurate surveying of the existing stream passage, the design of a new pathway and the construction of that pathway. The time available was two weeks with the final day coinciding with the Friends of Buchan Caves working bee on 30th June 1990.

-Program and design concept

Monday 18th June commenced with a site visit. Caves Reserve employee, Jim Daly was assigned to the project as Peter Ackroyd's assistant. Jim is a highly skilled and practical person and quickly became enthusiastic about the whole concept. Peter Ackroyd, Graham Parkes, Jim Daly and Technical Officer, Jack Lewendon, looked at the practicalities of the project and agreed that the path should be cast-in-situ concrete, with water and electrical services included below the path, and that silt traps should be incorporated into the pathway as needed. Given these factors and constraints, Peter's assessment was that the project was feasible, and that the programmed completion date of 30th June 1990 could be met.

-Description of Project

A double run level traverse using a surveyor's level was carried out from a pool at the 'Spaniel's Ears' (just before the start of the King's Chamber) to the point in the Eastern Chamber where the stream from the Galadriel's Gift Extension enters the cave (see map). The total length of stream passage was 82 metres, 34 metres of this being along the Eastern Chamber pathway under construction.

The computations for the level traverse, and then the pathway design, were carried out on the night of Wednesday 20th through to the early hours of Thursday 21st, thus allowing setting out work to commence as early as possible. The optimum design called for a constant gradient of 1 in 70 over the entire 82 metres of stream passage. This design eliminated the need for silt traps and would minimise the excavation of a high point in the streamway near the shawl at the far side of the first rockfall.

A trial set-out of the pathway design was carried out so that by Thursday afternoon Graham Parkes was able to view the proposed vertical alignment. Considerable discussion followed concerning the minimum height of passage required for tourists, the final figure settled upon being 1.5 metres. Elsewhere in Fairy Cave the passage height is lower, but for shorter lengths. This additional design requirement meant a return to the drawing board.

Following another late night, Peter was able to provide a pathway design which met this latest criterion, and which was still reasonably efficient hydraulically, although it would now be necessary to include a large silt trap at the base of the steps leading into the Eastern Chamber.

Setting out recommenced on Monday 25th June. At this stage all surface mud and silt had been removed from the proposed pathway alignment, mainly by Jack Lewendon and other Reserve staff. Once level pins had been established to grade throughout the Eastern Chamber, clean fill was brought in to raise the low sections, while at the same time high sections were chipped back. This work was made easier by the use of an electric 'Kango' breaker. The same tool was used to great effect to lower constrictions in the stream channel, to remove some of the old wire netting stanchions, and to excavate for the major silt trap at the base of the steps.

On Wednesday 27th, an electrical contractor installed electrical services in a shallow channel cut into the subgrade. These services were in 25 mm conduit, and were to be cast in place below the pathway. After the electrical services were in place, a 25 mm black polythene water pipe was laid in the same channel and the cluster of services pegged using 250 mm lengths of 10 mm steel rod. To prevent disturbance by construction traffic, and to seal the backfill, a thin cement grout was mixed on site and poured over the whole length of the fully prepared and graded pathway base.

Considerable care was taken to ensure that the sub-base was both at the correct depth to give a pathway thickness of about 40 mm, and that it was on grade. The purpose of this early attention to detail was to make the task of placing the final pathway concrete as trouble-free as possible.

On Friday 29th June removal of material for the major silt trap pit at the base of the steps was commenced by Peter then continued by Jack Lewendon and Robyn Calnin, while Peter commenced construction of the pit frame on the surface. The frame was of welded steel construction with cellulose fibre cement sheet formwork panels fixed at the sides.

The design of the pit was such that it would operate as a silt trap even when completely drowned by flood water (an event that is expected to occur about once a year). This was achieved by the use of an expanded metal walkway as a pit cover. The turbulence set up by such a pit cover will provide sufficient loss of velocity to maximise the settling of suspended silt.

