



INTERNATIONAL SHOW CAVES ASSOCIATION

# ISCA Newsletter

May-June  
2021

## CONTENTS

# IYCK 2021...& 2022

Even negative situations have positive things. The COVID-19 pandemic hit worldwide tourism as no other crisis had done before, but many of the events are now being celebrated online, reaching every corner of the world and taking show caves to a wider audience.

As per the **International Year of Caves and Karst 2021**, which had been scheduled to take place through the current year, the **Union Internationale de Spéléologie (UIS)** has recently confirmed that the event will also be celebrated in **2022**.

In the last months, there are many **ISCA** members who have already prepared a series of events to celebrate the **IYCK2021**.

The third of our newsletters in the current year also includes some of the materials shared by those of you who decided to be a part of this important event.

## PAPERS, VIDEOS & MORE

The following pages pay attention to the latest papers and other publications related to the subterranean world. In addition, videos, interviews and other resources are presented to the reader in order not to miss anything.



## JOIN ISCA NOW!

Would you like to become a member of the **International Show Caves Association**? Find all the information you need on our [website](#).



## FOLLOW US!

Our **Facebook page** is the best place to share your own materials in order to reach others! Do not forget to **like us**!

# Message from the President

by Brad Wuest

Dear ISCA Members,

Greetings from Texas, USA!

As COVID-19 vaccinations become more readily available around the world, I hope that you, your family, and coworkers have had the opportunity to get vaccinated. I received my second Pfizer shot recently. All the adults in my family have been vaccinated and many of the employees at our show cave. In Texas and many areas of the USA, the vaccine is now readily available for everyone. We are strongly encouraging our employees to get vaccinated and will even be hosting a vaccination clinic at our show cave, [Natural Bridge Caverns](#), to make it even easier for employees and their family to get vaccinated. I know in many parts of the world, show caves are still dealing with challenges from COVID-19 restrictions, closures, and ever-changing protocols.

I look forward to us achieving “herd immunity” with our staff to alleviate the challenges of employees missing work due to COVID-19 infection and/or close contact exposures. As all of you know, it is hard to operate your show cave without enough employees.

Further contributing to our staffing challenges is the fact that so many people are de-incentivized to go back to work now because they can make more money not working and getting paid enhanced government unemployment benefits. I have been told this same issue is a challenge in numerous other countries too.

In March our state government restrictions were lifted and we were able to return to 100% capacity. That along with vaccines being more available, COVID-19 hospitalizations decreasing, [pent-up demand](#), and nice spring weather we are blessed with high levels of visitation and guest spending. And the travel forecast for the second half of 2021 looks very favorable for many regions of the world.

But I also know in many parts of the world now, show caves are still dealing with challenges from COVID-19 restrictions, closures, slow vaccine roll outs, and ever-changing protocols. I look forward to the time when all our show cave businesses can return to a more normal state and take advantage of pent-up demand as people are ready to get out and travel.

I hope all of you are doing what you can to celebrate the [International Year of Caves & Karst](#) (IYCK). Keep us posted on what your show cave is doing to celebrate the IYCK so we can share that on Facebook and future newsletters. And remember to post your events on the [International Year of Caves & Karst](#) website.

And speaking of celebrations, let me remind you that our International Day of Caves and the Subterranean World is coming up soon on June 6th! Each year members of the ISCA join cave enthusiasts around the world celebrating the [International Day of Caves and the Subterranean World June 6](#) to increase awareness about the significance of caves to our environment, culture, history and economy. Last year and this year we will also use the international day as an opportunity to share how show caves, our employees and the economy have been affected by COVID-19. To quantify how our industry was affected, ISCA conducted an [international survey](#) last year. In the first half of 2020 show cave visitation was down 59% amounting to 42



*Brad Wuest, ISCA President*

## BRAD WUEST

President/CEO at Natural Bridge Caverns (Texas, USA) and ISCA President. Born in 1972 in New Braunfels (Texas), Brad is married to Lexi and they have four beautiful children: Ashley, Clara, Millie and Harrison.

Contact: [bwuest@naturalbridgecaverns.com](mailto:bwuest@naturalbridgecaverns.com)

million visitors and revenue was down 61% amounting to 514 million Euros. The results of the [international survey](#) were shared worldwide to create awareness and help the show cave industry.

