

Congratulations to Andy Baker

Awarded the Clark Medal for distinguished research in Natural Sciences (Geology)

The Clark Medal is named in honour of William Branwhite Clark (1798–1878). An English clergyman and geologist who emigrated to NSW and established the understanding of the state's geology – including the discovery of gold

Professor Andy Baker, of UNSW School of Biological and Behavioural Sciences, has been awarded the Clarke Medal for 2022 from the Royal Society of New South Wales. The nomination was for his karst research in NSW.

He is an international authority in cave science, hydrology and geochemistry, especially as it pertains to our understanding of karst – complex underground systems formed from dissolution of soluble rocks, characterised by sinkholes, caves and stalagmites.

The Clarke Medal is awarded each year for distinguished research in the natural sciences, conducted in Australia and its territories, in the fields of botany, zoology, and geology.

Andy sent the following thanks via email:

“First and foremost, thank you to Pauline Treble for inviting me to join her existing Yarrangobilly research program and team, and the support of Bernadette Zanet (and managers before her) at Yarrangobilly Caves. Sophia Meehan for suggesting that I work in the Macleay, which has led to a fruitful collaboration with the Kempsey Speleological Society. Thank you to Kathryn Crowe and the team there for supporting that research.

Thank you, Sophia, again for her support of fire research on karst in NSW, and David Smith at Wombeyan and all the other NPWS staff that helped make that happen, and all the students, RAs and PhD researchers that did the work.

Thank you to the NCGRT team (Ian Acworth, Martin Andersen, Helen Rutledge, Mark Cuthbert, Gabriel Rau and more) who back in 2011 got behind the ‘caves as observatories’ program and irrigation experiments at Wellington Caves, and Michelle for supporting the ongoing research there (and managers before her).

Mike Augee, Andy Spate and Andrew Baker were generous with their NSW karst knowledge, thank you!

And now and into the future, thank you to the emerging ‘caves as observatories of groundwater recharge’ and ‘stalagmite records of fire history’ teams, including Pauline and her group, Andreas Hartmann and his group, Micha Campbell, Liza McDonough, Christina Song, and Rebecca Chapman. And finally, thank you to my colleagues in the UNSW Analytical Centre who made so many of the geochemistry and isotope analyses that provided the evidence base for all the research, in particular Chris Marjo’s team and chief IRMS wrangler Lewis Adler.

Professor Andy Baker. Photo: UNSW.



Links to the Wider World

This section aims to provide links to articles and items related to caves and karst that may lie outside the normal ACKMA sphere of influence but may still be of interest. All links are functional at the time of publishing but may not open if viewing at a later date.

1,000-year-old stalagmites from a cave in India show monsoon isn't so reliable

Gayatri Kathayat, Xi'an Jiaotong University and

Ashish Sinha, California State University, Dominguez Hills

<https://www.eastmojo.com/world/2022/09/22/1000-year-old-stalagmites-from-a-cave-in-india-show-monsoon-isnt-so-reliable/>

By analyzing the geochemistry of these stalagmites in a new study published Sept. 19, 2022, in the Proceedings of the National Academy of Sciences, we were able to create the most precise chronology yet of the summer Indian monsoon over the past millennium. It documents how the Indian subcontinent frequently experienced long, severe droughts unlike any observed in the last 150 years of reliable monsoon rainfall measurement

Study finds famous Australian caves are up to 500,000 years older than we thought - and it could help explain a megafauna mystery

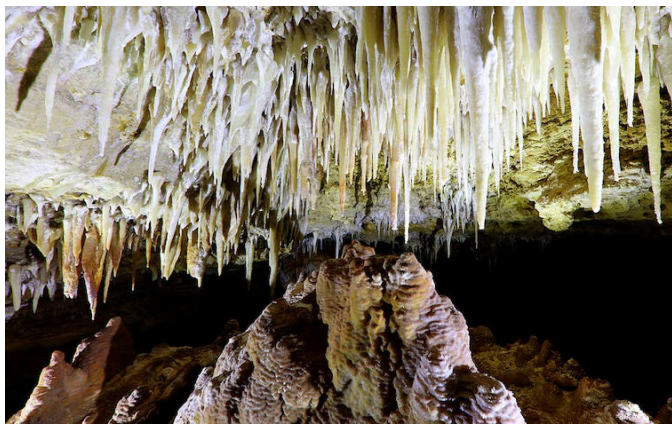
Rieneke Weij, Jon Woodhead, Kale Sniderman, Liz Reed

In The Conversation Sept 27, 2022

<https://theconversation.com/study-finds-famous-australian-caves-are-up-to-500-000-years-older-than-we-thought-and-it-could-help-explain-a-megafauna-mystery-190688>

South Australia's Naracoorte Caves is one of the world's best fossil sites, containing a record spanning more than half a million years. Among the remains preserved in layers of sand are the bones of many iconic Australian megafauna species that became extinct between 48,000 and 37,000 years ago.