Friday was also used to make final preparations for the placement of concrete on the Saturday by the Friends group. Cement was stored inside the Fairy Cave shelter, coarse and fine aggregate was carried up by 4WD to the entrance, as was the concrete mixer and wheel barrow.

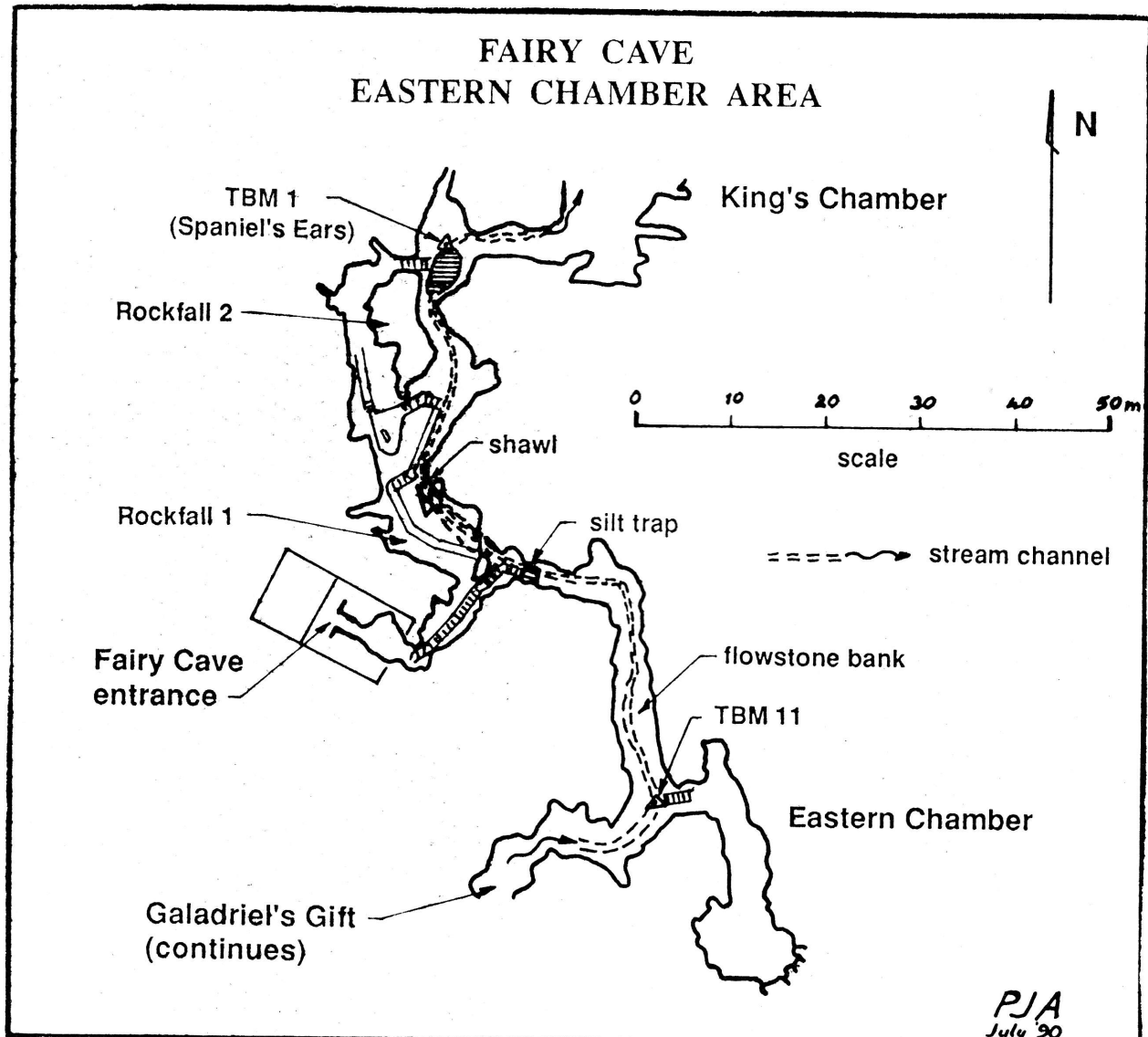
On Saturday 30th June twenty-three Friends of Buchan Caves were on site to help complete the Project. John Van Dyk operated the concrete mixer and the first bucket of concrete was carried down at 9.30 am. Each bucket held about 0.007 cubic metres of concrete and a total of 2.5 cubic metres was placed - 360 bucket loads! About eighteen people were involved in forming a bucket brigade to move the concrete down Fairy Cave's 100 odd steps to the people placing and finishing the concrete pathway. The main concrete finisher was Jim Daly, occasionally relieved by Dale Calnin - Saturday was to have been Jim's day off! Job supervision and overall coordination were undertaken by Peter Ackroyd at the same time as finishing the excavation for the silt trap and installing the new pit frame and formwork.

