

AUSTRALIAN

The Journal of the Australian Speleological Federation

CAVER

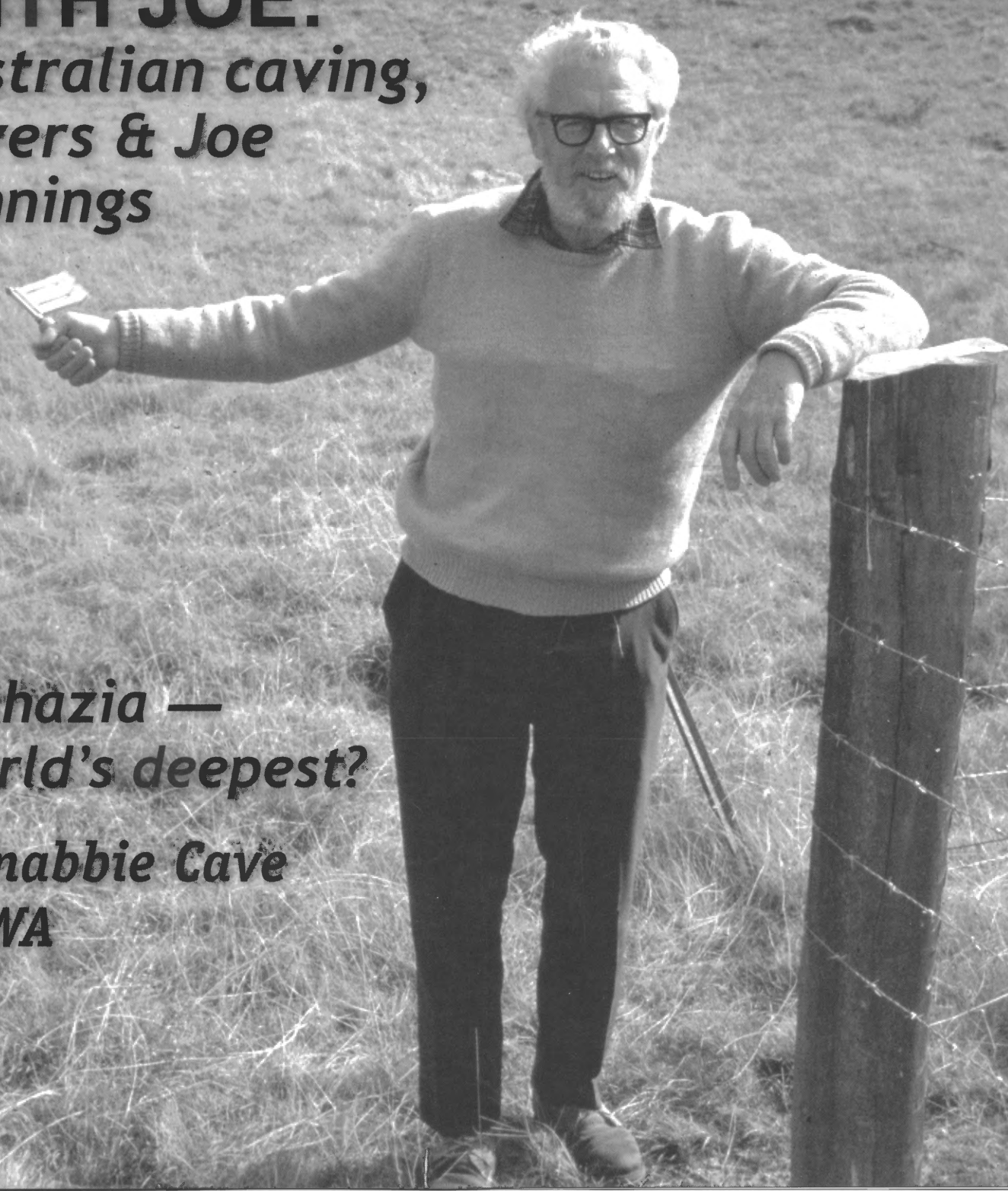


No. 161

March 2004

WITH JOE:

*Australian caving,
cavers & Joe
Jennings*



*Abkhazia —
world's deepest?*

*Burnabbie Cave
— WA*

Coming Events

This list covers events of special interest to cavers and others seriously interested in caves and karst. A similar list in the ACKMA Journal will give more attention to meetings of specialist scientific interest. Both lists will be just that: if you are interested in any listed events, contact Elery Hamilton-Smith on [REDACTED]. If you plan to visit North America or Europe, we can probably provide details of the many local-regional meetings which take place there.

2004:

- April 14-16 **Australasian Bat Conference**, Toowoomba, Qld.
 May 12-17 **XI International Symposium on Vulcanospeleology**, Azores www.sveurop.org/gb/documents/meetings.
 May 1 **NSW Speleo Council Meeting**, Wee Jasper, Megan Pryke 02-9524-0317.
 May 23-28 **Cave Presenters Workshop**, Mole Creek.
 May 29-30 **ACKMA Annual General Meeting**, Mole Creek.
 June 21-14 Genesis and formation of hydrothermal caves, Budapest, Hungary.
 Sept 13-18 **TRANS-KARST**: First International meeting of the Vietnamese-Belgian Karst Project, Hanoi.
 October 16 **NSW Speleo Council Meeting**, Sydney, Megan Pryke 02-9524-0317.
 October Dwight and Mary Deal hope to run the Karstlands Tour of South-West China, which was scheduled for 2003 but wiped out by the SARS epidemic. (Will Bird flu now wipe this out?)
 October 10-16th **Limestone Coast 2004**: International Conference at Naracoorte and Mt Gambier; will include the final meeting of ICGP 448 and a workshop on RAMSAR Subterranean Wetlands.
 November 6-7 **SSS 50th Anniversary!** To be held at Wombeyan caves. Launch of new Wombeyan Caves book, anniversary dinner with speeches and guest speaker. Details: <http://www.sss.org.au/>
 November **Canberra Speleological Society 50th Anniversary** – see note within, details Rosie Nicholson 02-6231-6665

And Looking Ahead

2005

- Jan 2-8 **25thASF Conference**, Dover, Tasmania (see separate note in this issue)
 Details: Ric Tunney, [REDACTED] or see Aus Caver 160
 January **26th ASF Conference**, South Australia, celebrating 50 years of the Australian Speleological Federation. Start planning now.
 April 10-17 **ACKMA Conference**, Westport, New Zealand.
 Aug 21-28 **14th International Congress of Speleology**, Athens, Greece.

2007

- January **ACKMA Conference**, Buchan. This will be part of the celebration to mark the centenary of the discovery of Fairy Cave.
 January **26th ASF Conference**, South Australia, celebrating 50 years of the Australian Speleological Federation. Start planning now.
 For further information on events go to [REDACTED]



Aspiring Products now in Australia...

Caving, Cave Diving, Climbing Safety and Rescue Equipment

NEW!
Trog Suits

Competitive Advantage Technologies Pty Ltd

\$ incl GST	Products	Application
\$189.95	Trog suits	NZ made suits: 1000denier durable Cordura, double stitched where needed most! Better value than cotton overalls!!!
\$99.95	Speleo	Caving sit harness, with maillon attachment, harness suited to SRT.
\$84.95	Triad	Caving sit harness with fixed attachment point (optional fixed cowstails).
\$119.95	Phantom	Climbing Harness — internally padded, top of the line harness for descents and climbing.
\$42.95	Footloops	Suited to SRT in combination with the Chest Harness & Speleo Caving Harness.
\$19.95	Chest Harness	Suited to SRT in combination with the Chest Harness & Speleo Caving Harness.
\$89.95	Liquid Ice	Compression bandage & Ice combined. 2 reusable bandages + coolant! Provides immediate first aid in the field.
<div style="text-align: right;"> <div style="border: 2px solid black; padding: 5px; transform: rotate(15deg); display: inline-block;"> NEW </div> </div>		

\$p.o.a

Racks and Figure Eights, Karabiners, Maillon Rapides, etc.

(Delivery charges additional depending on the location & urgency)

All other access hardware for cave diving, caving, climbing, safety and rescue.

Email: tonymorris@optusnet.com.au

Phone: 0407 807 076

Order 4 or more of any item and get 10% discount on that item

AUSTRALIAN CAVER

Australian Caver is the Journal of the Australian Speleological Federation and is published quarterly.

This work is © Copyright 2003, Australian Speleological Federation Incorporated, although copyright in articles, photographs and illustrations remains with the authors. Aside from any fair dealings for the purposes of private study, research, criticism or review as permitted under the Australian Copyright Act 1974, no part may be reproduced without the written consent of the author and/or publisher and the inclusion and acknowledgement of the source.

The views expressed in *Australian Caver* are not necessarily those of the Editor or Publisher of the Australian Speleological Federation or its Executive, Commissions or Committees.

Editor: Geoff Crossley

Guest Editor: Andy Spate

An active caver and member of Canberra SS for more than 40 years, Andy is a Fellow (Honorary Life Member) and former Vice-President of ASF, a Life Member of ACKMA, and author of numerous cave science articles. Recently retired from a lengthy spell as Australia's first National Parks karst expert (with NSW NPWS), he now runs Optimal Karst Management, a consultancy based in Hall, ACT. Our thanks to Andy for his assistance!

Production Manager: Joe Sydney

Email: [REDACTED]

ASF Executive

President: John Dunkley
Senior Vice President: Jay Anderson
Vice President: Chris Bradley
Vice President: Joe Sydney
Vice President: Nick White
Treasurer: Grace Matts
Executive Secretary: Vacant
General Secretary: Winfried Weiss
Membership: Jodie Rutledge

ADVERTISING RATES

Commercial Advertising:

Sixth page	\$35
Quarter page	\$50
Third page	\$70
Half page	\$100
Two-thirds page	\$140
Full page	\$200
Half page inside back cover	\$150
Full page inside back cover	\$250
Half page inside front cover	\$200
Full page inside front cover	\$250
Full page back cover	\$400
Half page fly sheet reverse	*
Insert (printing required)	*
Insert (inserts supplied)	*

A discount of 10% applies to a series of four advertisements for up-front payment.

Caving community events:

Half page	\$35
Full page	\$70
Insert (inserts supplied)	*

Classified advertising:

1/24th of a page (for ASF members only)	\$5
--	-----

* Contact Joe Sydney for rates.

Australian Caver

No.160 August 2003

ABN 15 169 919 964

PO Box 388

Broadway, NSW 2007

www.caves.org.au

ISSN 0817-8240

Registered Publication NBQ0005116



CONTENTS

- 2 Coming Events
- 4 Annual Report
John Dunkley
- 6 National Conservation Report
- 8 Joe Jennings 1916-1984
Andy Spate
- 15 CaveMania Conference Forms
- 27 Burnabbie Cave, WA
Paul Hosie
- 30 Abkhazia
Al Warild
- 34 Book Review
Delving Deeper

COVER: JNJ at the Coolman Plains
*meteorological station measuring
relative humidity and temperature.
Photo Andy Spate.*

Layout and design: Jacqui Fry

ASF Executive Changes

The ASF sadly sees Kath Rowsell resigning the position of General Secretary to take up new work challenges in Ghana. We wish her well in her new prospects!

General Secretary: Winfried Weiss. A warm welcome is extended to Winfried, the latest addition to the ASF Executive (Mittagong Council 2004). He's a qualified lawyer, and is with the Queensland Police Force in Marybrough. A member of Chillagoe Caving Club with interests in exploration and documentation, particularly new and little known areas.

CONTENTS



Annual Report 2003

Highlights of 2003

Presented by the President, John Dunkley, Mittagong, NSW, January 2004

- An increase of approximately 16% in membership over the previous year, including a return to membership by one long-established previous member society,
- Sponsoring (with WASG) of two public seminars on conservation in Perth and at Margaret River,
- Organisation (through NSW SC) of a field training day on recognition and documentation of sites of aboriginal significance in caves and on karst,
- Completion of draft Risk Management procedures,
- Reduction in premiums and improvement in coverage of insurance, including for training,
- Completion of the first half of Stage 2 of the Karst Index Database software,
- Publication of the long-awaited book on cave science in Australia (the 'Jennings' book),
- An extensive public relations program aimed at managers and other decision-makers,
- Discussions with NSW Premiers Department about future of Jenolan Caves Reserve Trust, and
- Venue arranged and preliminary publicity circulated for the next Conference in Tasmania.

So much is happening on the environmental front particularly that this will be dealt with separately and if necessary added later to the published version of this Annual Report. In particular, following his appointment as National Convenor for Conservation, Nick White has identified issues that need national attention, as distinct from those being dealt with on a state level, and the ASF Environment (Public) Fund is now ready to assist with issues from largest to smallest

Public Liability Insurance (PLI)

Following a direction from the last Council Meeting we successfully negotiated a reduction in premiums compared to the earlier quote for 2003. Since contributions were already set, these savings increased the buffer fund so that there are now sufficient funds to pay the premium for 2004 without any increase in contribution rate.

We also continued to press strongly for some form of cover for member-to-member incidents, and for training. The offer received in November (termed an Amateur Sports Injury Insurance Policy as an extension of the main policy) does cover both those and several other contingencies. Details were circulated to clubs in December.

The Executive strongly recommends that the 2003 insurance contribution be maintained at \$45 for 2004 (\$10 for exempted university clubs). If this is agreed, we expect to be able to maintain 2005 contributions at the same rate i.e. the rate will be unchanged for 3 years running.

Publications

Helictite: continues to greatly improve the image of speleology generally among cave management

authorities as well as presenting Australian cave science to the world. Everyone is urged to subscribe.

Australian Caver: The Executive made this a high priority for 2003 and we believe the current standard can be maintained at current costs for another year or two. With *Helictite* firmly established again, and ASF registered as an Environmental Organisation, we believe that it would be timely to reconsider the overall image of the journal.

Jennings Book: The long-awaited book on cave science in Australia (the so-called Jennings book) at last appeared, published by University of NSW Press in an attractive format. The editorial team of Ely Hamilton-Smith and Brian Finlayson deserve congratulations for this, along with the many contributors; reviews have been very favourable.

To complement this, Andy Spate agreed to guest-edit a special issue of *Australian Caver* (no. 161) focusing on reminiscences of Joe Jennings the man, the caver and the mentor.

Other Publications: a reprint of the 1985 *Australian Karst Index* sold out, as has the stock of Wee Jasper books. Is there a club with a first-rate photographer prepared to obtain photographs for a new edition of the Wee Jasper book, including of Careys Cave?

Representation with other bodies

Late in 2003 four members discussed the future of the Jenolan Caves Reserve Trust with officers of the NSW Premiers Department. In December the Minister announced that the Trust Board would be replaced by an Administrator pending a decision about the future operation of the Trust's estate. The interposition of Xmas and New Year means that we have not yet developed a response to this decision. The previous Board had included 3 experienced speleologists, including the Chairman Richard Mackay and ASF representative Patrick Larkin. Because it is ASF that had statutory representation, and because of its wider implications, this issue is of national importance to ASF.

Speleologists are also represented on official bodies in Queensland, Victoria and WA and have been influential in the NT. In Tasmania the situation discussed at the last Council Meeting has not noticeably improved; there and in SA authorities appear less inclined to involve speleologists in decision-making. Why not?

Membership

The New Member category for university societies has been very effective, as has the parallel Introductory Membership category for other clubs. We need some assistance in redesigning the membership database & is there someone with expertise in this area?

International

ASF is co-sponsoring and assisting organisation of the Limestone Coast 2004: International Conference at Naracoorte and Mt Gambier from Oct 10-16 2004, which includes a workshop on RAMSAR Subterranean Wetlands.

Cave Diving

I make special mention of cave diving in this report because of its increasingly significant contribution to knowledge of Australia's caves. Some major discoveries in the last year or two have been due to cave divers, in turn opening the door to stygobitic and troglotic fauna studies. Divers are geographically dispersed and we need to give serious consideration to the most effective means of accommodating them.

Special Acknowledgments

The 2003 Executive was the most productive I have ever known and although everyone did a wonderful job, all would agree that Joe Sydney deserves special mention for huge amounts of work put into insurance and the journal in particular, for helping organise a fund-raising dinner for the Environmental Fund, and for general liaison. Numerous other people worked hard in 2003: the Journal improvements are due to Angus Macoun and Geoff Crossley; Helictite prospers under Sue White, Ken Grimes, Glenn Baddeley and Stefan Eberhard; Bob Kershaw put vast amounts of work into risk assessment; Brian Finlayson and Elery Hamilton-Smith brought the

Jennings book to fruition; Steve Bunton, Ric Tunney, Arthur Clarke, Robyn Claire & June McLucas have done a lot of work on the next Conference; Dick Heffernan handled publications sales; and Mike Lake beavered away quietly on the Karst Index Database project which is now almost finished.

Issues to discuss, and to pursue

Last year I said it was time to put insurance behind us and get on with our real objectives. Issues needing attention by the Council and by the Executive in 2004 include:

- The cave conservation retrospective book idea
- Arrangements for ASF's 50th Anniversary at the 2006/2007 Conference
- How to encourage joint initiatives between ASF & like-minded organisations such as Greening Australia (as is happening in WA this year)
- The unsatisfactory progress at Mt Etna National Park
- Streamlining the membership register and continuing the New Member initiative,
- How best to publicise the Environment Fund and seek tax-deductible donations,
- Assisting Limestone Coast 2004 organisation,
- Accommodating the needs of cave divers,
- How to handle the proposed restructuring of Jenolan Caves Reserve Trust, and
- Continued improvement and revamping of the Journal, and support for Helictite.



ASF Environmental Fund Report 2003 — John Dunkley

The Environmental Fund (or "Gift Fund") is registered by the Australian Taxation Office and the Commonwealth Department of the Environment and Heritage as a Registered Deductible Gift Recipient, meaning that donations are tax-deductible. It is managed by five Directors appointed by the Executive

Anne Atkinson OAM resigned as Director due to ill-health and was replaced by Dr Kevin Kiernan, a lecturer at the University of Tasmania.

Donations to the Fund increased during 2003. More was raised at a dinner at Bankstown Sports Club at which people were invited to make a donation to the Fund (this is not shown in the annual accounts, which closed on 31 August).

The Directors did not hold a formal meeting in 2003 although several informal discussions were held both between Directors and with outsiders with expertise in running similar Funds. The intention is to formulate firm procedures for running the Fund early in 2004.

General feeling is that promotion of the Fund could be on two fronts. One would be to assist in pursuing conservation campaigns, for example of the kind that involve legal action in a Mining Wardens Court. The other is to support low-key environmental projects run by clubs or individuals, such as cave cleanups, restoration work, gating, installation of track marking & other protective measures, development of management plans etc. Some of these might be carried out jointly with land-owners, indeed we feel this is a desirable goal. In the USA, funds similar to ours have purchased several cave and karst properties, although in that country relatively many more caves are privately owned than is the case in Australia.

What's in ...

ACKMA Journal
March 2004 No. 54



Articles of interest in this issue include:

- The Caves of 'Eua, Kingdom of Tonga (Dave Smith);
- Karst Management Training for ASEAN (Elery Hamilton-Smith),
- News from the West Coast, South Island,
- New Zealand (Deborah Carden);
- Integrated Natural Resource Management in South Australia (Anthony Hele);
- Te Anau Glowworm Caves (Neil Collinson);
- Cave Conservation in Indiana USA (Kriste Lindberg);
- Dismal Swamp Polje 'Eco Tourism Development' (Deborah Hunter);
- Waitomo Remembers the Passing of an Icon (Kevan Wilde);
- The Green Sickness, Lampenflora (Andy Spate); plus a large number of book reviews.

The ACKMA Journal is published quarterly in March, June, September and December. Any ASF member is most welcome to join ACKMA and thus receive the journal. Indeed, many cavers are already members!

Kent Henderson
Publications Officer

Visit: <http://www.ackma.org>

NATIONAL CONSERVATION REPORT 2003

(This report summarises more detailed state reports in the ASF Annual Report distributed by e-mail)

Nicholas White, Convenor

Only a few matters have come to my attention. These are discussed below. A lot of issues are best dealt with at a State or club level, which is appropriate. Increasingly access controls are being introduced into management plans. Where these are introduced for safety reasons there should be no complaint and in particular smaller well led cave parties have less impact as they can more strictly adhere to the Minimal Impact Caving Code. A number of management authorities have requested permission to use the Minimal Impact Caving Code. This is freely given and encouraged providing the copyright is acknowledged. The Environment Fund is now established and operational. The Commission looks forward to productive inaction with the Fund trustees. The book idea noted below could further ASF's conservation credentials and might be facilitated through the Environment Fund.

Minimal Impact Caving Code

This is open for review but an open invitation to review the Code has not been made yet. It has been put to me very strongly that Item 18 should be changed. This currently reads 18. If bone material is found on existing or proposed tracks it should be moved off the track to a safer location if at all possible. Collection should only be undertaken with appropriate permission. This has certainly been caving practice for some decades. The SA Parks Service promotes the Code but considers the moving of palaeontological material irresponsible. We would do well to modify this section.

Cave Conservation Email List

A network of individuals interested in and actively pursuing conservation objectives should be established.

Trading of Fossils

During the year Ebay advertised some Australian (SA) megafaunal fossils for sale. These in fact were from a private site and protective legislation was inadequate to prevent the sale. It is apparent that National legislation is inadequate to control such trading and the export of such material. Legislation varies between the States and in the instance of Victoria, only fossils in National Parks have any protection.

Quarrying

Only one quarrying proposal for karst was objected to during the year. Newcastle Hunter Valley Caving Group requested a karst inventory be undertaken prior to quarrying at Gloucester, NSW.

