



# *Australian Caver*

*The Quarterly Journal of the*  
**AUSTRALIAN SPELEOLOGICAL  
FEDERATION INCORPORATED**  
*PO Box 388, Broadway, NSW 2007*

**Issue No. 139, January 1997**

*Printed on 100% recycled paper*



[Ewart Ackroyd in] Angel Cave (GP-8), Cape Schanck, Victoria  
[Photo by] P J Ackroyd, [9th] April 1996."



**Who to blame  
when things go  
wrong...**

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# Editorial

## Meet the new Editor folks...



A Tasmanian Editing our Journal? Surely that's not right?!?!?!?!?

Well, I'm afraid it's true! Those of you with email access who subscribe to Ozcavers (and anyone with email access should!) should know what's happened and how a Tasmanian came about getting the job. But as for the rest of you - I'll try and give you a brief summary as to how it transpired...

Ozcavers is an electronic mail discussion list that a lot of Australian cavers in all states and clubs subscribe and contribute too. Over the last 6 months or so, it has been flooded with comments about the non-appearance of the Australian Caver for such a long time,

and no-one could really give an valid answer as to when, or why, there had been no Australian Caver for such an extended period of time.

Being a bit mentally slow like I am(!), around 2 months ago, I offered to take over the role of Editor (*not realising what a task it would turn out to be!*), but it was thought best not to make a change yet, as the Editor at the time had only recently taken over the role

still no issue appearing, and just more broken promises and excuses as to why this was so. Finally, it was decided to pass the job on, and I was the only one dumb enough to do it...

If you had sent material in to previous Editors to be published - don't despair, as I hope to retrieve that material soon for future issues. For now though, it was thought important to get something out as soon as

possible to let people know the situation and what's been happening. Luckily for poor little old me, I can use that as an excuse for this issue being a bit below par in the quality stakes, as it was slapped together in a couple of days!!!

I must say, I was quite stunned at the amount of material that arrived in my mailbox within 2 days of the announcement of me being Editor, and I just hope the practice keeps up! It was almost too much to keep track of at first!

Anyhow, I promise the next issue (*which should "hit the stands" around March*) will

## Contributions

If you are reading this bit, then maybe your thinking of contributing something yourself? Yes, am I correct???

If so, then contributions can be sent to me via email at [deanm@netspace.net.au](mailto:deanm@netspace.net.au)

or sent via 3 1/2 inch floppy disk. Preferably Word for Windows, RTF, or ASCII formats. Pictures can be in most formats, but Jpegs, Gifs, Bmp's, and Tiff's work best for me.

It is also preferable if you can send me a hard copy of your material so I know I've got it right in the electronic transfer.

If you have no computer, then typed, scribbled, hand written, carved in rock slabs, courier, carrier pigeon - who cares, as long as I get it!

Of course - you'll have to bribe me with money if you want it to appear in print...

Send contributions to:-  
Dean Morgan, 17 Belhaven Ave, Taroona,  
Tasmania 7053  
[deanm@netspace.net.au](mailto:deanm@netspace.net.au)

and had not been given a sufficient chance.

Unfortunately, a couple more months passed with

"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."

--Carl Zwanzig:



have more photos, drawings, surveys and such in it, as it won't be as rushed as this one was, and I promise to keep producing them at least Quarterly, (dependent on the ASF's Journal budget of course!!!) If you have been a contributor in the past, but have lost faith in contributing due to a complete lack of Australian

Caver - I urge you to start again!

Thanks for the support from those who know who they are. A special thanks to Arthur Clarke for hassling to get me the job (at least, I *think* it should be a thanks?!?!?!), and also to Stuart Nicholas for guidance

and wisdom whenever I asked him for some.

Keep all the articles coming, and I promise you all a better March issue.

Catch you all next issue!

Dean Morgan  
Editor

## Hey look! I've also got my first - "LETTER TO THE EDITOR"!

The Editor,  
Australian Caver.

My Dear Mr Morgan

Re: Historical usage of the 'BoobTube'

I refer to the article entitled "Definitions and Colloquial Terminology" by G.K. Smith esq. published on page 17 of the 138th edition of the Australian Caver.

The so-called 'boobtube' was in use by bushwalkers long before 1973, though not under that name; particularly so in Tasmania where it was ideal for drinking out of button-grass swamps.

For example, in the book "Equipment for Mountaineering" (second edition, 1965) published by The Melbourne University Mountaineering Club, it is described on page 17, under the heading "Rubber tube" as: "A length of rubber tubing (about 3 feet) can be used for drinking from shallow pools, for blowing fires, and as a snake bite tourniquet." Apart from being clear and metricated, the 'boobtube' described by Mr. Smith would appear to be the same thing. The modern non-elastic version would seem to be inferior for the purpose of tourniqueting embittered snakes.

I remain,  
Your diskumble servant,

Prof. Gordon G. Grimsley  
Office of the Chief Lexicographer,  
Corinda Armchair Speleological Association.



# ASF ISSUES

## Rick Bray

4/12/52 - 26/10/94

Sadly, Tasmania and the rest of the world suffered the loss of a fellow caver a short time ago when Rick Bray passed away.

Rick first joined the Northern Caverneers after emigrating from England in 1980. After a few years of enjoying the splendor of the Mole Creek caves, he knuckled down to some real hard work and was voted in as Club Secretary for many consecutive years.

Taking on this role with ease, he then looked at the even more difficult role of Editor and was well respected as a doer, and was

renowned for his attention to detail.

This would often involve complex communications with unsuspecting souls on the other end of the telephone!

His capacity to organise himself and others often left those around him in a spin, but against all odds - Rick would always get the job done.

He would ensure that no stone was ever left unturned in the organisation of various activities. He never took sides in any debate within the club, but listened;

and always miraculously managed to produce the letter needed to convey the club's opinion when needed.

Rick will be sadly missed by the club and all his friends, and we hope to be able to keep up his high standards of organisation and documentation.

Rick worked at the Maritime Collage as a lecturer up until the time of his death, and his spirit will remain with the club.

*The Northern Caverneers  
Incorporated*

## The new SOUTHERN TASMANIAN CAVERNEERS

*By Arthur Clarke*

On December 4<sup>th</sup>, 1996, organised caving in Southern Tasmania took a new step forward as Australia gained a "new" caving body: **The Southern Tasmanian Caverneers (STC)**. The new body was formed by an amalgamation of the three predominantly southern Tasmanian based

caving organisations: **Tasmanian Caverneering Club (TCC)**, **Southern Caving Society (SCS)** and the **Tasmanian Cave and Karst Research Group (TCKRG)**.

The new organisation's name was chosen from one of four options following a

postal ballot of all financial and life members of previous bodies. Other name options included:

- Southern Tasmanian Caverneering Club (STCC),
- Southern Tasmanian Caving Group (STCG)

*"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."*

*--Carl Zwanzig*



- Caving Association of Southern Tasmania (CAST).

The concept of having a single caving body in Southern Tasmania is not new; previous attempts in the 1970's and 1980's both faltered. In what might seem to be an enigmatic position for mainland cavers, in recent years there has been a growing decline in active caving and new memberships in Southern Tasmania along with the increasing discovery of new caves and extensions of known systems. In the case of all three previous bodies, declining interest was compounded by the fact that those cavers at the helm of the individual clubs (*Mainly Presidents and Editors*) were increasingly carrying more of the workload. Moves towards amalgamation

emanated from the AGM's of both TCC and SCS earlier in the year (1996) along with support from TCKRG, conditional on a "cave science" component being included in the new organisation.

Subsequent to the initial EGM's, the amalgamation process began to falter because some life members of the previous TCC expressed concern that the new body should retain the

"TCC" name, since it was the oldest caving body in Australia. It was also deemed that TCC had been responsible for directly "spawning" other

Tasmanian caving bodies: Northern Caverneers and the Southern Caving Society were formed from members of TCC, it also indirectly, the TCKRG was also spawned from members of the TCC.

**Arthur Clark - our new President**  
"expressing a point"



The Tasmanian Caverneering Club was formed in September, 1946, and recently celebrated its fiftieth anniversary. (*See Stephen Buntton's article on page 26*) By virtue of the fact that TCC has now amalgamated to become *STC (along with SCS and TCKRG)*, Southern Tasmanian Caverneers will continue to be the oldest caving organisation in Australia, carrying forward

the proud traditions and combined history, experience, and achievements, of the three previous bodies.

The newly elected office bearers for *STC* include:

**Arthur Clarke** (*President*),  
**Kelly Miller** (*Vice President*),  
**Dean Morgan** (*Secretary*),  
**Vaughan Andrews** (*Treasurer*),  
**Jeff Butt, John Hawkins-Salt & Vaughan Andrews** (*Joint Editors*),  
**Albert Goede** (*Scientific Officer*),

**Jeff Butt** (*Equipment Officer*),  
**Stephen Buntton** (*Public Officer*),  
**Arthur Clarke** (*Karst Officer & Librarian*),  
**Jeff Butt and Dean Morgan** (*Search and Rescue Officers*).

Ultimate issues of outstanding publications of the three previous bodies will still be published under their previous

named bodies for one final time, then subsequently revert to the new *STC* title.

The TCC's magazine, *Speleo Spiel* will become a more member based newsletter with just club gossip and news, and the SCS's *Southern Caver* will be a quality Journal with all the good material in it, as well as the more scientific material that used to be in the TCKRG Journal.

**All correspondence or journal exchanges should be forwarded to our postal address as:**  
**Southern Tasmanian Caverneers,**  
**PO Box 416, Sandy Bay, Tasmania, 7005.**



## Mole Creek - Tasmania A new Karst National Park

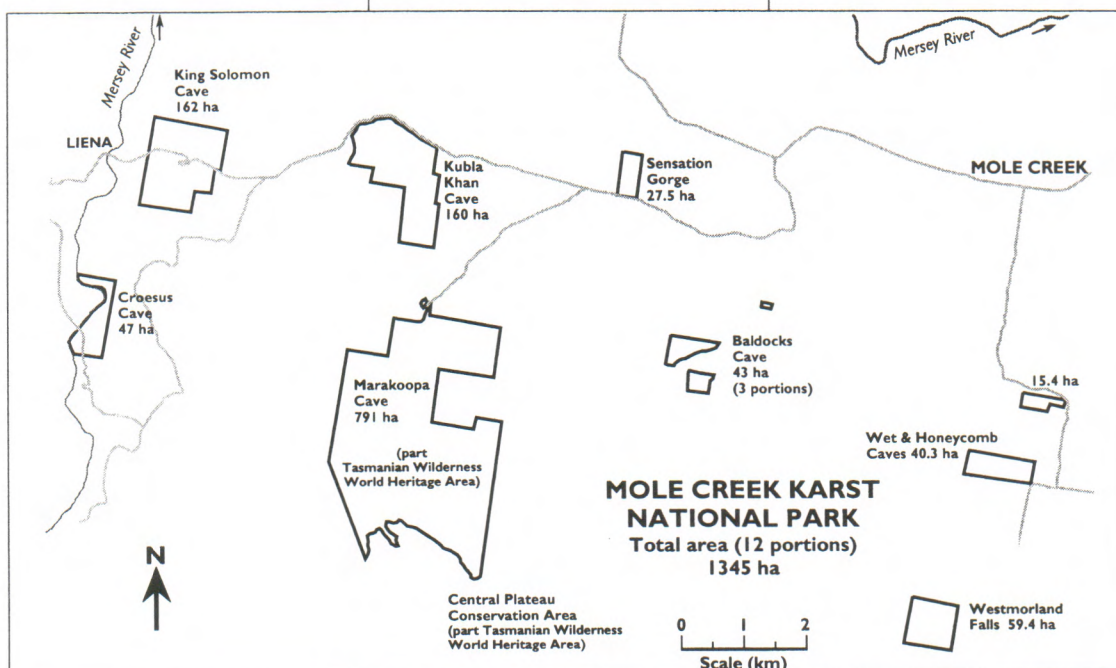
By Greg Middleton

The Mole Creek Karst National Park was formally established on 13 November 1996, when the Tasmanian House of Assembly unanimously approved the Governor's proclamation. The Upper House and the Legislative Council, had approved the proclamation on 5 November, again without anyone voting against it (*although a couple*

Honeycomb Caves, Westmorland Falls and Sensation Gorge (*the only probably non-karst area included*).

The intention of the amalgamation, is to provide a consistent management regime over all of the reserves, facilitate tourism promotion of the show caves, upgrade the

outside the Commission's terms of reference. Kiernan (1984) originally proposed a consolidated reserve over the Mole Creek/Lobster Rivulet catchments (*the system including Wet Cave*) at least as early as 1984, but most of this continues to have no protection, although forestry activities in the catchment have been suspended.



of members expressed reservations about the creation of *any* new National Parks).

The new park comprises 12 separate parcels of land, most of which had already been reserves of some sort. Including State Reserves (*whose legal protection is equivalent to National Park*) at Marakoopa and King Solomon's (*show*) caves, Baldocks Cave, Croesus and Kubla Khan caves, and Crown land reserves at Wet Caves and

protection status of the areas not formerly State Reserves, and draw attention to the special nature of karst (*hence the inclusion of the word in the title*).

The park is a direct result of Dr. Kevin Kiernan's timely submission to the Inquiry into Tasmanian Crown Land Classifications conducted by the Public Land Use Commission. Although Kevin had proposed other land be included, this was

In making its final recommendations, the Commission said that the Commission considers the suggestion of a Mole Creek Caves National Park to have considerable merit. Such a park would focus attention on the underground connections of these areas and the important nature conservation values contained in these systems. Nature conservation values include biological (*cave systems are noted for the*



occurrence of rare invertebrates which are unable to exist outside of caves) and geomorphological values.