By 6.30 pm the whole job was completed and the tools washed - it had been a tremendous success. The project helped demonstrate that Friends groups can make valuable contributions to the largest undertakings planned by park managers. The estimated total value of the Project was \$16,000, although the actual cost was less than half this amount due to donations of time, skills and tools.

Finally, this project would not have been possible without the whole-hearted support of the workers at the Caves Reserve. Their freely given skill, enthusiasm and time made the successful completion of the Eastern Chamber Project a reality.

Acknowledgement

I wish to acknowledge the assistance of Elery Hamilton-Smith who provided some of the historical details at the beginning of this article.



SPELEO SYNOPSIS Feb - July 1990
AUSTRALIA

by Peter Ackroyd

Helictite 27(1) (1989) A possible evolution of drainage in the vicinity of Judd's Cavern (Cracroft Area of Tasmania) is suggested by Kevin Kiernan.

JSSS 34(3) (Mar 1990) This issue contains an article about early photographers of Jenolan Caves. The work of four photographers is compared.

Trog 25(7) (Feb 1990) The conflict over quarrying at Yessabah may soon be resolved, with the needs of the quarry company and of the NPWS being met by a compromise solution.

NEW ZEALAND

NZS Bulletin 8(149) (Mar 1989) Gradually catching up on their backlog, this issue contains articles on the exploration of Purgatory Cave, Waitomo and Te Reinga Cave System, Gisborne (now over 3.5 km long). Also in this issue, Trevor Worthy describes the fossils and sub-fossils found in Moa Eggshell Cave, Waitomo.

NZS Bulletin 8(150) (June 1989) The lead article in this issue chronicles the 1987 Mt Owen expedition (South Island) during which several new, but small, caves were explored and mapped. Other items describe caves at Karamea, the Te Kauri Scenic Reserve, Takaka Hill and Golden Bay. A new cave numbering system for the South Owen Karst field is also described.

NZS Bulletin 8(151) (Sep 1989) Several minor caves are described in this issue including caves at Wairo, Waikato (a cave in columnar basalt), Kawhia and southern Kawhia. Also in this issue is a list of New Zealand's longest and deepest, appropriately preceded by an article by Danielle Geminis.

EUROPE

Descent 92 (Feb-Mar 1990) A good cover photo and not much else apart from some details of Bill Stone's computerised oxygen/helium re-breathing apparatus for deep diving and Part I of a tape-recorded interview with the original hard man of English caving, Bob Leakey.

Descent 93 (Apr-May 1990) This issue has Part II of the Leakey tapes, in which Bob Leakey describes the original opening and exploration of Mossdale Scar caves during the 1940s. Also in this issue is the description of the opening of a new entrance to Malham Tarn Cave (North Yorkshire), allowing extensions to be made in the cave.

Caves and Caving 47 (Spring 1990) Amongst the few articles of interest is one on a 1989 visit to Guizhou Province in China, a report on QUCC's expedition to Northern Spain, a report on a LUSS expedition to Austria during which Ratsel Hohle was pushed to 425 m and the news that Clearwater Cave (Mulu National Park, Sarawak) is now 75 km long, following the 1989 Mulu expedition.