History of Cave Conservation and the Law

A proposal for book on this subject has come forward. ASF and its members have pursued some important conservation battles since the 1960's. Many of these involved legal challenges establishing important precedents in Australia. Such a book is timely and should be supported.

Geological Trail on Eyre Peninsula and the South Australian Nullarbor

This proposal was brought to the attention of SA Parks Service expressing the view that a geological

trail was a good objective it should not include caves on the Nullarbor until such time as there was adequate on site management. Koonalda Cave was mentioned.

Cave Protection Legislation

Victoria, in its rush to enact legislation for fauna flora and heritage, has completely left out any mechanism for protecting geological features. Only features protected under one of the schedules in the National Parks Act have legislative protection although there is some protection provided in Planning Legislation. There is an urgent need to change this situation. It is not known whether there are similar gaps in other states.

Graffiti at Loch Ard Gorge, Victoria

To date Parks Victoria has not attached high priority to developing actions to remove and control this problem on the walls of the gorge and in the caves at the bottom of the gorge. This Park is one of Victoria's major international tourist destinations. It should be managed better. Representation to the Minister will be made if Parks Victoria do not take steps to manage the problem.

Geoindicators Workshop

I attended and represented the ASF at a Geoindicators Workshop, Canberra, November 2003. Geoindicators have been developed to assess and monitor rapid geological changes (less than 100 years). There are a number of parameters that can be usefully measured on karst and used to express changes to caves and karst. Geoindicators are now being used in Canada, USA and various European countries in environmental reporting. So far when we see changes to caves we have not had a methodology to compare different caves or karst. It would be useful to adapt the methodology in the Australian karst context.

Jenolan Caves Trust

The Trust has been the subject of review and is to be disbanded, an Administrator appointed and management placed within the NSW Parks Service. Administrative changes such as these affect users and stakeholders. It is not the first time administrative arrangements for caves have changed in Australia. What is important is that changes lead to better management.

Huon River-Riveaux Karst Area

This Southern Tasmanian karst is within a logging area. Significant caves have been found which are beautiful and/or contain indigenous art. A logging road has been cut along a ridge causing sediment to wash into a stream cave. So far, Forestry Tasmania has not been willing to provide direct protection of the caves or karst. Satisfactory evaluation of the caves and karst has not been undertaken. An agreement to undertake an investigation has now been agreed to by Forestry, Parks, aboriginal groups and caving representatives. This is a first step, the parameters of the investigation are not defined. ASF, STC and the Wilderness Society will be watching this closely. This seems to be a major failing of the Regional Forestry Agreement process

which legitimised the logging regime but did not put strictures on the forester to modify cutting in the light of changed information or circumstances. It is apparent that this karst should be investigated before any more changes occur and if the area is as significant as it appears to be, it should be protected and included within the bounds of the World Heritage Area with which it is contiguous.

Yanchep and Karst North of Perth

Jay Anderson amongst others has kept working to protect the karst in the face of increasing urbanisation on and in proximity to the karst. There are no easy solutions but as a consequence of the problems, ASF together with Greening Australia will be hosting a major workshop in 2004 to examine the threats to karst and biota as a result of urban developments.

Recommendations — Operational

1. Review Minimum Impact Caving Code particularly Item 18. Give consideration to the development of Code for Scientific Investigation in Caves.
2. Rejuvenate State Conservation Coordinators list and respondents.
3. Establish ASF Cave Conservation Email chatline.

Recommendations — Activities

1. Review legislation National and State concerning the collection, trade and export of fossils in Australia. Prepare strategy to provide legislative protection for cave contents including fossils.
2. Proposed book on cave conservation cases and the law. Support in principle and Executive to give impetus and support for such a publication.
3. Review legislation in Australia protecting natural features. Develop strategy to achieve legislative reform and control this problem on changes for use in protecting caves.
4. Examine Geoindicators methodology with aim of applying it in the Australian context. Proceed then to having the methodology used as an important land management and planning tool for use in karst areas.
5. Maintain watching brief on developments concerning the Huon River-Riveaux Karst Area, Southern Tasmania and conduct active campaign for protection if the proposed investigation does not stop logging on the karst.

NSW cavers' 'extravaganza' dinner!

Saturday 18 October 2003

What a night it was! Megan Pryke opened the evening with words of intended fine feasting and merriment in store.

We were all soon to realize that it was to be full a very full evening and that it would make one feel like being on a major caving epic. This year saw most clubs in NSW attend and with over 80 cavers and guests. Special invitees on the night included Fire Services personnel and City Productions who are working on a secret 'cave horror' movie related to our activity (see SMH 19.2). Can't say much more but watch the movie guides in the near future. Oh, these guys also worked on 'The Matrix'. Our thanks also to the mob of VSA members that was quite vocal after consuming much merriment.

The night could not have been a success without our three major sponsors: Mountain Designs, Old Caves Winery and CHOICE Magazine! They provided enough great items to raffle for the first ever major fundraiser for the ASF Environmental Fund. In all, the dinner and fundraising effort raised over \$1200 for the fund! Not bad for the first fundraiser and thanks to HCG!

So how did we raise so much, well the 'rigged' raffle was the most amusing. Of eight prizes drawn by Lachlan and Kelly Vaughan-Taylor, 5 prizes went to the HCG table — the club that organized the event. This seemed strange but it was an honest draw — honest!

The auction of speleological treasures from old caving books, memorabilia, trinkets, cave books and consumer items went down well! I wonder if the old 14" color TV still works that went to Keir's kids! The raffle of Mountain Design products too raised a tidy sum not to be sneezed at.

RSS organized a 'trivia' competition that was at times quite riotous! Tables competed against tables with the most perplexing of 40 cave related questions. Some of which taxed many of the greatest and oldest minds present. Well done Jason who hosted the competition.

It was soon time for a stretch so everyone was asked to stand and shake hands arms and legs. Then they were asked to look under tables to find 'bonus' sweets taped to selected chairs, well timed after such a fine feast!

The highlight of the evening was Al Warild talk on his most recent attempt to break the world's depth record in Voronya cave in Abkhazia. We heard and saw fascinating pictures of a war torn country riddled in civil war. "I guess that added to the excitement of a great adventure", said Al. Not to mention the pictures of breathtaking countryside and one the deepest caves known. Al was scheduled to talk for 40 minutes but so many were enthralled, it was over an hour before we realized it was time to move on.



Al talking on Abkhazia.

A few opening words from John Dunkley, ASF President.



Joe Sydney assisted by Lachlan and Kelly Vaughn-Taylor during raffle draw.

The finale was a series of presentations by clubs on what they have been doing for the past year. Many a great trip happened during 2003 and it seems that a lot more are planned. HCG's presentation was on the history of the club since the 1950's. Some incredible pictures of pristine caves, old cars and old and new cavers. This was an event that will go down in NSW caving history as another success.

HCG wishes to thank all those that supported this fine event and a special thanks to our sponsors!!

Joe Sydney, HCG.



Old Caves Winery



With Joe: Australian caving, cavers & Joe Jennings

Compiled by Andy Spate

It was with very great pleasure that I accepted an invitation from the Federation's Executive to act as Guest Editor in this edition of *Australian Caver* that is largely dedicated to the memory of Joe Jennings.

This year marks twenty years since Joe's untimely death skiing on the mountains above Eucumbene Dam in the Snowy Mountains of New South Wales. Last year the University of New South Wales Press published *Beneath the Surface: A Natural History of Australian Caves* under the editorship of Brian Finlayson and Elery Hamilton-Smith. A copy of this excellent book should grace the shelves of every Australian caver.

The Executive felt that this issue of the *Australian Caver* should mark the publication of this book, dedicated to Joe. John Dunkley and I sought contributions via ASF Clubs across Australia and from Joe's past scientific and caving colleagues across Australia. I thank all of them for their contributions. John Dunkley, in particular, deserves thanks for keeping me to the task and for performing editorial and layout suggestions.

I met Joe within a few days of his arrival in Australia in January 1953, started caving regularly with him in 1959 or '60 and was last with him in a cave within a week of his death nearly 32 years later. Scarcely a day goes by when I don't think of him somehow... He crammed an enormous amount into those years as a caver, explorer, scientist and lover of the Australian environment. As you will see when you read the contributions below Joe left different impressions on those he met – some found him a diplomat and others somewhat less so! Which reminds me of his mildly 'dirty' joke about the difference between a diplomat and a lady ...

Joe was a wonderful mentor for me and many others as can be seen in many comments made below. Yes, he could be loud, almost belligerent (I well recall a bellowing Joe charging up a steep hill near Blue Waterholes toward a group of cavers – I won't identify their club – who were rolling boulders down the slope toward our group. They scattered!). But he was also wonderfully helpful and patient toward those groping to an understanding of any aspect of Australian environments. He didn't suffer fools gladly!

Joe was a caver – potholer – in Britain before the war and took up recreational caving in the mid-1950s. This soon stimulated his intellectual interest in karst. He was active in caving clubs and in the development of the Australian Speleological Federation – although the exigencies of speleopolitics enraged him! One measure of Joe's support of amateur speleology is that he organised the meeting room for the Canberra Speleological Society in the tearooms of the Old Hospital Building around 1960. When he moved into the new Coombs Building in 1963 he organised the use of a room there. CSS still meets in that building.

Like many of us in caving and other outdoor pursuits, he changed with the times in that the activities of his youth, such as digging and the burying of rubbish in the bush, evolved into a more responsible approach to the environments we were enjoying. A similar pattern can be seen in the development of the Federation itself.

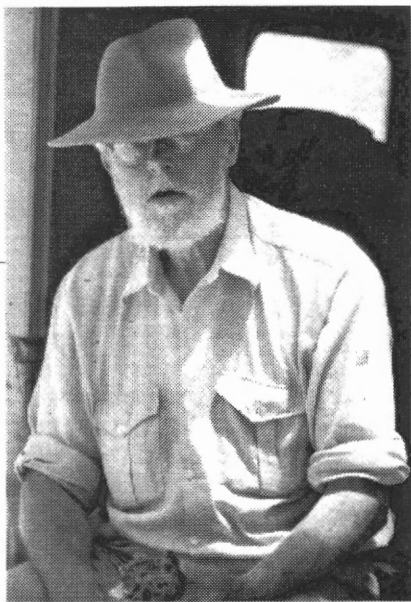
The following is an edited and supplemented version of material recently supplied to the *Australian Dictionary of Biography*

JENNINGS, JOSEPH NEWELL (1916-1984), geomorphologist, was born at Leeds, Yorkshire, United Kingdom, the only child of Joseph Newell Jennings, confectionary salesman and radio mechanic, and his wife Alice, née Rhodes. He was educated at the Oldershaw School for Boys, Merseyside. Known universally as Joe, he studied at Cambridge University and was awarded both Bachelor and Master of Arts. War service, largely in Iceland with the Royal Artillery, interrupted his doctoral studies in the Department of Botany at Cambridge and, nearly, his personal relationships.

Following the war, he accepted a lectureship at the University of Leeds but regulations inhibited him from resuming his doctoral studies but a grant from the Royal Geographical Society allowed him



CSS around the campfire, Blue Waterholes, Cooleman Plain; Carol Anderson, Brian Garrington, Reg Homer, Neil Anderson, Judy Jennings, JNJ, Ian Nankivell. Photo Graeme (Bluey) Thomson.



*JNJ at lunch,
Coolman Plains.
Photo Andy Spate.*

to continue the work on the origin of the Norfolk Broads. Although the work was meticulous and the conclusions valid from the data obtained, further work with Dr Joyce Lambert demonstrated that his earlier ideas were invalid. This allowed him, with Lambert's assistance, to publish an able self-refutation. This was characteristic of Jennings in that he was able to accept new data and ideas that ran counter to his earlier opinions.

In 1952, he was appointed to the Department of Geography at the fledgling Australian National University where he was to spend the remainder of his career. He arrived, with his family, in January 1953 and became a naturalized Australian in 1963.

His academic career blossomed in Australia and covered a wide range of Australian landscapes — from changing sea levels to the highest peaks and from deserts to coral reefs. He commenced caving as a recreational activity in Canberra but soon became immersed in the science of caves and karst eventually became a world authority on karst geomorphology publishing two monographs on subject (the last posthumously). He also edited the Australian National University Press' seven volume *An Introduction to Systematic Geomorphology* as well as the long running series 'Australian Landform Examples' in the *Australian Geographer*. Ultimately his publications numbered over two hundred monographs, book chapters and papers with about 120 devoted to caves and karst. He was an Associate Editor for the prestigious journal *Zeitschrift für Geomorphologie*; held the Clarke medal of the Royal Society of New South Wales and the premier award of the Royal Geographical Society of London, the Victoria Medal.

His research was not confined to Australia but ranged from Britain to Iceland and Jan Mayen in the Arctic, and onto New Zealand, Papua New Guinea and Malaysia. As well as geomorphological studies, he also published in the fields of zoology, European exploration and landuse in Australia and in climatology. He enthusiastically accepted new ideas, methodologies and technologies to the very great advantage of his science.

In 1972, Cambridge University awarded Jennings a Doctorate of Philosophy by Letters. At his insistence, this was in Botany rather than Geography marking the culmination of his research commenced before the War in that Department. It was recognised that Jennings' achievements should have been at a Doctor of Science but again he insisted that he be given the lesser degree appropriate to his original enrolment. Again this was a mark of his character in that he sought only appropriate recognition.

Jennings was a remarkable mentor for his students, co-workers and the caving community making his time freely available to many across the world. A considerable number of Australian and overseas landscape scientists owe much to his unflagging friendship and advice. He had an enormous influence on Australian and New Zealand cave science and exploration with particular emphasis on the Eastern Highlands, the Nullarbor and the Kimberly as well as

sandstone karstlands across northern Australia. He was perhaps the first to publish, worldwide, on the unusual young karst landscapes in carbonate dunes of southern coastal Australia — the so-called 'syngenetic' karsts

He was a Founder and President of the Australian Speleological Federation and its Trustee from 1956 until his death. He played an active role in Australian recreational caving and promoted the study of caves in a number of caving societies lending his support and research in a number of significant local publications such as the *Bungonia* and *Wombeyan* books and journals such as *Tower Karst*. He had a very long-time role in supporting both the Speleological Research Council, Ltd, and its long-running journal, *Helictite: the Journal of Australasian Cave Research*. He was one of very few people, not American citizens, on whom the American National Speleological Society bestowed honorary life membership.

Jennings was fascinated by, and revelled in, the Australian 'bush' in all its manifold entities and was an active camper, bushwalker and skier as well as an enthusiastic lover of Australian red wines. He died on 24 August 1984 of a heart attack while skiing in the Snowy Mountains of New South Wales where he had conducted so much of his research into Australian landscapes. His devoted wife Betty, son Guy and daughters Sarah and Judy survive him. Judy continues to be involved in the science and management of Australia's natural resources.

For more information on Joe see the following:

- Spate, A.P., and Gillieson, D.S. (1984)
Joe Jennings — an obituary and karst bibliography, Helictite 22(2)35-42
- Spate, O.H.K. and Spate, A.P.,
Obituary: Joseph Newell Jennings 1916-1984 (and comprehensive bibliography), Australian Geographical Studies, 23(2)325-337

I have largely left the pieces intact apart from a little minor editing (except where the authors have asked me to do more). I have provided some editorial comment in square brackets and italics here and there.

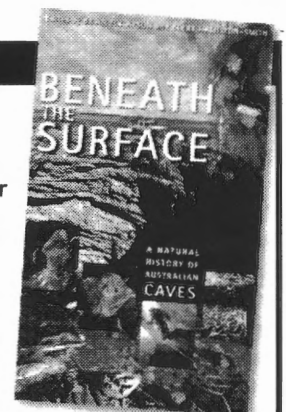
In closing my remarks I would like to slightly paraphrase a paragraph from the Preface to John Tyndal's delightful *Hours of Exercise in the Alps* (Longmans, Green, and Co., London and Bombay, 1871, p viii).

To the name of a friend who taught me in my boyhood how to handle a theodolite and lay a chain, and who afterwards turned his knowledge to account on the caves of the world... Of the firmness of a friendship, uninterrupted for an hour, and only strengthened by the weathering of 50 years of companionship, both physically and in spirit, he would need no assurance. Still, for the pleasure it gives myself, I connect this volume with the name of JOSEPH NEWELL JENNINGS.

BOOK REVIEW

Beneath the Surface

Produced with the assistance of ASF, this book (reviewed in *Australian Caver* 159) comprehensively covers what we presently know about Australia's caves including the varieties of cave types and how they form, cave fauna, fossils, Aboriginal relics and decorations in caves, and a history of cave exploration and cave science in Australia. The contributors include some of Australia's leading scientists — all of them active cavers. It is illustrated with 37 colour and 49 black and white photos, with maps and line drawings. Available from good bookshops, or for mail ordering details, go to <http://www.unswpress.com.au/isbn/0868405957.htm>



Joe and the Australian Speleological Federation

From Brian J O'Brien (First President of ASF, SUSS)

As inaugural President of the ASF, I am honoured that Joe Jennings played such a distinguished role in its activities, and am delighted that the present members of ASF commemorate his person and his activities through this edition of the Australian Caver.

Joe Jennings brought to Australian caving and the Australian Speleological Federation in its early, formative days, a greater "respectability" and maturity of scientific status than it could have otherwise achieved.

In an article "Caving in Australia" in *Quadrant*, Vol. 8 in Spring, 1958, which I wrote in close liaison with the distinguished Editor and leading Australian poet, Professor James McAuley, I wanted to convey to the conservative readers the sense and range of caving personalities. I used Joe and my best mate, Fred Stewart, as two contrasting but allied examples, and there could be no higher compliment I could give them. I wrote (page 26):

The attractions in caving do not come solely from caving per se. Infinite variety results also from the human element, since men of many types are cave explorers.

One is a scientist, eminent in an Australian university. He is content to enter a cave, choose a region where the roof is a few feet above the floor, and then lie on his back and gaze for hours at the geological wonders.

Another is a medical student, and my close companion in many caves. In all the coldness of Kosciusko and Yarrangobilly, swathed in jumpers, multiple trousers, blizzard jacket and the rest, he has always quite seriously refused to wear his last jumper, because otherwise, he "wouldn't have anything to put on if it got any colder."

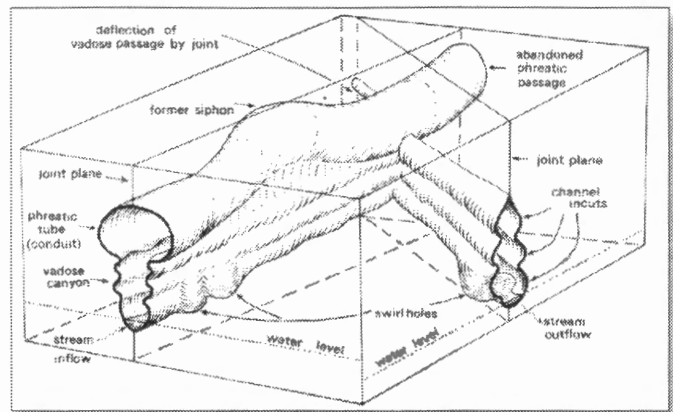
With companions such as these, night-long discussions of campfire philosophies are vastly different from the hurried say-your-piece and make-your-point coffee-cup discussions beloved of students. The radiant, ever-changing depths of a campfire are far more conducive to contemplation than the tepid murk of coffee."

If I had been writing such an article today, I probably would have also said that Joe was able to "read the book of history" of the cave he was in.

From Warren Peck (Third President of ASF, SUSS)

Whilst many people thought of Joe Jennings as Canberra's professional 'pot-holer' and a specialist on karst topography, he was also Australia's leading geomorphologist, studying the evolution of varied land forms in response to changing geological conditions. His interests were very broad and his published papers included "The influence of wave action on coastal outline in plan" (1955), the evolution of lunettes in arid regions (*Le complexe de sebkhas*, 1955), *Some geomorphological problems of the Nullarbor Plain* (1963) and *Man as a geological agent* (1965). Joe and I were both active in the Australian Speleological Federation about 1960/61 and I found him to be a most interesting, yet relaxed person. After a day's caving, Joe was just as happy to chat about bushwalking or skiing, as he was to chat about caves. He was an excellent ambassador for speleology and was primarily interested in promoting both the science and the sport.

Joe not only spent considerable time in various cave systems, but also thoroughly enjoyed the mountains that stretched from near his Canberra home all the way to Mt Kosciusko. In the summer of 1954/55 he led a small party of bushwalkers through the Jagungal Wilderness of the Kosciusko National Park, at a time when very few walkers ventured near Mt Jagungal and topographic maps of the area were almost non-existent. A couple of days were spent at the Grey



Mare Hut, with its nearby abandoned gold mine. The group included a Sydney artist, who decorated the hut's interior walls with pencil murals of a horse (the Grey Mare?), a lady skiing and other young ladies relaxing. From that time, the Grey Mare murals were greatly appreciated by visiting stockmen, skiers and walkers, and Joe was revered as honorary curator. Unfortunately the murals did not last much longer than Joe. Since the late-sixties increasing numbers of walkers and skiers used the hut and its open fireplace and by 1987 the murals were almost invisible, due to the hut's interior walls becoming black from accumulated soot.

When Joe came to Australia in the early 1950s, there was considerable debate worldwide as to whether limestone caves formed and developed above the watertable (the vadose theories) or below the watertable (the phreatic theories). As a geomorphologist, it was not surprising that Joe studied the evolution of caves and karst in general, as part of his university research. Joe concluded that many caves contain evidence of phreatic beginnings, epiphreatic enlargement, vadose deepening and cave breakdown.

