



CAVE MANAGEMENT IN AUSTRALASIA 15

PROCEEDINGS OF THE FIFTEENTH AUSTRALASIAN CONFERENCE ON CAVE AND KARST MANAGEMENT

**Chillagoe Caves and Undara Lava Tubes, North Queensland
5th May – 11th May 2003**

ORGANISER:

Australasian Cave & Karst Management Association Incorporated
P. O. Box 36
Carlton South
Victoria
Australia. 3053

SPONSOR:

Queensland National Parks & Wildlife

CONFERENCE CONVENORS:

Lana Little (Chillagoe), Val Speedie (Undara), and Professor David Gillieson.

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**Proceedings of the Fifteenth Australasian Conference on Cave and Karst Management,
Chillagoe Caves and Undara Lava Tubes, North Queensland**

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Cover Photo: The Conference Logo

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EDITOR'S INTRODUCTION

Firstly, I wish to apologise for lateness of the publication of this volume. It is pointless enumerating the reasons, except to say there were many, and mostly beyond my control.

The Fifteenth Australasian Conference on Cave and Karst Management, convened by ACKMA, was an outstanding success. This Volume contains the conference program, the List of Delegates, and papers presented.

With respect to the latter, I can only express my great disappointment that, despite many pleadings and more than adequate time, more than a few paper presenters have failed to submit a final version of their paper for inclusion herein. Where that is the case, only the original abstract appears below.

That said, a number of papers were "Powerpoint" presentations – an increasing trend these days, of course.

Many of those presentations, in that format, will be published on the CD Rom version of these Proceedings, which will be released in coming months.

Kent Henderson,
ACKMA Publication Officer
1 April 2004

FIFTEENTH AUSTRALASIAN CONFERENCE ON CAVE AND KARST MANAGEMENT

CONFERENCE THEMES:

Limestone and lava	Sharing the Resource
Managing and interpreting tropical caves	Vegetation on karst

CONFERENCE PROGRAM

DAY 1 – MONDAY 5 MAY (overnight Chillagoe)

Arrival Day

Morning and Afternoon

9.00am Assemble in Cairns (railway station). Travel to Chillagoe. Stops en route include mango winery, Mareeba Heritage Centre, and coffee plantation.
2.00pm Lunch at Railway Hotel, Almaden

Late Afternoon

Arrival in Chillagoe
Registration – delegates obtain their Conference satchel

Evening

6.00pm **Welcome to Delegates:** Peter Chandler, President, ACKMA Inc.
Welcome to Chillagoe: Lana Little, Conference Convenor.

Paper 1. KEYNOTE ADDRESS – Dr John Nethery***

Topic: *New evidence and constraints on the age of the Chillagoe karst*

Welcoming Address – Cr Mick Borzi, Mayor, Mareeba Shire.

7.00pm **BBQ Dinner** and slide show

*** **BIOGRAPHICAL NOTES ON THE KEYNOTE SPEAKER:**

Dr. John Nethery graduated early 1969 from the University of NSW, with a B.Sc. (Geology) and a Diploma in Education and has worked ever since then in mineral exploration. He is a Fellow of the Australian Institute of Geoscientists, The Australasian Institute of Mining & Metallurgy, and the global Society of Economic Geologists, a Member of the Geological Society of Australia and, most importantly, is Secretary of the Chillagoe Turf Club.

He worked for 18 years for the metals exploration section of Australian Oil and Gas Corporation Ltd, progressing from field assistant to General Manager - Minerals, before establishing a Sydney-based consultancy as Nedex Pty Ltd in 1987, which he shifted to Chillagoe in 1993.

He has explored throughout Australia and 20 overseas countries, primarily for gold related to volcanic rocks. He has been exploring in North Queensland since 1974 and discovered several new bulk tonnage gold deposits, notably Mt Success, Bald Mountain, Anastasia and Triple Crown. In

recent years he played a major conceptual role in exploration projects around Chillagoe including the Red Dome area and the “virgin” gold - zinc - copper - lead - silver deposit at Mungana. In 1987 he and partner-in-crime Ian Plimer developed a model for the tectonic and mineral controls in the Mediterranean countries. Discoveries included a major virgin deposit of over 2 million ounces of microscopic gold in volcanic rocks on Milos in the Aegean Sea, in an area where pottery and industrial clay has been mined continuously over at least 3500 years since the Minoan civilisation.