As suggested in one submission, an underground National Park comprising the cave systems between existing State Reserves could be established. (PLUC 1995)

The idea of an *underground* national park had been put forward by Debbie Hunter and the Mole Creek Caving Club. No decision has yet been made in relation to this proposal which would have national park underlying other forms of land tenure. Although legislation to provide for this exists in NSW, it has not been utilised and the Tasmanian

Parks Service is not convinced that on balance it would be beneficial. If this status did nothing to secure the overlying and upstream catchment areas it might give the appearance of cave protection without, in fact, providing any ecological or management benefits.

There can be no denying that much remains to be done to provide the necessary conservation and management of the Mole Creek karst; the new National Park is a step along the way.

#### REFERENCES

Kiernan, Kevin 1984. Land Use in Karst Areas: Forestry operations and the Mole Creek Caves. Unpublished report to

Forestry Commission and National Parks and Wildlife Service, 290. Subsequently published in modified form in 1989 as Karst, Caves and Management at Mole Creek, Tasmania Dept. of Parks, Wildlife & Heritage Occ. Pap. #22 pp. 111-112 Public Land Use Commission 1995.

**Inquiry into Tasmanian Crown Land Classifications:** Final Recommendations Report

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## Are these free eggs rotten?!?!?!?

Written by Paul Van

(Reprinted from Troglydite Issue 5, No 3)

Tasmanian MHA Denise Swan and Director of Parks Max Mitchell officially opened the Mole Creek National Park (13/11/96). It comes as no surprise that the local cavers had no input, or in fact had to invite themselves along to find out what was going on!

The "new park", (1345ha) is an amalgamation of existing reserves areas including Westmoreland Cave, Wet Caves, Croesus Cave, Baldocks Cave & King Solomon's. Sounds like they just changed the logo on the letterhead and the government has said "Aren't

we good!" without actually doing anything constructive. Now we have all sorts of things to think about. No camping at Wet Cave (because the Mineral Spring water people are concerned about campers 'pooing' in the stream. Whatever happened to the council approved piggery upstream of Wet cave?!?!?). Access FEES to the new park and bit's thereof. Maybe even more permit caves.

**But all of this is rhetoric,  
as we haven't been  
officially told anything...**

Having phoned around our farming friends in Mole Creek just to pass on the Christmas cheer, they once again have also been kept in the dark about the park and are wondering about all the same things as when the World Heritage listings happened. These guys 'in charge' are a worry. They ignore those who are involved.

Phone/write now to Denise Swan and Max Kitchell, and let's find out how many versions of what's going on we get...

Paul Van



## ***The ASF.... Where are we going ??***

*by Alan Jevons*

The April 1996 Council meeting of the ASF allocated an hour out of normal business to brainstorm some 25 topics and ideas on this subject. I proposed a motion, that was carried, in which it required the Executive Officers, Commission and Ad-Hoc Committee Convenors to write a 5 year Strategic Plan for their portfolio's. **Clubs and individuals are also invited to provide their vision for the ASF for this period.**

The idea is that when every officer of the Federation has given thought to their perspective of the Federation, mix in the views of those clubs who reply, the Executive could then develop an overall ASF Strategic Plan into the next millennium. This plan is to be presented by the Executive and discussed at the 21st Conference, Easter 1997, Quorn, South Australia.

### **Why is this important ??**

We all plan. Either we recognise this or we do not. "If you fail to plan, You plan to fail" is often heard amongst those who have made their life what they want it to be. The same applies for a group of individuals or clubs brought under the banner of the Federation. The backbone of the Federation is its member clubs. However the circulatory systems, organs

and functions are those of the Executive and the Commissions.

Many people said that these keep the Federation alive. If this is true, then the Federation is slowly strangling itself to death.

Why ?? A consistent and major theme that underlaid the three Council meetings that I have attended revolves around the "dreaded thing called

does so out of their own pockets. It has always been an unwritten rule to ensure that the eight Executive Officers represent the vastness of Australia. This has meant that Executive members have been paying anything up to \$700 to fly to Council meetings and Executive meetings. Thereby incurring expenses around \$3,000 pa. in managing your organisation.

How many of you realise that you contribute approximately \$100 pa. towards each Executive member, leaving them to find the other \$2,900 ea. Just imagine what services the Federation could provide you if we all paid that much to be a member!!

It was interesting to reflect that the average price of meals at the Wellington Hotel, where the Council meeting was held and delegates ate, was \$8, plus a drink or two. Everyone would have consumed, at least twice in the day, their annual contribution to the Federation.

What do you want and expect from the Federation? Lets plan where we want the Federation to be in 2001 and then review funding accordingly.

Comments to the  
ASF Secretary,  
18 Reginald St, Mt.  
Gambier  
SA 5290

**By End of February, 1997**

**"If you fail to  
plan,**

**You plan to  
fail"**

MONEY" and the lack thereof. Cry's of "the members don't care about all this [Council] stuff", "the university students will leave if we charge any more". These were in response to moves that were made to provide sufficient funds to assist the Commissions, in particular the Executive, manage the Federation.

Many a good member who had taken on or is currently fulfilling the role as a manager of the Federation



# Conservation Officer Report for 1996

By Keir Vaughan-Taylor

The National Parks and Wildlife Amendment (Abercrombie, Jenolan and Wombeyan Karst Conservation Reserves) Bill 1996 ("the Bill") was introduced into the NSW Parliament on 19 June 1996 and has now been passed. The Bill was intended to fulfill election commitments made by Labor in 1995, and subsequent commitments made by the present Government, which are summarised below.

The Bill amends the National Parks and Wildlife Act 1974 ("NPW Act") to dedicate Abercrombie, Jenolan and Wombeyan Caves as Karst Conservation Reserves under Part 4, Div 2B of that Act. Action requested by NSWSC.

In summary, the following promises have been given by the Government:

1. Labor will enact a Karst Conservation Act, which will create a system of Caves National Parks. The Act will establish Jenolan Caves as one of the first of these parks. The title 'Caves National Parks' was later amended to 'Karst Conservation Areas' ("KCAs"). Abercrombie and Wombeyan Caves were also to be given similar protection.

2. The Karst Conservation Act will give KCAs the same protection as national parks, with the specific additional statutory objectives of karst

conservation and conservation of cultural resources. The Act is supposed to "provide a clear statutory basis to karst conservation in NSW".

3. The Caves Trust will be established as an independent statutory authority responsible for the management of the system of KCAs, directly responsible to the Minister for the Environment. The Trust will report directly to the Minister independent from the National Parks and Wildlife Service ("NPWS").

**Psssttt...**  
*Do you wanna become really famous?  
 Get you name in print all 'round the  
 world??  
 Impress fellow cavers with how many  
 fancy words you can spell???*  
*Then make sure you contribute to the  
 next issue of Australian Caver!!!!*  
**Send material now!!!!**

4. Present members of the Caves Trust will continue to hold office under the new Act, and the present staff of the Caves Trust will be transferred to become staff of the new Caves Trust.

5. A Carr Labor Government will undertake a review of highly significant Crown reserves which contain cave and karst areas with a view to making further KCA declarations.

The potential of the promises for protecting karst and promoting

scientific research with the Reserves was enormous. Unfortunately, this is not to be the case....

Activity was focused on this legislation by myself and the NSWSC, since it could have been a golden opportunity to further protection of caves and a landmark for other States to follow. In February 1996, the ASF became aware that the Government was not intending to pass a separate Karst Conservation Act, but instead to amend the NPWS Act. ASF and NSWSC

made repeated requests to meet with the Minister and to be consulted on the details of the proposed legislation. Only through a Freedom of Information applications to the Department of Land and Water Conservation ("DOLWC") and NPWS was the nature of the proposed

legislation made clear. The Trust was to be changed and there was not going to be an independent Karst Conservation legislation but rather the Caves were to be administered through the National Parks.

The present Trust membership was appointed shortly after a major protest by speleologists about construction and developments planned in and around the area of the Grand Arch. This development was not in any accordance with a previous feasibility study and was



generally without any environmental consideration at all. The new Trust abandoned the development and began another feasibility study which constructed a new set of proposals with a more environmentally conscious ethic. We waited years for this believing this plan is what is best for Jenolan but the present Trust did not proceed for many reasons, one of which was the election and the Karst Conservation Legislation. ASF was concerned that removing Trust members would impede the plans to which the Trust was committed.

The Minister of the Environment suggested in February 1996 that ASF and NSW would receive a personal briefing from her closer to the time of the introduction of the legislation. Despite attempts to arrange such a briefing, it was never given. The Minister refused our subsequent requests for a meeting before the Bill was introduced.

A meeting was held on 9 April 1996 with Patrick Holland, policy adviser to the Minister, and Merran Knox, ministerial liaison officer. Representatives of NSWSC and ASF attended, along with other speleological representatives. Mr Holland stated that it would be impossible to reveal any aspects of the legislation. He refused to confirm or deny that any of the breaches of which we were aware would take place. He stated that we would have to wait until the tabling of the Bill in Parliament before we would know what was in the legislation.

Following the preparation of the Bill, an earlier draft of this document setting out our concerns was provided to the Minister, and to Mr Bob Debus, who introduced the Bill into Parliament. A meeting was held on 3 September at which Ms Allan and Mr Debus dismissed all of NSWSC's concerns. Ms Allan stated that we were "shooting at shadows", and that she was not inclined to take any further action as this issue was taking up "a disproportionate amount of time". Our concerns were conveyed in writing to the Attorney-General, Mr Jeff Shaw, and the Premier.

On 20 November 1996, the Bill was debated in the Legislative Assembly. The Government introduced a series of amendments which addressed some of this NSWSC concerns. The Government gave no notice that it was to present amendments, nor did it show them to this Council or discuss them in any way with us.

It was apparent that we needed support in the upper house. The group working on this project sent representatives to each of the cross benchers to appraise them of our concerns and aspirations. There seemed to be general support but in politics, support is an ever changing prop.

In summary, we wished to limit the control of the National Parks and Wildlife over Jenolan, Abercrombie and Wombeyan, and maintain an independent Trust. One reason for this is the present inability of NPWS to act to protect the

environment when under the influence of political pressure. As an example, a recent Freedom of Information applications shows that the National Parks Service initially wanted to protect Yessabah Caves. They held an objection against the mining lease at Yessabah but Neil Pickard, the then Minister for Minerals and energy, wrote to Tim Moore indicating that he wanted the mining lease renewed. NPWS shortly thereafter negotiated a settlement with the mining company and the objection was dropped, adversely influencing the strategy in an environmental court case. In contrast, the Jenolan Caves Trust conducted stiff litigation to prevent mining at Wombeyan. They also acquired extra tracts of land at Wombeyan further securing land against mining in that area.

We wanted some security of the Jenolan Trust so that it would not be dissolved by an administrative stroke of the pen when no-one was paying attention some years in the future. We wanted the funds generated from the tourists to remain invested in the Caves and caves research.

The new Bill had the potential to remove the system we have now that appears to be working.

When the Bill was put before the Parliament, Pam Allan, Minister for the Environment displayed her annoyance at our attempts to be heard, by accusing the speleologists of using the Caves as their own personal playground. *(Interestingly this accusation has been*



used everytime ASFG wishes to protect caves against destruction) She further accused the Sydney University Speleological Society of misusing the Reserve by smoking marijuana in caves. (Incidentally this is not true!) The Hansard excerpts will soon be published in a SUSS bulletin.

Green candidate Ian Cohen supported some of our amendments, putting a further amendment to add a National Parks Association representative to the Trust. (Note not NPWS) He did not support any of the amendments that would have limited power to National Parks. Although there was spirited defence of the speleologists by the Liberal opposition, J. Ryan, which included a reference to back stabbing using a quotation from Hamlet, the Liberals did not move any of our amendments either. He made some reference to interdepartmental turf wars which is presumably a reference to public service power struggles.

In summary, some of our amendments went through and some did not. The Trust membership is to be seriously changed although ASF retains its representative. There are now eleven Trust members, three of which will remain the same - assuming ASF, the National Trust and National Parks retain their original appointees. Regulations and powers within the Reserve rest with National Parks. The Trust can only be removed with an

Act of Parliament and the financial security of the Caves remains with the Caves. Funds will not disappear into "general revenue". Transfer of new areas to the Trust is possible and Borenore is a possible candidate.

### ASF Conservation and The Future

Each of the convenors was asked to make a statement about what they see as the future for their commission.

Clearly, ASF's role as an environmental defender has increased over the years. We

little bit. This is becoming more possible with the Internet. We are not a big enough organisation to risk legal challenges. In the case of Mt Etna, ASF was forced out of the legal battle by a demand by the mining company for legal costs. In the Sellick's Hill case, we could not risk the existence of the organisation if we lost. Despite other legal successes, the law is a game for the extremely wealthy. The Federal government has suspended legal aid making access to the law only for the rich - especially for environmental cases.

For ASF to continue protecting out karst heritage we must be involved as early as possible on any conservation problem that arises as soon as possible. If a letter of protest is lodged prior to mining operations and financial investment then we can fend off problems before they become entrenched. We need to organise trips to conservation problem spots and run research programs in those areas, but also as many areas as possible. ASF must establish representatives on as many management committees relating to karst where we are able to field candidates. We should in future make every attempt to send a well briefed ASF team to liaise with mine/developer management to put our case and begin any negotiation possible to protect caves in association with industry if at all possible. This all means getting more members involved.