Joe was an excellent communicator, able to present complex processes with a few, well-chosen words, pictures or diagrams. I present his Figure 5.1 from his chapter on the origin and evolution of the Wombeyan Caves (part of the book on Wombeyan, published in 1982, by the Sydney Speleological Society) as a personal example. This diagram and Joe's accompanying text provided me with the answer about an unusually shaped section of the River Cave at Jenolan, over which I had agonised for many years. It turned out that I had been puzzling over a phreatic tube and vadose canyon that ran about 30 metres from the dripstone formation called The Minaret to the cave pool called The Styx. This experience confirms to me that Joe's papers and books on karst will continue to assist speleologists and geomorphology students for many more years into the future.

Des Lyons suffers... (TCC)

The Fate of Old Soldiers

Establishing a national speleological organisation in Australia was a difficult task. Joe was our second President, with the particularly unenviable task of chairing the second Conference in Hobart in 1958, hosted by the Tasmanian Caverneering Club.

Afterwards, Des Lyons was "asked to write a report on the ASF conference – because I was the TCC delegate". A member of the Lyons family that produced a Premier and Prime Minister and the first female Federal MP and cabinet minister, Des was known for his acerbic and acidic literary skills: no effort was spared and no opportunity for defamation lost when he was asked to write the report, including a poem dedicated to each club's delegates. The particular issue of TCC Bulletin from which the following was extracted has become something of a cult classic among discerning cavers.

[Extracted from Bulletin of the Tasmanian Caverneering Club, No. 4, Sept. 1960, describing field trips after the second ASF Biennial Conference, Tasmania, 1959]



We go to press, yet CSS
As cavers I cannot assess
For three came across
And I'm quite at a loss
To judge the others by these
One's career as a caveowner
Began while she was over here;
One fellow had grown
Fond of water and stone –
But wait! I have more to disclose
To top the lot, believe it or not,
One was a quite incredible clot:
He liked to ring bats –
InTassie? Oh, rats:
As for the others, who knows?

[These three were Edie Smith, Joe and Dave Purchase, respectively.]

"(one club) stayed away and appointed a proxy (Joe Jennings) without giving him any instructions – this, though one of their members was present... as it was, Joe voted 'agin the government' from time to time – on advice. Anyone can read the dull official matters in the minutes or elsewhere. Let me tell you who was there and what happened. There was Joe Jennings, the President. Two minutes after I met Joe someone approached to introduce us, and exclaimed, "Oh, you know him!" No, I didn't, but it shows you the extent of Joe's hail-fellow-well-met friendliness. I know Joe was determined not to let the business be completed on time, but despite his fatherly indulgence to waffling speakers we managed to thwart him in this ..."

As well as being TCC delegate, I was Area Officer, Mole Creek. When I accepted this, I visualised myself sitting in an armchair, drawing up programmes and ordering various minions to do all the work. Alas! There were no minions, and no armchairs, but there was work.

I arrived fresh from the rigours of the conference, and you can take that how you like... people began to be put in train, notably two crazy scientists hight (sic) Jennings and Sweeting. Them I rode about with, pointing out this and that and leading them by the hand in and about caves. Joe Jennings got me into the far end of Croesus and forced me to lie down in a cramped, strained, wet, cold position while he swung a sort of silent gas rattle and entered hieroglyphics in a notebook. Later he made me carry his infernal stones, and help with the measuring and recording thereof. Joe – but if I go on I will explode. I will return to him when I can stand it...

I roamed Honeycomb looking for fluorescein all through the night (Joe again!). That was only one side of it. I shared a tent with Joe; I argued with both him and Marjorie Sweeting; I was cut, bruised, nettled, mired in a boggy creek... I tried to keep control of caving activities; I got people away in time for return to the mainland; I lost a beautiful thick bacon steak when King Alfred – sorry, Joe Jennings – built up the fire in my absence and watched it burn. These, and many other experiences undreamt of in Horatian philosophy were my lot...

...Joe Jennings interred some of the club's fluorescein in Westmorland Creek in vain (it was never seen again), and more of the National University's in Honeycomb, also in vain (it went where everybody knew it would).

Who wants to make ASF conferences annual? Off with his head!

From John Dunkley (Current President of ASF, SUSS)

In about 1963 I was enrolled in Geography II at Sydney University: historical geography of the American west, fisheries in Australia, regionalism in Belgium, and similarly dreary research interests of lecturers. I saw a notice that several lectures on karst and caves would be given by Mr J.N. Jennings. At the time he existed only as a name, the one who in the opening seconds of a documentary called "Under the Nullarbor", swung around from a desk in his study saying something like "Oh, hello there" as though caught unexpectedly by a camera, before launching into a learned dissertation on that little-known, legendary part of the Australian outback. So, as Secretary of SUSS I wrote rather formally to the famous name at the Australian National University suggesting that perhaps he could give a talk to a forthcoming SUSS monthly meeting which conveniently was also in the Geography building. Those were the days of god-professors so it was something of a surprise when this chatty, ebullient Yorkshireman turned up, all enthusiastic about words we'd never heard before: vadose, phreatic and other things, all Greek to us then.

It was the beginning of a lengthy acquaintance. Later that year Joe spent a lot of time poring over aerial photos of the Nullarbor, locating collapses to be pursued by the 1963/64 SUSS Nullarbor Expedition, leading to discovery of Mullamullang Cave for example. In 1966 he gave me encouragement to produce the red "Caves of the Nullarbor" book, writing a chapter and obtaining the support of other prospective authors. Tea and cakes followed at the house in Hobbs Street when I passed through Canberra. In about 1972 he conned me into joining the Helictite editorial team, and I am convinced that it was his reference that landed me a job in Canberra in 1974. A vivid image of the time is of Joe as a kind of line judge at the first SpeleoSports ever, at Nibicon in 1972, standing guard on a garden seat in a vinyl swimming pool on the roof of the college at UNSW.

Parts of the Australian Karst Index are now on the web but few realise how much we owe to Joe for its success. Joe effectively acted as guarantor that ASF could complete the project, which was kicked off in the early 1970s by a National Estate grant to provide inventories of the nation's heritage. As the project creaked into the 1980s, Joe's right hand fended off the bean-counters while his left threw gloved and un-gloved punches and feints at everyone from the President down. We eventually published the Index in 1985, but only after much behind-the-scenes work by Joe, both diplomatic and not so diplomatic.

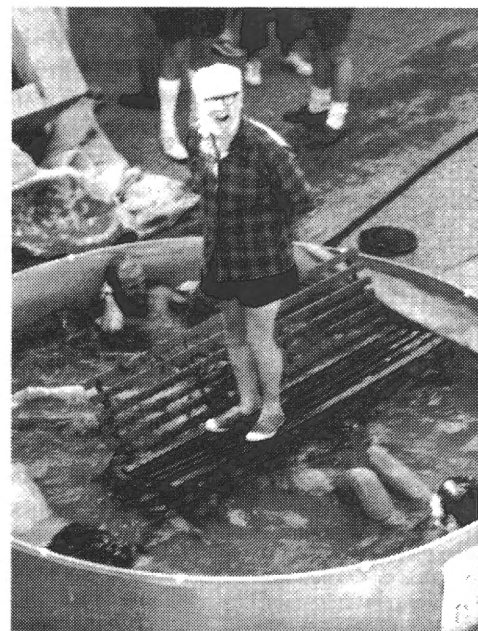
Most of us who pass through a university can think of people



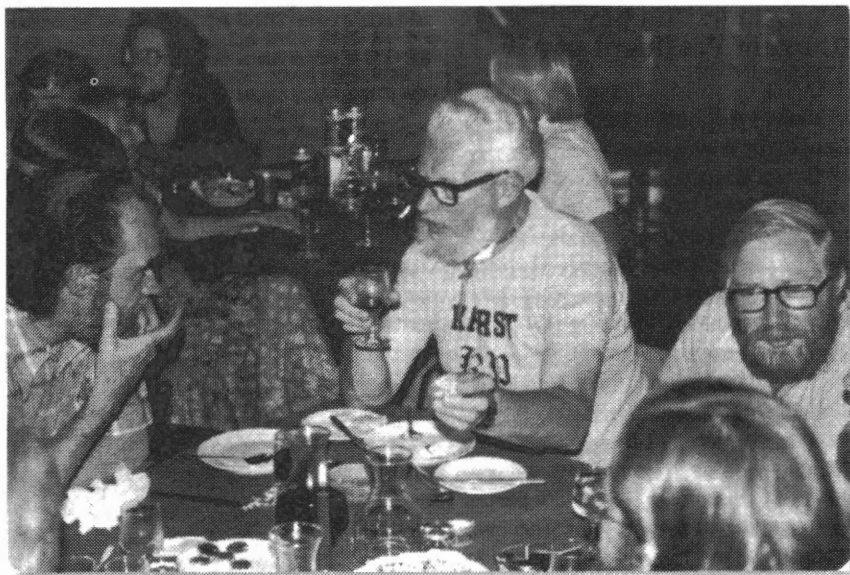
JNJ and Judy Jennings, White Fish Cave, Coleman Plains. Photo Graeme (Bluey) Thomson.



JNJ on ferry, Nibicon dinner, Sydney. Photo John Brush.



JNJ pulling his weight in Australian speleology, Speleo Sports, Nibicon, Sydney. Photo John Brush.



Nibicon dinner on ferry, Sydney; Elery Hamilton-Smith, John Masala, JNJ, Ted Anderson. Photo Jeanette Dunkley.

who served as mentors of a kind. It was Joe Jennings rather than any of my Sydney University lecturers who taught me the importance of writing precisely and succinctly, using plain English where possible. In 1972, in three long pages he deconstructed an article I wrote on geomorphology at Jenolan and took me to task over the title of the 'yellow book':

"Whilst I am griping about terms, may I remonstrate about 'speleogeography'... Why more of such horrible concoctions when 'cave geography' does just as well? All you needed in your title was 'Exploration and description of Mammoth Cave'. But have you written a geography? Today, geography implies all aspects of environment and human use of an area. For me the geography of a cave would be a synthesis of all aspects of a cave, not just the aspects of morphology you have talked about ... I believe I know what you had in mind – you wanted to describe the features in this publication and leave the interpretation to (a later one). Well, there have been terms concocted previously for this in the past...Isn't it better to use simpler, more easily understood terms, particularly to reach the composite caving world? ... all this amounts to a plea for using simple terms in plain English as much as possible."

The term was in fact a borrowed Americanism; nevertheless, I never heard the word 'speleogeography' used again in Australia!

Strangely, I did less work with Joe after moving to Canberra than before: Joe's interests at the time were Yarrangobilly, Cooleman and Wombeyan, mine were primarily at Jenolan Caves where there had been virtually no scientific research for more than 50 years. However, I did psych him up about the hypothesised buried dolines in McKeowns Valley and the possibility of former periglacial processes at work on the surrounding slopes. In time, he and I and Bao Haosheng spent a weekend marching up and down the Playing Fields swinging a giant mallet on to a steel plate, an antediluvian sonic device for analysing buried sediments. There followed an hour or two of fiddling with figures in the bar of Caves House, but the results were inconclusive and nothing much ever came of it.

[Whilst John refers to a Bison Refraction Seismograph as 'an antediluvian sonic device' it was, at that time, a fairly new gadget, which Joe and others used to considerable advantage in other karst

studies notably at London Bridge near Canberra. Like many geophysical instruments, interpretation of the results can be difficult – particularly in confined environments like the alluvium in narrow valleys.]

It was Joe more than anyone else who maintained my interest in speleology, by showing how amateurs with few or no professional qualifications could make valuable contributions to speleological science. For this reason he was always enthusiastic about exploration and discovery, seeing no dichotomy there between speleological pursuits and, I guess, progress in the earth sciences. Just about my last meeting with him was to talk about the dolines, poljes and caves that I had been exploring in northern Thailand in January and May 1984. Pure exploration, but it was progress in knowledge: he urged a proper paper, the first I wrote for *Helictite*.

Joe never stinted on time for those, no matter how untutored or unpublished, who shared his passion and enthusiasm. Things change: one of the saddest aspects of his legacy is not that he's gone, but that the pressure on universities and careers these days is such that academics rarely make an investment in time to indulge and enthuse amateurism.

Before the die was karst – early days with Joe Jennings, especially with CSS From Graeme and Evelyn Young (CSS)



Joe Jennings came to the fledgling Canberra Speleological Society like a whirlwind. The dozen or so of us who had more or less drifted together to form a caving club in Canberra were suddenly brought to understand that there was much more to caving than just climbing down holes in the ground. Joe introduced us to the science of speleology.

Joe taught us science in situ, always with kindness, tolerance and good humour – climbing and rope techniques, accurate surveying and map production from the data we gathered. He explained the underground phenomena to us – the reasons "why" and "how". He taught us to respect and treasure what we saw, always making a pleasure out of a caving trip, no matter how great the physical discomfort and tiredness.

Joe was a staunch friend as well as being a very knowledgeable and skilful teacher – great company in almost any situation and a great raconteur, especially over a glass or two of wine at the evening campfire.

Whenever old CSS members meet, the gossip that follows will inevitably turn to some story told by or about Joe Jennings.

From David Purchase (CSS)



If my memory serves me correctly, the following episode took place in Fish Cave at Cooleman during the third ASF Conference field trips in January 1961.

Joe was leading a small party along a flowing watercourse in a cave. The water was decidedly chilly and mutinous rumblings were coming from the party as we sloshed our way through the water. Joe was busily offering both encouraging and disparaging comments including 'Come on, its only up to my knees' when he stepped into a hole and disappeared



HELP SUPPORT ASF

The Federation is run solely by subscription to ASF. Your donation or bequest will assist our work in lobbying to save karst, ensure continued scientific projects and more. To make a contribution or receive an information pack, contact The Secretary or visit www.caves.org.au

from sight. Only his helmet, bobbing on the surface of the water like flotsam, remained. This scene, reminiscent of a maritime disaster, lasted only a few microseconds when Joe exploded from the depths like a Polaris missile and with water pouring off his hair and beard, he exclaimed 'Well it was only up to my knees'. I'm not sure how the rest of us fared with the hole, but I suspect we found various ways of circumventing it without getting a ducking. For the rest of the trip and for some time after Joe was given the designation of 'It is only up to my knees, Jennings'.

Joe's determination to get a job done in the face of adversity is well known. He could also be quite obstinate.

During the winter of 1965, I think in late July or early August, I accompanied Joe on one of the trips he made regularly to Cooleman to gather hydrological data in and around the Blue Water Holes. The winter had been particularly cold and the snow on the Brindabella Range, which lies between Canberra and Cooleman, was clearly visible from the city. When Joe arrived in the university Land Rover to pick me up I suggested it might be a good thing if we took skis, just in case they were needed to get into Cooleman. Joe was adamant that snow never became deep enough on the Cooleman Plain to prevent access to the Blue Water Hole by Land Rover and therefore skis would be unnecessary. Although snow was present on the road across the Brindabella Range it got alarmingly deeper the further we travelled along the Rules Point Road into the Fiery Range, with the ascent of Peppercorn Hill proving to be a challenge. Nevertheless we finally arrived at the turn-off to Cooleman at which point discretion was thought to be the better part of valour and we walked the remaining 9 km to the Blue Waterholes. It was a hard trudge in the snow but the data were collected and as a bonus Joe agreed that we should have taken skis. For a while after this trip the RAAF ferried Joe between Canberra and Cooleman by helicopter. These trips were made in the guise of training flights...

One of the more memorable and entertaining nights camping I have had was on a CSS trip to Cooleman in June 1965 (a month or so before Joe and I walked into Cooleman in snow) when I shared two tents with Joe. It was obviously going to be a freezing night and as we each had a Paddy Pallin 3-man 'Era' tent we decided to pitch one and then pitch the second one over the top as a sort of fly. A travel rug was put on top of the ground sheets on which we then placed our lilos and sleeping bags. That evening, after everyone had retired to their tents, we lay on top of the sleeping bags in our underclothes and with a gaslight going in the tent it was absolute luxury despite the freezing conditions outside. Our enjoyment and conversation was further enhanced by a bottle of scotch and two glasses.

The next day four of us, including Joe, walked to an area of limestone on the Goodradigbee River 5 km downstream of Blue Waterholes that resulted in us being 'benighted'. This event led to the Banquet sur Cooleman Plain chronicled in 'The Very Best' that was issued for the celebration of the silver jubilee (1953-1978) of the Canberra Speleological Society. The fact that four of us had not arrived back at camp the previous night hadn't seemed to have concerned

the rest of the party in the least. We arrived back early in the morning to find many members of the party still in their sleeping bags.

From Carol Anderson (CSS)

Joe and the cave ladder survey

An early CSS trip report concluded that the Society should train more people in the rudiments of cave surveying, noting that "at present the whole burden of surveying falls on Joe, and when he is exploring, surveying ceases, and what happens when Joe goes on study leave"?

During the drought of 1967/68 a number of active stream caves throughout eastern Australia either dried up or were severely diminished in flow. On 20th January 1968 a CSS group unexpectedly found the sump in Murray Cave at Cooleman open for possibly the first time in 65 years, and hastened exploration for some 1,200 ft. The party sagely agreed that Joe Jennings would want a survey done in the interests of science, in case it closed again. We were not impeded by a shortage of surveying gear. Without ado, a CSS caving ladder was pressed into service, a survey drawn up and duly presented to Joe on return to Canberra.

Joe soon responded that it didn't match with existing surveys of other parts of the cave and surface traverses. Another surveying party was despatched to the cave within 4 days, armed with miners dial and tapes. Just in time, we thought: the third sump was already full and the second visibly filling. Jennings himself turned up the following weekend, found the sumps down a little and completed the survey. He was right: it didn't match up.

Joe suggested we measure the surveying instrument. We did. The home-made 30 ft CSS ladder was only 27'6" long!

[As taught to me by a good, practical surveyor – "Always remember that a short chain, chains long: and a long chain, chains short"!]

From Neil Anderson (CSS)

The discovery and naming of Keiths Faint Hole, Cooleman Plain

A frigid and frosty morning after minus 8° C overnight made the grass crackle under the feet of a small group of cavers that included Joe Jennings and the late Keith Fitchett, Joe's redoubtable and long-suffering research assistant.

Due to a culinary reaction or our imbibing of red wine or whatever, Keith fainted. Simply passed out and slid gracefully to the ground. Since this phenomenon was more usually observed in the evening following the odd glass of cheer, the party gathered with some concern to assess the extent of Keith's problem.

Respiration, colour etc. were judged to be normal, and Joe was checking the pulse rate at the (now recovering) patient's wrist while someone supported



Re-measuring the grasslands micro-erosion meter site (now lost), Cooleman Plains; JNJ, Andy Spate, Sue White, Photo Ken Grimes.



the head. Joe delicately held Keith's wrist whilst checking the pulse rate on his watch held near eye level.

This grave picture of medical concern (certainly worth of Florence Nightingale) was rudely interrupted when Joe suddenly exclaimed "Gosh, look at that!" and stood up abruptly, pointing to a thin, telltale column of mist arising on a distant bluff.

The audible thud when the patient's head and arm re-connected with the frozen ground went almost unnoticed as the party hurried off to investigate.

The source of the mist was named "Keiths Faint Hole" in honour of the fully recovered patient and it proved to give access to an upstream section of the River Cave stream.

River Cave Sump

Coolman Plain was an area of special interest to Joe and he was very eager to hear details of our free-dive through the first sump (now called the "duck-under") in River Cave in late 1965. He was keen to get details on the depth and length of the sump and sought my opinion on whether a person of his size could get through. Since the sump was 2 metres wide and 1.5 metres high, smooth, oval, with a gravel floor and only 3 metres long, I assured him that with the appropriate support of wetsuit-clad assistants, he would have no trouble.

Thus, we were assembled in the frigid depths of River Cave a couple of weeks later. Reg Homer and I, wet and shivering from our total immersion while negotiating the duck, took up position facing each other, shoulder deep on the inner side of the sump. I could communicate with Joe through a tight fissure and shouted, "OK, Joe, it's a piece of cake. Three strokes and you're through! You can't go wrong!" In retrospect, an optimistic assessment.

With much thrashing and splashing, Australia's foremost karst expert made his entry into the inky blackness of the siphon. Reg and I were poised two metres apart, arms outstretched, ready to salvage the large, waterlogged Yorkshireman.

The duck normally takes less than five seconds surface to surface. After about 8 seconds Reg flicked me a look of some concern. I returned what I thought was an encouraging smile. After 10 or 11 seconds, Reg gave me a look, which clearly said, "This was your bloody idea and you can tell his wife and kids!"

After a few more seconds my thin veneer of optimism dissolved and I sucked a giant breath in preparation for a rescue attempt.

Suddenly a great thrashing was heard behind us some 3 metres further into the cave! We turned in unison to see a large, portly, submerged geomorphologist, eyes tightly closed, performing a sedate U-turn before re-entering the sump.

With much relief, I tapped him on the shoulder and pointed out that he was through and he may as well come up.

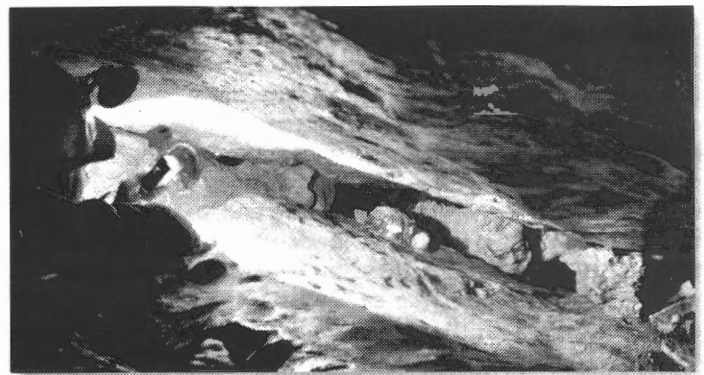
When questioned, Joe said he had gone far enough underwater and had decided that he had best reverse the procedure and have an educational chat with me in the near future.

