

Forum

Readers are invited to offer thesis and dissertation abstracts, review articles, scientific notes, book reviews, comments on previously published papers and discussions of general relevant scientific interest, for publication in the **Forum** of *Cave and Karst Science*.

All views expressed are those of the individual authors and do not represent the views of the Association unless this is expressly stated. Contributions to the *Cave and Karst Science* **Forum** are not subject to the normal refereeing process, but the editors reserve the right to revise or shorten text. Such changes will only be shown to the authors if they affect scientific content. Opinions expressed by authors are their responsibility and will not normally be edited, though remarks that are considered derogatory or libellous will be removed, at the editors' discretion.

Cave and Karst Science Transactions of the British Cave Research Association Editorial Team

In the past, if space allowed, we would include details of the membership of the *Cave and Karst Science* (CaKS) Editorial Board (EAB) close to the beginning or end of journal issues, for the benefit of readers as well as to inform potential contributors. This practice fell into disuse over the years, though the EAB continued to exist. For various reasons, including — sadly — mortality, the membership of the EAB has changed during the past few years, and indeed was never intended to be set in stone. The panel below shows the current make-up of the CaKS Editorial Team.

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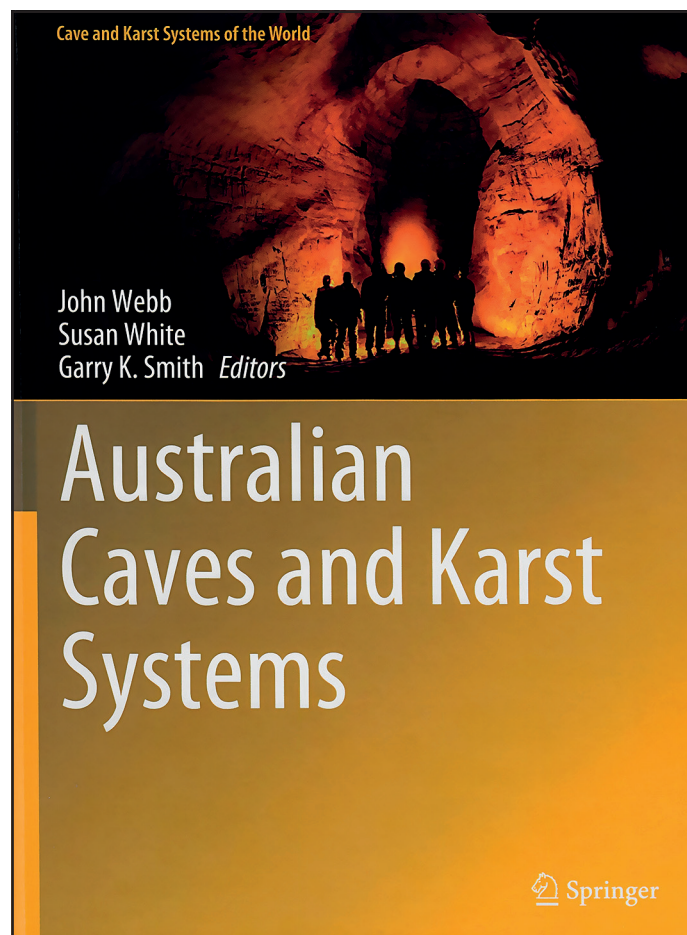
**Book Review*****Australian Caves and Karst Systems.***

John Webb, Susan White, Garry K Smith (eds.), 2023, Hardback, 398pp, Springer: Cham, Switzerland, £74.47. ISBN 978-3-031-24266-3

This is not a guide to the caves, but is a comprehensive and authoritative description of the karst and caves of Australia, in the style that one would expect from Springer. Profusely illustrated on glossy paper, the book looks good, and it certainly covers the ground in 24 chapters.

Eight of these chapters, some at the start and some at the end, are non-regional overviews. A chapter on cave minerals, by none other than Julia James, is, of course, very thorough, and extols the great range of features in Australian caves. Odd that there is a chapter on Australian cave diving, when surely the underwater caves are just components of the karst geomorphology alongside the rather drier caves; nevertheless, it does reveal some truly fine water-filled caves that very few readers will have any other chance to appreciate. The conservation chapter focuses on individual battles of development versus environment, some of which have been major. Your reviewer is not competent to assess the completeness and value of the chapter on cave fauna, but is greatly impressed by the suite of 74 excellent photos of cave dwellers small and very small.

There are seven chapters that describe the caves in various regions of limestone karst spread across the continent. Australian caves have plenty to offer, and so does this book; a review can only pick out highlights. The caves of Tasmania are splendid, and it is impossible not to be impressed by the Kubla Khan Cave with a suite of calcite speleothems including many that are either beautiful or magnificent or both.