*Keir Vaughan-Taylor*

#### Publications for sale :

**Karst Studies Seminar,  
Naracoorte Feb. 1996**

**Book of Abstracts  
Fieldtrips Guidebook**  
\$6.00 each including postage

**South-east Karst Province of South Australia :**  
A comprehensive review of karst heritage features  
in the region

by Grimes, Spate and Hamilton-Smith  
\$25 incl. postage

Elery Hamilton-Smith  
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have engaged in a number of legal and political campaigns to protect karst. Mostly these campaigns have been successful but the toll of time, money, and energy on individuals in the society is high. In the future ASF must continue and expand it's influence role. Rather than rely on a few individuals to run campaigns, the executive should encourage many more people to contribute a



# Karst Index Progress Report

13 Jan 1997

By Peter Matthews

There has been steady progress with the Karst Index database project\* (e.g. 320 hours on KI in 1996), so that now it has reached a stage where I think the remaining work is defined enough for me to be game to list it out.

Anyone visiting Melbourne is always welcome to call in and see the current stage (Please contact me beforehand).

In order to get the initial general release version out as quickly as possible, I have avoided adding a lot of extra fields beyond those on the original ASF Cave Summary form at this stage. The main extra fields added are only those needed for providing various ways of storing exact location information, i.e. lat/longs, grid references from multiple maps, cadastral information, and "how to find the cave". Nevertheless, the total number of fields needed in the system is now up to 510(!), although some of these are "internal", e.g. for describing the fields themselves.

Another difference from the original version which produced the Karst Index book, is of course that the database will be updated locally instead of centrally.

This means that it can more conveniently be kept right up to date, will distribute the updating load, and will be available for local usage. Each cave area will have one formal updating club, specified by the State Speleo

example, the field definitions ASF is using will be the main starting point for discussion which it is hoped will result in an International set of field definitions. Having field definitions which are standardised will

enable valid comparison / exchange / consolidation of cave / karst data between independent databases, and so facilitate cave/karst study and data exchange on a global basis. This discussion is expected to start early this year via the CaveData mailing list on the Internet, and then

at the UIS Congress in Switzerland later in the year.

If you want to take part in the discussion, send me an email. (Paper-based circulars would not be practical for such a discussion, but we may be able to organise a discussion, at the current state of play of the definitions, during the ASF Conference.) Note that the Australian database is using our old definitions and proceeding independently of this discussion, not being held up by it. As our fields have worked fairly well, there are not likely to be many changes later. What is

*\* For those new to ASF, the Karst Index is the national cave and karst database operated by ASF. Previously it was a central database on a mainframe, and contained about 6,600 caves, 2400 cave map bibliographies, and 900 references. It was used to produce the book, "Australian Karst Index 1985". The current project is to enable it to be run on PCs, and to be updated locally by a specific club per cave area. Read-only copies will be generally available to speleologists. These locally updated areas will be uploaded to the consolidated state and national level databases at regular intervals to enable state and national-level analyses, and to assist safety and distribution. However, exact cave location data will always stay only with the local club (except where a club has asked ASF to hold a safety copy in their separate, unaccessed archive system). Future editions of the Karst Index book will be State based rather than national, but will form part of an overall set. The exact form(s) of the "book" are of course interesting to contemplate.*

Council where it exists, (normally this would be the club doing the cave numbering for the area), but anyone at all can supply new information via that club. There is of course a mechanism to show who has supplied what data, so that proper data attribution can be given. There will also eventually be a means of transferring data to and from other cave database systems, at least for their compatible data fields.

The system is also acting as a mutually beneficial pilot for cave data standards being proposed by the Informatics Commission of the International Union of Speleology (UISIC). For



more likely is that further fields will become available.

You are no doubt wondering why (*the hell*) the system is taking so long to produce! As soon as you move from a "personal" database which can be relatively quickly produced (*and which only you need to Know and Love*), and move to a situation where the general caving population has to use it, it becomes "a whole different ball game". For example; it has to allow for use by non-computer people, multiple sources of data entry, different structures and land information systems per State, different ways of doing things, more data integrity checking, and so on. Because there has been no previous experience to go on, one of the ongoing difficulties with estimating the project has been the number of "system" issues which have had to be resolved because of the above, and which had not even been thought of earlier. Hence my various previous estimates of being "nearly finished" being so woefully wrong...

Anyway, below is approximately what is left to do before I send a "Beta" version to a few selected testers to try it out before making the system generally available. It still remains hard to estimate how long this will take, but I am trying hard to get it to the testers in time for the next Conference. The main criterion determining release of the Beta version is that it must be complete enough to

be practical and safe to use, with minimal risk that the testers will have to redo their cave data updating again later.

- Finish Help screens (*Online Data Prep Manual and context-sensitive field help*) (*current*)
- Finish adding cave data integrity checks.
- Update picklists for 3-letter organisation codes (*Steve Brooks is managing the codes*).
- Allow local admin. to add names of relevant local Government areas to picklists.
- Allow local admin. to add any local instructions to field help screens.
- Add a preliminary basic searching and reporting facility.
- Enable passwords for determining access level, e.g. admin., update, read-only.
- Convert existing KDI data into new system (*Glenn Baddeley has written the program*).
- Prepare updated Cave Summary forms (*Being done by Roger Taylor*).
- Prepare installation disks and instructions.
- Establish Data Use Agreements.

- Send system to Beta testers.

While it is with the testers, I will be adding missing features and fixing any bugs or critical shortcomings they find.

Work done in 1996 has included:

- completion of the exact locations design, screens and picklists.
- ability to track who provided what updating, to allow proper data attribution.
- enable deletion of a cave (*trickier than it sounds in a multi-table system!*).
- allowance for multiple generation of the same org or person by various clubs.
- fieldname & definition reporting and integrity checks (*housekeeping*).
- addition of various ongoing Help screens.
- allow local addition of new orgs and people for use with picklists.

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# AN UPDATE ON THE NATIONAL OUTDOOR RECREATION COMPETENCY STANDARDS

by Alan Jevons

## BACKGROUND

In January 1996 the National Outdoor Recreation Leadership Development (NORLD) project completed its four years. In that time it grew from a symposium gathering at Port Sorell, Tasmania in May 1992, to a national network of outdoor recreation practitioners across seven activities. (*Rock Climbing, Caving, Canoeing, White Water Rafting, Bushwalking, Cross Country Skiing, Abseiling.*)

The NORLD project had three foci - Competency Standards, Policy, and Networking. The highly profile face of NORLD was the development of competency standards. However, behind the scenes, as it were, the fourteen member national Board were very active in lobbying all levels of government to basically raise the profile of the outdoor recreation industry.

Since 1993 the ASF has been represented on the NORLD Board through two seats allocated for the Activity Representatives. I held one of these seats and represented the seven activity groups. I also represented the ASF as the Caving Standards Convenor for NORLD.

During the time up to January this year the Activity Convenors have

## ASF STANDARDS

### TEAM

#### **SASC Training Committee**

Peter Kraehenbuehl

#### **NSWSC**

Chris Norton

#### **VIC**

Tony Watson

#### **WA**

Rauleigh Webb

#### **TAS**

ASF-CLAG

#### **Convenor**

Alan Jevons

been working with their groups to develop national competency standards. In November, 1995 NORLD published the latest draft of the Competency Standards. Unfortunately, funding to finish the process was held up in federal government changes.

In January, 1996 the NORLD Board reviewed its directions and decided to dissolve and form an incorporated body to be known as the **OUTDOOR RECREATION COUNCIL of AUSTRALIA (ORCA)**.

In reviewing the achievements of NORLD and the future pressures for the recreation industry the interim ORCA Board developed a structure of

three divisions, Advocacy, Industry Services and Standards & Training. The latter division is called the National Outdoor Recreation Leadership Division. This division will continue the work of developing national competency standards and will expand further than the mandate to which NORLD was bound and ensure that the quality of training delivery to meet the standards is developed and maintained.

During its life the NORLD project developed a high profile within various circles and this became a major role and it is important that this be developed and is the main focus for the Advocacy division. The Industry Services division main focus is to develop the members in the outdoor recreation sector of the recreation industry.

Lets take a closer look at the three divisions, advocacy ensures that ORCA has a direct input into top levels of government and industry for issues such as access, education, insurance, risk management. Industry Services is to provide assistance to organisations, such as the ASF, in the development of the outdoor recreation industry and to facilitate the communication across industry groups such

"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."

--Carl Zwanzig



as, professionals, commercial operators, educators, volunteer /community groups, land managers/ stakeholders.

### COMPETENCY STANDARDS

The NORLD Division, covers the area of development of national competency standards and training. These will provide a government (*federal, state & local*) recognised set of standard "benchmarks". Development of nationally recognised competency standards help set the benchmark for what individuals are required to be assessed against.

This means that organisations such as TAFE, who provide courses in Canoeing, Caving etc., who want to ensure that their courses are nationally recognised must ensure that their course, at least, delivers outcomes that meet the national competency standard.

As previously stated, the ASF have been writing the caving standards and funding has been approved for ORCA to process the NORLD draft through to the final stage of approval by the National Training Framework Committee (NTFC) of the Australian National Training Authority (ANTA). Therefore, nationally recognised activity competency standards will be endorsed by mid 1997.

The endorsement of the national standards by the NTFC is Step 1 in the completion of a training

package (see inset). ANTA has now focused on ensuring that *vocational* outcomes for the industry are set through standards written by the industry, that their is only one set of standards across the industry i.e.: Professional, Commercial, Training etc. and that national assessment guidelines are written to ensure the national standards are reached and thereby resulting in national qualifications.

### ASF STANDARDS:

During the ASF Council meeting of 1993 the Council

All Training Packages will include the following endorsed components:

- national competency standards;
- national assessment guidelines; and
- national qualifications

and may also include a range of additional non-endorsed components such as:

- learning strategies;
- professional development materials; and
- assessment materials.

approved the development of ASF Caving Leadership Curriculum Standards which will meet the national Caving Competency Standards.

The ASF standards provide the framework through which clubs can develop their own training and provide a resource for leaders who wish to learn caving at their own pace. The ASF has set a timeline for the full implementation and integration of the scheme by the end of 1999.

The ASF standards have been developed with three operational levels:

- Horizontal Caving Leader

- Laddering (Abseiling) Caving Leader
- Vertical Caving Leader

These then provide a national basis for understanding within the Federation on the level of training / skill that members who wish to be leaders, have achieved.

### ACCREDITATION:

Currently there is no requirement for Leaders within the ASF to be accredited / certified. The Federation has decided to establish a training framework. The emphasis has always been on clubs to identify their training requirements and to issue qualifications, certificates, titles, membership status etc. as they see fit.

The ASF Scheme, as it has been called, will evolve as clubs utilise the scheme and begin to train their leaders. The Horizontal Caving Leader standards were released in 1995 with the remainder due for release at the 1997 Conference. Additional modules have already been identified for Search & Rescue, Cave First Aid, Survey & Mapping.

### TOURISM:

NORLD has also been playing a major role in the development of the National Curriculum Framework for Adventure Guiding which is the outdoor recreation section of the tourism training industry. This covers "adventure" activities ranging from the Bushwalking, to Four Wheel Driving.



Recently, ORCA has initiated input into the development of "interpretation" standards being developed by the Ecotourism Association of Australia.

#### THE FUTURE:

ORCA provides a conduit through which organisations such as ACKMA, ASF, can establish national competency standards.

ORCA was "launched" in May, 1996 at the Risk Management in the Outdoors conference. Outcomes from this conference and the conference papers have been released.

International affiliations have and are continuing to

be developed. Especially with our Australasian neighbors, New Zealand, through their NZ Outdoor Instructor Association (NZOIA) and soon with the developing NZORC, and recently with the Outdoor Recreation Confederation of America (ORCA!).

Across Australia, as a result of just the draft development of the national competency standards, ASF members are already involved in updating the training and education in organisations such as the Scout & Guide Associations, in establishing assessments for Commercial Operator licenses and/or Leaders for caving (WA, TAS) and a TAFE College has enhanced its course to comply with the standards.

The underlying philosophy of ORCA is to develop and promote a safe, quality outdoor recreation industry which is sensitive to environmental, cultural and social considerations.

Alan Jevons  
ORCA Executive Director -  
Standards & Training, ASF  
Convenor - Leadership  
Standards

**Copies of the NORLD  
Standards, Orders for Risk  
Management Conference**

**Report:**

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Fax (02) 9923 4237

## ASF AND THE INTERNET

BY PETER MATTHEWS

Well, you may not have heard much from ASF via your letter-box, but there has certainly been a lot of caving info and discussion about ASF flying around on the Internet.

Apart from person-to-person emails, the main caving usage on the Internet is:

#### Ozcavers

This is an email mailing list which enables

- (1) fast circulation of news, and
- (2) discussion of a topic.

Any email sent to it is automatically reailed to everyone on the mailing list. It has been set up and provided by Rauleigh Webb in WA. To get yourself on the list, send an email to: [majordomo@techpkwa2.curtin.edu.au](mailto:majordomo@techpkwa2.curtin.edu.au), and in the body of the message put the line: `subscribe ozcavers`

#### ASF info on the Web

This is a series of globally-accessible "World Wide Web" pages containing information about ASF, for example; names and addresses of the executive, info about commissions,

publications, conference details, insurance, standards, etc. etc. It has been up since November 1994 and is operated by Peter Matthews of the ASF Documentation Commission. The host computer space has kindly been provided by the Melbourne University Geography Department. The address is: <http://rubens.its.unimelb.edu.au/~pgm/asf/>

Commission convenors and other ASF officers are invited/encouraged to send material about their area of responsibility to Peter



Matthews for addition to these pages. Similarly, anyone else who has material which they think would be an advantage on the site is invited to send it in. Send it in plain ASCII text by email or diskette, and preferably already HTML-coded. Alternatively, if you already have your own site, send its address so that a link to it can be added. For example, Rauleigh Webb is maintaining the web copy of ASF's Constitution, Code of Ethics, and Minimal Impact Caving Code on his own site, but they are accessible via links from ASF's pages as if they were local to ASF's site.