How Reg and I missed catching him I do not know, maybe large Yorkshiremen can be as supple and slender a ballet dancer when immersed in cold water!

Down Under All Over with Joe. With Julia James at Bungonia and Wombeyan (Former President International Union of Speleology, SSS)

This tribute to Joseph Newell Jennings is a personal one. Others will introduce him to you as a successful academic, a lover of karst and a prolific publisher. Yet others will nominate him as the grandfather of Australian caving. I present to you Joe Jennings as a caver and diplomat.

In the late 1960s I was working on a Bungonia book as a member of the Sydney Speleological Society. We were working on mapping and describing the caves in order to produce a guidebook like those found for caving areas in the UK. SSS felt that a more ambitious book was required; one that emphasized the importance of the Bungonia



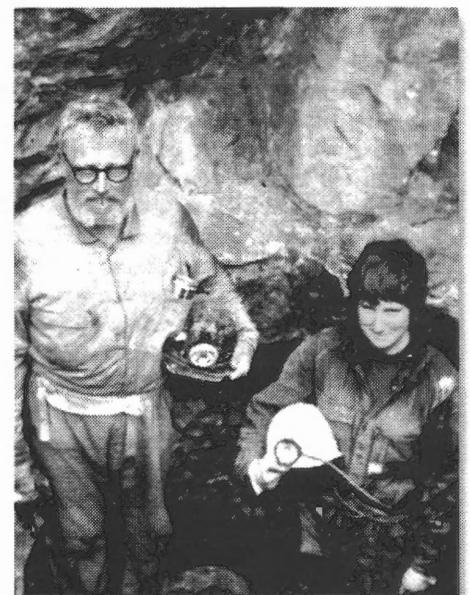
JNJ squeezing in Argyle Hole, Bungonia. Photo Julia James collection (Plate 1).

karst and could assist in saving the gorge as at that time Bungonia Gorge was under threat of being mined for limestone.

Joe was invited to be the geomorphologist/geologist for this publication. A somewhat arrogant Julia was unimpressed. How could you have a karst expert that had suffered a heart attack and therefore unlikely to be able to visit the depths of the caves at Bungonia, especially those that contained high concentrations of carbon dioxide? How wrong I was! The first caving I did with Joe was the inspection of Argyle Hole. It has a challenging squeeze for anyone and Joe was not a small person — however his determination was extraordinary — and centimetre-by-centimetre he forced his way through (Plate 1). One thing led to another and Joe did the 300 m flattener into the Hogans Hole-Fossil Cave extension. This time there was no problem with him getting stuck as the loose sediment could be excavated to free him. Next was Drum Cave with its 50 m entrance pitch. It was decided that the only way for Joe to see the cave was for him to be lowered down and pulled up the pitch. However the hauling equipment and haulers had to be tested first and I was the trial victim. I have always been dumbfounded that it took three people to haul the smaller lighter Julia (Plate 2) and two to haul Joe.

In the effort to explain the genesis of the Bungonia caves and karst, Joe visited many of them — despite squeezes, pitches and foul air. This almost proved to be one cave too many. It was the Grill. Joe determinedly made his way past "Safe from the Russians" and the "Danger Foul Air" signs, finally reaching the narrow vertical rift down to the sump. That day CO₂ levels were close to 5% v/v. Not to be deterred, down the rift Joe went using gravity to aid his descent. The return journey through the rift was a different story. Joe literally forced his way up expending enormous amounts of energy. He began to hyperventilate and was very distressed. It was exceptionally hard to prevent him trying to rush out of the foul air and to encourage him to sit still and stabilize. Finally after what seemed to be a very long time we exited the cave slowly. I was intensively relieved when at last we were out of the foul air.

At night there would be the campfires and Joe would share around his excellent wine and tell stories. He frequently stated that Australia would never run out of suitable land



JNJ and Julia James at the entrance of Drum Cave, Bungonia. Photo Julia James collection (Plate 2).

Conference Registration Form



25th Biennial Conference of the
Australian Speleological Federation

2 January to 9 January 2005

P O Box 198 North Hobart
Tasmania 7002

Enquiries: [REDACTED]

One application per applicant!

Name: (Mr/Mrs/Ms/Dr) Club or Affiliation:

Address:

Postal Address: (If different to the above)

Phone Number: (h) (w) (fax)

Email:

Please ☒ where required

1. Arrival Date:

Sunday Afternoon 2nd January: ☐ Monday Morning 3rd: ☐

Other: (please specify)

2. Registration details: (* Includes one set of proceedings!)

First timers: (1 st time at a ASF conference! Pls be honest!)	@ \$50	\$
Early payment by 30 September*	@ \$38	\$
ASF member: (All other categories)	@ \$100	\$
Early payment by 30 September*	@ \$75	\$
* Please provide my copy of proceedings on: Paper: <input type="checkbox"/> CD: <input type="checkbox"/>		SubTotal \$

3. Extra Copies of Proceedings:

Paper @ \$25 including postage within Australia	\$
CD @ \$15 including postage within Australia	\$
Add \$8 for overseas postage	\$
Sub Total	\$

4. Presentations:

I wish to present a: Paper (Name of paper): Poster presentation:

Name of author/presenter:

5. Accommodation: (shared room) at Far South Wilderness Inc all meals except CaveManiacs Dinner

Full stay @ \$340	Sub Total	\$
Daily rate @ \$55	Sub Total	\$
Dates:		

6. Accommodation Preferences:

(All accommodation at Far South Wilderness is in six person bunkrooms.)

<u>Same Gender Bunkroom</u>	<u>Mixed Bunkroom</u> <u>with Partner and/or Friends.</u>	<u>Mixed Bunkroom</u> (With 2 Other Couples your own age group.)
Don't care: <input type="checkbox"/>	(Please specify people/club you wish to share with.)	Youngish: <input type="checkbox"/>
Male: <input type="checkbox"/> Female: <input type="checkbox"/>		Middle aged: <input type="checkbox"/>
		Other: <input type="checkbox"/>

Accommodation will be allocated on a first come first serve basis. The earlier you register the better your chance of being accommodated according to your wishes. *No guarantees on what you get!* Accommodation is also available in the area but is limited and is likely to be much more expensive.

Conference time is 'peak' holiday season, book early!

7. Meals: (For those people not staying at Far South Wilderness Inc.)

Meal	Dates required	Sub Total \$
Lunches @\$10 each		\$
Dinners @\$20 each		\$
Sub Total		\$

8. Dietary Considerations and Allergies to Food:

Vegetarian meal required: ☐

Vegan meal required: ☐

Other special meal requirements including food allergies:

9. CaveManiacs Dinner

Dover RSL Friday 7th January 2005 @ \$30 per head <i>Please see dietary consideration & allergies above!</i>	Sub Total	\$
---	------------------	-----------

10. Merchandise:

Item	Size & Number Required	Sub Total \$
T-Shirts @ \$22 each	XS: S: M: L: XL:	\$
Long sleeved T-Shirt @ \$25 each	XS: S: M: L: XL:	\$
Bucket Hats @ \$15 each		\$
Stubby Holder @ \$8 each		\$
Sub Total		\$

11. Fieldtrips: conference/post conference

Conference trip - Mystery Creek (5th January) @ \$25	\$
Conference trip - King George V (5th January) @ \$15	\$
Conference trip - Gordon Dam Abseil (15th January) @ \$25	\$
Payment for Post-Conference Fieldtrips (9th-22nd January) @ \$10 per day will be collected at the conference.	N/A
Sub Total	\$

12. Medical conditions:

Do you have a medical condition that we should be aware of:.....

13. Payment:

You may pay either a deposit or full payment.

Early payment for either will result in a generous discount on registration only. See item 2.

I am making a deposit payment and will pay balance <i>before</i> 1 December 2004	<input type="checkbox"/>	See item 2.
I am making a full payment now. (Full payment due <i>before</i> 1st December 04.)	<input type="checkbox"/>	

Method of payment:

Cheque: ☐

Bank Cheque: ☐

Postal order: ☐

Send payment and papers to:

CaveMania 2005
PO Box 198



Total Payable:	
(Full payment) ..	\$
Deposit:	\$
(Minimum deposit = registration)	
Balance:	
(By 1 December 2004)	\$

Our thanks to the following sponsors!



To book your special CaveMania fare,
ring 1800 684 880 & quote
CaveMania Profile Number : 3572751.



Ardvark
Adventures

Anvers
Confectionery

Cascade
Beverage Co

The Hastings
Experience

Walch
Optics

Register now to avoid disappointment.

4th Speleo Art Exhibition

Entry Form



Downunder at Dover
ABN 15 169 919 964

25th Biennial Conference of the
Australian Speleological Federation

2 January to 9 January 2005

Application to enter

Application to enter the CaveMania Art Exhibition is now open. Members are invited to submit as many entries as they wish. For detailed rules, please refer to CaveMania website. To enter, please include a few lines about yourself, your art work and cave details. There is no limit on number of entries.

One entry per form please. *Entry is free! Good luck!*

Name: (Mr/Mrs/Ms/Dr) Club or Affiliation:

Address:

Title of the work:

Medium Used (Please tick):

Mailed artwork: Maximum submitted non-framed artwork size mailed - 65cm x 100cm.

(Larger & framed permitted if you bring it! Please advise in advance!)

Painting: ☐ Drawings: ☐ Literature: ☐ Poetry: ☐ Sculpture: ☐ Ceramics: ☐

Glass work: ☐ Craft work: ☐ Interpretive dance: ☐ Performance art: ☐

Other:

Photographic: SLR: ☐ Digital ☐ (Please tick)

Details of camera settings:

About the Artist: Please submit a few lines about yourself and your interpretation of submitted art!

.....
.....

Sale terms & conditions

Sale price:	\$
ASF contribution add 10% of sale price:	\$
Dover Gallery Commission add 25% of sale price:	\$
Total:	\$

Entry details and enquiries contact:

June MacLucas



All work to be delivered to:

CaveMania



All care will be taken in handling your work but no responsibility will be interred into if damaged. Artwork will be returned to owner at the earliest possible convenience, or collected at conference! Conditions do not include return postage!

Entries close 30th November 2004.

4th Speleo Art Exhibition



Downunder at Dover
ABN 15 169 919 964

25th Biennial Conference of the
Australian Speleological Federation

2 January to 9 January 2005

Bringing together speleo artists from around the world.
This is your chance to take part in the 4th Speleo Art Exhibition

An exhibition of cave art will be held at the
Dover Gallery Tasmania, Australia, during the
25th Biennial Conference of the Australian Speleological Federation.

Be creative, include whatever the caves suggest to you.

Submit: ★ Painting, ★ Drawings, ★ Literature, ★ Poetry, ★ Sculpture,
★ Ceramics, ★ Glass work, ★ Craft work, ★ Interpretive dance, ★ Performance art, or
whatever you feel is appropriate.

The Sky's the limit but, if you are mailing art work, then it is to be no larger than 65cm
x 100cm, no frames (unless you are delivering the work yourself). All appropriate work must
be mounted and titled. Entry is free!

Each artist to present a few paragraphs about themselves and their work and something
about the cave item they have portrayed. For all artwork sold, ASF will charge 10%
commission plus Dover Gallery charge 25% at the conference. Please include these costs in
your pricing. Prices are in Australian dollars!

To submit your entry in the Art Exhibition, use the entry form and please contact:

**Entry details and
enquiries contact:**

June MacLucas



All work to be delivered to:

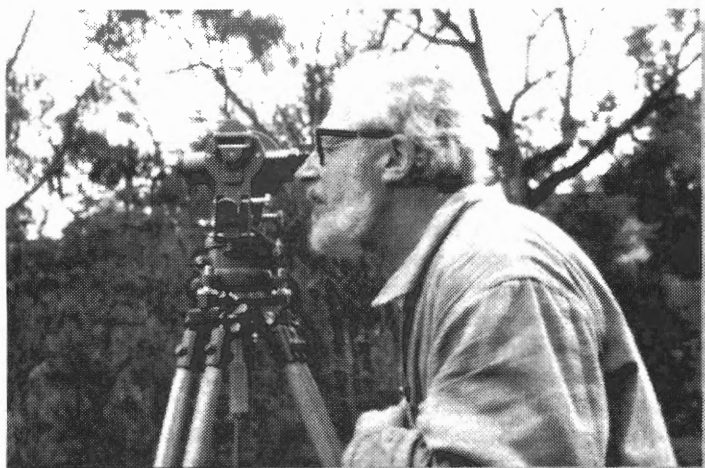
CaveMania



**All care will be taken in handling your work but,
no responsibility will be interred into if damaged.**

*Artwork will be returned to owner at the earliest possible convience,
or collected at conference! Conditions do not include return postage!*

Entries close 30th November 2004.



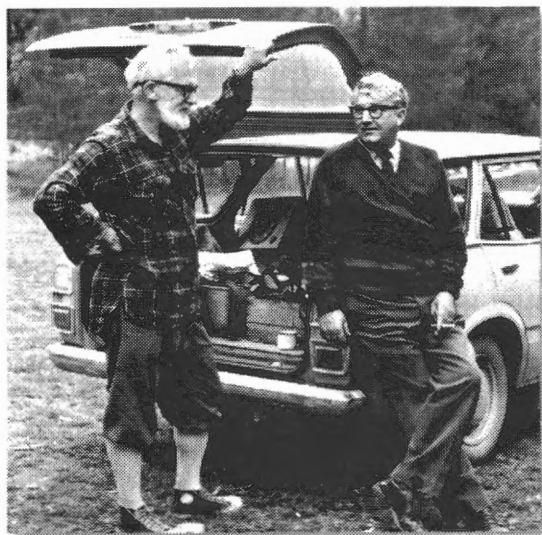
JNJ surveying at Wombeyan. Photo Julia James collection (Plate 3).

to grow grapes for wine. It also became clear that Joe was a real pedant when it came to karst terminology and cave names. He most definitely didn't approve of the major spring for Bungonia Caves being named "The Efflux" because out of effluxes comes effluent, not the best quality karst water.

By the time we had finished at Bungonia, Joe had convinced me that I should give up conventional chemical research and take up speleochemistry, and that he was an exceptionally determined caver. After success of the Bungonia book, Sydney Speleological Society commenced work on the Wombeyan book. Joe and I worked together on a number of the chapters. I was relieved that at Wombeyan the caves are both easier and safer. It was here that I learnt that Joe could turn his hand to any task. He took over the surveying (Plate 3) after we had done a magnetic survey amongst the steel railings of the Fig Tree Cave and then revealed a further mistake by checking the accuracy with an overland survey. He collected water samples and measured flow. He was an ardent photographer (Plate 4), but most importantly, he was our liaison officer.

The superintendent at Wombeyan at that time was Clyde Stiff (Plate 5). Clyde had bad experiences with most cavers. It was Joe who obtained permission for us to visit the tourist caves usually forbidden to cavers. However, even Joe had to have a minder when in the tourist caves — usually one of the guides — but often Clyde Stiff himself, would accompany us.

These two experts had many, often intense, debates. They both had their opinions and delighted in scoring points off each other. On one memorable occasion we were down in the Marble Way in the Fig Tree Cave where Joe was waxing lyrical over the rock mills in the marble passage. When he picked up a lump of rock, which he identified as a conglomerate that was probably part of an old false floor. Clyde who was our minder at the time explained that it was in fact, concrete — part of the old walkway.



JNJ and Clyde Stiff at Wombeyan. Photo Julia James collection (Plate 5).



JNJ photographing karren. Photo Julia James collection (Plate 4).

Joe's energy was enormous. He was always up at dawn even after an evening of drinking Victorian reds and swapping stories with Clyde. His enthusiasm was transmitted to us even to eating porridge and kippers for breakfast and getting up before dawn to view the remnants of an old course of Mares Forest Creek because it was better to photograph it in the early morning light.

The second edition of the Wombeyan book is being prepared, those preparing it will miss the input of the legendary Joe.

With Les Pearson at Chillagoe (CCC)

Joe Jennings goes shopping at Chillagoe

Joe was in North Queensland in the mid 1970s to supervise a Chillagoe karst thesis project being done by Joyce Lundberg, one of his post-graduate students.



Most days Joe visited Byrne's Hotel in Chillagoe for a late afternoon beer and to hear the town gossip. One day, when thirst had been duly quenched, Joe asked the Publican for a bottle of Claret to have with his evening meal. The Publican mumbled a bit but said he would have a look out in the shed as some years ago he had a bit of wine sent to him by his supplier. No one in Chillagoe was interested in wine so the contents of the whole wine case ended up in his shed. A bottle was produced and Joe paid \$5 for it and both he and the publican were happy.

Joe enjoyed his evening meal and noted that under the dust on the bottle the label showed it to be an early Penfolds Hermitage Grange. At \$5 it was a bargain. Joe quickly went back to the Hotel and purchased the balance of the case, at the same price. He was astonished at his bargain, as this wine at the time was bringing many times what he paid. Everyone in Chillagoe then heard about his bargain.

[I heard this story from Joe several times... but the wine was not always Grange and the pub was not always Byrne's.]

When Joe left Chillagoe all his specimens had to be sent back separately as he filled his luggage with his bargain bottles of Hermitage Grange and took particular care so that he got them all home without any breakages. He really had something to remember from his trip to Chillagoe.

Joe Jennings' Sixty-Fourth Birthday

In mid 1980, when Joe was in Chillagoe with Bao Haosheng, a professor from Nanjing University, he joined up with a party of Chillagoe Caving Club members for a visit to Mitchell-Palmer Limestone area.

This trip commenced with the usual excitement of crossing the Mitchell River, when Alan Cummins' new "super-duper" trailer suspension came apart midstream and was welded together again on the river bank by the Little brothers after their four wheel drive was rescued from stranding on a rock in the river.

Next day was Joe's sixty-fourth birthday and he announced he wished "to visit a suitable cave to celebrate it". The caving party took him up onto the nearby Mordor Tower to a location

referred to as "Kodak Point". From this position an all-round karst panorama could be photographed. Then Joe, after taking the usual photographs, set off with the group down the Tower, searching for the entrance to Emu Cave. This cave has an interesting panel of Aboriginal art that was considered to be worth Joe's viewing, and especially on his birthday.

Unfortunately, none of the party had approached Emu Cave from above and it successfully eluded the group for quite some time. The going was very steep and through prickly vegetation. In desperation, Alan Cummins went down off the tower and climbed up to the cave in the usual direction. At about the same time as Alan arrived at Emu Cave, Mick Godwin and Les Pearson proved their navigational skills by arriving from above. Some time was needed to cool off after the struggle down the Tower. Joe then examined this cave and, after viewing the paintings and looking about, lectured us on the karst features of the cave and tower.

Unfortunately the cave was a dry one so Joe was unable to take his usual water sample.

Joe Jennings surveys Here It Is Cave at Mitchell-Palmer.

Joe wanted to show Bao Haosheng how to survey a cave and, after some discussion, it was agreed that the party should survey Here It Is Cave. The intention was to take measurements with tape, compass and clinometer and to give him real mapping experience. Bao was given the job of drawing up the cave map and noting the cave features.

This cave was not selected with any malice aforethought but it proved an incredibly difficult cave to draw. The cave developed along a rectangular joint pattern on a number of levels, but what made it difficult was the fact that the rectangular grid was turned off horizontal on both jointing axes. Subsequently, Joe accused the Chillagoe Cavers of deliberately selecting a difficult cave to survey, and it took some time to convince him that this was not the case.

When the survey was completed as far as was reasonably possible, Joe, as usual, wanted to get a water sample from the bottom of the cave. Unfortunately, the water was beyond a very narrow tight slot that had previously stopped caving parties getting any further. Joe then produced his geologist's hammer and some accelerated weathering took place. Eventually, Bao, who was the smallest of the party, managed to get through, but he refused to go any further until someone else joined him as in China there are "tigers in the caves". No other members of the party could get their backsides through the enlarged slot. Eventually, after more weathering, Mike Little managed to squeeze through and Joe got his water sample.



JNJ supervising construction of the West Deep Creek weir, Yarrangobilly. Photo Andy Spate.

Joe Jennings profiles Capricorn Tower

On 5th July 1980, at Joe's instigation, the caving party at Mitchell-Palmer agreed to make a profile of Capricorn Tower from the watercourse on the east to the watercourse on the west. As the tower is quite sheer on the east and very broken in steps once over the peak, this proved quite a challenge.

The sheer eastern face of the tower presented a challenge, but Joe was put on the brink of the cliff and roped to a good anchorage. He had a 50 metre steel tape and thought that it would do the job, with a suitable rock tied to its end. Unfortunately the face was 76 metres and Alan Cummins joined him and with his tape tied on they eventually managed to get a measurement. As Joe was throwing his tape and untangling it from bushes on the cliff-face he was heard to mutter something about "casting on karst!". The party then surveyed up to the top of the tower and built a rock cairn for future survey of the tower top. The descent then took the rest of the day as the western side of the tower was a series of rugged, aggressive green-ant filled vine scrub covered pitches, somewhat like an enlarged staircase.

After dark Joe and Les Pearson began calculating out the survey information and plotting up the traverse. They did not complete it that night, as they were quite weary from the survey activity. However, Joe and Les spread a story that their calculator froze up, as it was a very cold night, and they had to wait for morning when the calculator defrosted and could be used again. [At Chillagoe?]

On the Nullarbor with Ian Lewis (CEGSA, CDA)

In Jan 1972, I led the first ever Nullarbor Cave Diving Expedition. We explored the big unknown tunnels of Weebubbie and Cocklebidy with single tanks and little low-powered hand torches, but what stupendous discoveries! Later, John Dunkley wrote and encouraged me to come to Nibicon and give a talk on what we'd found. At that stage I hadn't been caving or diving outside of South Australia or CEGSA, so he had to persuade me that it would be a worthwhile effort to attend.