As we do each year for the International Day of Caves and the Subterranean World, ISCA will produce and distribute press releases to all of you and media internationally. Please use the press materials and the international day as an opportunity to share your show cave's story with your local media. And please share what you do with us too! Juanjo would love to post and share!

Speaking of Juanjo, he has published an excellent newsletter filled with so much interesting and useful information. I hope you find it valuable, informative, and entertaining!

If we can do anything to assist you, or if you have any ideas on what we can do to make ISCA even better, please let me know.

My best wished to all of you for your health and prosperity.

God Bless,



President

International Show Caves Association



INTERNATIONAL SHOW CAVES ASSOCIATION



# From the editor: Mediterranean cave-trip

by Juanjo Tíscar



*My everything, Tiza.*

Dear ISCA friends,

I hope you, your family and friends are doing great.

I would like to start by mentioning someone who has been (and will be) really important to me. **Tiza**, my **15-year-old dog**, passed away last April 27th.

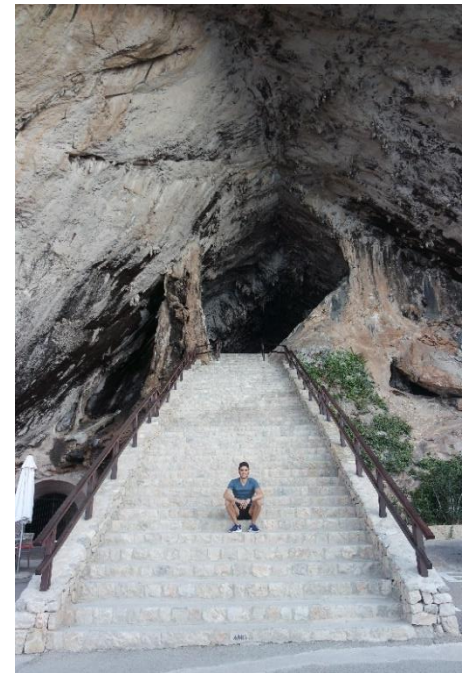
I wanted to honor her unconditional love and loyalty through these many years, half of my life, in which she accompanied me every single day.

This is just a small tribute, but she deserves much more. Your family will **always** remember and love you, Tiza.

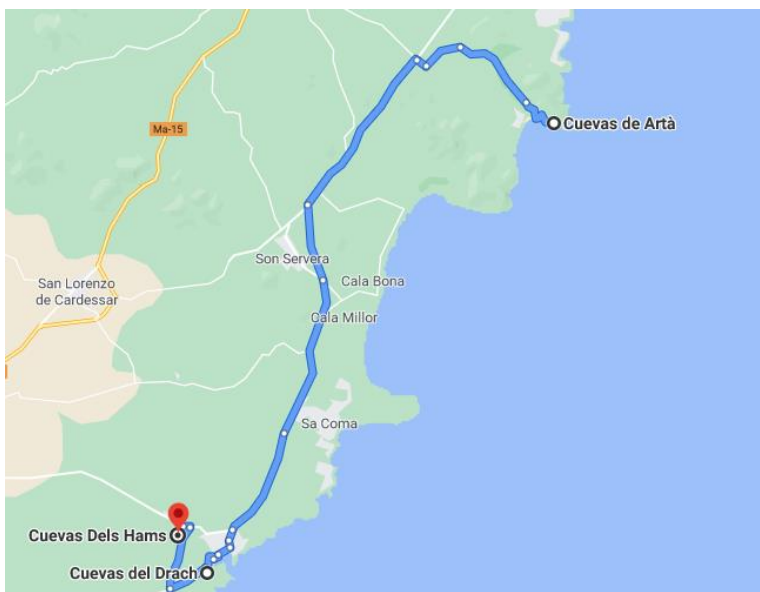
Speaking of caves (which is the reason why you are here), and in the **International Year of Caves and Karst**, I would love to share with you my experience in **Mallorca (Spain)**, a place which I visited in 2019 and which I will be visiting again next August, as long as the pandemic does not get worse!

During my last trip, which I had the pleasure to share with my parents, I visited some of the most amazing **show caves** on the islands.