Descent 94 (June-July 1990) There are lots of interesting articles in this issue. An all too brief item on the "Leaky Feeder" cave communication system describes how to use two low power hand held radios and a single run of wire to allow communication anywhere along the wire without hooking up to it. Following this is a trip report from Sardinia (Italy), a description of the discovery of Ogof Nant Hyfryd (Wales) and the third instalment of "The Leakey Tapes" in which Bob Leakey describes his early free diving exploits. Also in this issue is a summary of British cave accidents for 1989 - 20 injuries, one fatal.

Cave Science 16(3) (Dec 1989) This issue is almost entirely devoted to archaeological studies at Creswell Crags, Derbyshire.

USA

NSS News 48(1) (Jan 1990) This issue carries two articles of note. The first officially documented caving trip in the US is described - a trip into Hell Hole (District of Columbia) on 31 Dec 1939. The other article is a trip log of the 1986 Chiquibul expedition to Belize, Central America.

NSS News 47(12) Part 2 American Caving Accidents 1988. Steve Knutson reports four "dry caving" deaths for 1988 in the Americas and nine cave diving deaths. Most caving deaths and injuries resulted from falls.

Compass and Tape 7(2) (Fall 1989) Two major articles: more on computer maps of caves - how to depict scale and north point on a map available only via a computer screen, and how to build a lens on a Suunto compass to permit steep sights to be taken.

NSS Bulletin 50(2) (Dec 1988) In this issue - solution equilibria of Sulphur River Cave, Indiana; a preliminary survey of sulphur metabolising fauna from Sulphur River Cave; scanning electron microscope and X-ray diffraction analyses of substrates from Sulphur River Cave; a treatise on the etymology of "moonmilk"; a relationship between external temperature and radon levels in Lehman Caves, Nevada; Quaternary vertebrate fauna from Indun Rockshelter, Indiana; bibliography of Indiana karst literature.

NSS News 48(2) (Feb 1990) This issue contains graphic descriptions and great photos of Maya remains found in Tunichil Muknal, Belize. There is also a brief listing of the 29 longest known caves in China, generally concentrated in the south of China.

Compass and Tape 7(3) (Winter 1989/90) More on computer maps, and how best to depict them.

Speleonics 14 (Feb 1990) This issue contains many reprints, and some original data on the subject of guide wire communication systems. This system uses a "leaky aerial" (a simple conductor) which has been run through a cave or tunnel to enable radios to be used.

NSS News 48(3) (Mar 1990) This issue has a cover photo depicting an Australian cave. The lead article describes Slacks Cave, Kentucky, while a second article describes the discovery and exploration of Sullivan's Cave, Kentucky.

NSS News 48(4) (Apr 1990) A summary of a 12 month trip investigating aquatic life in South Pacific caves includes details on the collection of syncarids from Australia. Other items of note are a lengthy obituary for Richard Schrieber and a couple of humorous articles.

NSS News 48(5) (May 1990) The lead article is entitled "Lint is not limited to belly buttons alone" - not much one can add really. The other article of note is a dissertation on the relative merits of various forms of bolts available to vertical cavers.

Nylon Highway 30 (May 1990) Articles in this issue describe the inherent lack of security of spelean shunts, a handled rack, an adjustable floating foot Gibbs, a test of glazing when nylon is rubbed on nylon during fast descents, the results of a membership survey and a brief summary of a Hungarian/Rumanian descender.

NSS News 48(6) (June 1990) This issue contains an excellent article on the excavation of and subsequent exploration and cave diving in the 27 km long Scott Hollow Cave (West Virginia). The other item of note is the news that Sistema Cuicateca, a new system to the south of Sistema Huautla (Mexico), is set to go big. A record breaking dye trace in March 1990 took only eight days to traverse 17 km horizontally, and a world record 2.5 km vertically. The Sistema Cuicateca is already 1340 metres deep but a rockfall near the bottom is preventing progress.

