

# BOOK REVIEWS

- Elery Hamilton-Smith

**Plimer, Ian, 1997. *A Journey Through Stone*. Reed Books, Kew, Victoria. 176 pp., 36 colour illust**

This book tells the story of our geologic past, commencing with the formation of the planets some 4,500 million years ago, but quickly moving to the events of a mere 500 million years ago that commenced the processes which have in turn shaped the current Chillagoe landscape. It is necessarily a broad view, encompassing not only a vast period, but a remarkably complex series of geologic events. Yet, conversely, it focuses a lot of attention upon the minerals and other micro-features which provide clues to understanding the broad picture. Plimer clearly has a personal enthusiasm for the numerous beautiful minerals of the area, and many of the colour illustrations depict these.

However, ACKMA members must be warned that the book does not do justice, or even accuracy, to the story of the caves. This is indeed a regrettable fault in what is otherwise an exciting and truly instructive book.

An interesting sidelight arises from Plimer's comment that the anaerobic bacteria were

probably the first life-form on earth, can well be considered the most successful, and played a key role in mineral genesis. Another recent publication (Banfield, JF & Nealson, KH (eds.) 1997. *Geomicrobiology: Interactions between Microbes and Minerals*. Washington, DC: Mineralogical Society of America) deals at considerable length with the relationships between bacteria and minerals, and provides an excellent introduction to what is clearly an important topic. But again, it does not deal adequately with the role of sulfur oxidising or reducing bacteria in calcites, and hence in relation to cave. Given some of the remarkable recent discoveries, e.g. at Weebubbie on the Nullarbor, Cueva de Villa Luz in Mexico, the Black Hole in the Bahamas and Movile Cave in Roumania. (The most readable account is an excellent chapter by Di Northrup and her colleagues in Hill & Forti's 1997 (2nd. Ed.) *Cave Minerals of the World*. Huntsville AL: National Speleological Society, pp. 261-266.)

**Cooper, Ian, Scott, Martin and Vaughan-Taylor, Keir, 1998. *Tuglow Caves*. Sydney University Speleological Society, Sydney. 65 pp., numerous photographs and maps.**

There has long been a mystique about Tuglow Caves. Said to have been discovered in 1884, they were visited and first described by Oliver Trickett in 1897. They were commonly visited and explored by parties of bushwalkers throughout the 1930s to 1950s (and since); the Sydney University Speleologists made their first visit there in 1949, and have been followed at one time or another by many Australian speleologists. Discoveries have been rumoured, made, lost and rediscovered. Surveys have been undertaken and maps produced, or in many cases, not produced. In spite of all the visits and exploration, this book is the first comprehensive account of this fascinating area, with excellent maps of all known caves.

Regrettably, it is also a book of very uneven quality as the authors do not seem to have a clear picture of their intended audience. Some parts read like a first primer of speleology while others have clearly written and in-depth explanations of various aspects of the area. They have also ignored too many typos. Yet I must admit I feel uneasy in being somewhat critical, as the enthusiasm and commitment of the authors shine through and make the book a very readable one.

Managers would do well to look at the section on 'Tuglow's decline'. No doubt, there will be people who disagree with the perspective presented here, but debates about accuracy are irrelevant to the facts that there has never been effective management in place, and a great deal of vandalism and destruction has occurred.

**Zokaites, Carol (ed.) 1997. *Living on Karst: A reference guide for landowners in limestone regions*. Cave Conservancy of the Virginias, Richmond, VA. 25pp.**

This is a model of careful and very clear text, with very clear but simple line illustrations (below) throughout. It deals with the nature of karst, groundwater systems in karst regions, management of wells and sinkholes, pollution, erosion, land subsidence, pesticides and fertilisers, septic systems, forestry practices, household waste management, and cave protection.

Its clarity of focus, language and illustration provides a valuable lesson to all karst professionals. I only wish I had always written so clearly! Its very comprehensiveness, all in a mere 25 pages, is even more remarkable. We could all use it as a reminder list to ensure that we do not overlook important details. Most importantly, we should be able to hand a copy of something like this to every karst area landowner!!!