When I gave the talk at the conference it was a smash hit. No one in Australian speleology had ever seen beneath those great lakes and I felt the crowded auditorium was all exploring them with me as the slides and maps went by. I remember a lot of applause at the end and was about to mumble some thanks and perhaps take a question or two when suddenly this old guy got up from the front row and started going on about the Nullarbor. I thought who the hell is this? Weird habits, these eastern state's speleologists, but I suppose they just wander on stage when they feel like it... Then through all the general excitement I began to realise that this bloke seemed to know a bit about the Nullarbor as if he'd once been there, so I finally started paying a bit of attention.

Most of what he was saying had already gone by and I was trying to pick up some thread of his words when he suddenly turned to face me at the side of the stage and said to the whole audience that it was one of the best caving talks he'd ever heard, and that what we had done and what I had described was so exciting that it was inspirational! I thought hell I hope he doesn't want me to teach him how to scuba dive... but of course it was Joe Jennings, of whom I'd never heard. And his enthusiasm was for the spectacle of those lakes, the breakthrough technology, and the sheer exhilaration of new cave discoveries and particularly for the geological implications, which my maps revealed. He pumped my hand, grinned in my face, may have even slapped me on the back, then presented me to the audience and revved up even more applause! It wasn't until later in the conference that I actually came to meet him and find out his significance to Oz speleology and indeed the world.

But what struck home was the impact of our exploration on those who couldn't go there, but who saw so much more than I did (I was 19 then, and was just flat out caving everywhere whenever possible).



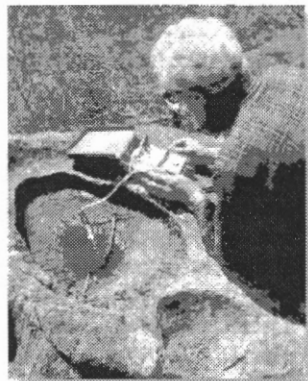
I saw almost instantly the capacity of divers with even a basic geological knowledge and an ability to map well, to enormously extend our understanding of karst in Australia, of the spectacular cenotes of Mt Gambier and the magnificence of the Nullarbor in particular. In those few moments, Joe lit the fire that has motivated me for 30 years since to explore and record underwater karst and make that knowledge available to as many people as possible. I have since given hundreds of talks, written dozens of articles, a couple of theses and several books which would not have happened if that old bloke hadn't sprung up on stage that day. I shook his hand vigorously, fielded an avalanche of questions and soaked up all the applause, all the while thinking I dunno who you are mate, but thanks anyway!

GOOD ON YOU, JOE!

With Marjorie Coggan at London Bridge and Yarrangobilly (CSS)



One of the most amazing things about caving (working?) with Joe was that you never knew what you were letting yourself in for. There was always a theory to be put to the test. One day we would be slamming a sledgehammer into a metal plate lying on the ground in an attempt at low-budget seismic surveying. Another we would be lugging generators to the bottom of deep gorges or wheeling barrows through dense bush to enable the construction of stream-gauging weirs. This would be followed by sitting in the rain at some remote point of the Yarrangobilly River taking hourly water samples hoping to pick up the odd lycopodium spore to prove a link from a distant sink. On other occasions we fiddled with fluorimeters trying to detect the presence of optical brighteners (used for stream tracing) against high background levels of natural fluorescence. Then there was the time we wandered about the Yarrangobilly Plateau with very expensive and delicate pH meters. Around the same time, Joe's micro erosion studies at Yarrangobilly and Cooleman were in full swing. How fast does limestone erode when it is sitting in a cave stream, buried in the soil, or just sitting on the surface? Just set up the experiment and sit back and wait for 20 years.



JNJ measuring electrolytic conductivity in solution pan, Yarrangobilly. Photo Andy Spate.

[The erosion rate studies established by Joe, Dingle Smith and myself continue – an unusually long term study (30-year) which has had a number of interesting publications arising.]

With John Brush at Wee Jasper (CSS)



Joe was always quick to pick up on new ideas, particularly if looked like it might advance the cause of cave and karst research. Geomagnetic dating was one such issue. It had long been known that relative ages in volcanic rocks could be determined by measuring the orientation of residual magnetism that aligned with magnetic north at the time the molten rocks solidified. What if, thought Joe, very fine clay particles aligned in a similar way as they slowly precipitated from underground streams? Could such alignments, if they existed, be used to date sediment sequences in cave passages?

Joe thought the Punchbowl/Signature/Dogleg complex at Wee Jasper would be a good location to carry out some local investigations. Within the complex, multilevel system there are a number of residual clay banks at different levels. Just one small problem, Punchbowl has a 20 m entrance pitch and it had been quite some years since Joe had used a rope or ladder. But not to worry, Joe figured Marjorie Coggan and I were responsible enough to be trusted with the tasks of not only getting Joe safely into the

cave and out again, but also helping to collect samples.

Sample collecting was not as simple as it sounded. First, we had to find an undisturbed deposit of fine clay. This in itself no mean feat at Wee Jasper. However, back in 1981 when this was done, they did exist – typically as a small deposit in a meander niche half way up a wall or in the remote reaches of a tight crawl. It was then necessary to carve a 2cm sided cube into the sediment, slide a plastic box over it, orient with a compass and then detach it from the rest of the deposit. This was difficult as the sediments were very friable and subject to collapse. A steady hand and a light touch were essential for successfully boxing a sample. Joe quickly became a master at carving blocks of sediment with a scalpel while balancing on a shaky cairn of rocks.

Unfortunately, this 1981 work was to no avail, as no residual magnetism was detected. However, I understand Joe was not deterred and the data was reanalysed in the USA leading to an interesting paper that does not appear in Joe's bibliographies.

[For the record: Schmidt VA, Jennings JN and Bao Haosheng, 1984, Dating of cave sediments at Wee Jasper, New South Wales, by magnetostratigraphy, Australian Journal of Earth Sciences, 31: 361-370]

With Roger Curtis at Cooleman and Bungonia (CSS)



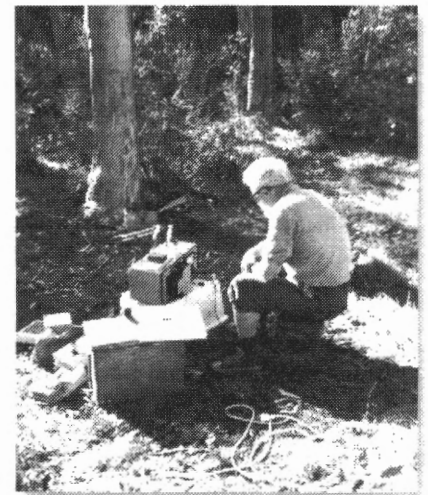
Joe Jennings was a controversial person at the best of times! Outspoken and not known for his diplomacy he has left his imprint on Australian speleology and the rest of the world in no uncertain way!

My first story is about Cooleman Plain one of Joe's favourite stamping grounds.

John Riley [another Yorkshireman] and I were visiting the plain in the early seventies, John and Maurine had just arrived in Australia and had contacted Joe regarding caving in the Canberra region and in the ensuing months myself and various other members were running familiarizing trips for John Riley.

John and I were visiting Cliff Cave and after exploring the cave we were resting on the outside when John noticed the water rising from a pile of rocks at the base of the cliff, John said to me "has anybody looked in there?" I said "no", not really thinking about what I was saying so John said "lets have a dig" (digging is a familiar exercise for Yorkshire Cavers as the only way you will find new caves in Yorkshire is by digging!) so of course we did and after spending half a day we had unearthed quite a reasonable amount of cliff, where we revealed the water flowing out through a half a dozen impenetrable slots, so as the sun was well below the yardarm and as it was Sunday we departed for Canberra.

The following weekend Joe and various CSS Members [Neil and Carol] came upon this environmental vandalism – naturally Joe was outraged. The following Monday I received a phone call inviting me to participate at lunch (sandwiches) with Joe. So with great excitement I went over to the ANU (I didn't get many invites to lunch with leading man in geomorphology). Joe came to the point very quickly – "Some bugger has been digging at the Cliff Cave Rising, if they had consulted with me first I would have told them that it was a waste of time" looking at me with a pair of eyes that penetrated to my very soul!



JNJ operating fluorimeter, West Deep Creek, Yarrangobilly. Photo Adrian Davey.

The following weekend John and I returned to Cooleman to replace the rocks with the weathered sides to the outside!

The second story is about a discussion that I had with Joe many times. Yes, I must apologise for not showing respect for his knowledge of geomorphology.

The first time that I went down Bungonia Gorge with Joe. I said to him with the innocence of the inexperienced that, I thought that there must have been an arch at the lower end of the Gorge, as that would explain the huge jumble of house size rocks and the 150 foot difference in the level between, the gorge bed and the bed of the creek out side the gorge.

Joe would always answer this with the words "poppycock" Limestones tend to form gorges as part of the erosion process – "read my book".

In hindsight, I believe that we were both right. There probably was an arch at that spot but it would have been when Bungonia Creek was at the same level or slightly lower than the than the Efflux certainly not in the present geological epoch after the rapid cut down of Bungonia Creek.

[Many people have suggested this and indeed the theory is in the popular press (Steve Parish's Australian landforms book). The rockpile is certainly suggestive but there is little or no supporting evidence. There may well be hydraulic reasons for the accumulation of boulders at the lower end of the Gorge. See also Tyndall J 1871 Hours of Exercise in the Alps, Longmans, Green, and Co., London and Bombay]

To the Nullarbor and Tasmania with Albert Goede (TCC)

I first met Joe at the inaugural ASF conference near Adelaide in late 1956. It was followed by an expedition to the Nullarbor organized by a dashing young scoutmaster, Elery Hamilton-Smith. Transport consisted of three five-ton steel tray trucks each carrying twenty cavers and a command vehicle carrying another six. Joe and I were in different vehicles and would probably not have met but for an accident on the second morning near the town of Kyancutta. The rear axle of our truck broke and we watched a double wheel roll away across the road as we came to an abrupt grinding halt. A new axle had to be brought from Adelaide and this was going to take several days. We camped alongside the Eyre Highway under canvas. It was hot and windy and our leaders were much concerned to keep us entertained. Joe, who had not been to the Nullarbor before, was prevailed upon to tell us about what was known about the geology and geomorphology of the region. It was a hot afternoon and the flies were thick. There were many interruptions as Joe tried in vain to keep the flies out of his mouth, ears and eyes. Most of the audience were less than dedicated to the subject and Joe finally admitted defeat when loud snores arose somewhere from the back of the assembled cavers!

I next met Joe in 1961 when I was a second year mature age student at the University of Tasmania. Joe came over as a visiting lecturer to give a series of six lectures on karst geomorphology that, unlike his earlier lecture, I really enjoyed. I also had an opportunity to join him on a fieldtrip to Mole Creek and Lake Lea (near Cradle Mountain). At Mole Creek there had been heavy rain for days and we were most impressed by the amounts of water rushing through the caves and flooding through Sensation Gorge. From there we drove to Cradle Mountain via Paradise! There we met two Tasmanian Geological Survey geologists, Kerry Burns and Denis Gee who were taking us to a then little known, formerly glaciated karst area – Lake Lea. Joe generously offered his ANU Landrover to provide transport. The track into the area was very rough. We did not discover until we arrived at a fishing shack at the lake that the owner habitually used a WW2 Bren gun carrier as transport. On our way in the track disappeared into an arm of the lake. Denis Gee decided to test the depth of water and signaled to Joe to wait. Joe thought he was being waved on and put his foot down. A wave came up over the bonnet but we were now committed and fortunately

managed to reach the other side before the engine cut out – no snorkels in those days! More excitement was had on the return journey as Joe managed to slide his vehicle sideways into a tree. It had to be chopped down before we could continue on our way.

My next experience with Joe was when I came to Canberra in 1964 as a PhD student with Joe as supervisor. That is when I really came to know him and appreciate his qualities, although he was away traveling much of the time and I did not get to cave with him. However, caving with CSS we met such interesting people as Neil Anderson and Andy Spate. During one of Joe's absences the university department moved from the wooden Old Hospital Buildings [where Joe had his office and lab in the old morgue] into a brand-new building – the Coombs Building. Joe arrived home one Friday afternoon and spent most of the weekend arranging his large collection of books on the shelves in his new room. When he returned on Monday morning the shelves had been torn from the wall and his beloved books were all over his desk and floor and had crushed his favourite desk lamp and his typewriter into a twisted lumps of metal. I can still hear Joe's furious voice with its thick Yorkshire accent reverberating through the corridors cursing the parentage and lack of quality of workmanship of those responsible! A collapse when Joe was working may well have shortened his career!

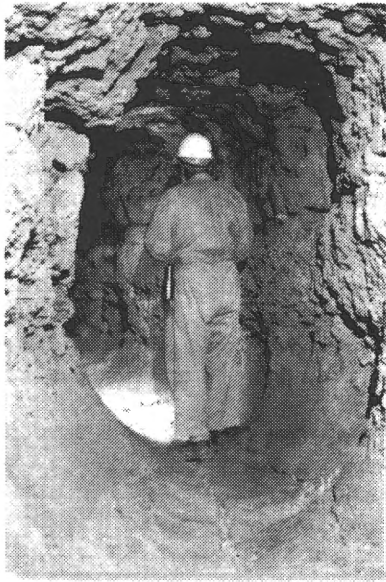
In 1965 I returned to a lectureship in Geography at the University of Tasmania but our common interest in karst and caves kept Joe and I in regular contact. In the following years Joe came to Tasmania several times to attend conferences and on one occasion we took him to Exit Cave to show him some of the new discoveries. He had recently had an operation and was far from fit. We had serious fears that we would have to carry him out on a stretcher but fortunately all went well as sheer grit and determination got him out of the cave and back to the vehicles.

In early 1981 Joe invited me to go to the Nullarbor for five weeks with himself and Adrian Davey. I could not have asked for two better guides and companions. We went in April-May and the weather was great. Temperatures were pleasant and there was not much wind and we frequently slept under the stars. Joe regaled us with stories of his overseas travels while Adrian turned out to be a gourmet cook. The meals were washed down with a generous supply of Joe's "rough" red. For the first time we were taking a close look at many of the shallow caves on the Nullarbor, especially in the Mundrabilla area and came to fully appreciate how different they were from the deep caves in their evolutionary history. We also came to recognise the abundance of speleothems, not only those made of calcite but also gypsum and halite varieties. Adrian and I were fortunate enough to discover the giant halite speleothem in Webbs Cave. Years later I was able to arrange for it to be dated. In the Mundrabilla area, we were joined by Kevin Mott and his party of SA cavers and by Norm Poulter from WA. Kevin and his crew had just discovered a major extension in Thampanna Cave with spectacular gypsum formations. Later I also had an opportunity to visit Mullamullang Cave that had not yet been discovered on my first visit to the Nullarbor in 1957. Joe, Andrew and Norm were all expert cave photographers and I learnt a lot of photographic skills during the trip.

After this excursion I was not to see Joe again. He passed away before the results of my Nullarbor research could be published. Joe and Edie Smith were two people who, more than anybody else in Australia shaped the course of my life and professional career since my arrival in Tasmania as a teenager. Many fond memories remain.

Dave Gillieson recounts... (UQSS)

Joe Jennings was a demanding supervisor for a PhD student in geomorphology, but he was capable of incredible acts of generosity. My doctoral project was on cave geomorphology and sedimentology in New Guinea. Early on it became apparent that I'd have to read the works of Philippe Renault, who had carried out detailed studies in French caves. The relevant papers totalled about 120 pages in technical French. My schoolboy French was barely up to the task, and I developed wrist strain from flicking through the best dictionary I



JNJ in Thampanna Cave, Nullarbor Plains. Photo Albert Goede.

research the relict red sands on the flat limestone terrain. The party comprised Joe, Andy Spate, Jim Stockton and myself. Plus enough bottles of Rutherglen red to provide two bottles per night for a month! As well as the elusive Pleistocene sand dunes and sheets, we intended to visit as many caves as possible. Two incidents stand out in what was a very enjoyable and productive trip.

One night we camped at Weebubbie, and the heavens opened. Water poured into the doline, and the whole surface of the plain was awash. So were our tents. Towards dawn Andy and I were splashing about, unable to sleep, and marvelling at the sheets of moving water transporting fine clays right across the limestone surface and down into the cave. We went over to Joe's tent and exhorted him to get up and join us observing the plain really working. "Rubbish", he said "you don't get sheet wash on the Nullarbor". But he did get up and was momentarily speechless before launching into extensive geomorphologising. Contrary to Lowry and Jennings (1973), you do get runoff on the porous limestone of the Nullarbor Plain. Needless to say we were stuck there for the next couple of days.

Later on in the trip we were looking for some red sands recorded by Dave Lowry on top of the Hampton escarpment. The critical reference was to a trig point, but tracks to the top were few and there was some strong dissension between Joe and Andy over its precise location. Joe, as a trained cartographer and military surveyor, was quite dogmatic. Jim and I just sat in the back and kept quiet. Having flogged up and down the scarp in the heat several times, tempers were flaring. Finally Andy said he was very sure it lay directly above us, and Joe said he didn't think so, the inference being it was a waste of time.

So up the scarp again we went, a short walk in the bush, and lo! There was the elusive trig point, with the appropriate number on a brass disc. At this point Andy took three paces, dropped his shorts, bent over and said, "Kiss my arse, Dr Jennings!"

For once in his life Joe was rendered speechless – then we all doubled up in laughter.

From Mike Bourke (UQSS)

Joe had a booming voice with the distinctive Yorkshire accent that could be heard all around the corridors of the Coombs Building at the Australian National University. Now in the very early days of the ANU in the 1950s, when it was a tiny university, the telephone list for the entire university fitted on a few sheets of paper. The story goes that one wag got hold of the telephone list for that year after it had been typed, but before it went to the printer. They deleted Joe's extension and instead wrote: "No need for a telephone". Joe is reported to have enjoyed the joke. That's the sort of bloke he was.

could get. After a couple of weeks Joe asked how I was going, sensed my impending failure, and said "Just lend me the papers for a few days".

A week later he presented me with a completely translated and annotated text, marking the really important bits for me. How he found time to do this in a very busy life I'll never know, but his generosity of spirit has provided me with a lifelong goal to aspire to with my own PhD students.

A bum's rush to the Nullarbor

Late in 1983 four of us went off to the Nullarbor Plain to

[Joe used to say that his loud voice was the result of his artillery training where the gun commanders were lined up on either side of the parade ground and instructed to shout fire orders to there opposite number on the other side. The cacophony must have been appalling and a loud voice must have been most advantageous!]

From Steve Bunton (STC)

I once asked Joe if he'd come and look at a cave I knew about. At this time Joe had a heart condition and this trip involved a long walk up a steep hill. He replied that his specialist didn't mind him climbing any mountains – it was the committee meetings he had to avoid because they really got his blood pressure up!



From Dave Dicker (ISS)

My association with Joe was limited to the 1982 Kimberley trip and its lead-up. I remember the time that Lloyd Robinson and I visited Joe in Canberra before the trip:

"Betty"

"Yes. Joe?"

"I really think I should go to the Kimberley again"

"Of course, Joe"

I think they may have discussed the matter previously...

Joe managed to lose his glasses out of the top pocket of his overalls early on in the trip. He didn't seem too concerned, as he rang his Betty from Halls Creek to get her to send a spare pair to Kununurra. I knew that he wore them for driving, so while he was behind the wheel one day I asked him if he could see OK.

"No problems, but if you see something on the road that you feel I need to know about, could you tell me."

To me, the 1982 Kimberley trip was one of the most harmonious trips, despite arduous conditions in the Turkey Creek area. Joe seems to have had a reputation for being a bit irascible at times, but I found Joe to be an excellent traveling companion, (provided there was shade and water for a wash at every lunch stop). In the field he was indefatigable – there was no such thing as days off! he truly led by example.

Jennings on Jennings...

[A little bit of self-deprecation was sometimes in order, as this extract from a CSS Trip Report by Joe himself shows. The 7-hour epic described is of a route about 76 km long, and the Edie Smith referred to was a distinguished pioneer of Australian speleology after whom our Award is named.]

Trip Report: "The Punchbowl and vicinity, Wee Jasper, Sunday 28th October, 1956", J.N.Jennings

The Landrover with Jennings, Leslie & Webb left Yarralumla about 6.15am and its route was to be the 'short cut' via Mullion



Supervising generator starting, Y46 weir construction, Yarrangobilly; JNJ, Andy Spate, Jimmy Quilford. Photo John Brush.



JNJ in Czechoslovakia. Photo Jeanette Dunkley.

Creek. Between Blundell's Homestead and the Mullion Creek Valley the track was quite good. But trouble came in the grassy paddocks of the Mullion Creek Valley and finally we got really stuck in a boggy stretch. Time passed but eventually the Landrover stood clear of the worst; then help came in the shape of two very slow-spoken stockmen mustering sheep and with four to pull, the remaining bog was quickly crossed. We were warned off the Wee Jasper track but pig-headed we pressed on. At Pringles, an aborigine also spoke unfavourably of the next stretch. Two further boggings justified his attitude but with care, we got through this wet part and came down to Mountain Creek. There was more water in the creek than we thought but it was easily crossed at the right ford, though not where we first came down to it and were faced by something of a precipice on the other bank. Not long after crossing the creek we hit quite a tolerable road and thereafter the journey to Wee Jasper and the Rip was uneventful. But we did not arrive till about 1pm! So much for the 'short cut'. Though an interesting route giving very wide views at certain points, it is certainly no short cut even in dry weather.