BOOK REVIEW by Elery Hamilton-Smith

HOWES, Chris, To Photograph Darkness, Gloucester, U.K.: Alan Sutton, xxi + 330pp., U.K. price 25 pounds.

Chris Howes' name will already be a familiar one to many Australian cavers. The quality of his many published photographs, his editorship of *Descent*, and his invaluable manual *Cave Photography* have all won him high regard by both cavers and photographers. This book - a comprehensive history of underground photography - can only add to this reputation.

One of my personal reactions on first reading was the extent to which Chris has demonstrated the first law of knowledge: if we don't look after it properly, it turns into ignorance very quickly. When I think back to the incredible efforts made in Australia to deal with the problems of lighting big caves - the various versions of what became known as the Diprotodon, various flash powders, Ted Anderson's Megaflash and a few other lesser lights (sorry!) - it is remarkable to see most of the same efforts had already been expended, and none of our attempts added substantially to the inventions of our 19th century predecessors. Chris has catalogued the whole story and if only we knew that story in the fifties and sixties, we could have saved many months of re-invention.

However, 'To Photograph Darkness' is much more than a simple review of technology, Chris has explored the social context within which an interest in and demand for underground photography developed, and also looked at the way in which photographs, in turn, influenced interest in and appreciation of the caves, catacombs and mines which were their subject. In short, he has succeeded admirably in producing a comprehensive history of real quality.

Almost inevitably, given the breadth of coverage, minor errors have crept in. For instance, on p. 271, Charles Kerry's claim to have discovered the Jersey Cave at Yarrangobilly is stated as if it were fact and the location mis-stated as Jenolan (where, of course, there is a different Jersey Cave). However, such errors are few. Most Australian cavers will be pleased with the attention given to Australia, commencing from the early and little-known work of Hart and Cornell, and ending with Norm Poulter's refinement of the Diprotodon!

The technical production of the book is excellent - good quality printing, an attractive layout, good quality photographic reproduction and an excellent index. My only (very minor) criticism is that a few of the illustrations reproduced as small marginal decorations deserved better treatment. In all, I believe it is one of the more exciting speleo books for some time and thoroughly worth buying - but be quick - the sales figures show that a very large number of people agree with me!

Elery Hamilton-Smith



CAVE LEEUWIN UPDATE:

CAVE LEEUWIN is almost here. Due to procedural problems the costing of the Conference has suffered numerous delays in formulation. However - at long last here it is and the organizing committee would like you to take note of the following points. Your club should have already relayed the relevant information to you.

(Editor's note: By the time you read this some of the deadlines set will have expired. This is unfortunate but beyond our control.

REGISTRATION DETAILS ARE:

REGISTRATION.....includes FIELD BOOK
PROCEEDINGS
ICE BREAKER BARBEQUE (BYO) \$35

OTHER COSTS NEW YEAR'S EVE BARBQUE (BYO) \$10 est
CAVE PERSON'S DINNER 3 course meal \$17
Daily lunch vouchers will be on sale at the conference

OPTIONS Conference 'T' shirts will be available
Registrants at the Conference will have access to discount cave tours

PAYMENTS 50% deposit required by October 30 1990
final payment required by November 30 1990

A late fee of \$5 applies to all payments made after December 7, 1990 with the exception of the photographic competition.

FINE PRINT As you can appreciate, some of the above prices were formatted prior to the events in the Middle East. Therefore the above prices are subject to variation without notice due to the current uncertainties in relation to the Middle East crisis and its effects on fuel prices.

PAPERS By the time you are reading this missive the Oct 1 deadline for completed papers will have expired.
However, papers will still be accepted up to December 16 provided they are on electronic format (floppy disc) and accompanied by a hard (typed) copy.

PHOTOGRAPHIC COMPETITION Intending participants are reminded that there is a competition and you do not have to attend the conference to enter. Competition details are listed in Australian Caver 123. Suffice to say that a \$3 fee per category is applicable payable up to and including January 2 1991.