#### ***Caving clubs***

Many caving clubs around the world including several from Australia have their own web site.

#### ***Australian Speleology***

Concentrating on a wider view of Australian speleology, this site links to other Australian speleological information outside of ASF, for example, other Speleo organisations, list of tourist caves, Speleo calendar, publications, etc. In the pipeline is a summary of Australian speleological

research being put together by Elery Hamilton-Smith (*biological*) and Brian Finlayson/Mark Ellaway (*earth sciences*). Address: <http://rubens.its.unimelb.edu.au/~pgm/austcave/>

#### ***Southern Caving Society/Southern Tasmanian Caverneers***

This one has general information about the Southern Caving Society in Tasmania, although now that the SCS has amalgamated into the Southern Tasmanian Caverneers, (*See article on page 4*) it will soon be updated to represent the new club. This one is maintained by Jeff Butt, <[jeffbutt@netspace.net.au](mailto:jeffbutt@netspace.net.au)> and the web address is <http://www.tased.edu.au/tasonline/scaving/scaving.htm>

#### ***ACKMA***

The Australasian Cave and Karst Management Association (ACKMA) web site contains a list of Australian and New Zealand tourist caves and their contact details, and the address list of the current ACKMA executive. Address: <http://rubens.its.unimelb.edu.au/~pgm/ackma/>

#### ***Master caving Web sites***

The following master web site maintained by Sherry Mayo in Canberra contains links to virtually every other caving web site in the world: <http://rschp2.anu.edu.au/8080/cave/cavelink.html>

As does the Polish Geomorphologists do-it-yourself master web site with hundreds of links at: <http://hum.amu.edu.pl/~sgp/spec/links.html>

#### ***International Cavers Mailing List***

Similar to Ozcavers, the Cavers Digest mailing list has hundreds of subscribers around the world. To join it send an ordinary email to: [jim\\_olsen@novell.com](mailto:jim_olsen@novell.com). Its web address is: <http://www.ditell.com/~cavers>

#### ***Specialist mailing lists***

Cave surveying: To join send an ordinary email to: [cave-surveying-request@mantis.co.uk](mailto:cave-surveying-request@mantis.co.uk)  
Cave databases: To join, send an email to: [majordomo@techpkwa2.curtin.edu.au](mailto:majordomo@techpkwa2.curtin.edu.au) and in the body of the message insert a line: subscribe cavedata

*Happy clicking!*

Peter Matthews  
[matthews@melbpc.org.au](mailto:matthews@melbpc.org.au)

## ***A tip from the Editor***

If you would like to see material from your club/organisation appearing in the Australian Caver more often, then may I suggest that you add me to your clubs mailing list

(see the magazine header for my address)

That way, I'll receive all the newsletters/journals, and I can pick the really interesting bits and place them in Australian Caver. Best of all though - I'll get to read them all too!



# ARTICLES

## The Tasmanian Caverneering Club's 50th Anniversary Celebration

By Stephen Bunton



There was a bit of apprehension about the type of celebration required to mark the half century of TCC, Australia's oldest caving club. TCC had always had an annual dinner, even in lean times, and so merely having an official dinner didn't seem quite substantial enough to mark this significant event. TCC dinners are always a mixed bag. More memorable for the quality of the food and

who you sat next to than anything else. Mostly they were memorable for the fact that Stuart Nicholas never used to turn up, but we always saved him a place and bought him a drink...

No, the TCC do would have to be better than that, and do more than just provide a feed.

So it was that over the weekend of the 16-17th

November, approximately fifty cavers gathered at the old Australian Newsprint Mills singleman's quarters on Junee Rd, Maydena. Anyone who has visited the Junee-Florentine would recognise this as an auspicious address. It is now run privately as Tyenna Lodge and Tall Trees Cafe. Members were booked into various forms of accommodation ranging from private rooms, shared

*"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."*

*--Carl Zwanzig*



rooms and floorspace to camping space. This was allocated according to their seniority, with the club picking up the accommodation tab. The weather was typically inclement, cool, southwesterly, and with occasional showers and the odd sunny patch that lasted long enough to have a BBQ lunch on the Saturday. The afternoon was spent on a variety of informal activities including the short walk to the Junee Resurgence which has been slicked up by NPWS and now boasts a viewing platform. Other people revisited Growling Swallet, and some people even went real caving! By far the most popular pastime was pouring over old photo albums and scrapbooks. This prompted lots of informal discussion and yarn telling which was the main objective of the exercise. This gave younger cavers such as myself with only ten years association with the club, a chance to meet my forebears. I'd not met Peter Shaw, although I'd seen many of his fine photos. Those old enough to remember will know Laurie Moody as ASF Newsletter editor, which was about the time I started caving.

Pre-dinner drinks were served, and cavers were asked to dress semi formally, which meant as formal as possible but with a caving helmet and light to cap off their outfit! There were a few spare helmets for those who had sold theirs upon retirement. A

group photo was taken to record the event. Everyone enjoyed the spectacle. The range of helmets and lights from candles to carbide's and gell cells would have done a museum proud! Bill Hodge dusted off his old belay belt and ancient karabiners for the occasion.

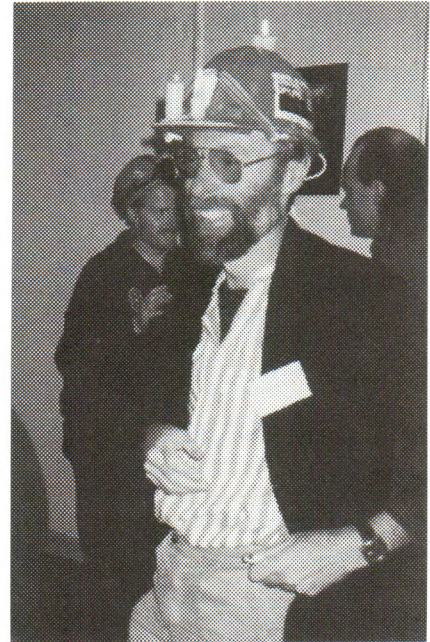
Dinner was a three course sit-down affair for a reasonable price per head. Most members formed tables of those from their generation. Of course, the other function of the celebration was as that of a reunion. The food was superb, Tasmanian baked trout was quite a popular choice and with a little wine and beer supplied by the club supplemented by people's own supply, most were in fine fettle for the photos.

There were three categories available for people to show their slides; scenery and pretties, archival and interesting, or humorous and embarrassing!

**Chris Riley & Arthur Clark  
swapping tales of "Huge passages  
& bottomless pits!"**



**A rather "dapper" looking Jeff Butt**



There were a couple of prizes for slides; one was won by Andrew Briggs for outstandingly hilarious set of pictures of a caver with their head fully immersed in the sloppy mud of Loons Cave, and another won by Nick Hume - who over indulged himself slightly and wasn't there to commentate on

fifteen years of TCC personalities, so we did it for him.

Dennis Seymour who joined the club in the first few months showed some black and white slides of the Forbidden City in Kubla Khan taken when it was first discovered. There were numerous photos of a very young looking Albert Goede. Unfortunately Albert was on sabbatical in New Zealand and couldn't attend the celebrations.





**Trevor Wailes - the very last TCC President**

There were other apologies including one from Professor Sam Carey who is credited with founding the club. Nevertheless there were two founding members present - David and Nancy Wilson, who cut the Birthday Cake supplied by Therese March. Andrew Skinner made a number of impromptu speeches during the procedures including

one to remind us that TCC had never lost a member on a caving trip, well not lost permanently anyway...

Trevor Wailes then rose to the occasion as the last TCC President having been re elected after a short spell. Prior to that he was one of the longest serving Presidents, presiding over ten of the boom discovery years of the eighties. He reminded us that it was to be the last TCC dinner and wished the new amalgamated club well into the future.

TCC has joined with SCS and TCKRG to become the Southern Tasmanian Caverneers. Paradoxically Australia's newest caving club is its oldest or the one with the longest history. The

mood for the evening was optimistic. There was sadness at the loss of TCC, but a number of current old SCS members had turned up too, and the dinner served a very unifying purpose as well.

Not too many people fronted up for caving the following day. It was easier to get the helmet on before a memorable dinner that went to well beyond midnight than the next morning when there were a few too many alcohol enriched craniums about! Stuart Nicholas set the nightowl record of about 4.30am, but then, there were a few dinners he had to make up for!

Stephen Bunton

## ***Speaking my piece...*** ***(Has bureaucracy gone astray???)***

*By Henry Shannon*

I went along to the meeting held at Ross (*Central Tasmania*) of representatives of government agencies and cave user groups despite my suspicions even of the mere "Exchange of information" theme. I had been approached to come as the Northern Caverneers representative in a polite phone call from Forestry in Hobart - and as Chris Riley said; "If you don't go along to these things you are assumed to consent to whatever is being imposed anyway, and there is at least a notional opportunity to head off damage."

As it happened, I was asked to speak quite early in the piece, possibly because I was known to have criticisms to offer. As to what our club was doing, I said first that we were trying to find enough caves in properties of friendly landowners to be able to survive as a caving group, since the drift of management policy for public lands was so hostile that we feared eventual loss of access. We had been so burnt by our previous contact with state authorities that we were trying as far as we could to avoid them. Without giving any details, I went on to say

that when water levels are low, I think we can manage, but not in high water conditions.

My assessment of the situation that has developed since active management and permits were introduced, is that has been in decline in Tasmania. The clubs are certainly hurting under these new arrangements. I consulted with the other club representatives present (*Stuart Nicholas & Debbie Hunter*) and they agreed that their groups, like ours, are down to about 10 aging active members each, and are conspicuously lacking

*"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."*

*--Carl Zwanzig:*



new young rookie recruits. The change in administrative policy is not the whole problem; the "Pepsi generation" for example is not into serious minded activities like speleology, and it is now easier to just scoot overseas. But the change in Tasmania from the old system where cavers felt welcome, to present setup - where it feels like we're in gaol, is the main fault behind the malaise.

We keep doing what we can to assist as we still get (the word has got out and much reduced the visitors coming to Tasmania for caving). We must bear the humiliation of having to apologise for the system, and warn people from mainland clubs to confirm permits first before even thinking about coming to Tasmania. Concerning Kubla Khan (which we think of as our cave now expropriated from us) Much misery was inflicted on our American visitor who needed 3 trips from the USA to see the cave. As regards the cleanup program (which we invented) it has been delayed, not assisted by the new regime.

We are now locked out of the best part of the cave resource once effectively available to us either by de facto confiscation as at Kubla Khan & Exit Cave, or indirectly by offence taken by private landowners over National Estate listing, etc. etc. Seeing a dog to kick, as at Herbert's Pot, they pick on us. We have not got anything we could construe as benefit out of any of this heavy handedness. So I am forced to consider any new proposal emanating from authority primarily in terms of the harm it is going to do

to us. As it affects Rolan Eberhard's project for classification of caves for vulnerability of fauna (for which a written preface was presented, and which I think was the real reason for the meeting). I explained that in open circumstances I could almost have written it myself, and the words would mean one thing; essentially a guide for visitors as to how to recognise and move around sensitively in areas with cave biota. But coming from where it's coming from, I see the same words essentially as an underhand and nasty threat of yet another round of cave confiscation's. Such is the inherent imprecision of language in a world of hidden agendas.

I have been around the caving scene since 1959, and was bought into caving by a generation that witnessed the introduction of the permit system in NSW, and were aware that it's real aim was to make cavers give up and go away. I persisted there with grim determination not to be ground down by the system. It was almost a relief to get away to Queensland at first, and although I got burnt out later on in the real conservation struggles; against the less insidious threats a great deal more effort could be sustained before cracking up. What hurt most was the abandonment of the "front line" UQSS people by most outside caving group and wildlife protection people. I later realised that holders of the "microconservation" approach were the ones at fault, and they are by temperament curiously blind towards cavings big conservation issues; as the

parable goes "Near enough he that straineth at the gnat, will swallow the camel". On the other hand, those that put the big issue first, were alright on the ethics of the smaller issues.

Other broken reeds were wildlife protection officers; although they might be disguised by the situation, the wildlife act was used by the government to prevent collection of data on the bats, because the government at the time identified with the mining and irrigation interests. Such manipulation is always open to a government and means no protective regime based on public service experts is secure.

Politically, a critical mass of interested, informed and creditable people who count as a local interest is needed to have impact, and the outside public needs to have reason to feel interested as well. This situation does not exist without a lot of public visitation to wild caves. I am reconciled to the wear and tear on the caves that may result from this, however big an effort I have put into the cleanup and track marking effort. It is the permit access rigmarole that damages the caving experience for me far more than the affect of uncontrolled public visitation. The permit system treats us like criminals on probation. It demeans cavers status in the community, and cuts the ground from under us in our ability to either instruct the public, or act in a real conservation crisis. I think caving clubs in Tasmania are headed for extinction in under current circumstances. It is significant for me, that



the Savage River Caving Club is the one doing the best; and I attribute their health to their happier access arrangement for their main caving areas. So different to our problem of having to beg from those who have hurt us.

I am not satisfied to offer in any future public consultations over cave

management. It is entirely possible for such consultation to be a matter of form only. My experience with a "public consultation process" in the case of Kubla Khan Cave management left me totally estranged since our concerns and interests were totally overridden at every point. My impression is that the real decision has been

made in advance behind our backs. I doubt very much if future examples will be any better, and I would participate more with the idea of spotting where the next danger is coming from, than in hope of fair treatment.