Have you ever been to any of our beautiful islands in **Spain**? There are many show caves in **Mallorca**, the heart of the **Mediterranean Sea**, so make sure you don't miss **Cuevas d'Artà**, **Cuevas dels Hams** and **Cuevas del Drach**, among many other natural wonders on the islands. Please, **send us** your caving experiences! We are looking forward to **share** them!

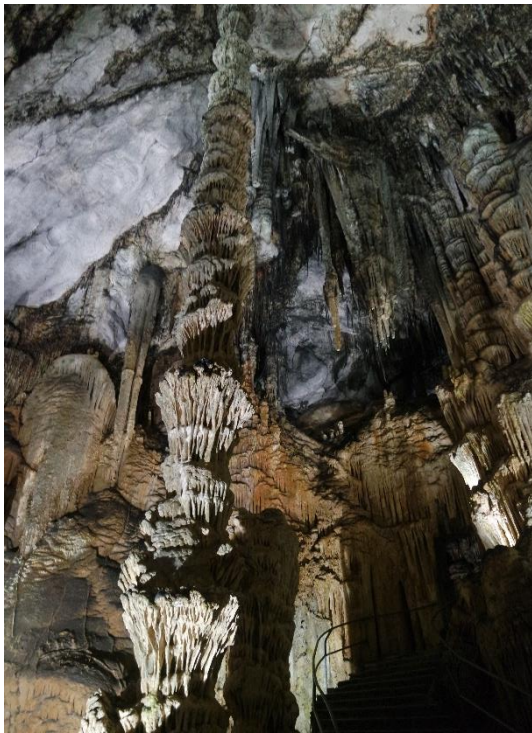


*Artà is a must-see in Mallorca*



*Most showcaves can be found in the East side of the island*





And don't forget: get a copy of my book!



ENGLISH



SPANISH

Contact: [juanjotiscar@i-s-c-a.org](mailto:juanjotiscar@i-s-c-a.org)



*Thanks for your time, we will always love you.*

# IYCK 2021: Online celebrations

- Click on the images to watch -



## Bats by CE3c

Dr. Maria João Pereira,  
Assistant Professor at the Zoology  
Department, Federal University  
of Rio Grande do Sul.

## Speleo Sun: Cave Crayfish by Bluff Dwellers

Online series to learn more about  
caves and karst. Check it out!



## A “Deeper Look” on formations

by Natural Bridge Caverns

Our Texas friends will help us  
understand what dripstones,  
flowstones and helictites are.





### Classical Karst

by [Francesco Maurano](#)

The **#Speleomedit** project has prepared a beautiful video from Albania. Share it!

### Ohio Rock Talks #11

by [OhioDNR](#)

A new episode in which eologists from the **Ohio Geological Survey** discuss sinkholes, caves, disappearing streams, and other features known as karst.



### Caving trip

by [Motopacker Malaysia](#)

Opening caving trip to support the **International Year of Cave and Karst 2021**.

# Partners and events of the IYCK2021

Over **140 caves and organizations** from all over the world are already a **partner** of the International Year of Caves and Karst. If you want to join us, send your **logo** and **website** to [webmaster@uis-speleo.org](mailto:webmaster@uis-speleo.org) and you will soon appear on the **IYCK website**.

Use the same e-mail address to contact **UIS** in order to share any event which is taking place at your location. Remember to include the following data:

- **Date.**
- **Location.**
- **Event name.**
- **Event description.**
- **A link to more detailed information.**

Your announcement will be highly appreciated and it will be shortly included on the **events section**. Check it out in order to learn more about some of the confirmed events taking place worldwide to celebrate the International Year of Caves and Karst.

## Did you know...?

### - Disclosure -

**We encourage you to download and use all of the IYCK files and information on the IYCK website. No permission is needed as long as you use it to promote the IYCK and teach the world about caves and karst. Please print, distribute, and share this information.**

The **International Show Caves Association** would also like to promote your events, so we will be picking some of them in order to be posted both on our Facebook and in future newsletters.