He has an interest in public education with a fetish for global tectonics and has contributed the district stories for Ian Plimer’s books “Journey Through Stone” about Chillagoe and “Milos Geological History”, which relate the local story to a global context of geological history. He has contributed the geological diagrams, story, rocks and fossils to the Timeline of the Chillagoe Hub. Has lived in the rush and bustle of Chillagoe since 1993 with spouse Kerry, a couple of kids, dogs, cats, goldfish, horses, chooks, ducks and turkeys.

DAY 2 – TUESDAY 6 MAY (overnight Chillagoe)

Morning

7.30am

Breakfast at Delegate's accommodation

9.00am – 9.15 am

Housekeeping etc: Lana Little

2nd PAPER SESSION – “FOCUS ON ASIA – Part One”

Chairperson: Andy Spate

9.15am – 10.00am

Paper 2: Kim Il Dong
Samcheok City's International Cave Expo – 2002

10.00am – 10.45am

Paper 3: Professor Kyung Sik Woo
Scientific Meaning of 2002 Samcheok International Cave Expo

10.45am – 11.15am

Morning Tea**3rd PAPER SESSION – “FOCUS ON ASIA – Part Two”**

Chairperson: Robyn McBeath

11.15am – 11.45am

Paper 4: Andy Spate
Would we go again? ACKMA and the 2002 International Cave Expo, Samcheok City, Republic of Korea

11.45am – 12.30pm

Paper 5: David Gillieson
Karst of Okinawa and Kikai, Japan: geomorphology and management

12.30pm – 1.30pm

LUNCHAfternoon

1.30pm – 5.00pm

Field Excursion. Visit to Donna and Trezkinn tourist caves

5.00 – 6.30pm

Sundowner. Poster SessionEvening

6.30pm – 7.30pm

Dinner

7.30pm

ACKMA committee meets. FREE FOR DELEGATES.

DAY 3 – WEDNESDAY 7 MAY (overnight Chillagoe)

Morning

7.30am

Breakfast at Delegate's accommodation

9.00am

Field Excursion. Visit to Royal Arch tourist cave & environs

12 Noon – 1.00pm

LUNCHAfternoon**4th PAPER SESSION – “FAR FLUNG PLACES”**

Chairperson: Professor Kyung Sik Woo

1.00pm – 1.40pm

Paper 6: James Baichtal
Evolving Karst Management on the Tongass – What Twelve Years of Implementation and Development have Taught

1.40pm – 2.20pm

Paper 7: Paul Griffiths & Tim Stokes
Karst Inventories and Management in Coastal Temperate Rainforests of British Columbia: Two Years On

2.20pm – 3.00pm

Paper 8: Nicholas & Susan White
Karst Features in Pleistocene Dune Limestones, San Salvador & New Providence Islands, The Bahamas

3.00pm – 3.30pm

Afternoon Tea

5th PAPER SESSION – “BIODIVERSITY”

Chairperson: Deborah Carden

3.30pm – 4.10pm

Paper 9: Claire Baker
Australian Glowworms – Managing an important biological resource

4.10pm – 4.50pm

Paper 10: Stefan Eberhard (delivered by Robyn McBeath)
*Environmental hydrology and stygofauna in the Jewel Cave karst system, southwestern Australia*Evening6.30pm – 7.30pm
7.30pm**Dinner**
WORKSHOP: “Sharing the Resource”
Chairs: Professor David Gillieson & Lana Little**DAY 4 – THURSDAY 8 MAY** (overnight Chillagoe)Morning

7.30am

Breakfast at Delegate’s accommodationMorning and Afternoon

9am departures

- choice of:
-
- Full day caving in Chillagoe-Mungana area or
 - Heritage tour, with some caves included

Evening*Al fresco spit roast dinner***DAY 5 – FRIDAY 9 MAY** (overnight Undara)Morning

7.30am

Breakfast at Delegate’s accommodation
Pack up for departure from Chillagoe**6th PAPER SESSION – “LAVA & THE TROPICS”**