Henry Shannon

## ***Report on Hades Cave Rescue, Buchan, Victoria.***

*by Peter Ackroyd*

At 8.28 pm on Tuesday, 5th December 1995, Peter Ackroyd of the Victorian Speleological Association (VSA) received a phone call from Senior Constable Darren Jones of Morwell D-24. Darren had a chilling message: an 18 year old male had fallen five metres in a cave in "an unstable sinkhole in Wyatts Reserve, nine kilometres north of Buchan" (*far East Gippsland, Victoria*). This was not good news.

Over the next 17 minutes, Peter attempted to build on this slim report. Via a radio connection from D-24 to an ambulance attending the scene, he extracted the information that the victim had suspected head injuries but was able to walk and talk. Peter still did not know the cave's identity. He asked the ambulance officer to walk over to the cave entrance and read the number off the cave tag. The cave was M-92, Hades. (*Victorian readers will realise that Hades is NOT*

*in Wyatts Reserve.*) It transpired that the original call to Morwell D-24 had come in at 6.59 PM and that the police Search and Rescue Squad had yet to be notified, one and a half hours later — a situation Peter suggested should be rectified immediately. VSA members John and Kim Van Dyk and George Bradford, all of whom live at Buchan, were already in attendance with the Buchan and Bruthen State Emergency Services (SES) group.

This was not an auspicious start to what appeared to be Victoria's most serious rescue callout yet. The callout procedure had not been followed and the information received in Melbourne was very poor.

A short time later the VSA team received the official callout from the Police S&R Squad (*under the Victorian State Disaster Plan (Displan) volunteer groups must be activated by the police*). The police

instructions were that "a carload" of Melbourne based VSA members were to drive the 374 kilometres to Buchan where they would join a team of three Police S&R Squad members who were going to fly to the rescue site. In the event, the police group, consisting of Senior Sergeant Geoffrey Frost, Sergeant Barry Gibson and Senior Constable Jon Reader, had aircraft problems and had to drive down also. They passed the VSA team, who were doing some moderate speed low flying of their own, on the freeway near the eastern outskirts of Melbourne at 11.15 pm.

The Melbourne VSA team consisted of Peter Ackroyd, Geoff Hammond, Roger Taylor and Eric Lenser of Traralgon. Geoff was the S&R Officer for the club and the remaining team members had been selected on the basis of their actual rescue experience, familiarity with Hades and availability. When Eric was



picked up from Traralgon at 12.40 am it was pouring with rain. This made the situation look very bad indeed. Water flowing into the cave would add immeasurably to the difficulties of a rescue.

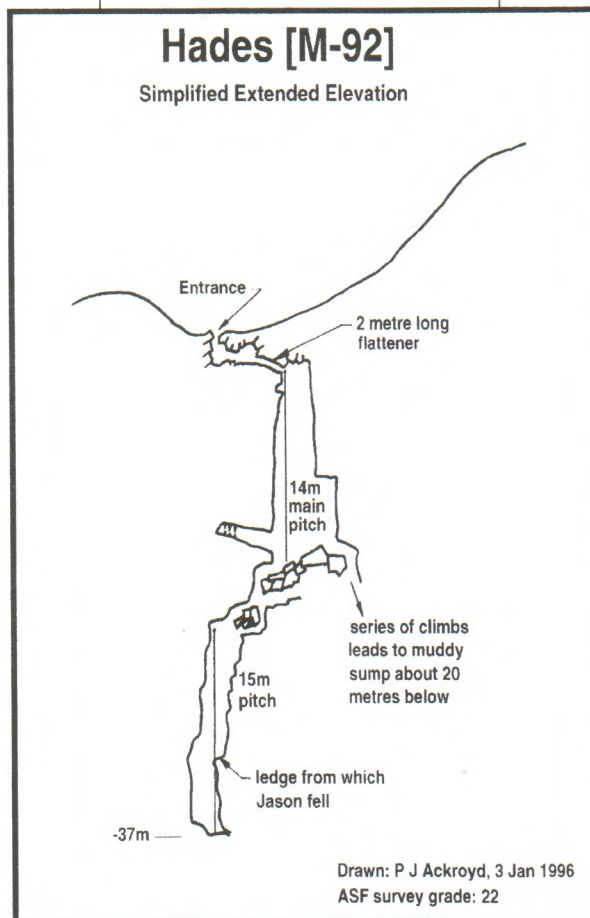
The VSA team arrived at the Potholes area near Hades at 3.01 am, Wednesday 6th December 1995 in heavy rain. Peter and Roger had already worked out how to tackle the rescue — one of the advantages of using people who are already familiar with the cave. After an initial inspection of the soggy site, Roger and Eric geared up while Geoff added his expertise in a surface liaison role, taking some of the load off Kim Van Dyk who had been filling that position. Meanwhile, Peter went into a huddle with the leader of the police S&R team, Geoff Frost, to plan out the details of the task ahead. This is often the most overlooked part of any rescue, and yet it is the most important. Unless the major details are worked out in advance, a rescue effort can turn into a disaster. Sometimes it is hard to resist the temptation to just rush into the cave and start putting people on stretchers and hauling them up pitches, but resist you must. Peter was able to advise Geoff Frost on the correct line the haul rope should take on the surface, the way the cave would be rigged inside and suggested the positioning of a log to

redirect the rope away from the edge of the hole.

It was at this time that Peter learnt that the injured person was 18 year old Jason Lau, a student at Donvale Christian College on an end-of-year outdoor pursuits excursion with about 20 other students from the same college. The group was under the control of a part-time maths teacher from the college. The students had been split into four teams. Jason Lau was part of a team which had descended into Hades using

It appeared that while the two team leaders were in another part of the cave, Jason Lau and the other three novices had been attempting to free climb down the second pitch (15 metres — see map). They reached a point about five metres from the bottom, where the climb becomes extremely exposed and somewhat overhanging. At this point the four students decided to return to the top. One of the novices managed to climb back up the pitch, but when Jason Lau attempted to do likewise he fell, landing on the rocky floor below. He suffered several cuts and lacerations to his face, head and arms. The first rescuers on the scene thought that he may also have injured his skull or spine.

A large SES contingent of around 40 had been on site since about 8.00 pm the evening before. They had set up tarpaulins over the cave entrance to shelter the site from the incessant rain and were generally supporting the underground rescuers. These consisted of local VSA members George Bradford and John Van Dyk, John's 16 year old son Josh Van Dyk and several SES members. This group had escorted the uninjured members of the school party from the cave and administered first aid to Jason Lau. From 11.30 pm Jason Lau came under the



SRT. Only one set of ascenders was available for the six member team. The team leader was 18 year old David Vaughan, who was assisted by Ben Grauer, also 18. David Vaughan had some rockclimbing experience but this was his first caving trip.



direct care of trained ambulance officer Bruce Wilson from Orbost. At some time after midnight this team had commenced the haul from the bottom of the cave.

Once we arrived at 3.01 am on the morning of the 6th December, Roger Taylor went down the cave to the rescue site, which was now a few metres above the head of the second pitch. There he took over from John Van Dyk at about 3.30 am. By now, the first wave of rescuers had been working for seven and a half hours and were tiring.

Once Peter had advised the Police S&R squad on the recommended overall course of action, he entered the cave to ascertain the current situation. On the way down, he assisted a near-exhausted member of the SES out through the flattener at the top of the main pitch. This took over 15 minutes to accomplish, all the while immersed in a, by now, Tasmanian-style waterfall. This same waterfall made communication extremely difficult. At this time John Van Dyk also made his way out of the cave.

Peter and Eric then removed the mass of rigging from the entrance pitch — more immersion in the waterfall — to permit the rescue haul system to be put in place. The ladder originally rigged by John Van Dyk was kept in place for the rescuers and the main haul line, now rigged by the police S&R squad on the surface, was run into the cave to test it out. Meanwhile, a fresh IV drip was lowered to be administered to the patient.

By now an hour had passed

and the waterfall crashing down the pitch was estimated to be between one and two litres per second — a not inconsiderable flow. Peter descended the main pitch to find that Roger had organised the lifting of Jason Lau completely out of the lower part of the cave and had him 'parked' under a rock verandah — the only truly dry spot left in the cave. Roger had just popped out to see what all the water noise was about and could hardly believe his eyes. Watching the waterfall crash down from the top of the cave, Peter and Roger commiserated that had this been any other time they would have loved to be in the cave in these conditions, but not when they were there to rescue someone.

Bruce Wilson had kept Jason Lau in excellent condition — he was warm and very relaxed. Peter first spoke to Jason to assess his mental state before advising Bruce that the volume of water coming down the main pitch was such that the lift could not be commenced just yet, due to the unacceptably high risk of hypothermia to the patient. After discussing with Bruce the patient's needs, Peter decided to exit the cave and arrange for the water to be diverted. Bruce reported that he could 'hold' Jason in his present condition for about another hour without needing any specialist equipment.

Given this information, and the fact that Peter, Roger and Eric were now wet and cold, they made their way to the surface to prepare for the task ahead and to rewarm and refuel themselves. Once there,

Peter advised the Police S&R officer, Geoff Frost, of the gravity of the situation and the need to divert the water. Geoff Frost immediately set to and, with the SES volunteers, commenced a moat-building exercise to divert the bulk of the runoff water, captured by the large surface doline and the hill behind, and pump it into an adjacent doline.

After an hour's warming in the back of a heated ambulance and with some food and drink inside the team, Peter had completed the planning for the rescue. Dawn was breaking when Peter, Roger and Eric re-entered the cave at 6.50 am. The water had been reduced to a small stream by the use of the moat and two pumps — the SES are to be heartily congratulated on the efficiency of this system. Roger dropped down the pitch to arrange the final shift of Jason Lau to the haul rope. Peter carefully bridged across the airy head of the pitch and rigged a large and very strong edge roller to the sharp lip. He also rigged a quick release and extraction system to allow the roller to be removed from the cave at the critical moment when Jason Lau reached it. Finally, Jason was fitted with a KED stretcher — a kind of super corset affair that completely encased and supported his head and upper body but allowed him to bend at the hips and to use his legs. The lift went smoothly under the very professional control of the S&R Squad on the surface. In the cave, lift commands were passed from Roger on the pitch, to Peter bridging over the head of the pitch,



to Eric in an alcove on the entrance side of the flattener, to the surface. From here, Sergeant Barry Gibson finally relayed the commands to Senior Sergeant Geoff Frost, who was commanding the team of haulers. It all went very well. At the lip, the edge roller was flicked up and out of the cave exactly as planned.

Then the crux of the rescue began. Roger lifted Jason's legs so that he could be eased slowly into the flattener, on his back and head-first. At the same time, Peter entered the flattener, face down and attached an additional, re-directional pull line for Eric, and prepared to manipulate Jason Lau, in the KED stretcher, through the extremely constricted, rocky, two metre long, tight section.

It was now imperative that the haul team on the surface follow instructions to the letter. In the constriction, a too enthusiastic haul could easily break Jason's neck. Again the haul team did a superb, highly controlled job. Even when Peter called for a 10 millimetre lift, that is what was delivered — pure professionalism! After three quarters of an hour of this, Jason had been eased through the flattener into the slightly more roomy entrance area. He was now only a few metres from the entrance and could tell from the excitement that he was getting close. Another fifteen minutes passed before Eric took control of the lift. Jason Lau was now a straight three metre haul from safety.

At 9.20 am on Wednesday

6th December 1995, Jason Lau was back on the surface. He was immediately whisked away by ambulance to Bairnsdale Base Hospital, where he was diagnosed as having lacerations, a deep cut under his left eye which required stitches and a broken nose. Given the potential for more serious injury, he was a very lucky lad indeed.

### Discussion

This was a disaster waiting to happen. The school group of which Jason Lau was a part was led by a person who appears to have exceeded his skill level. At a later debrief, it was discovered that even though this was to be an SRT trip the leaders did not know what a rappel rack or a Petzl Stop was. The most experienced of them, the camp leader, referred to a 'whalebone' as being the highest tech thing that he'd ever heard of for descending SRT ropes. The rigging of the cave was primitive 'straight down the pitch' style, taking no account of the very severe rub point over the lip. (Although it was claimed padding was used, none was found by the first rescuers on the scene.) Two things that the group did correctly were to have their charges wear construction helmets with chinstraps — Jason's helmet stayed on his head during the fall and was effectively destroyed when he hit. This no doubt absorbed much of the energy of the fall and saved Jason from more severe head injuries. The group also had a trained first aider and a small first aid kit in the cave with them. They were therefore able to carry out effective first aid.

There were over 50 people involved in the rescue in one way or another and everyone performed selflessly and efficiently. The Victorian Police S&R Squad are always good to work with — they are thoroughly professional and safe in everything they do. The ambulance officers on site were ever helpful and ensured everyone remained in good shape and able to continue their work. The Buchan SES volunteers did many of the things for which they are justifiably famous. They supplied a constant supply of hot food and drinks, electric lighting and a 'can do' attitude that ensured the underground workers had the best resources attainable. They were particularly valuable, having the knowledge and skills to deal with the huge flow of water running into the 50 metre doline above the entrance to Hades.

The three cavers from Melbourne, and one from Traralgon, finally stopped for their first rest in over 30 hours at 12.30 pm, snatching a brief two hours' sleep at Buchan before making the long drive home, having also missed a day's work. As if this wasn't enough, Eric had to be back at Traralgon in time for a two-and-a-half hour Senior Motor Mechanic's examination at 6.30 pm!

We've always wondered when the first really serious rescue would happen in Victoria. Now we know, and it appears that while school and outdoor groups keep ignoring the basic rules of common sense while in caves, we can expect to see more.