**Lines, William J. 1998. *A Long Walk in the Australian Bush*. University of New South Wales Press, Sydney.**

One could read this just as a travelogue - it tells the story of walking the 650 km. Bibbulmun Track, from Perth to Walpole, and captures something of the magic of the South-west. Sadly, it is also a resounding criticism of forestry practice in the South-west, which has destroyed so much of the magic. Then at a third level, it is an equally resounding and penetrating discussion of the global forces which underlie the destruction of the natural environment.

The Bibbulmun does not pass through karst country, and so it may seem a bit strange to review *A Long Walk* here - but Lines should be compulsory reading for all those interested in or concerned with the salvation and protection of our world. He is one of the increasing number of voices which proclaim and challenge the continuing defeat of conservation. The cover blurb claims, with a degree of accuracy unusual in such claims, that he provides '...an understanding of the past and a responsibility to the future, and provides the courage to conserve.'

***Islands: Economy, Society and Environment. Proceedings of the 1997 Joint Conference of the Institute of Australian Geographers and New Zealand Geographical Society. Published by the New Zealand Geographical Society; details of availability from Joanne Goodwin, Department of Geography PB3105, University of Waikato, Hamilton, NZ.***

This massive volume has a wide range of interesting materials, and the following papers refer quite specifically to cave or karst issues :

- Nguyen Thi Son, How can tourism and parks exist symbiotically? Cat Ba Island, Vietnam.
- David Gillieson & Peter Wallbrink, The extent and rates of recent soil erosion on the arid karst of the Nullarbor Plain, Australia.
- Andy Spate, Kevin Kiernan & Ebery Hamilton-Smith, Geoconservation in land-use planning:

Some lessons from North West Cape, Western Australia.

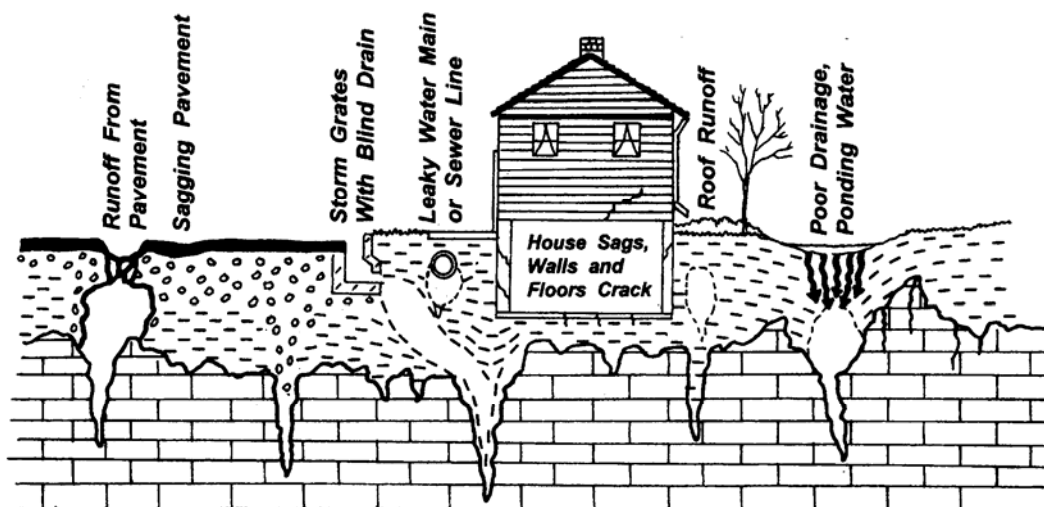
- Ebery Hamilton-Smith & Armstrong Osborne, Geodiversity and Conservation at Jenolan Caves, New South Wales.
- Russell Drysdale & John Head, Late Quaternary travertines at Louie Creek, Northwest Queensland.

### **INSIDE EARTH**

This is a relatively new newsletter from the US National Park Service Cave and Karst programs. Edited by Dale Pate of Carlsbad, it provides an excellent overview of what is currently going on across the cave parks of the USA. The current issue, amongst many other things, highlights the threats from diesel fuel spillage, gas drilling near

caves, raw sewerage leaking into the aquifer and parking lot run-off. In particular, Carlsbad have identified the maintenance yard and workshops as probably having the greatest potential for disaster with a high fire risk and hence potential for utter catastrophe.

Two issues are out so far. It is available on the World Wide Web at <http://www.aqd.nps.gov./grd/geology/inside/>



In karstlands, uncontrolled or altered runoff can cause structures to be undermined, resulting in subsidence or damage.