- **Date:** 2021.
- **Location:** Online.
- **Event name:** CaveMAB Network #TogetherForCaves
- **Event description:** The CaveMAB Network is hosting an outreach campaign to promote the understanding, exploration, and protection of the biological and cultural diversity of cave and karst environments through sustainable actions. The CaveMAB Network was formed in 2018 to connect people from the more than 150 UNESCO biosphere reserves across the globe with cave and karst resources. We believe that we are stronger together and invite you to join the network as well as participate in on-going collaborative projects.
- **More information.**

# June 6th: International Day of Caves and the Subterranean World (#IDCSW)

Show caves around the world celebrate the **International Day of Caves and the Subterranean World** on **June 6th**. As in **previous years**, the **International Show Caves Association** would like to encourage show caves and cave associations from all around the world to take part in such a special day.

In the last years, the promotion of environmental awareness and conservation were among the main objectives of the special events, tours, and educational activities scheduled by many tourist places worldwide. Some of these activities included lectures with some of the speleology world's top experts as well as local caving and conservation organizations speaking to the importance of exploring, studying, protecting and preserving caves and karst landscapes.

According to **ISCA President, Brad Wuest**, "understanding caves and karst is important because karst covers about 20% of the Earth's surface and is the only or major source of drinking water for about 10% of the world's population. However, almost everyone knows about caves, but only a small percentage of people have even heard of karst."

As per 2021, if there is anything which you would like to **share** with us, contact [juan jotiscar@i-s-c-a.org](mailto:juan jotiscar@i-s-c-a.org) and give us details about your events and materials.

Let's celebrate the **International Day of Caves and the Subterranean World** together!

For more information about the #IDCSW, visit [our website](#).



*Celebration of the International Day of Caves and the Subterranean World in Crystal Caves (Bermuda)*

# Andy Spate AM

interviewed by Juanjo Tíscar



## INFO

**Full name:** Andy Spate AM

**Date and place of birth:** 12 December 1946, London, United Kingdom

**Profession:** Retired geomorphologist/speleologist

**Hobbies:** Reading, writing and caves!

**Favourite cave:** Impossible to say ...

**Approx. number of caves visited:** Over 100 show caves. Well in excess of 250 'wild' caves.

*Andy on his way to launch the first edition of Dr David Gillieson's fine textbook, Caves, Processes, Development, Management, 1996 at Wombeyan Caves, New South Wales. Second edition coming this year! Unknown photographer.*

In our previous newsletter, **Hein-Jacques Gerstner** requested us to interview **Andy Spate**. It is now time to discover more about a true cave lover.

**Hein-Jacques' question #1:** Is your beard real?!?

**A:** Yes, last shaved in December 1970!

**Hein-Jacques' question #2:** What made you interested in caves?

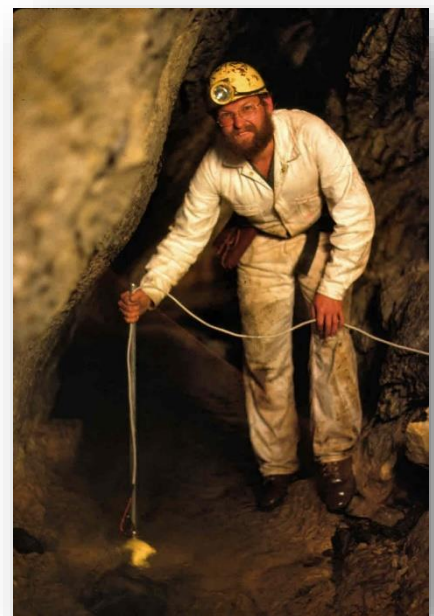
**A:** Mapping caves at **Wee Jasper, NSW**, with the renowned karst geomorphologist, the late **JN (Joe) Jennings** as a teenager.

**Q:** Following **Mr. Gerstner's** first question, did you ever think you would devote most of your time to caves and karst?

**A:** My first professional appointment was as a scientist in the **CSIRO Division of Land Use Research** working on various hydrology and soil conservation projects. Caves and karst took a back seat but were not neglected. After CSIRO I spent 22 years with the **NSW national parks service** as their **caves and karst specialist**. Subsequently, I ran my own consultancy company, **Optimal Karst Management** for several decades.