### Postscript

Both the outdoor pursuits group leader and team leader were very helpful in the provision of information upon which part of this report is based. The group also made a donation of \$200 to VSA.

Peter Ackroyd  
May 1996

## Cave Divers Body Found

**NELSON - NZ.** The body of a cave diver which has lain in a deep cavern west of

Nelson for the past 18 months has been recovered. Motueka police flew to the Pearse River below Mt Arthur yesterday to bring out the body of David Weaver, who drowned at the Pearse Resurgence. Mr Weaver, aged 30, a caving and rafting guide from Waitomo had been trying to achieve a cave diving record on May 20, 1995. His body was last seen on a ledge in an underwater cave more than 80m below the surface. It was considered too dangerous to recover the body at the time.

Sergeant Jim Burrows said a letter written to the police by a diving team was delivered to Richmond Police on Tuesday night,

telling them that Mr Weaver's body had been brought to the surface.

Mr Weaver's parents, who live in England, were notified just before 9am yesterday that their son's body had been found.

The coroner, Jim Fry, said an inquest had established that Mr Weaver died by misadventure, but a further investigation could now take place.

Quoted from the  
'New Zealand Herald'  
Thursday January 9<sup>th</sup> 1997  
& Posted on Ozcavers  
9/1/97 by  
Mark Bodt  
[markbodt@stss.co.nz](mailto:markbodt@stss.co.nz)

## FIRST CIRCULAR Celebrating the parks- A symposium on Parks History

At Mt. Buffalo Chalet, Victoria, 17-19th April 1998

As part of celebrating the 1998 Centenary of Wilsons Promontory and Mt. Buffalo National Parks in Victoria, an informal Parks History Group has been established. One of the major projects for the year is to set up a symposium to review aspects of parks history in Australia. Put the date in your diary now! Papers are invited on any aspect of parks history - national parks and other protected areas or urban parks are all welcome. At this stage, we can

announce that the Chalet will provide accommodation, meals, etc. (Thursday night to Sunday afternoon) for \$345 (shared

bathroom facilities)

or - \$405  
(en-suite accommodation).

### Registration of Interest in Celebrating the Parks Symposium :

Full Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

e-mail \_\_\_\_\_

I am interested in offering a paper :

A cheaper alternative is available at the nearby Tatra Inn for \$270. Conference fee will be kept to minimum, probably under \$100. If you are interested, please complete the form and send it to the conference convenor.

Elery Hamilton-Smith  
P.O. Box 36, Carlton  
South, Victoria  
3053, Australia.

"Duct tape is like the Force. It has a light side, a dark side, and it holds the universe together...."

--Carl Zwanzig



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# Crinoids

Written by Garry K Smith

As published in the NEWCAVES CHRONICLES No 7 July 1996

Fossilised crinoid stems are found in many limestone caves throughout Australia. They are the remains of marine creatures which flourished predominantly throughout the Palaeozoic era. They grew in diverse ocean habitats from shallow warm tropical water to cold deep water. These creatures were anchored to the sea bed by a root-like structure. When crinoids die, their calcareous skeletons soon break into segments and fall to the bottom. Ocean currents of the Early Carboniferous period moved vast quantities of crinoid remains across the sea-bed to form large drifts which over time consolidated into limestone deposits.

**Crinoids**, belong to the class of marine invertebrate called Crinoidea (phylum Echinodermata). Crinoidea meaning, "lily-shaped animals". A distinctive characteristic of echinoderms is their calcite skeleton and the symmetrical five-rayed structure of the adult body.

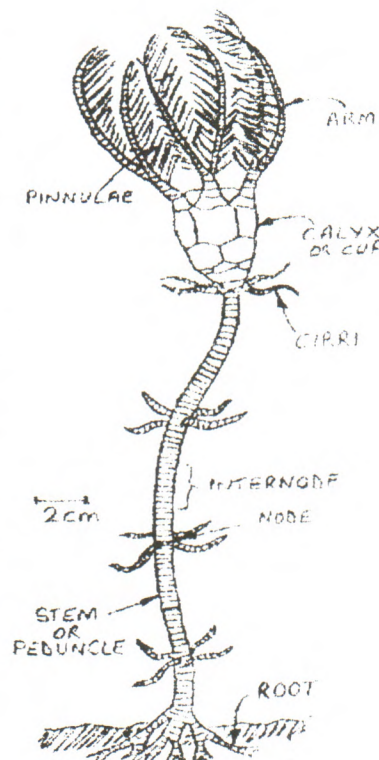
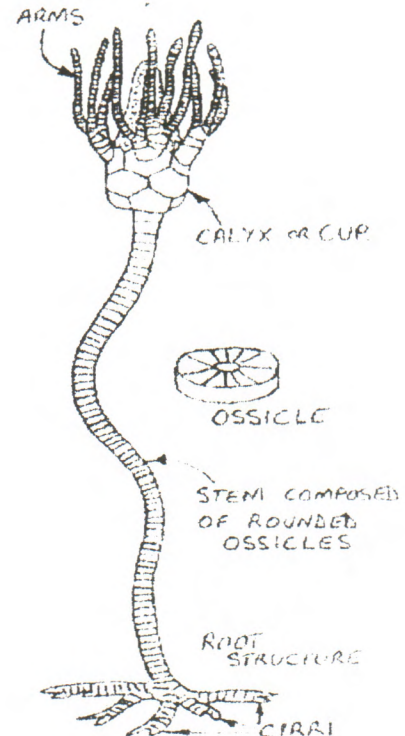
Crinoids consist of three main parts:-

- \***The calyx**, which is usually a cup-shaped body enclosing the vital organs
- \***The arms**, of which there are five or more. They are used to convey the food particles to the mouth
- \* **The stem (or peduncle)** and roots (or cirri), which serve to fix the animal to the sea bed

Crinoids are strictly marine animals which generally live attached to the bottom by a long peduncle, although some species are known that become free-moving as adults, having been fixed during development. These lack a peduncle, and carry on the lower part of the calyx a number of tendrils, which they can adhere to the solid ocean bottom.

Refer to the sketches at the side of the page as we look at the Crinoids in more detail-

Crinoids have five arms, or tentacles, which are edged with feathery projections called pinnulae. The animal has a root structure called cirri which attaches it to the ocean bottom. A slender flexible stem (also called peduncle) supports the main part of the body, called the calyx. The mouth faces upward from the centre of the calyx. The five featherlike arms extend from the calyx and act as food gathers in the water current. Like the stem, the arms are made up of numerous calcareous discs called ossicles, which are held together by muscles or ligaments. The tentacles have open grooves, along which minute hairlike projections sweep food particles toward the mouth. This food consists mainly of zooplankton less than 0.5 mm in size. When the animal dies the entire skeleton normally falls apart into the small separate plates (ossicles). Therefore, it is rare to find intact well-preserved crinoid fossils.





**Morphology:** Crinoid larva development is known exclusively from the comatulids. When the egg ruptures, a free-swimming, bilaterally symmetrical larva, called a *doliolaria* is formed. The larva swims about, using four or five rings of cilia, for a few hours or days, and then settles to the sea floor to attach itself by the anterior end.

Crinoids can be divided into four subclasses, the **Inadunata**, **Flexibilia**, **Camerata** and **Articulata**. Of these, the first three are confined to the Palaeozoic era and the last to post-Triassic communities. The precise origins of the class are lost in the Precambrian, although both cystoids and eocrinoids have been proposed as possible ancestors.

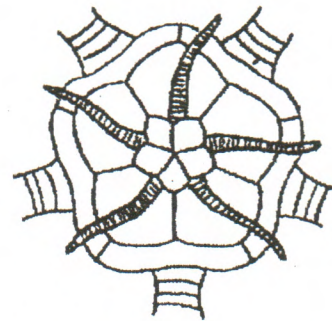
Numerous species evolved with varying numbers of plates in the calyx, arms and other specific features. The anchorage structure of the crinoids is also present in many forms. The shape of columnar plates which make up the stem, varies from species to species. They may be circular, elliptical, pentagonal, square or stellate, while some may have a smooth outer surface, radial lines or petal-like designs. The one thing in common is that they all have a hole in the centre of each plate, to form a canal which runs the length of the stem. The classification of crinoid species is also based to a large extent on the structure of the cup (calyx).

Throughout the Palaeozoic era, the inadunates and camerates dominated coastal reef faunas. During this era, crinoids flourished in the ocean habitats from shallow warm tropical water to cold deep water. Diversity of species and numbers reached a peak during the Silurian, Devonian and Carboniferous periods. (Approx. 430 to 280 million years ago). At the end of the Lower Carboniferous the camerates suffered a dramatic reduction in species from over 700 to just 4. This reduction also occurred in the other subclasses, but they survived in significant numbers until the end of the Permian Period (Approx 225 million years ago). Some Paleozoic limestone deposits, largely composed of crinoidal remains are up to a couple of hundred metres thick and cover areas measuring hundreds or thousands of square kilometres.

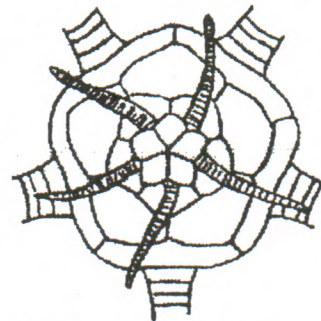
**Echinoderms** - "More than 21 classes have been identified, but only about 6,000 species of six classes are known to still exist. The six are:- Crinoidea (*feather star and sea lilies*), Asteroidea (*starfishes*), Ophiuroidea (*brittle stars and basket stars*), Echinoidea (*sea urchins, cake urchins, and heart urchins*), Concentricycloidea (*sea daisies*), and Holothurioidea (*sea cucumbers*). Echinoderms are widely distributed in all the oceans, occurring in marine environments ranging from the intertidal zone to the deepest ocean trenches". (*Encyclopaedia Britannica*, 1989)

There are approximately 700 Crinoid species alive today. All belong to the subclass, *Articulata*, of which there are about 80 stemmed forms. They inhabit water more than 100 m deep. The deepest water crinoid, *Bathocrinus*, lives down to 9700 m in the Kuril Trench and to 8210 m in the Kermadec Trench.

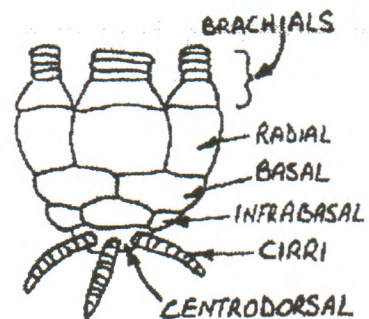
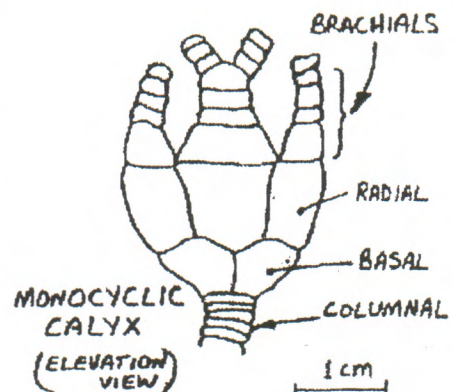
**Crinoidea** - Subclass *Articulata*, is the only subclass in which there are species alive today. These include the Sea Lilies and Feather Stars.



MONOCYCLIC CALYX  
(PLAN VIEW)



DICYCLIC CALYX  
(PLAN VIEW)

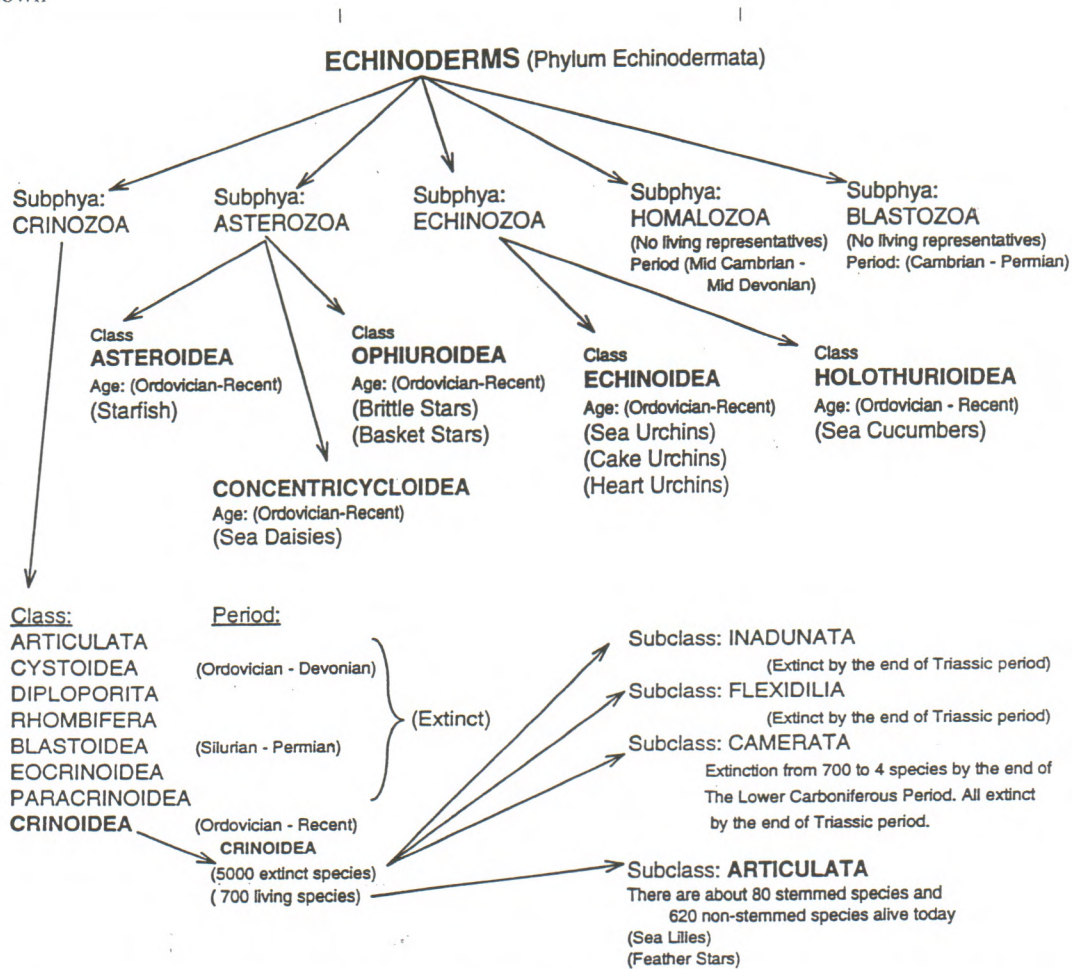


DICYCLIC CALYX  
(ELEVATION VIEW)