[description of the caving business of the day deleted]

After tea, the Doutches and Edie (Smith) departed. But in a few minutes, Edie returned on foot to report



almost total submersion of the car engine in the Wee Jasper Creek ford. The Landrover soon pulled the car out and while Fred (Doutch) dried the engine out, a fire brightened things up a bit. Dodging the road ford, we all crossed the creek at the ford on the Micalong Creek track but Fred's engine conked on the sharp rise on the Wee Jasper side. Joe managed to bust the tow rope by some bad driving. However a second attempt succeeded and the only major stop after this was an oil change at Wee Jasper. It wasn't far from midnight before everyone reached home.

[Joe and I tackled an even shorter, short cut to Wee Jasper a number of years later — it took even longer...]

From Greg Middleton (SSS)

[This letter was kindly supplied by Greg Middleton. It has been edited slightly by Greg and myself to save some space and to take into account handwritten annotations and the like. It demonstrates Joe's readiness to assist others and to avoid conflict. It also throws some light on his views on terminology...]



Dear Greg,

I hasten to reply to your enquiry about Yarrangobilly because we were trying to go about things in a way which we thought best designed to get cooperation rather than otherwise. This is the position. A group of people in Canberra, in particular Bob Nichols and Mike Owen in the B.M.R. and Andy Spate in CSIRO, felt the time was ripe to make a more powerful and more varied attack on Yarrangobilly as a karst area (not simply or even mainly as a caves area) than had been done before with more cooperation between people approaching the same area from different points of view also than has commonly been achieved. As Andy Spate knew I had long intended doing solution studies along the lines of the Coleman Plain work on one part (not the whole of Yarrangobilly, i.e. one catchment feeding a major spring/outflow cave), I was brought into the group and hope after a little while (next summer) to get my side going.

Perhaps my major say in the discussions has been the stressing of the importance of not cutting across the work of other people already active in the area and this was agreed. Indeed even before I made this plea, Andy had already written to the Secretary of the NSW Coordination Committee to ask for a meeting at which to discuss the plans we had when they were formulated. We then scratched our heads to think out who from Sydney was active in the area and came up with the following:

[list of people removed]

My talk with Julia and Neil was aimed at making sure this was the real tally. I don't mean to say there aren't other people with interests there, of course there are; these were people who had been doing something fairly definitely and fairly recently also.

Bearing this in mind a plan has been put together after a preliminary meeting with the Park Superintendent. This will be discussed, I presume, at the proposed meeting of the NSW Coordination Committee. Care has been taken in discussion with the Park Superintendent:

- (1) to stress that much of the work proposed was surface work e.g. mine is almost entirely and so is a high proportion of the remainder.
- (2) to separate the working group from formal association with the two Canberra speleological societies so as to avoid this work cutting across the



**ASF welcomes
and old friend
— MSS!**

At the February 2004 Mittagong Council meeting, Metropolitan Speleological Society (MSS) after a short absence, was granted full club membership back into ASF. Welcome back MSS!

http: [redacted]

JNJ obtaining
palaeomagnetic
samples, Punchbowl
Cave, Wee Jasper.
Photo John Brush.

usual system for club access to the caves area.

If we are right in our assessment of the Sydney situation as regards serious scientific interest and expertise, our plans certainly avoid overlap and competition with one possible exception, namely the water tracing. So much water tracing needs to be done however (the same connections need doing at different water stages here because of the possibility that underground divides are overflowed at flood stage) that I don't see why all the tracing that people want to do cannot be accommodated. Different parts can be different peoples' responsibilities. I will, of course, need to get the catchment I study defined well from the water tracing point of view. But I think I shall have to decide on my outflow point first and then delimit its catchment after or get someone else to do it for me or in combination with me. Authorship of publication would of course depend as it should always do on who has done the work and may of course call for joint authorship, a course to which I am far from reluctant.

I think I have said enough to indicate that there is willingness, even keenness here to go about this work at Yarrangobilly in ways which will encourage others to join in and will not interfere with normal club activity. I think it is almost inevitable that a lot of the impetus for this sort of thing at Yagby will come from Canberra because of both our proximity which makes it feasible for us to think of more time there and more regular visitation where this is required and of the training and responsibilities of some of the Canberra speleologists, e.g. Mike Owen was the leader of the BMR mapping team which is finishing remapping the geology of the 1/100,000 Tantangara and Brindabella sheets and Bob Nichols is one of the palaeontologists supporting that mapping. The boundary of their work just fell short of Yarrangobilly by a mile or two otherwise some of the proposed programme would have been done as part of the BMR programme.

Anyway there will be opportunity to discuss the plan at the NSW Coordination Committee meeting at which it will come up. It will be unlikely I shall be at it unfortunately, bearing in mind my movement in the next few months, though I shall be in Sydney on one occasion before I go to Czechoslovakia (the doctors have agreed to let me go).

Don't hesitate to write to me again on this matter therefore.

Turning to Terminology...

[paragraph removed]

...But in general let me say this. I was persuaded into more surveying terms but nobody has suggested I include photographic terms as yet. And the surveying terms gave lots of headaches. I am inclined to let the overall situation rest. I should say the present list is very different from the version you have and has more surveying terms. In fact as regards extension of scope it is much bigger because people have asked. I have done some throwing out but not as much. I think you would find that many of your points have already been satisfied. But not all and, I suspect, the main sources of difference between us you have already spotted. I still maintain that this is a select list of terms recommended for use and does not intend to reflect unexpurgated actual usage. Secondly I don't believe recommending elaborate and foreign words when there are perfectly good Anglo-Saxon words for the subject already in use. Thirdly I believe there



is very good reason to help people forget about certain words which are just plainly confusing in modern usage in a serious way. What it boils down to, I suppose, is that I am not prepared to put my name alongside a list I don't like. So maybe the thing is to let me have my way this time but let me gracefully resign from the preparation of the next version and have a real committee do it. By this I don't mean I haven't consulted, I have, quite widely, but with individuals with one exception. NUSS did get together and send me quite useful comments but I think you realise how difficult it would be to get a consensus first within each club and secondly between clubs if it were done that way. However having said all this, I will do my best to be quite open-minded when I look at your list very soon.

Just glancing down it, I guess that the percentage of your list which has already been the subject of revision or omission is very high indeed.

One last point just look at some parts of Marjorie Sweeting's book and mine on some subjects and I think you will [understand] why I am against foreign terms. Parts of her book one wonders whether it is in German or English! That isn't to say it isn't an extremely valuable book — her field experience and her knowledge of the literature take some matching and it shows.

Lastly back to your question about a better topo map of Yagby. The answer is no. Forested as it is it would be a very difficult matter to improve on that map's contours bad though they are. The hydrology can be represented better as I have shown (Cartography 1967). This will be done I trust. However the people more concerned than I (because my participation will be modest I trust) are well aware of the difficulty in this respect and are already doing some theodolite lines. Not with the idea of contouring but fixing the heights of crucial points. I think even Ted Anderson would blanch at the idea of trying to contour Yagby decently unless we reach the stage of getting beneath the trees effectively photogrammetrically.

If you don't like springs, why not risings or outflows according to whether the springs come up or run out. Perfectly good Anglo-Saxon words. Gordon Warwick is a friend of mine but I could well put something in his tea over the day he brought in influent and effluent and influx and efflux — totally unnecessary.

All the best,

[Signed] Joe — 22 June 1973

JNJ instructing NPWS staff, Yarrangobilly Caves House; Helen ?, JNJ, Bob Denholm. Photo Andy Spate.

HELICTITE! HELICTITE! HELICTITE! HELICTITE!

We are currently seeking suitable articles for Volume 39. Have you explored and documented a new (or known) area? Have you found out about some aspect of the discovery of a cave or cave area? Why don't you write an article for Helictite?

Without 2 more articles we cannot proceed with the publication of the next issue. These must be suitable for reviewing by a referee but if you need help editing it to this stage please contact either Susan White or Ken Grimes

Memories of Joe by Evalt Crabb. How very sad to lose a good friend.

From my very first involvement with ASF — early 1964 — I met Joe and enjoyed his company and support. With him I raised the lack of communication between the amateur weekend cavers (who discovered most things) and the stand-off academics. He agreed that cave explorers had a most significant role, as academics often lacked hands-on data. In this he was exceptional, mixing freely with fellow cavers.

Around Easter 1968 he joined us (HCG) at Cooleman Plain, shoe-horned into an undersize wet suit and joined in diving in River Cave. Then to the newly discovered Glop Pot, but missed out on the subsequent discovery of Easter Cave. On that trip, he brought along and introduced a young fellow named Andy (Spate).

A year or two later, HCG had an advanced design Radio Direction Finder which was used by CSS to trace the course of Dogleg Cave at Wee Jasper. Joe, as a staunch member of CSS, was overwhelmed by the result and was most profuse in his appreciation of, at that time, the hi-tech opportunities offered.

In later years, early to mid 1970s, Bungonia was a major focus due to threats from the extraction industry. Exploration, surveying, recording became intense and this was possibly the highest yielding period of all time in that area. Joe was in the thick of it, involved in and absorbing all of the action. We rambled, we observed, we talked. I presented ideas on cave evolution. He listened, he agreed and drily commented "you'll be expected to prove it, you know!" Such was his encouragement of the amateur.

I miss, but will always remember, his infectious roaring laughter reflecting his great sense of humour and friendliness. We miss his kind.

Evalt Crabb

President of Highland Caving Group



Near Landrover, L to R, Bob Russell, Robbie Schaeffer, un-named diver from South Pacific Divers, and Joe Jennings. Foreground check shirt, Bryan Race, with bare chested Bob Smith sitting on right then standing un-named SPD. Two at rear LH end are unknown. RH top, Andy Spate, then David Gant-Thompson and Alan Moule. Photo: Evalt Crabb.

The last word... Nick White trumps Joe (VSA)

[Before reading Nick's contribution re-read the last paragraph above. One of Joe's great attributes was to recognize when he was bested—but often after strenuous rearguard argument. See also Warren Peck and Julia James' offerings.]

The Eleventh ASF Conference was held in Canberra in December 1976. It was in many ways one the most successful held. The Proceedings contain a mixture of excellent papers that continue to be quoted in the literature. The morning the Conference opened is memorable to me for many reasons, not the least of which was that I was scheduled to present. Judith Wright McKinney gave a very pertinent and stirring opening speech that set the scene for many of the important cave conservation papers later in the conference.

This was one of the few conferences in my time in ASF at which Joe Jennings attended. It was on his home ground and he gave the opening paper "Caves around Canberra". The karst in proximity



to Canberra had provided him with numerous examples of karst processes, which he investigated with numerous cavers from CSS and the Sydney clubs. Joe gave a paper that pointed to the importance of processes at or close to the watertable. He proposed the term *nothepheas* for caves formed in such a situation. This term has not come into common usage and *epiheatic* seems to be the term in common usage now. Joe was punctilious about using terms precisely. The written text of his paper does not include some of his digressions which exemplified the misuse of various words. He abhorred the use of 'efflux' instead of 'spring' or 'rising' because to have an efflux one needed effluent!

This presented me with a dilemma because my paper was about effluent that came out of an efflux! It was with some trepidation that I rose to speak after Joe's address. What to do? Change my paper or confront it head on. I chose the latter and my introductory remarks were to the effect that the Moons Cave Efflux was correctly named because it had effluent coming out of the entrance. Joe took this in good spirit and the audience with considerable mirth! The sequel to the Moons Cave story was that some \$80,000 was spent on a new sewage treatment plant after it was found that the Manager of the Buchan Reserve had been paying a plumbing contractor to clean the baffles in the septic system that were nonexistent!

I was able to show Joe on a visit to Buchan subsequently the input point for the effluent and the Efflux. This trip was also memorable for a trip to Slocombs Cave with Joe and his new Olympus OM-2 camera and the tangles of flash cords as he tried to photograph the end chamber.

Many others will have more involved memories of Joe on trips but I only had a couple of weekend trips with him. There was a Nullarbor trip Susan White was on in which there was overnight rain. The testosterone levels and Joe's impatience lead to a morning of bogged four wheel drives within sight of camp but by lunchtime the Peugeot 504 was able to drive straight out of camp!

Having allowed Nick to have the penultimate word, I will, in closing my remarks and the observations of those who contributed to this issue of Australian Caver, slightly paraphrase a paragraph from the Preface to John Tyndal's delightful *Hours of Exercise in the Alps* (Longmans, Green, and Co., London and Bombay, 1871, p viii).

To the name of a friend who taught me in my boyhood how to handle a theodolite and lay a chain, and who afterwards turned his knowledge to account on the caves of the world. Of the firmness of a friendship, uninterrupted for an hour, and only strengthened by the weathering of 50 years of companionship, both physically and in spirit, he would need no assurance. Still, for the pleasure it gives myself, I connect this volume with the name of

JOSEPH NEWELL JENNINGS.

Andy Spate

JN JENNINGS AWARD SCHOLARSHIP

To commemorate Joe's enormous contribution to the study of Geomorphology, the Australian and New Zealand Geomorphology Group (ANZGG) inaugurated the JN Jennings Award, a \$500 prize presented annually to an outstanding Australian Honours student in the wider geomorphological field. Joe's interests spanned the whole range of geomorphology topics so the award is not restricted to karst studies alone, although a number of these have been recipients.

The ANZGG runs biennial conferences in either country and Award presentations are made on these occasions. A significant number of ANZGG members who are now senior academics in both countries were students of Joe's and are as keen as those of us in the Speleological world to remember this remarkable and well-loved man and his profound effect upon our later lives. The JN Jennings Award is their way to do this. After many years the original funding pool for this Award ran down and recently the membership of the ANZGG at their Annual General meeting in February 2004 accepted the offer of 10 years' future endowment of this award by Ian Lewis, a Life Member of CEGSA and South Australian karst worker who has contributed elsewhere in the Joe Jennings tribute article in this issue of Australian Caver.

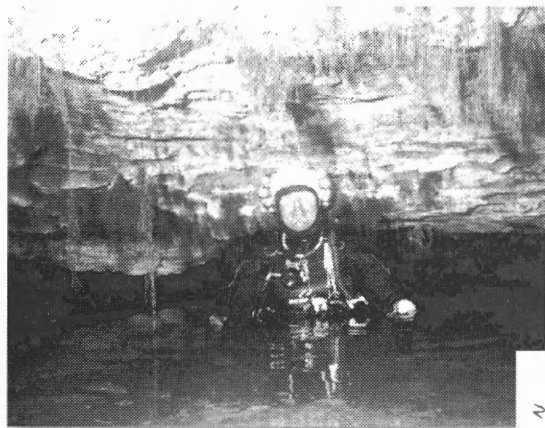
The ANZGG can be contacted through its President, Dr David Dunkerley (not to be confused with ASF President John Dunkley!), School of Geography and Environmental Science, Monash University, Melbourne Vic 3800, tel (03) 9905 2914 (direct) or 99052929 (Dept) and email

Burnabbie Cave, Roe Plains (Nullarbor), Western Australia

by Paul Hosie (WASG, [REDACTED])

Do you believe in Destiny? Can't say I was ever a big fan, but sometimes there is such an unlikely confluence of events as to make you think twice. This was the situation when I came to meet 'The Crazy Czechs' – David and Petra Funda of the Cave Exploration Group of South Australia (CEGSA) and how the three of us explored and mapped two kilometres of underwater passages in the magnificent Burnabbie Cave on the Roe Plains between Christmas Day 2003 and New Years Day 2004.

Burnabbie Cave was discovered by Max Hall of CEGSA during some aerial surveying he did in early 2003. It was first visited and dived by Rod O'Brien of Sydney University Speleological Society (SUSS) in July 2003 and it was he that discovered the low flat (LF) phreatic window passage that opened into the first of the Big Rooms in the 'Main' Tunnel. Rod's sketch is reproduced below and shows a very conservative "passage approx 2m x 2m". It is from this point that another 2km of tunnels has so far been explored !!



Rod O'Brien (SUSS) in Burnabbie Cave.

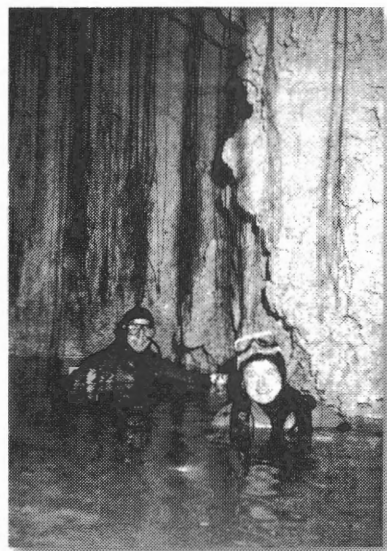
Rod's Sketch after the first dive.



I heard of the Crazy Czechs after receiving emails from them wanting to know the location of Olwolgine Cave. I then heard positive reports about their diving activities in Mulumullang Cave and Nurina Cave through my caving club – the Western Australian Speleological Group (WASG). They were in Perth for a conference and holiday, so we all met and they showed us the exciting new discoveries they had recently made in Mount Gambier – very impressive !!! We organised for them to dive Tombstones Cave with Karl Hall and Craig Challen before Christmas and I was able to join them for that. We all enjoyed it thoroughly and even managed to push a lead to establish another 50m of passage connecting back to the cave's entrance. I soon realised that David & Petra were very competent cave divers and more importantly, that they were speleologists as well. I saw an opportunity for us to do some bushwalking on the Roe Plains over Christmas and invited them for a dive in Burnabbie Cave to see how far it really went. When they accepted, the plan came together and we met on the Nullarbor on Christmas Eve.

All gear has to be walked to the cave from the camp through thick bush, then across open plains. You pass caves and sinkhole features on the way, it is a beautiful area to walk around – even more so when you get to dive a cave at the end of it !! Christmas day we set off with our 7ltr & 5ltr cylinders and a few reels with an optimistic 400m of guideline knotted at 3m intervals for surveying purposes. I did the first dive and as I followed Rod's line down under the entrance lake I realised that the entrance chamber was bigger underwater than above – it would need surveying itself.

Through the phreatic window and up into the first Big Room I realised how excited Rod must have been at this point, but at the same time his felt his disappointment at not having full tanks or much line with which



David & Petra in Tombstones Cave.



The Crazy Czechs in Burnabbie Cave.

BURNABBIE CAVE



Walking the gear to/from Burnabbie Cave

to explore this further. I tied onto the end of Rod's line heading NW and down through the 2m x 2m section Rod had described. This immediately opened into a second Big Room – 25m long, 10m wide, ceiling at -4m and floor at -10m. I could easily see into excellent lead tunnels on both the left and right and in the floor !! My way on was to follow the line of the fault though, so to the NW I continued, up and through a long LF at the roof of the cave for the next 25m. At a couple points I thought "stuff this, why not go back and look at those beautiful side tunnels?" but I could see straight ahead and I eventually emerged to go down a floor hole (FH) to -9m where an excellent side tunnel to the South presented itself, but on I went, following that NW faultline like a hound dog – Woof Woof !!! I ended up at a boulder collapse, having laid 140m of line along the faultline with the way ahead uncertain. I marked the best of the side tunnels on my return with the few remaining line arrows I possessed.

After sketching my dive and briefing them on it, David and Petra decided to explore the side tunnels I had marked and any others they could find. This turned out to be very productive and they returned with big grins and empty reels ! They had explored The 100m Tunnel, Petra's Plunge and generally enjoyed themselves following Rod's line and identifying more leads to be looked at on subsequent dives. Their elation after the dive is evident by the photo here.

We extracted tanks and reels for refilling and virtually skipped back to camp, arriving just after dark. The plan for Boxing Day was to push once more with 7ltrs and commence surveying. We had walked to the cave by 10am and I headed off for the first push of the day with 180m of line on my reel. Reaching the collapse, I pulled a few boulders out of a likely looking hole and gingerly slid through the gap, emerging on the northern side of a long, apacious, inclined fissure passage – 8m(H) x 8m(W) x 50m(L). I began swimming along the shallowest part of the passage but noted some strange looking stalagmites so I carefully redirected the line around the bottom of the passage so as to avoid any damage to them from line placement or subsequent divers. The passage changed into a LF tunnel and continued for another 30m before another boulder choked collapse was

encountered. This one looked easier to excavate and I could see a nice dark void beyond it. Wiggling through the hole and disturbed silt I found myself in a large 7m x 2m conduit heading to both the left and right with no end in sight either way !!

An apparently simple choice confronted me but it was one of the hardest I've had to make underwater !!! I tied off and labelled it Decision Point – it's a nice place to be, that's for sure !! I headed left and the tunnel pinched down after a further 70m and exactly where my reel emptied. I surveyed out and noted some more side leads on the way, including a lake chamber at the end of the 50m inclined fissure. After looking at my survey data and realising that the LH tunnel from Decision point actually came back parallel to the Main Tunnel, David & Petra decided to explore to the right from Decision Point and push the cave as far as they could to the NW. The Crazy Czechs laid 175m of line all heading the NW on that dive and I believe it was about the best dive of them all – they tied off with the passage continuing without visible end ...the perfect cave dive !!

We now decided that 100cuft cylinders were needed to go further – this would require a greater physical effort so we decided to take a rest day on the 27th at Cocklebidy Roadhouse. The next dive was a push to the current limit, a dive of some 800m from the entrance through beautiful sections of passage including the 41m leg: 'Nurina on Steroids' which is a beautifully dissolved, large fissure passage. Many side passages were marked for exploring and some connections were made between the Main Tunnel and different side passages by exploring LF phreatic tubes on the return trip.