The well-known Jenolan caves, near Sydney in New South Wales, are given only brief treatment (their survey is lost in the cave diving chapter), which is too short to justify the fascinating claims that parts of the caves (in Silurian limestones) date from Carboniferous karstic processes (based on dating of clay minerals in the cave sediments). The remote Gregory karst, in the Northern Territory, has Bullita Cave with its 126km of passages in mazes nowhere far from one of multiple entrances along a narrow outcrop of limestone that is also distinguished by both large fissures and microkarren in its semi-desert environment. In Western Australia, the Kimberley karst includes the delightful Tunnel Cave, which is a walk-through in the dry season, with the added attraction of resident crocodiles (harmless 'freshies'), but fills in the wet season when the low-gradient rivers typically flood to levels around 10 metres above normal.

Nearly 200 colour photographs range from the interesting to the spectacular. Great photographs, but sadly such poor maps. Seemingly picked out from various obscure publications, some are good, but too many are not. The map of the important Exit Cave System (on page 62) does not even mark the entrances; it offers no understanding of the cave's morphology. Texts refer to figures, but then the features are not labelled on them. The plan of Wolf Hole (on page 66) cannot be related to its unlabelled profile. Many of the maps should have been redrawn; they let the book down.

Separated out from the previous chapters on caves in hard limestones (which are more akin to the Carboniferous limestones in Britain) are another five chapters on karsts developed on soft, or indeed very soft, limestones. Notable is the chapter describing the Nullarbor, with its nearly 200,000km² of low-lying, desert plateau formed on Palaeogene limestone. Between vast expanses of barren, empty nothingness, a few hundred collapse dolines reach impressive sizes, with some opening into cave passages that are up to 30m in diameter. None more than 100m deep, and some with great lakes beneath the desert karst, these were developed by southbound drainage (towards the ocean) under wetter climates many millions of years ago. Australia is justifiably known for its landscapes with an antiquity that is barely conceivable for those of us living in the northern hemisphere. In contrast, Christmas Island may be famous for its red crabs, but it also has some beautiful caves and karst.

Two chapters are devoted to lava caves, with those at Undara, in Queensland, including some of the world's largest-diameter lava tubes. Then there is a chapter of miscellanea, with landslip fissures, piping caves in sandstone, and sea caves. Australia is a big chunk of land, and it has the landscapes to match, so this book might be something of an eye-opener for many readers.

Though a commendable mine of information, this book does seem rather out of place in the Springer marketing profile. True, it sits in a series alongside 25 other volumes, mostly priced at well over £100, on karst regions scattered across the world, but karst and caves occupy only a very small niche in the geosciences. Its topic coverage is very similar to that of Volume 1 of BCRA's *Caves and Karst of the Yorkshire Dales*, which was marketed at a fraction of this price, and both books find only a very limited market outside the caving fraternity. At the time of writing this review, Springer still markets the softback edition at £149.99, whereas the hardback edition was initially at the same price, but is now reduced to just half that. Though published in 2023, the review copy only came to BCRA late in 2024, and was a hardback. One senses that Elsevier might have a pile of books that they need to clear out. At £75 it still cannot appeal to many cavers, but it could be a worthwhile purchase for any serious enthusiast or researcher of the limestone underground.

Review by Tony Waltham





Correspondence



Contextual background

The communication from Terry Reeve that is presented below, was received during November 2024, at which stage the content of the *Forum* section for *Cave and Karst Science* (CaKS) Volume 51, Number 3 (December 2024) had already been chosen, edited and formatted. Hence the letter and supporting images were held over until the current Issue.

Terry's communication was penned in response to *Correspondence* and related content that was published in the CaKS 51(2) (August 2024) *Forum*. This in turn referred back to localities described in an earlier *Feature* submitted by Terry, which was published in CaKS 50(3) in December 2023.

As is our usual practice with written *Forum* contributions, Terry's letter of November 2024 is transcribed below with only minimal Editorial intervention, which includes insertions of supporting information in square brackets, hopefully clarifying various potentially ambiguous aspects within the original communication for the benefit of readers.

Placement, cropping and sizing of the supporting photographs relate to the approximate order of cross-references placed in the text, as well as to adjustments to meet space constraints within the layout. Reflecting their age, the colours recorded in several of the scanned images are, almost inevitably, shifted due to degradation of the original colour dyes, related to exposure to light and to random temperature variations over the years. Though not consistent across all of the images, there is a particularly noticeable shift towards red and brown tones in the older ones. Some adjustments have been made using digital methods, but results are inevitably subjective, and we hope that, as presented, the images remain realistic and informative.