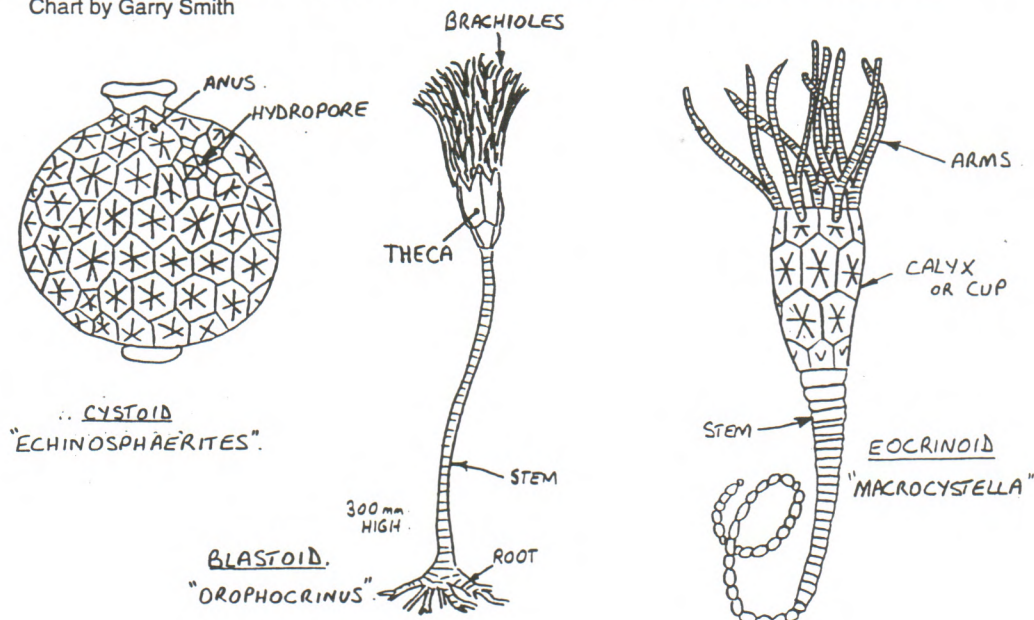
**Sea lilies** live mostly in deep ocean waters. They were abundant in prehistoric times, but only few species remain today. Sea lilies eat tiny aquatic organisms.

**Feather Stars** are closely related to sea lilies, however they break from their stalks when young and live free, often on tropical coral reefs. Feather Stars can swim short distances by waving their arms up and down



There are more than 21 classes of ECHINODERMS and only about 6,000 species in the six highlighted classes are known to exist today. About 700 of these belong to the subclass: Articulata.

Chart by Garry Smith





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# STUFF...

**What ISS has been up to.**

The year 1995/1996 has been a good year for I.S.S. Inc. We have had a full calendar, and all trips have been well attended. Our membership has increased and it is interesting to note that many trips are attended by prospective members.

One of our main advances in '95/'96 was at Yarrangobilly. We have consolidated our position in this area. Excavations of rubbish and debris from previous Cave management track making and lighting in Jersey Cave by various clubs, including 2 cubic meters by ISS have deepened the hole to stage where a ladder will be needed. The restoration of the cave location map in the Ranger's Office is 99% complete - a few more contour lines need to be drawn in. An offshoot of the cave location map is the accurate location of many of the caves - for the future!

Bendethera, west of Moruya, is another area which has had concentrated attention. Our collective knowledge of the area has increased, as has the

documentation. Much information has been contributed by other people - notably Richard Willson and Co., and members of the ex Bermagui Speleo Association. I would like to thank these groups for being so enthusiastically forthcoming with maps and information. Current members of I.S.S. have also spent time and effort locating, exploring and surveying caves at Bendethera, which now number upwards of 65.

We have had two visits to Wyanbene in the last year. For many people the trips were purely a re-visit after a long absence. It's no more dry or comfortable than it was 15 years ago!

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**NEWCASTLE &  
HUNTER VALLEY  
SPELEO SOC.  
(NEWCAVES)  
PRESIDENTESS'S  
REPORT for 1996**

By Jenny Whitby.

This has been an exceptional year, with visits to many

karst areas across NSW, such as Yessabah, Canomodine, Bendethera, Carri Arch, Bungonia, Jenolan, Pilchers Hill, Gloucester, Moore Creek, Dinton, Borenore, Wellington, Cliefden and Timor.

There have been significant discoveries by members of NHVSS at caves in our area. At Pilchers Hill a major extension in a known cave was discovered which was inhabited by a large colony of Bent-Wing bats. At Gloucester, divers Jarn Hodgson and Ian Vickery have done significant underwater exploration to extend the known length of Gloucester Caves by 40 metres down to a maximum depth of 5.7 metres. A dig at Timor resulted in the discovery of a small chamber with a helicity, and several straws, the longest measuring 58cm long. Quite a discovery for Timor! Due to the previous damage in this public cave area, the dig was resealed, leaving a time capsule in the chamber. The exact location of the dig, being known only to those present.



Gloucester Caves and Karst area has come under threat of being mined by a company formed to supposedly supply agricultural lime for the local region. The company has been approaching the local landowners and asking them to sign access and test drilling agreements. In the first instance the company approached landowners to sign access agreements before the "Department of Minerals and Energy" had granted the "Exploration License". A misleading and underhanded tactic as the company only had an Exploration License Application No. 575. Many of the landowners are totally against granting access for test drilling or mining. On a subsequent visit to landowners, the company executives, armed with a granted Exploration License No. 5073 covering approximately 78 square kilometres, used almost stand over tactics to persuade landowners to sign the agreement. Several landowners have resisted however it appears that the Mining Act does not give the property owners an option in the long term.

Property owners were told that the mining would be a small 2 man operation to supply crushed lime for local agriculture. However we are led to believe that the executives of the company (J. Sonnberg & M. Sheldon) have ties in the coal mining industry and that lime will be used to neutralise the acidic water from a local coal mine. The water is believed to be run-off from coal stockpiles and the waste water from the coal washery. Some of this water is believed to be leaching

into a local creek. Another possible use for the limestone is to consolidate roadbase for the upgrading of the Pacific Highway. A number of NHVSS members are convinced that this mining operation if it goes ahead, will be on a much larger scale than the executives of the company are forecasting, and it will continue for in excess of 20 years, given the number of coal mines getting underway in the local region. The caves GL1 to GL13 are extremely abundant in fossil remains, are hydrologically important and contain significant varieties of fauna including glowworms, Gudgeon Fish, crustaceans, long neck tortoises and leaf tailed Geckos, as well as significant bat roosting sites.

On another subject, the State Government has legislation in progress that proposes a major restructure of the management of Jenolan, Abercrombie and Wombeyan Caves. The NSW ASF has also been lobbying for the government to consult and honour its pre-election commitments, which preserve the independence of the "Caves Reserve Trust" from NPWS, and of the Karst Conservation Act. The bill also proposes the control of these reserves primarily by the NPWS. All activities would be governed by NPWS regulations, including issuing permits, and control of caving/abseiling activities. A concern to us all. We'll keep you posted. (*See, 'STOP PRESS' on page 3 for more details*).

Our club gained extensive publicity in Newcastle through the "Toys For Men

Expo" held in November 1996, we even made it on NBN television news! In the current issue of Australian Geographic (Jan-Mar 1997), a close look at an article about an AG sponsored SUSS exploration over the last two years of McCavity Cave at Wellington shows some of our members. Look closely and you will find Gordon, Danielle & Sean Vincent (who all hold dual membership of NHVSS and SUSS). Also a recent article on caving in "The Post" featured NHVSS. Virtual and computer cavers of the world wide web look out, NHVSS is soon to be on the internet! Our resident computer whizzes Katie & Stephen Vandenberg are in the process of creating a NHVSS site.

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#### **Some news from Exmouth, for what it's worth...**

*[Ed's Note - I didn't write  
that line either!!!]*

Cave exploring has continued at a steady pace through 1996 and the number of recorded features has risen to 599. The last few months has been a bit quiet due to involvement with the DOT Marina quarry cave. Local speleo's have been involved with the cave relocating and mapping project which started in Jan '96 and have sketched and mapped approx' 40 features this year. Hopefully the "first 100 recorded features" part of the project will be finished in mid '97 and the 101 to 200 series can be started on.

The main cave mapping project, C-163, Wanderers



Delight, is still in abeyance, as it has been since September '93 due to flooding of the canal system, which has to be negotiated to gain access to the unexplored section of the cave. This doesn't look set

to change in the near future what with a heavy cyclone season predicted for this year. The surveyed length of the cave remains at 6.49km.

Some pictures of Cape Range caves (*and me!*) can be accessed on the WASG home page at  
<<http://techpkwa.curtin.edu.au/Speleology>>

Darren Brooks

## DEFINITIONS OF CAVING TERMS.

### HOW MANY DO YOU KNOW?

Written by Garry K. Smith with assistance of Jenny & Gary Whitby and Jill Pender.

*How many times have you taken a novice caving for the first time? You have probably thrown around caving terms in general conversation without considering whether the novice knows what you are talking about. I am quite sure you could spin a good yarn about many of the common terms used by the caving fraternity. You will probably get a good laugh out of the following terms and their meanings. Do you know what the real meaning of these words are?*

<b>Anthodite</b>	A stalagmite covered in ants.
<b>Bedding Plane</b>	Aircraft used by the Mile High Club.
<b>Braccia</b>	Scientific name for a type of fern that grows near the entrance of a cave. This is the shortened name for (BRACCIA YA LEG) as the damp ferns are typically known to cause cavers to trip and fall at the cave entrance.
<b>Boulder Choke</b>	The fate of a person on bottom belay when a rock is dislodged and you neglect to yell "below".
<b>Cave Pearl</b>	The end result of picking ones nose after a day in a dusty cave.
<b>Cavernicole</b>	The entrance fee to a tourist cave.
<b>Clints</b>	The sound made when you drop a karabiner.
<b>Daylight Hole</b>	The result of a large fire near a nylon tent.
<b>Dog-Tooth Crystal</b>	A Formation that bites.
<b>Dolomite</b>	Commonwealth Bank account for Junior Cavers.
<b>Drapery</b>	Parts of overalls left behind in a tight squeeze lined with cave coral.
<b>Fluorescein</b>	A new brand of toothpaste.
<b>Fluorometer</b>	Toothpaste dispenser.
<b>Fluorescence</b>	Sparkling teeth after cleaning with <i>Fluorescein</i> toothpaste.
<b>Flutes</b>	Found on a <i>Whaletail</i> .
<b>Friend</b>	Someone willing to go caving with you after eating baked beans for breakfast.
<b>Gastropod</b>	A strong pocket of gas left behind by a caver who has had baked beans for breakfast.
<b>Handline</b>	The result of a fast abseil without gloves.
<b>Helictite</b>	Spiral shaped squeeze.
<b>Heligmite</b>	Spiral shaped parasite.
<b>Inflow Cave</b>	Pit toilet in the cavers camping area.
<b>Joint</b>	The parts which ache after caving.
<b>Karst</b>	A splint used to hold a cavers broken limbs ridged.
<b>Meander</b>	Looking for a cave entrance.
<b>Moonmilk</b>	Cavers cocktail.
<b>Overhang</b>	The day after the cavers Christmas party.
<b>Pothole</b>	A cave used to store illegal substances.
<b>Spelunker</b>	The impact sound of a caver who has abseiled off the end of a short rope without a knot.
<b>SRT</b>	Suspended Recreational Tourist



# BOOK REVIEWS

## *Sinkholes, Caves & Spring Lakes*

*An introduction to the unusual aquatic ecosystems of the Lower South East of South Australia.*

by Mia E. Thurgate

Review by Ken Grimes

*South Australia  
Underwater Speleological  
Society  
Occasional Paper number  
1  
1995  
A4, 48 pages, 8 figures, 4  
site maps,  
20 colour plates.*

This 48 page publication is based on an earlier, less accessible, report produced in 1992 by the Department of Ecology and Evolutionary Biology at Monash University, where Mia did the original research. There has been considerable reorganisation of the original report and the discussion of the stromatolites, in particular, has been expanded.