Chairperson: Professor David Gillieson

9.00am – 9.40am

Paper 11: Ann Atkinson
Undara Volcano, North Queensland, Australia: Some geological wonders in its lava field – their management, past, present and future

9.40am – 10.20am

Paper 12: Dr. Kevin Kiernan and Greg Middleton
Groundwater Movement and Management in Tube-fed Lavas

10.20am – 11.00pm

Paper 13: Penny Davidson
Managing and interpreting tropical caves: Feeling how different caves are

11.00am – 11.30am

Morning Tea**7th PAPER SESSION – “EFFECTS & DEVELOPMENT”**

Chairperson: Dr. Ruth Lyons

11.30am – 12noon

Paper 14: Andy Spate
Bushfires and karst in southern New South Wales – 2001/2002 and 2002/2003

12noon – 12.30pm

Paper 15: Dr. Neville Michie
The use of monuments in caves

12.30pm – 1.00pm

Paper 16: Stephen Swabey and Martin Roest
Chromated copper arsenate treated timber in caves

1.00pm – 2.00pm

LUNCH

Afternoon

2.00pm Depart for Undara with stops of interest en route.

Evening

6.30pm – 7.30pm **BBQ Dinner** with Undara Guides
7.30pm **FREE EVENING**

DAY 6 – SATURDAY 10 MAY (overnight Undara)Morning and Afternoon

7.30am **Breakfast**
9.00am **Field Excursion.** Depart for full day visit to developed lava tubes
Bush lunch *en route*
5.00pm – 6.30pm **Sundowner.** Poster Session.

Evening

6.30pm – 7.30pm **Dinner**
7.30pm **ACKMA Inc. ANNUAL GENERAL MEETING**

DAY 7 - SUNDAY 11 MAY (overnight Undara)Morning

7.30am **Breakfast**

8th PAPER SESSION – “LIVING WITH KARST” Chairperson: Peter Chandler

9.00am – 9.30am Paper 17: Jay Anderson
Limestone & Development – Living with Karst in Western Australia

9.30am – 10.00am Paper 18: Professor Elery Hamilton-Smith
Karst and the Biodiversity Context

10.00am – 10.30am Paper 19: Stephen Swabey
Sediment budget for the Gardners Gut Cave, Waitomo, New Zealand

10.30am – 11.00am Paper 20: Jennifer Dyring, Ian Houshold and Rolan Eberhard
An Overview of Cross-tenure Management of Karst in Tasmania

10.30am – 10.20am **Morning Tea**

9th PAPER SESSION – “CLIMATE, DEVELOPMENT & DISCOVERY” Chairperson: Brian Clark

10.20am – 11.50am Paper 21: Steven Bourne and George Bradford
Victoria Fossil Cave- Making it a Cave once again

11.50am – 12.20pm Paper 22: Stefan Eberhard, Dr. Neville Michie, Robyn McBeath, and Peter Bell
Carbon dioxide and climate in Jewel Cave

12.20pm – 12.50pm Paper 23: Andy Spate and Jess Spate
The caves at Ravine (re)discovered

12.50pm – 1.30pm **LUNCH**

Afternoon

1.30pm: Departure for full afternoon **Field Excursion**
Choice of:

- Supervised visits to undeveloped lava tubes, or
- Walk up to Kalkani Crater
- Plus working dog demonstration on neighbouring cattle station

Evening

7.30pm

Pre-dinner drinks

8.00pm

CONFERENCE DINNER Master of Ceremonies: Kent Henderson
(Delegates: Please note: This is traditionally a “dress-up” affair)

AFTER DINNER SPEAKER: Professor Julia James
Topic: *The Benefits of Internationalism in Speleology*

DAY 8 - MONDAY 12 MAY (overnight Cairns)

Morning

7.30am

Breakfast and pack up

9.30am

Closing Ceremony & thanks

10.30am

Departure for Cairns. travel via Innot Hot Springs, Atherton and Gillies Highway

En route visits to Mt. Hypipamee Crater and Lake Barrine

Late Afternoon

Drop off delegates at Cairns accommodation