Regarding the correspondence [*Cave and Karst Science*, Vol.51(2), *Forum*; pp 86–87] about the deneholes described previously in my *Feature* that was published in *Cave and Karst Science*, Vol.50(3), 125–133... I was puzzled that Trevor [Faulkner], referring to my quoted depth of "...just over 80 feet [c.24.4m]" for the holes at Hangman's Wood, thought that they were only 40 feet [c.12.2m] deep — unless he was thinking of the average depths of the deneholes forming the Cavey Spring group at Bexley. But, putting that aside, I will move on to the second part of the CaKS 51(2) *Forum* contributions...

Among the photographs provided by Harry Long, those of the shaft with the 'alcove' show Denehole No.5 at Hangman's Wood. This was the only shaft that remained open when I first visited the site during my schooldays in the late-1950s. My first descent of this denehole was made in 1963. On that occasion I was accompanied by Ray Russel, who I had met while I was attending a full-time course at Erith Technical College.

At the time of the 1963 visit we had little in the way of caving gear, but I managed to get down the hole by making use of hemp ropes and a home-made ladder. The 'alcove' part way down the shaft provided a welcome resting place as well as presenting us with an opportunity to re-belay the inadequate length of ladder, in much the same way as described by Harry Long.

For lights we used electric torches [flashlights], as seen for example in Photograph 1, with spare batteries in case of failure. Candles were carried as emergency back-up. We also made good use of a Tilley paraffin [kerosene] pressure lamp (shown in photographs 1, 2 and 3), which provided far better illumination than anything else that we had available at that time.

As referenced above, photographs 1, 2 and 3 were taken during that first descent in 1963. They were captured using bulb flash and an Exa 1, 35mm, SLR camera, which I continued to use for almost all of my underground photography up until the incoming of the digital age.



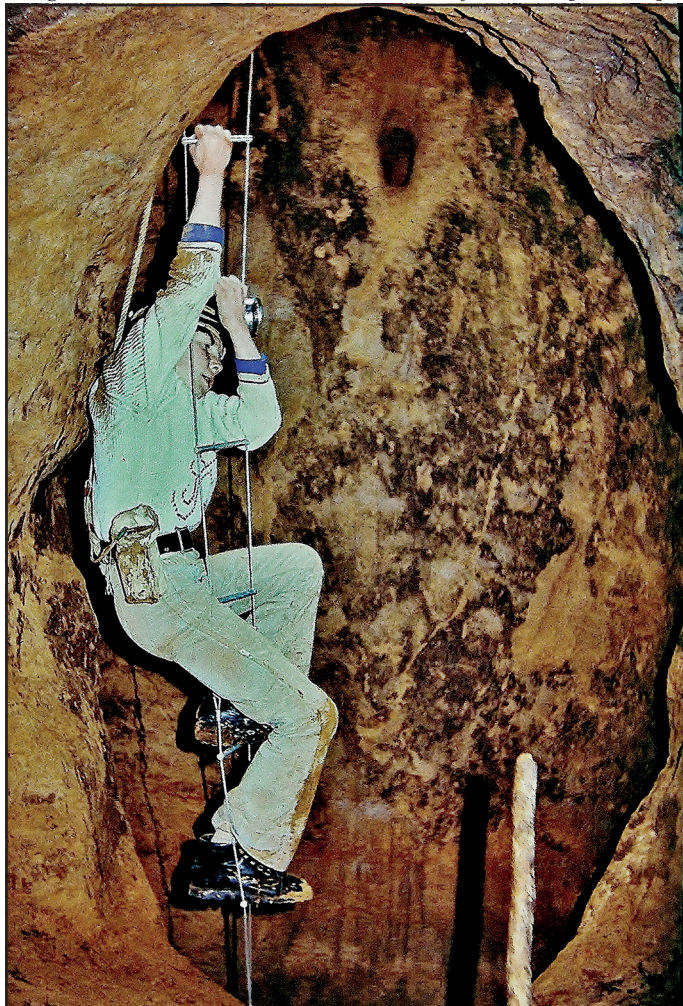
Photograph 1 (Left) and Photograph 2 (Right): Parts of the workings entered via Denehole No.5 at Hangman's Wood, near Grays in Essex, in 1963. Note the use of an electric torch (in Photograph 1) and a Tilley pressure lamp (in both photographs) to provide underground lighting.



Photograph 3: Using a Tilley pressure lamp during exploration of the Denehole No.5 workings at Hangman's Wood in 1963.



Photographs 4 (above) and 5 (below): Electron ladder in use below and alongside the 'alcove' in the Denehole No.5 shaft in 1979. [See text.]



Photograph 6: A 1963 view of a hole that connects the workings of deneholes Nos 7 and 11 at Hangman's Wood. [See related text below.]

During visits to Hangman's Wood that took place during the time of my survey work in 1979, photographs 4 and 5 were taken from the 'alcove' (mentioned above) in the Denehole No.5 shaft. In the view looking down the shaft (Photograph 4), the climber is Dave Hart, who assisted with the surveying. Another view (Photograph 5) — taken from the back of the alcove — is of Dave's son (whose name has since slipped my memory), demonstrating good ladder-climbing technique.