The next series of dives were the most illuminating of all as we began to get a different perspective of the cave from the growing map – now up to approximately 1.3km of surveyed passages. When Dave & Petra did their next dive they found the most spectacular parts of the cave so far – the Fauna Lakes Tunnel and the Black & White Raft Room. When I found the Big Black Room and we surveyed all these big passages, we realised that they were all in the same line and therefore, the 'Main Tunnel' we had been diving until now was in fact just a parallel fissure of the Real Main Tunnel !!!

The Fauna Lakes were alive with trogllobites – cockroaches,



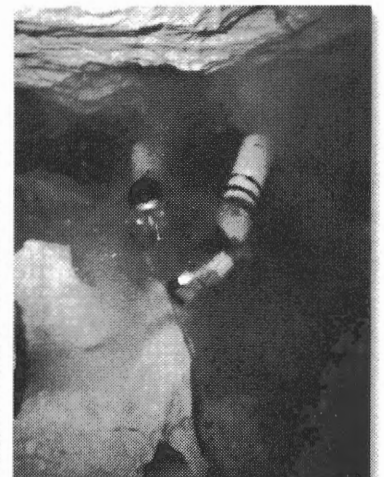
Petra reels into a new passage.



David & Petra in a Fauna Lakes Room.



The Tunnel at Decision Point (7m x 2m).

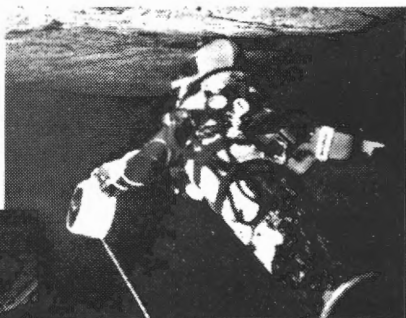


David exits a restriction.

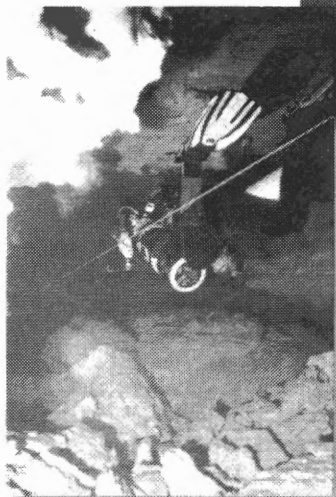
spiders, even a large pure white centipede was seen. Tree roots festoon the ceiling and drape into the water in chambers several hundred metres from the entrance which have likely been isolated from the outside world for aeons. The air is noxious, so we leave our face masks on and breathe from our regulators to avoid the high CO2 atmosphere. Specimens were collected for the WA Museum, one of which included a pure white, troglotitic cockroach.

Our final dives involved completing some surveying and investigating several small leads. While I was negotiating a nasty set of restrictions attempting to circle back around the entrance doline, Dave & Petra laid 100m of line into the Blue Reel Tunnel. This tunnel was very exciting as it is such a fantastically unlikely passage, heading between tunnels above and below it, then narrowly avoiding the two Big Rooms at the start of the cave to head off to the NW. Dave & I explored the B&W Raft Room which is where I got out of the water and explored 20-30m of dry passage heading to the WSW.

An ASF dry caving and cave diving expedition to the area is planned for early this year and is hoped to complete exploration and surveying of this magnificent cave, as well as to conduct a more detailed fauna study. Details of the cave's location will not be released until the line has been properly set with jumps and arrows and a management plan has been agreed with the landowners. It is vital that we put in place measures to protect the fragile areas of this cave so future generations can experience them in a pristine state just as we have. Any ASF cave divers wishing to participate and assist in this effort are invited to contact us through the trimixdivers website.



Petra reels into the Big Black Room.



Petra traverses one of the Big Rooms.



David prepares to explore a side tunnel



Author explores dry passages.

HELP SAVE AUSTRALIAN CAVES & KARST

The ASF Environmental Fund is completely funded by donations from cavers, caving clubs and public. Your donation or bequest to AEF will assist our work of informing Australians, and conserving Australian caves and karst. To make a contribution or receive an information pack, contact The Secretary or visit www.caves.org.au. Registered as an environmental body by 'Environment Australia'.



Call For Papers, Posters and Presentations

Invitation Become a Presenter at CaveMania!



Topics: Biospeleology, Cave Diving, Cave Management, Documentation, Computing, Conservation, Exploration, Geomorphology, Hydrology, Photography, Safety, Surveying and Techniques. Any cave related topic is suitable. Choose your speciality and take this opportunity inform a willing audience.

Papers: Will be allotted half hour time slots, including question time and grouped in sessions according to topic. Abstracts will be made available to conference participants and all papers will be published in a proceedings.

Posters: Will be displayed at the conference venue and presenters will be allotted a ten minute time slot to talk to their poster.

Deadline: Notification of your intention to present a paper or poster at CaveMania must be received and Abstracts must be submitted before September 30th 2004. Papers must be ready for publication at the time of registration January 2nd 2005. No late papers will be presented or published.

Albert Goede will be editing the proceedings. Format Papers to be submitted electronically.

Address Enquiries, Notices of Intentions and Abstracts to:
Arthur Clarke [REDACTED]

Website information for 25th ASF Conference

STC website: [REDACTED]

General information about the Far South Wilderness site, where the 25th ASF Conference is being held: January 2nd-9th 2005, plus links to other areas and attractions that Tasmania has to offer: <http://www.discovertasmania.com.au/home/index.cfm?siteid=166&display=product&productid=2010779>

Website for Far South Wilderness: site of 25th ASF Conference <http://www.farsouthwilderness.com.au/>

For general information about the site, see: http://www.farsouthwilderness.com.au/about_us.htm

For simplified how-to-get-there directions: <http://www.farsouthwilderness.com.au/location.htm>

For more detailed info about the site and area/ regional attractions: <http://www.farsouthwilderness.com.au/backpack.htm>

Abkhazia by Al Warild

Australia's legendary expedition caver takes on freedom fighters, the military, high altitude and Arabika massif in an attempt to push Voronya cave even deeper into the record books as the world's deepest.

"No problem" said Denis. "We just meet the guy on the edge of town at 9.00 pm. He'll look after everything"...the large car rolls up and over waddles the driver. More conversation in Russian. Denis again: "he says 'all your gear in the back, Al, you in the front, you look most like a Russian. Remember, no photos, don't talk. You haven't seen him before, you don't know who he is...' " half an hour later we were in Abkhazia the country that doesn't exist. Much smoother than the last group of 'foreign' cavers who had to wade the river in the middle of the night.

Squeezed into the south-west flank of the Caucasus mountains with Russia to the north, Georgia to the east and the Black Sea to the south and west, Abkhazia tried to succeed from Georgia in the early '90s. After a bloody civil war it managed to, in practise at least, but not in theory. Abkhazia has a parliament, army, issues visas to those who can get in and is recognised by no other country on earth. It also has some of the world's deepest caves. I knew there was a reason for coming here.

In May 2003 I scored a spot with the Spanish "MTDE Team" who were joining the Russian/Ukrainian 'Cavex' team trying to push further down Voronya cave. In the opening days of 2001 the Cavex team stunned the caving world with the announcement "A new world record deep cave: Voronya, 1710 m deep." Just over a year later the reply came from France "Mirola: 1732 m profondeur". August 2003 and the Soviets were back ready for the four week push.

Six hours on the back of a 6WD Russian ex-army truck got us up the mountain, then three carries up the last 200 m hill and we were set to go. The good news was that the re-rigging was going well and ropes were already in place to camp 1 at -500 m. Things would of course slow down as the cave got harder and deeper.

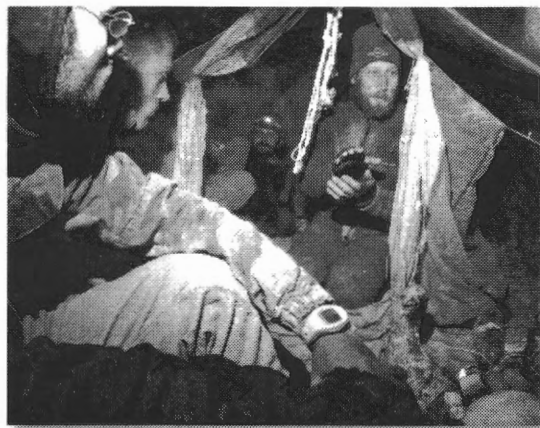
With 30+ cavers in camp and only one lead in sight, it was a long way to the sharp end. Us 'Spanky' entertained ourselves in Berchilskaya, a possible higher entrance 700 m away and 150 m up the mountain and 'hardly looked at'. A really pleasant porch entrance to get changed in. The real entrance is the crawl hole around the corner, and the cave only gets worse below there with some tight, sharp meanders to a 40 m pitch. Below, the place resembles a giant jar full of coarse gravel. On day one we got down 90 m. The cave was reputed to be -500 m deep, only 400 m of rockpile to go. But at -200 m is a nice big chamber with an old camp and a most impressive array of hammers, chisels & crowbars of all shapes and sizes. Hardly looked at. Over the following days we pushed further. People found excuses to go prospecting, peak bagging, sleeping, lending a hand in Voronya. At -430 m we hit a camp that the inhabitants had little more than abandoned. Everything was there: food, stoves, fuel, carbide, tent. Only thing missing were the cavers. Back at camp a good map emerged. Tell

me again, why have we been mapping this horrible cave? "Well, you see, the Moldovans tried to email the survey data but it didn't arrive intact so I thought we could just resurvey the cave to save the hassle..."

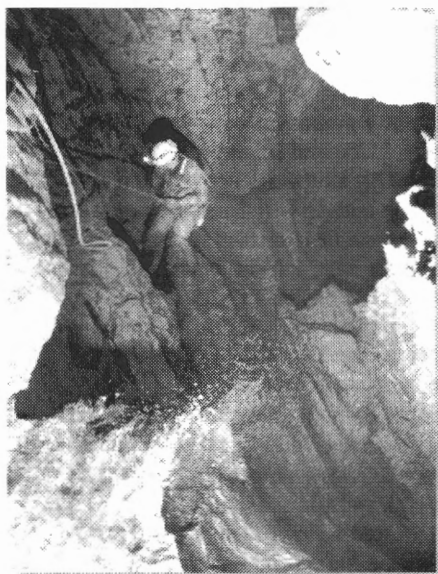
My first visit to Voronya was to be a gear carry trip to take diving gear to -1450 m, then camp supplies to the camp at -1710 m. Might as well jump straight into the deep end. So with Fonso and José from Spain and Max from Moscow and me from Australia, and four big gear sacks from base camp, the eight of us were on our way. The plan was to go to -500 m camp, get a cup of chai from the two guys climbing an inlet down that way, and collect two more gear sacks and drag the lot to -1200 m camp where we'd sleep the night. Next day we'd continue with our six friends, dropping items at strategic locations along the way, and end up at the 'Chamber of the Soviet Speleologists' at -1710 m and return to -1200 m camp to sleep the night before heading out.

Dropping to -1200 m in a cave with almost continuous pitches is quite something. You get really blazé at crossing rebelay without even thinking about them perhaps not the best thing for your long-term survival, but in a 3° C wet cave, moving slowly is not an option.

We rolled into -1200 m camp at -4pm, about seven hours after we'd left the surface. And was that tent a welcome sight. The last 800 m of spectacular waterfalls and meanders had been really quite something at first, but after three hours of zip, click, zt, unthread, rethread, unclick, relick, stand, unclick, 'libre!', zzzziip, click, zt, etc, it's nice to hide in a warm tent and have another chai, cook up a lovely meal of gretchka (a cracked wheat that looks, and perhaps tastes, like something you'd buy from a poultry supplier), chat on the phone to the surface, share stories of Sydney, Moscow, Bilbao and Granada. The idea of pitching a tent in a cave camp seemed a little quaint at first, but in these cold caves it makes good sense. A thin, light tent made of



-500 m camp. The one Sasha nearly landed on when he fell on the rope above. The camp is at the base of a 150 m pitch.



Denis kept talking about the 'funny' pitch. Fairly typical of the pitches between -800 m and -1200 m.

an old parachute traps the heat in and cuts drafts so well that the temperature inside is usually well above 20°C when you're active with the stove running, and doesn't go much below 15°C overnight.

Day two was to be the big day. A quick check-in with the surface to say we're off, and we're off. Three pitches and 50 m down we see a light coming towards us. We stop in a dry overflow. The sound of the waterfall abruptly increases and the waterfall is suddenly ten times bigger. Shit! ¡mierda! gretchka! No one wants to spend hours huddled on this muddy little ledge waiting for the water to subside. Sasha (all Russians are called Sasha, unless when they're called Iliya) arrives sopping wet. We make signs about us continuing deeper, he makes a sign of cutting his throat. Good, we agree. When Max reaches us we can exchange a little more info. Yulia is somewhere behind, but Sasha reckons she'll be fine and seeing as the water hasn't got any higher he continues on up. I mention Yulia. Sasha says something like "nicht problem". I wow them with my command of Russian and say "da". Back in -1200 m camp Yulia finally arrives looking very, very wet. That's one tough girl alright. She then peels off the oversuit, the drysuit, the fibrepile jacket and climbs into the tent in a perfectly dry full furry suit. I switch from wondering how she survived the cold water to how she survived overheating.

Back on the phone we find out that it's been raining heavily all morning, but they didn't want to alarm us, so said nothing. What's more we are due out tomorrow. Over more gretchka we hatch a new plan. One that still gets the gear and us to the bottom and still makes way for the diving party who are due in tomorrow. We'll go for the bottom as early as we can, then come up to the -500 m camp, and out the day after. The six of us in four sleeping bags worked just fine except for Yulia rolling out of the tent, and off the sleeping platform, in the middle of the night.

Day three becomes the big day. The stretch just below where we're flooded is awkward and miserable, but the 'best' bit is a 20 m pitch with an entrance like a small window. The stream flowing out the bottom of the window, then out into space with an awkward deviator that gets the rope hanging almost metre to one side. Perhaps our real concern is that the next pitch is called "Underwater Rigging", but it turns out to be a joke name and the rope is tied back to a jug just below the surface of a still pool of water. Even better is that the bottom is the "Sandy Beach" and we can dump the dive gear and go on with lighter packs through an initially unpleasant maze of uncharacteristic old phreatic tubes before we hit the down route again and more end-to-end pitches. As we descend we can see that the rigging gear was getting scarce. More ropes tied to hangers and even tinier krabs. At last a spectacular pitch series with a final 30 m drop into a lake and we're at the prime camp in the cave. Large comfortable chamber, dry sandy floor, beautiful lake just 30 m away, no raging waterfall or spray and a toasty 5°C.

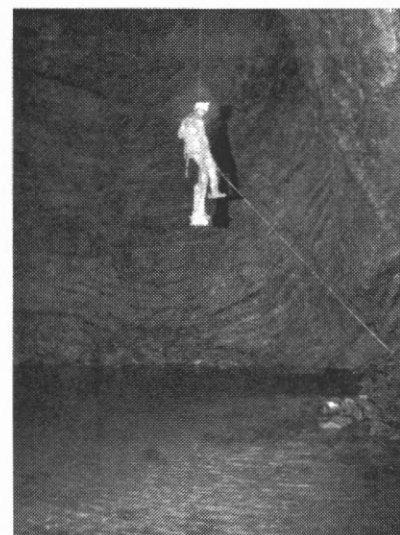
We pay our respects to the bottom of what we think is the second deepest cave in the world, and by far the deepest trip you can do. The highest point is the one entrance. In around 12 hours travelling

time we've dropped 1700 m down and about 300 m sideways, so unlike many deep caves that follow the surface slope down the mountain, here you're sitting under 1600 m+ of rock.

After a chai and gretchka we start the loooong climb up to -500 m. Just below -1200 m camp we meet Sasha and Yulia again dragging cave sacks. Klim and Denis have arrived and tell us that because of the flood (they were also on their way down when it hit and turned back), the rest of the team have delayed a day. This means we can crash here and head out tomorrow.

Next morning we're off. We sort by speed and drop into autopilot for the endless climb out. Somewhere near -600 m I spot a landmark meander — not far to -500 camp now. What seems like hours and hundreds of metres higher I spot another landmark meander that really is just below camp.

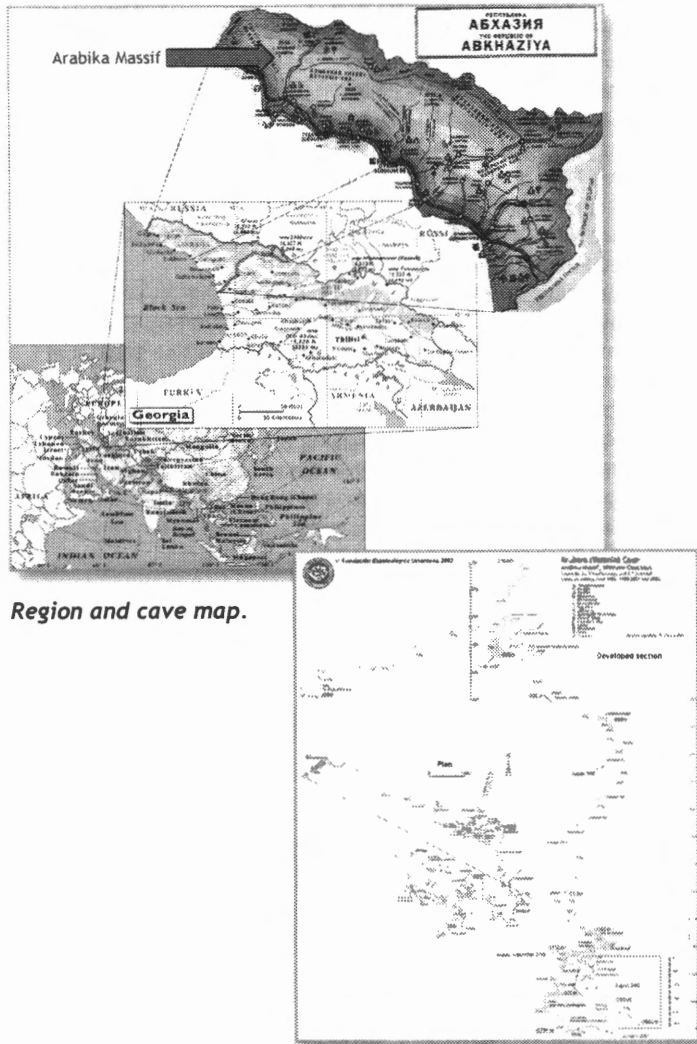
Time for a quick chai before tackling the 'entrance series'. Well, it feels that way when you only have 500 m to go. The first pitch out of camp is 152 m and the camp is in the only place available — at the foot of the shaft, so don't drop anything. After half an hour prussiking, I can still see the camp tent below. I do eventually get off rope into Mozambique Meander (the map shows it as Ulybka 'Smile'? I'm sure there's a soviet joke/play on words in there somewhere, but I can't see it). After a couple more 100+ m pitches, 500 m doesn't seem so close to the surface after all. On the entrance pitch there are shouts from above "wait, wait, the cameraman isn't here yet". Oh well, good excuse to hang about and rest for a while. Then after ~75 hours, I'm out. Nothing for it but to fill up on chai and gretchka and catch some sleep.



Jose-Manuel about to touch down into the final chamber at -1710 m.

There is also no such thing as a tourist trip down Voronia, and with Klim, then Denis getting through the sump at -1450 m, there's always plenty of gear to lug in. So after a few days rest, Jose-Manuel and I did another blap down to the Sandy Beach with a heap of food and dragged out an empty dive bottle and some rubbish. On the last push they'd used all the gear, right down to descending on the 50 m of 5.5 mm kevlar (don't try this at home kids!), and were at -1680 m looking down a ~30 m pitch with a lot of water noise below, and no way to get there without another expedition — no new world record this time. The party at the bottom did extend the cave by digging a 3 m hole in the floor. 1710 m to 1713 m. I guess that's something.

With only a few days to go the expedition swung into derig phase. Fortunately for us surface dwellers, those in the underground camps could handle most of it and we wouldn't be called on. Huey had other ideas though and he'd been cooking up better and better storms each day. On the second last caving day we got a show that only the mountains can put on. Pissing rain and truly impressive lightning hitting the hills all around us. Well, not only the hills. Voronia is equipped with a single-wire telephone. This included 300 m across the surface from base camp to the entrance and another 500 m in the other direction to a hill for mobile phone hookups to Moscow. Sitting in base camp we were both marvelling at the storm and wondering what effect it was about to have on the deriggers below. By all accounts it dropped more water faster than the one that got us the week before. Suddenly a large blue spark leapt out of the telephone. A second later a much bigger spark hit the hill above us. We guessed the phone was fried, but nobody was game to go near it. What we didn't know at the time was that Iliya was trying to



Region and cave map.

call us from -1200 m camp. The shock sent him flying out of the tent and down a mud hole with the old chai leaves. He'd only sustained two small burn marks on his hand, but didn't feel too good and went to bed. This was most definitely a good move because it saved him and Max from being hit by the flood pulse now racing down the cave. The pair above weren't so lucky and they got hit on rope around -800 m. They had no choice but to swing into a side rift and wait it out. No fun at all at 3°C and sopping wet.

The two Abkhazians also had a fun time. For one of them, this was his first caving trip and the other hadn't done much more. A waterfall of icewater on the head makes such a nice intro to deep caving. At least they weren't far from -500 m camp.