The reasons for the demise of these megafauna species are intensely debated. But the older the fossils we can find, the better we can understand the species' evolution and extinction.



To date, determining the precise age of the caves has been difficult. However our research demonstrates, for the first time, how old Naracoorte's caves really are – and the answer is up to 500,000 years older than previously thought.

Our findings shed new light on the antiquity of this important place. We hope this will aid understanding of how biodiversity responds to a changing climate over time.

Image: Whale Bone Cave, one of the oldest caves at Naracoorte. Photo Steve Bourne



UIS Cave Glossary Project

The International Union of Speleology (UIS) has started a project to produce an extendable, multi-lingual glossary of cave and karst terms that is both human-readable and machine-readable.

The project is being run by the Dictionary Sub-commission of the UIS Informatics Commission (UISIC) and aims to create a web- and Linked Data-accessible cave and karst glossary of terms that also provides definitions linked to the terms in the existing Caver's Multi-lingual Dictionary. In the first instance it will start by converting an existing comprehensive and professional glossary into a term-addressable web page, linked to the terms in the Multi-lingual Dictionary. This glossary will also be incorporated into the UIS KarstLink Ontology for *Linked Data*.

Everyone interested is invited to follow or contribute to the project.

Full details of the project can be found on the project's web page and forum:

Web page: <https://www.uisic.uis-speleo.org/lexgloss.html>

Forum: <https://www.uisic.uis-speleo.org/forum/viewforum.php?f=19>

Draft Glossary: <https://www.uisic.uis-speleo.org/lexgloss1.html>

Multi-L Dictionary: <https://www.uisic.uis-speleo.org/lexintro.html>

KarstLink: <https://uisic.uis-speleo.org/exchange/karstlink/index-en.html>

Peter Matthews – Project Leader
Mike Lake – Assisting

France HABE PRIZE 2023

The *Karst and Cave Protection Commission of the International Union of Speleology (UIS)* is pleased to announce the opening of the PRIX France HABE 2023.

The prize is named in memory and in honor of Dr. France HABE (□10/12/1999) from Slovenia (Yugoslavia), Past President of the Protection Department of the UIS (1973 -1997). The purpose of this prize endowed with €300 is to promote the protection of karst and caves. Their natural heritage is an increasingly rich source of proven information on the history of our planet and of humanity, allowing us to act in a more thoughtful, effective and sustainable way for the future of our environment.

You will find the complete regulations in French, English and Spanish on the UIS website by following this link: <http://uis-speleo.org/index.php/karst-and-cave-protection-commission/>

Feel free to disseminate widely.
Jean-Pierre Bartholeyns
President



Under the Earth: Caves of Tasmania

Yoau Daniel Bar-Ness for RACT

<https://www.ract.com.au/membership/journeys/experiences/under-the-earth-caves-of-tasmania>

Tasmania is a significant destination for cave explorers, with some of the deepest and most challenging caves for those who can't resist the call.



These definitely aren't places you'll want to explore alone. They are cold, wet and exceedingly dangerous. They're also delicate and sensitive places that are easily damaged irreparably. Fortunately, here in Tasmania there are caves of all sizes and geologies that are safely accessible for those who are feeling adventurous.

Mole Creek Caves tour (formerly Marakoopa Cave Tour)
Credit: Tourism Australia & Graham Freeman



Hollow Earth: Art, Caves and the Subterranean Imaginary

An exhibition at the Nottingham Contemporary until January 2023

<https://www.nottinghamcontemporary.org/whats-on/hollow-earth-art-caves-the-subterranean-imaginary/>

A major thematic exhibition which brings together a wide range of responses to the image and idea of the cave. It includes painting, photography, sculpture, sound, installation and video, as well as archives and architectural models, stretching from 1960 to today, alongside works from the 18th and 19th centuries.