Photograph 6, from 1963, shows Ray Russel sitting in the hole connecting deneholes 7 and 11 at Hangman's Wood. This appears to be the same location as Harry Long's image that included Sid Perou (*CaKS*, Vol.51(2), p.86, Photo 2). Another view of the hole is provided by Photograph 7, dating from a more recent visit by members of the Kent Underground Research Group, and shows clearly the flint layer that is included in Harry's other image of the same site (*CaKS*, Vol.51(2), p.86, Photo 1). The obvious flint seam below the explorer's feet is probably William Whitaker's "Three-Inch Flint Band" (Whitaker, 1865, p.395), within what is nowadays known as the Seaford Chalk Formation.

Reference

Whitaker, W., 1865. On the Chalk of the Isle of Thanet. *Quarterly Journal of the Geological Society of London*, Vol.21, 395–398.

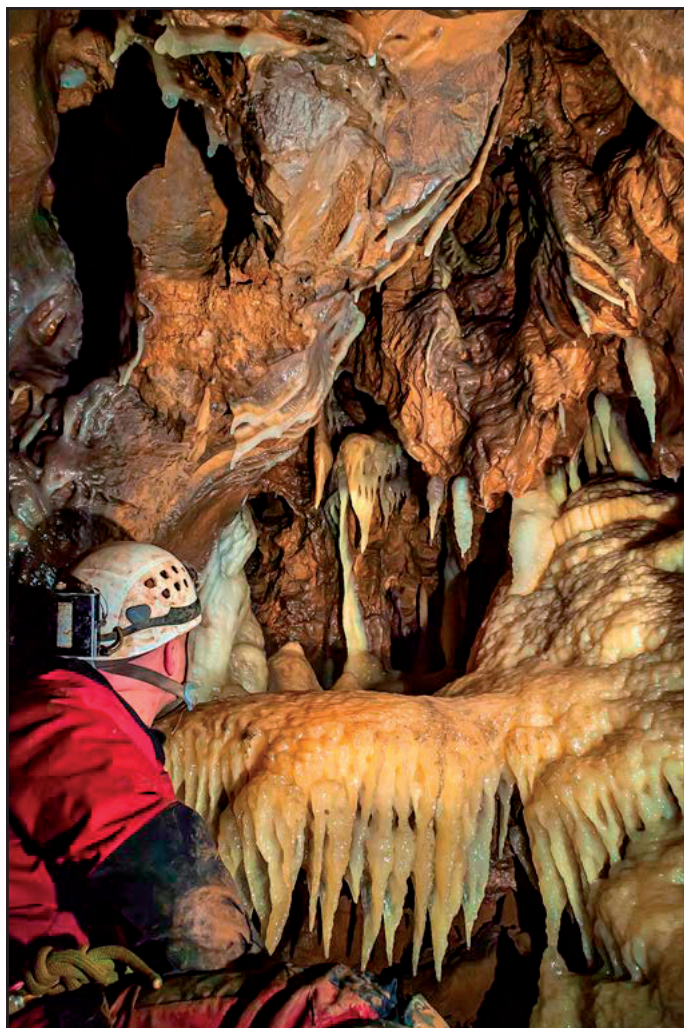


Photograph 7: A different view of the hole shown in Photograph 6, Hangman's Wood. [For discussion of its relevance, see the text above.]



Photo Feature

Elephant's Head Chamber, Victoria Aven Series, Peak Cavern, Derbyshire, UK.
Phil Wolstenholme



Photograph 1: A still-developing series of flowstone in a small alcove to the side of a passage connecting southwards to the Victoria Line.



Photograph 3: Part of Elephant's Head Chamber, looking towards the connection from the top of the aven..



Photograph 4: A small gour pool lying at the base of the speleothem formations, now almost filled.



Photograph 2: The "Tabernacle" formation, comprising a single calcite column framed within its own alcove, adjacent to the passage leading southwards to the Victoria Line, also at high level.

Victoria Aven is a massive, fault-guided vein cavity lying c.170m beyond the end of the show-cave section of Peak Cavern at Castleton in the Derbyshire Peak District.

100m tall, the aven is partially roofed by the essentially impermeable Cave Dale Lava bed, and at its top it links to a network of ancient high-level phreatic passages. These passages are at the same altitude as the White River Series — farther west in Peak Cavern — to which they are undoubtedly related, and which were largely abandoned by water as cave development moved downwards toward the present Peak Streamway horizon.

Where the lava cover is not present, a few speleothems are still developing, albeit slowly, as a result of the limited seepage of percolation water currently available from the now-nearby surface. The features illustrated in photographs 1 – 4 are related to the Elephant's Head Chamber, which lies on the western side of the aven.

Photographs and text contributed by Phil Wolstenholme.