Following an introduction to the geology, karst, climate and surface biology of the region, Mia describes the cenote lakes: the

stratification and chemistry of their waters and then the biology - in particular the stromatolites that grow within them. The recognition of these actively growing calcareous organo-sedimentary deposits was the most important discovery to come out of Mia's work in the area. A description of the Spring Ponds (and associated submerged caves) then follows, including the hydrology and the extensive aquatic vegetation. The final conclusions put up many questions and emphasise the need for additional studies, as well as active management of these unusual ecosystems. Two appendices contain species lists for the cenotes and the spring ponds. There are also maps and photos of four study sites (Gouldens Hole, The Black Hole,

Ewens Ponds & Piccaninnie Ponds)

The apparently high price of \$35.00 is a necessary consequence of the 20 colour photographs. These are quality prints which have been pasted in, and include some excellent aerial views of the cenotes and ponds, and underwater shots of the stromatolites and the submerged caves at Piccaninnie Ponds.

The report is available from SAUSS:

c/- Grant Pearce, PO Box 265, WILLIAMSTOWN, SA 5351

for \$35.00 + \$2.00 post within Australia.

Or, from Mia Thurgate, Dept. Tropical Environment Studies & Geography James Cook University, Qld 4811.

## Underground Photographer Issue 1 & 2

Underground Photographer is a new quarterly publication from the United Kingdom covering photography, video, lighting and art underground. Issue 1 was published in December

1995 as a forerunner to the setting up of a British Cave Research Group (BCRA) special interest group (SIG) for cave photographers. In the end a SIG was not started however two brave

individuals who no longer wanted to go caving volunteered to put together a quarterly magazine. Volumes one and two are reviewed below. These are excellent publications for



anyone interested in underground photography and a must for the club library. Subscriptions and further information can be obtained from

*Kym ap Rhys,*  
*Underground*  
*Photographer,*  
*40 Buckingham Road,*  
*Petersfield, Hants,*  
*GU32 3AZ, United*  
*Kingdom (email:*  
*kym@dhios.demon.co.uk;*  
*webb site:*  
*http: www.dhios.demon.co.*  
*uk).*

#### **Underground**

**Photographer Issue 1:** This issue was put together by members of CREG to gauge support for a specialist Cave Photography Group in the UK. It consists mostly of previously published articles on photography particularly from the BCRA Cave Radio and Electronics Group (CREG) publications. Many

of these are quite technical covering areas such as the construction of a Redundant Array of Little Flash guns (RALF concept), connectors for home made flash guns, the use of modeling lamps underground and the construction of helmet mounted CB radios to for photography in large chambers. Photographic topics include the use of high latitude black and white film, 3-D photography, underwater photography and speleothem luminescence using UV light. Electronic imaging and storage is also included. There is also an excellent article on photographic copy right by Chris Howes which although written specifically for UK law is very relevant to Australia.

#### **Underground**

**Photographer Issue 2:** This is the first issue produced by

Kym ap Rhys and Paul Peppiat who bravely took on project. It sports a new format from Issue one including a gallery section of readers photographs, letters to the editor, beginnings of a question/answer section and pictorial features from top UK photographers. Chris Howes continues his excellent series on photographic copyright. The material is mostly new and is generally less technical than Issue 1 and therefore more accessible to cavers like me. Considerable space is devoted to a video feature covering basics and lighting set-ups. The only negative is the quality of the photographs which let the publication down, this is due print quality not the original photographs.

David Gwillim

## **SPELEO SYNOPSIS No 21**

**May 1995 - September 1995**

*by Peter Ackroyd*

### **AUSTRALIA**

**Speleo Spiel 286** (May 1995)

This issue of the Tasmanian Caverneering Club's newsletter carries proposals for access restrictions to one of Australia's premier caves, Exit Cave. The restrictions include gates on all non-vertical entrances to the system and a permit is required for access by Tasmanian caving clubs or commercial groups. Clubs from any other Australian

state have no access rights except through a Tasmanian club.

**The Western Caver 34** (1994)

This issue contains many articles on invertebrates in Western Australian caves. These articles give a good overall idea of the life forms likely to be encountered in the twilight zone of WA caves. There is also an update on newly numbered caves found in Yanchep and

a report on a new caving area, East Pilbara.

**Helictite 32 (1) (1994)**

A granite cave in New England, NSW, is described in this issue. It is apparently formed within weathered bedrock.

**Helictite 32 (2) (1994)**

Detailed geological mapping of the Bungonia limestone by Julie Bauer takes up much of this issue. An article on cave dwelling



leeches in Papua New Guinea completes it.

#### **Southern Caver 59** (*Aug 1995*)

This issue gives an update on current exploration in the JF-34/341 Rift Cave System, now up to nine kilometres long, and a map of Niggly Cave, at -375 metres, Australia's deepest cave. This latter cave is now known to be a part of the fabled June Master System, confirmed by dye tracing from Growling Swallet and, later, Porcupine Pot, five kilometres to the north. Current exploration efforts are being concentrated on caves to the north and south of Niggly Cave.

## **NEW ZEALAND**

#### **NZ Speleo Bulletin 170** (*Jun 1994*)

The initial discovery, and subsequent exploration, of the caves of Garibaldi Ridge (north-eastern part of the South Island) take up much of this issue. Euphrates Cave, at 2.8 kilometres, is the longest known cave here. Elsewhere, tales of trips to Greenlink (Takaka Hill, South Island), during which, on two separate occasions, groups became entrapped by floods, make exciting reading. There is an obituary for original NZSS member, Ernie Truscott, who passed away at the age of 94 and a section called 'Cave Notes' mentions a diving connection being forced between Virginia and Warrens Caves at Waitomo (North Island).

## **EUROPE**

#### **Mmoires de Biosp,ologie XXI** (48) (*Dec 1994*)

Several new species of cave dwelling animals are described including molluscs, crabs, pseudoscorpions, mites, araneae, opiliones, collembola, coleoptera and fish.

#### **UIS Cave Diving Magazine 6** (*1994*)

This magazine is edited in Italy where printing standards are very high and this is reflected in the quality of this International Union of Speleology publication. Articles written for it are either in English, French or German and cover the fields of underwater cave science, cave exploration and diving techniques.

#### **International Caver 12** (*1994*)

This issue has lead articles on the caves of Vietnam, the Cuetzalen area of Mexico and an interview with three members of the International Union of Speleology (IUS). Other items include a guide to the caves of Romania, with tips on food, carbide and travel, and a listing of the current longest and deepest caves in the world.

#### **Caves & Caving 67** (*Spring 1995*)

The latest major discovery in the UK, Ogof Draenen, is still in the news in this issue. Now that the rate of new passage found in the cave has fallen below one kilometre per week, there is time to publish a review of just how it all came about and to print a map with some geological details. Elsewhere in the world, an Oxford University Cave Club trip to Northern Spain resulted in two caves being pushed to -450 and -500

metres respectively, the UK based Imperial College Caving Club has been active in the Migovec Plateau area of Slovenia, a small team (from Australia?) has carried out a reconnaissance of karst areas in South Sulawesi and East Timor (Indonesia) and there is a report from the China Caves '94 project team on their discoveries in the Xinlong Gorge area, near the Yangtze River. The issue finishes off with descriptions of "finding" a backdoor entrance to Dale Barn Cave in Kingsdale by the simple expedient of carrying out an RDF fix from inside the cave and blasting down to it.

#### **Cave and Karst Science 21**(2) (*Mar 1995*)

This issue contains papers from an international symposium on karst environments and includes articles on cave water chemistry, cave conservation in the UK, regional mapping of karst for environmental analysis, human impact on karst in Japan and Slovenia, the effect of the epikarst zone on speleogenesis, vadose karst canyons in Norway and the hydrology of the Southern Cape karst belt on South Africa.

#### **Descent 124** (*Jun Jul 1995*)

Another good issue, which contains a major article describing extensions to Ogof Draenen (South Wales), now over 26 kilometres long and still growing! There are some reminiscences from Sid Perou, known world wide for his caving films and for epics in getting the right shot in the ridiculous conditions normally met in caves, a short report on a caving trip to Belize and a



summary of accidents in the UK for 1994.

### **ISSA Newsletter Vol 1** (Spring 1995)

The International Society of Speleological Art (ISSA) has recently been formed (June 1994) and has published volume one of its newsletter. The aims of the society are to provide opportunities for, and to promote the execution of, works of art on a speleological theme. Drawing and painting appear to be the most common forms of expression but any medium, including photography, is acceptable. The sole Australian representative of ISSA to date is CEGSA member, June MacLucas.

### **Descent 125** (Aug Sep 1995)

This issue of Descent commemorates the first descent of Gaping Gill (Yorkshire) by E A Martel 100 years ago. In other articles, more extensions have been found in Ogof Draenen (South Wales) to make the cave the fourth longest in the UK and Sid Perou continues his saga of his early (1960s) attempts at underground film making.

### **International Caver 13** (1995)

This issue contains a map and description of the 1,392 metre deep Lukina Jama - Trojama System in Croatia. The cave consists of a series of shafts which end in a siphon almost directly below the entrance. Tim Stratford gives a brief description of the prolific stone age art, estimated to be 20,000 years old, found in Grotte Chauvet in the south of France. This is followed by expedition reports from

Northern Mongolia, South China, the Philippines and Central and Western Turkey.

### **Caves & Caving 68** (Summer 1995)

Some extensions and links to known caves in the UK are reported in this issue. A report on the October 1994 British cave radio and electronics group field meeting reveals some interesting developments in underground radio. In the overseas section, a small group pushing Hoyo del Sedo in Northern Spain reached a depth of -905 metres with unexplored cave still ahead. Dave Checkley led a team to some caves in Borneo and more caves are reported from Nepal. In the news section it is revealed that one of Austria's major caves, H"lloch, has been sold to a commercial trekking group which will now be charging entry fees to the third longest cave in the world.

### **Cave and Karst Science 21** (3) (June 1995)

This issue contains learned papers on alpine speleogenesis in Europe, an inventory of karst in Southern Turkey, efforts to conserve limestone pavements in the UK, field tests of limestone dissolution rates in Austria, lakes as a speleogenetic agent in Brazil and evolution of caves in Tibet.

## **USA**

### **Compass & Tape 37** (Jan 1995)

The two principal articles in this issue deal with protecting Suunto compasses and clinometers

by dipping them in "thermoplastic rubber solution" and a description of survey standards and procedures adopted by Carlsbad Caverns National Park.

### **NSS News 53(2)** (Feb 1995)

This is a special conservation issue containing a wide variety of articles. The main one covers the huge strides made in recent years in the conservation of Alaska's karst on the timber rich Prince of Wales Island - cavers have played a significant role in ensuring foresters take karst into account when harvesting logs and building roads. Other articles deal with cave clean-ups, lint and graffiti removal, bolting of caves by rock-climbers and an interesting philosophical discussion on just whether humans belong in caves.

### **NSS Bulletin 56 (2)** (Dec 1994)

Articles in this issue include the results of an eighteen month biological survey of Lechuguilla Cave (New Mexico), the effects on cave microclimate of a restaurant in Mammoth Cave (Kentucky), changes in Washington's Mount Rainier glacier caves over 80 years, investigations in salt caves in Israel and correlation between cave passages and surface features in South Dakota caves.

### **NSS News 53(3)** (Mar 1995)

This issue records the fascinating tale of a group of cavers searching for and mapping dolomite caves in North-Western Botswana, Africa. Three new caves were found including



Botswana's longest, the 1.8 kilometre long Blue Cave. Other articles cover the collecting of embroidered caver 'patches' and an examination of rabies in insectivorous bats.

**NSS News 53(4)** (Apr 1995)

Removal of old mining debris and fill from a show cave is the subject of the main article in this issue. Other items include an overview of a study of the effects of workshops and septic tanks above Carlsbad Caverns in New Mexico and an obituary for Russell Gurnee, caver and cave manager extraordinaire.

**Nittany Grotto News 42(2)** (May 1995)

This is a special edition covering a 1994 expedition to Harrison's Cave, Barbados, to advise the Government there on mitigation of environmental and structural problems related to karst.

**Georgia Underground 31(3)** (Jun 1995)

This is an excellent club magazine with some great articles. The first item describes the extension of a 25 metre deep TAG pit to a depth of 137 metres. A short article follows describing finding new pits

on a remote ridge and getting them 'pirated' by members of the same club! Hidden River Cave in Kentucky has been extended to almost ten kilometres in length with many leads yet to be pushed. Internationally, the club has been active in Guatemala (Central America) and Spain.

**NSS News 52(12) Part II - American Caving Accidents, 1993**

The compilation of American caving accidents serves as a useful reminder to remain alert and to learn from others' mistakes. An introductory article discusses 'in cave' care of sick or injured cavers in situations where extreme remoteness (eg 1,000 metres down) or other circumstances make it impractical to commence a rescue operation immediately. In 1993 twenty people were seriously injured and ten were killed in US caving accidents. Most of the injuries, and some of the deaths, were due to falls in caves. Six of the deaths were those of underprivileged youths when their 'counsellor' ignored signs and verbal advice, and took them into a flooding cave. Five cave

divers drowned in the US in 1993.

**NSS News 53(5)** (May 1995)

Some obituaries and a summary report of a 1993 Christmas reconnaissance visit to Mexico make up this issue.

**NSS News 53(6)** (Jun 1995)

A slim volume containing a description of the exploration and mapping of two short stream caves in tufa in Guatemala.

**The NSS Bulletin 57 (1)** (Jun 1995)

This issue records cave fauna from Alabama and cave fish from Florida, a diving protocol for aquifer sampling in underwater caves, speleothems originating from aerosols, formation of underwater helictites correlated with paleotemperatures and "What are Anthodites?"

**NSS News 53(7)** (Jul 1995)

This issue is devoted to a report on the 1994 surveying and cleaning project carried out in Alabama's Cathedral Caverns, a spacious, 3.4 kilometre long show cave.

THAT'S ALL FOR THIS MONTH  
KEEP THOSE ARTICLES ROLLING IN...