Of course we were all concerned for those below and out of contact, but there was nothing to be done for it until the water subsided. We attached our last decent telephone and hoped for an answer. Next day Buldo and Sergio were to try a carry from -1200 m. They got as far as -500 camp before they stopped (for a chai of course) and Sasha wasn't far behind them. They could hear him clinking and clipping his gear as he crossed the rebelay far above. With no warning, there was a scream and thump. Fortunately Buldo and Sergio were still in their caving gear, but outside it was all dark. Was the noise from Vladimir below or Sasha above? Then they spotted him. Sasha was hanging from the rebelay 20 m above, bleeding all over the place and groaning. Fortunately for Sasha, Buldo is one of the heavies in the Speleo Secours Français (French Cave Rescue) and was about to put all that theory into practise. He wasted no time in getting Sasha off the rope and down to the camp tent and gave him a quick look over: gashed ankle – but the bandages were stopping the bleeding; pelvis hurting a lot; spine also; some nasty gashes down his back; one tooth missing. All in all, not too bad for someone who's just fallen 30 m.

Sasha had spent a lot of time in the cave so he was as familiar with it as anyone. He was travelling fast down a cave he knew, perhaps trying to keep up with Buldo and Sergio. It was his last caving day of the trip and only three rebelay above camp where he was to collect a sack to bring out. So with three rebelay to go and mentally at least, caving would be over for this expedition. He clipped his bobbin and brake krab past and still had his cowstail attached. As soon as he unclipped his cowstail and sat back he realised that he hadn't closed his bobbin correctly. Too late to do anything about it, he free-fell to the next rebelay with only his brake krab around the rope. Just above this next rebelay the wall shelves out a little and he hit as he pulled up on his brake krab in the rope loop for the rebelay. A severe fall indeed: 30 m onto a loop 30 m long in one direction and 3 m in the other. That makes a fall factor of somewhere between 1 and 10.

In the -500 m camp they started trying to call the surface for help. Up above we were enjoying the sunshine and nobody could hear the phone. The phones were a little shaky after the lightning strike anyway, so Sergio started out to raise the alarm. Fortunately someone did eventually answer the phone and our relaxing expedition finish was thrown into turmoil. A totally incapacitated caver with unknown injuries, 500 m down a very vertical wet, cold cave, three tight meanders to get through, no stretcher, no doctor, a diplomatic imperative for eight of us to get through Russia within three days. I don't think anybody underestimated the gravity of the situation but as so often happens in truly serious situations, everyone swung into action to get Sasha out.

Within an hour I was on my way down with a pack full of just about everything medical we could find. It was like caving with a siren blaring. Everyone in the cave had instructions to get off the rope and let me past. Just above the last meander and pitch I passed Fatek, one of the Abkhazians. He was holding up pretty well on his first trip: flooded on his way down, party to a serious accident on his way up.

At the scene of the accident there was no choice but to descend the rope that had caught Sasha. I checked the hanger and karabiner, but that was all I could do. Approaching 30 m down, the shaft was liberally splattered with blood. The rope sheath had been dragged down the rope and my Stop was having trouble sliding. Finally there was a nasty bight in the sheath where Sasha's brake krab had torn through the sheath. Moments later I was in camp and passing the medical supplies into doctor Buldo (a scary thought for people who know him – 'Buldo' is short for bulldozer). Hanging around is the worst part so I took off down the cave to steal enough rope to re-rig the damaged sections above. Of course the next reasonable length of rope was beyond the longest meander in the cave. A couple of hours later all was re-rigged and reinforced and there was nothing to do but wait, drink chai, and do what we could for Sasha.

Above, things were moving fast. Denis was in touch with mountain rescue in Sochi, just over the border in Russia. They weren't cave rescuers, but at least they had a doctor and stretcher. Diplomatic channels were opened and they were waved through the border in their 6WD truck. They tossed around the idea of a helicopter, but the weather was still cloudy and they were unsure about flying over another country, and especially Abkhazia – no point getting the army shot at if at all possible.

All through the night and into the morning we could hear the rumbling of blasting in an attempt to remove the worst lumps and spikes from the Mozambique meander above. Plans were sorted out. The 'Spansky' would do the first part, then bolt out of the country before our Russian visas expired. The rest of the team would still be fresh enough to get him the rest of the way. We'd scrounged a long rope from the St. Petersburg cavers camped just down the mountain and had rigged the pitch above camp for a single long lift with two cavers as a counterbalance at the top and three others with guiding pulleys at touch-points and corners in the shaft. The stretcher arrived sometime after midday, Sasha was given a hit of painkiller, strapped in and on his way. With Buldo prussiking along

beside on the main rope to fend off and call stop/go instructions, the shaft was easy.

Mozambique wasn't. The guys with the bang hadn't been able to ream out the zig-zag start. We had to remove the stretcher stiffening poles, haul him up head-first, then swing him in feet-first. Just as we were about to, Buldo said "head up into here, then feet in here, we'll have to tip him sideways for the first bit. He's going to scream a lot so we want to get it over as fast as possible..."

Scream he did, and it seemed to take hours. The stretcher was for helicopter rescue and not for sliding along sharp rocks. The meander was low — we couldn't lift, but we couldn't slide either. In the end we just took turns at laying or crouching in a hole in the bottom of the meander and passing the stretcher over the top of us. In 10 hours, we'd got him all of 200 m but the top of Mozambique is no place to hang around. A waterfall spatters everything and the draft makes it really uncomfortable. Some of us had done our bit and headed out. Past the bivvie at the beginning of the Kyrm (Crimea) meander. Past the blasting party in the meanders just below the entrance (Wait for the drilling to stop, a yell, a bang, hold your breath as you prussik through the smoke cloud and yell a lot so they know you're coming.) . Past the 'professional' rescuers with their new gear and video cameras and out into the night.

Later that day most of us were on our way down the mountain. The soviets had never done a real rescue before and asked Buldo and Sergio to stay and supervise the rest — they'd get them through Russia somehow.

Next day it was the man we didn't know and his car across the border and the day after a flight out of Russia.

Just before I left town, Denis showed up. They'd got Sasha to the surface around 3 am, nearly 60 hours after the lift began. The only sticking point was when the professionals wanted to take over to do the final lift to the surface for the cameras. I believe Sergio knows how to say "Follate maricon!" in Russian as well. It took another 14 hrs to carry him down the hill and then the truck ride down the mountain. By that evening Sasha was in Sochi hospital with a fractured pelvis and compressed vertebra and would be in plaster for 9-10 months.

...and that world record? It seems that the guys who claimed Mirola to be 1732 m had forgotten that it only has a 1628 m dye-tested depth potential. Much (cave) mud in French faces and Voronia still is it with 1713 m — for now.

US cavers push the 2000m barrier!

http://magma.nationalgeographic.com/ngm/0402/online_extra.html

In February Bill Stone will be deep below Mexico's Sierra de Juárez on an expedition that could make the Cheve Cave the world's deepest.

Bill Stone's got one thing on his mind these days — going where no one has gone before. And he hopes to make that happen when he travels to the depths of Mexico's Sierra de Juárez region in February with about 35 international teammates. For two months they will dive, rappel, hike, and dodge razor-sharp karst in hopes of breaking into Cheve Cave's main system, which is believed to have tunnels deeper than 6,500 feet (2,000 meters).

If the expedition succeeds, Stone and his team will have established Cheve as the world's deepest known cave, bypassing Krubera Cave, in the Republic of Georgia. It currently holds the record at 5,610 feet (1,710 meters). Watch out Al!

Miki Meek (Exerpts from media release).



UPDATE!

February issue of National Geographic highlights the push in Voronya cave, Abkhazia for the world's deepest. Australian expedition caver, Al Warild, is pictured amongst other team members along with some great cave pictures.

For more information, buy a copy or visit <http://www.nationalgeographic.com>

US cavers to challenge Voronya Cave, Abkhazia!

www.cavediggers.com

Later in 2004, Mark Passeby, a US caver and better known through cavediggers.com, will lead a team to continue the record push in Voronya cave. Supporters for the expedition include the Australian manufacturer — SRTE. More on this in AC162. Good luck to all all cavers attending!

Restructuring of Jenolan Caves Reserve Trust



Following extensive discussion at the last Council Meeting, ASF President John Dunkley, NSW Speleological Council President Megan Pryke and ASF Conservation Convenor for NSW Keir Vaughan-Taylor met the Trust Administrator Alan Griffin and General Manager Andrew Fletcher in Sydney on March 16. Our chief concerns are retention of critical decision-making by a statutory body of some kind that includes community and expert representation, holistic management of Jenolan (not managed separately as commercial and non-commercial precincts), and provision for better management of karst throughout NSW than NPWS has been capable of delivering.

The main news is that Abercrombie, Borenore and very probably Wombeyan will almost certainly be transferred to National Parks & Wildlife Service. The proposal is to then split Jenolan into a non-commercial precinct to be managed by NPWS, and a commercial precinct to be worked out later, a proposal that is objectionable on environmental grounds. There is some progress: A Karst Management Policy Unit (outside the normal structure of NPWS) is proposed that would be extended to most caves and karst on public lands in NSW, but its real operational authority is unclear and there is no provision for oversight by a Trust or other statutory, representative body as was the case previously.

Although a preliminary report will be delivered on March 31, the Administrator will continue for most of 2004 to investigate issues of concern to us, so members wishing to be involved in our response, even if only by e-mail, should contact Keir Vaughan-Taylor at [REDACTED] & ask to be put on the e-mailing list.

Source: ASF.

KARSTFLASHKARSTFLASHKARST

Mt Etna quarry closure after 40 year battle! Cavers and environmentalists will be pleased to hear that the gate to Mt Etna quarry in North Queensland has finally closed to mining operations. This is a major victory for cavers after Australia's longest running environmental battle of over 40 years!! Efforts are now underway to rehabilitate and restore the quarry site to a more natural state.

Rehabilitation of the quarry site is expected to take up to 10 years. Peter Berrill, active campaigner during the Mt Etna battle and other CQSS members were at the closure to see the last trucks leaving the quarry compound. More on this in AC162!

Source: ASF.

Book Review

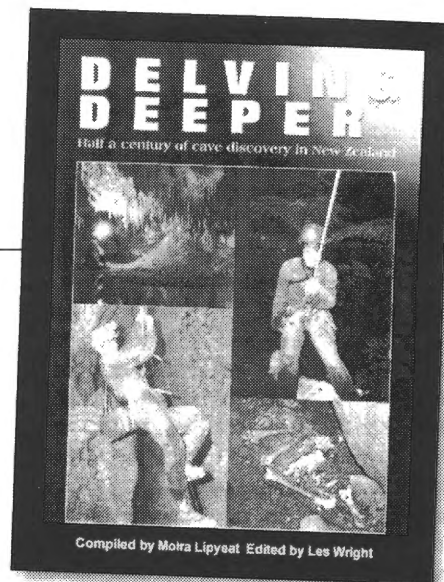
Delving Deeper, half a century of cave discovery in New Zealand.

Compiled by Moira Lepyat and Edited by Les Wright. Hazard Press PO Box 2151 Christchurch New Zealand

I guess I am becoming more of an armchair caver, either that or history is becoming more interesting as I live an increasing amount of it, but I found this an enthralling book. Whilst this book celebrates 50 years of the New Zealand Speleological Society and does concentrate on the history of NZ caving through the eyes of the club, it has the expanded brief of covering the whole history of exploration in New Zealand since European occupation. It also covers the activities of New Zealanders on overseas expeditions. The book is arranged in chapters spanning a decade and each chapter covers the exploration in the various caving areas, cave science, conservation and club matters.

Readers are therefore able to trace the history of exploration in notable caves such as Nettlebed and Bulmer Cavern. Quite a number of Australians were involved in mini-expeditions to explore some of these caves and I found it interesting to follow the continued developments in areas since the time I visited them. Much of this was published elsewhere and I was vaguely aware of how the stories panned out but it was good to see things in an edited form and brought together in a well presented volume.

It is interesting to note the same old names cropping up, some people are perennial! Also there is a continued influx of new names that indicate a very healthy caving scene in New Zealand. There are accounts of the epics, tragedies and the very public cave rescues which have occurred, some news of which did cross the Tasman in a number of forms. Again it was good to see the records set straight



although in many cases the stories were rather abbreviated.

Delving Deeper is a well presented book with numerous black and white photos to illustrate the text, entertaining cartoons and items of a historical nature dot the margins and there are even some text boxes which further enlighten the reader to the details of some episodes.

New Zealand is a stunning place with it's high rainfall and vertical relief, ideal for cave development, it is truly blessed. It offers great potential for exploration and adventure. Delving Deeper captures the interest and some of the excitement of the New Zealand caving scene. The only trouble for Australian readers not familiar with kiwi caving areas will be coming to grips with the unfamiliar, difficult to pronounce and often similar looking local place names. They are a bit taxing for the short term memory and therefore make parts of Delving Deeper a bit of a struggle to read! Nevertheless this is a great book and well worth including in the club library, especially as a resource for the next generation of trans-Tasman sportcavers.

Steve Bunton ■

CSS cleans up Yarrangabilly, NSW

CSS Inc has moved into the rubbish disposal business. At the request of Peter Bell, the new Caves Manager at Yarrangabilly, CSS spent a weekend removing part, (an est 5 cubic metres) of the accumulated rubbish that had been dumped into Saddle Creek sink for many years. The team also re-landscaped parts of the sink from where the rubbish was removed. The next part of the process, the stabilisation of the steep slope above the entrance, will be co-ordinated by the Park Service.

By John Brush



Bin filling: Christine O'Keefe, Marjorie Coggan and Judy Elton at work in the Saddle Ck blind valley.



Tim & entrance: Tim Jepsen at work in the stream sink. Note the pile of rubbish above.



Tim Jepsen emptying a bin 1hr after starting rubbish removal from Saddle Creek Sink.

Phone & Mail Orders
available
or call into the shop
& training facility



Formerly Caving Equipment → Rescue Equipment & Now THS

Phone
(02) 9966 9070
Fax
(02) 9966 9071

Shop Address: Unit 10 / 87 Reserve Road, Artarmon, NSW, 2064
Postal Address: PO Box 230, Milsons Point, NSW, 1565

Website: www.ths.com.au
Email: sales@ths.com.au

World leaders in equipment for vertical and horizontal caving

The THS difference is simple:

- Experienced & knowledgeable sales staff
- World leading brands and products
- Extensive equipment display showroom
- Wide range of brands and products

Services include:

- Rope access and rigging specialists
- Internal and external training center
- Access, rigging and rescue systems
- Ascending & descending rig design



Petzl head Lamp Special

MYO



(L371,E26P)
MYO

NORMALLY
\$70.22
SPECIAL
PRICE*
\$55.86

(L371,E27P)
MYO 3

NORMALLY
\$96.80
SPECIAL
PRICE*
\$77.00

(L371,E28P)
MYO5

NORMALLY
\$140.80
SPECIAL
PRICE*
\$112.00

* ASF member discounts do not apply to already discounted products or the special as advertised above. Special offer is valid till 31 June 2004 or while stocks last.

Blue Water, Beal, Bonwick, CMI, Gibbs, HB, Kong, Maillon Rapide, Omega, Petzl, Spelean, SRT, Wild Stuff

AUSTRALIAN CAVER BACK ISSUES SPECIAL OFFER!

Missing issues in your collection? Why not fill the gaps with this 'special' offer.

Be quick to ensure you don't miss out on this opportunity to gain your piece of Australian Speleological History. Available back issues commence from No.52. Prices for issues start from \$1. Some 'rare' issues may cost a bit more.

Issues for \$1 each: 83 to 96

Issues for \$2 each: 52, 53, 54, 58, 59, 60, 62, 63, 65, 66, 67, 68, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82

Rare issues for \$10 each: 56, 64, 69

Sorry, sold out! 55, 57, 61, 70, 71, 74

Send your order to:

ASF Back issue offer

ASF

P.O. Box 388

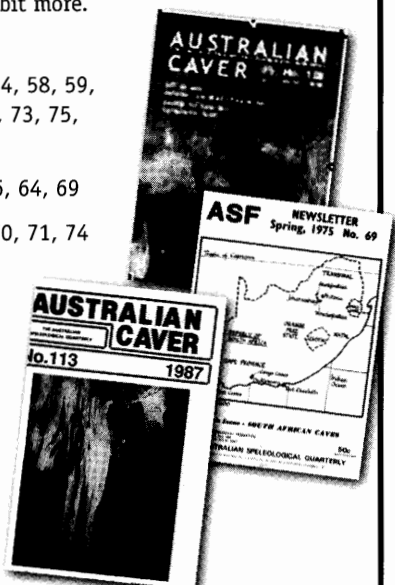
Broadway, NSW, 2007

Postage

Under 10 magazines add \$2

10 to 20 Magazines add \$5

21 or more add \$10.



WANTED

Electronics expert to build 'Hey phone'.

The NSW Cave Rescue Squad is interested in building a UK designed 'Hey Phone' — a low frequency radio communications device capable of sending messages through rock. The unit is not available as a pre-built unit however we have access to circuit boards, parts list, instructions to build/use etc. CRS is interested in building either one or two units in the interest of caving safety.

What we are seeking is someone with an electronics background capable of building this unit for a fee under contract. If any caver is interested, or knows of someone who may be, can you\they please contact me direct. Please note that this is a very sophisticated piece of hardware and maybe beyond the scope of an electronics dabbler.

I look forward to hearing from prospective & budding electronics experts.

Joe Sydney (President)



MYO Headlamps

the new generation - compact and light weight

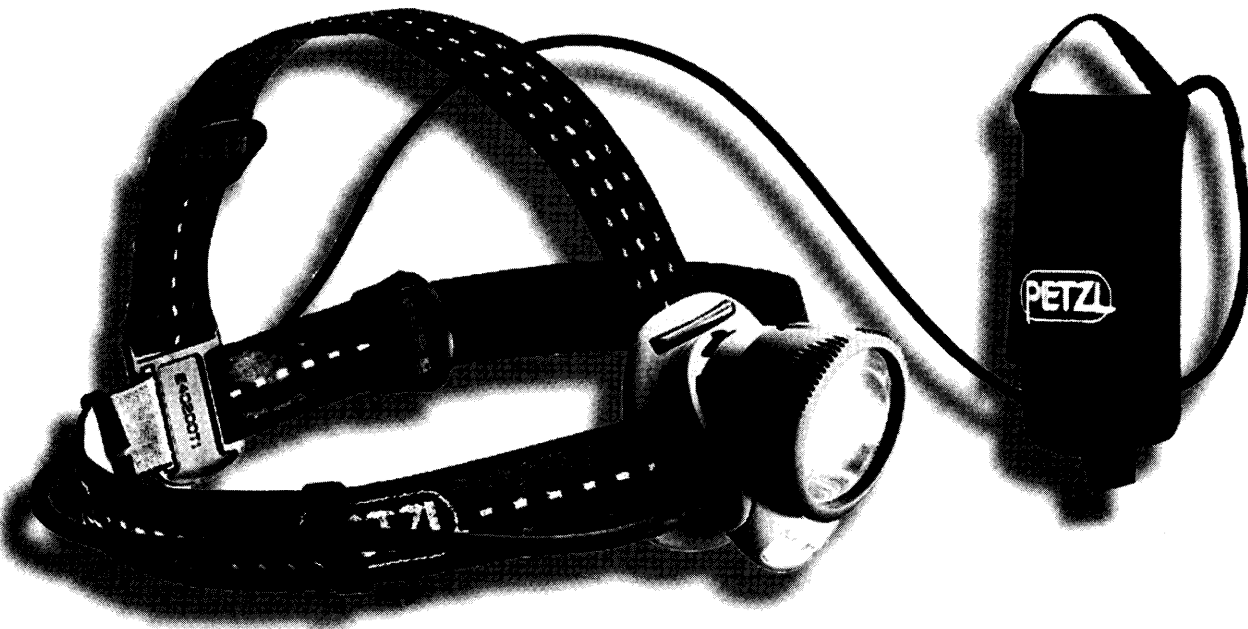


MYO 3

A headlamp with two light sources: Xenon halogen bulb + 3 LEDs.

The MYO 3 is suitable for users who need the advantages of both a bright, long-range beam and efficient LED proximity lighting. The LEDs provide brilliant white light for over 100,000 hours of continuous burn time.

- Maximum range 100m (Xenon halogen bulb), 15m (3 LED)
- Burn time: 4h Xenon halogen bulb, 180h LED
- Supplied with a spare 6V Xenon halogen bulb
- The lamp has a locking switch, a tilt feature and a focusable beam.
- Separate reflector units house the LED array and the Xenon halogen bulb ensuring maximum output in both lighting modes with no shadow spots.
- Operates with 4AA alkaline batteries (included)
- H2OK: Water-resistant for snow, rain, and brief submersions in water
- Weight 137g (without batteries)



Myobelt 5

Headlamp with two light sources: Xenon halogen bulb + 5 LEDs with belt mounted battery case.

Lighter on the head as the battery packs can be worn on the belt or under clothing, increasing the life of the batteries in cold conditions. Ideal lights for users who need to vary the level of light and keep the weight on their head to a minimum. The Myobelt 5 has electronically regulated brightness settings and a reserve power feature and a long burn time.

- Maximum range 100m (Xenon halogen bulb), 15m (LEDs).
- Burn time: Xenon halogen bulb 4h, LEDs up to 360h.
- Supplied with a spare 6V Xenon halogen bulb.
- Lamp has a locking switch, a tilt feature and a focusable beam.
- Separate reflector units for LED array and Xenon halogen bulb.
- Alkaline batteries included 4xC.
- H2OK: Water-resistant for snow, rain, and brief submersions in water.
- Weight without batteries - 173g.

Petzl products are exclusively distributed by:
Spelean Pty Ltd, P.O. Box 645, ARTARMON, NSW 1570
Ph: 02 9966 9800, Fax: 02 9966 9811
Spelean (NZ) Ltd, P.O. Box 219, OAMARU
Tel: 03 434 9535, Fax: 03 434 9887