**Q:** What projects are you currently working on?

**A:** Well, I am 'retired' but I am copy editing a large book on the **fossils** of **Tasmania**, helping organising and operating the **ACKMA Covid-19 cave climate monitoring program**, developing guidelines for the development and operation of show caves, and continuing to write regular columns for the **ACKMA Journal** on various aspects of cave and karst science.



*Stream gauging in River Cave, Yarrangobilly, New South Wales. Photo: John Brush.*

**Q:** Did the pandemic affect any of the projects mentioned?

**A:** No – but project number two was generated as a result of the pandemic.

**Q:** Will you attend ISCA 9th Congress in Texas?

**A:** Unfortunately, no – the uncertainties and lack of funds contribute to this decision.

**Q:** Can you recommend a weekly/monthly online or paper magazine you never miss?

**A:** I read the *Sydney Morning Herald* daily as well as a variety of science and other news sources.

**Q:** What does the AM after your name mean?

**A:** In June 2019 I was made a Member of the **Order of Australia** (AM) “for significant service to conservation especially caves and karst. This a high Australian honour.

**Q:** Who would you like us to interview in the next newsletter? What would you like to ask him?

**A:** **Professor Kyung Sik Woo** (former Director of the **Korean Cave Research Institute**). I would ask him “What led you to create the Korean Cave Research Institute?” and “What has the Institute achieved?”

#### RANKING: TOP-CAVERNERS

1. Pavel Gejdoš – 325 caves!
2. Andy Spate – 250 caves
3. Hein-Jacques Gerstner – 124 caves
4. Heros Lobo – 101 caves
5. Rafael Pagés – 100 caves
6. Juanjo Tiscar – 25 caves
7. Nuno Jorge – 18 caves

How many caves have you visited?

[juanjotiscar@i-s-c-a.org](mailto:juanjotiscar@i-s-c-a.org) and let us know!



Halite (salt) stalagmite, Webb's Cave, Nullarbor Plain

Collecting “world’s largest” halite (salt) stalagmite from Webb’s Cave, Nullarbor Plain, Western Australia. This stalagmite was standing in the 1930s but fallen by the 1970s. It was removed to sterile, stabilised storage at the Western Australian Museum. Photo: Adrian Davey.

# Mammoth Cave National Park, the longest cave system in the world

Adapted from *National Geographic*



- Read the full article by [Austyn Gaffney](#) -

**Mammoth Cave** is Kentucky's only national park and the **world's longest cave system**, a natural wonder which is visited by more than half a million visitors every year. Even though the COVID-19 pandemic hit hard this beautiful destination, there seems to be hope in tourism and the area has been placed in **AirBnB's list of top 10 trending destinations** in March 2021.

**Molly Schroer**, spokesperson for Mammoth Cave, says diversity is the main attraction for visitors, who can enjoy different experiences including over 100 miles of trails and riverways above the surface, where they can try **hiking, biking, horseback riding**, and **paddling**, as well as over 400 miles of **limestone labyrinths** which can be found below the surface.

Mammoth Cave was discovered more than 4,000 years ago and much has changed since then. Seven tribes, which included the Cherokee Nation and Shawnee Tribe, used the cave system to mine minerals like gypsum with mussel shell scrapers harvested from the Green River. Petroglyphs, pictographs and burials were used to tell their own stories. Now, **Austyn Gaffney** and **National Geographic** take us to one of the places which may prove that people started to live in America twice as long as we all thought.



Mammoth Cave National Park. Photo: National Park Service.

# 18th International Congress of Speleology: postponed to 24-31 July 2022



The International Congress of Speleology has been **postponed to July 2022** because of the pandemic and, therefore, the UIS Bureau has decided to extend the International Year through 2022. It will be held **24-31 July 2022** in the same location, Le Bourget du Lac, Savoie, France. All registered papers will be accepted.

## II Colombian Congress of Speleology



The **II Colombian Congress of Speleology** will be **virtual**. You can't miss it! **July 7-9 2021**.  
More info: [II Colombian Congress of Speleology](#)



## 36th Brazilian Congress of Speleology

The **Sociedade Brasileira de Espeleologia** will be held on **20-23 April 2022**.  
More details: [36th Brazilian Congress of Speleology](#)



# Stump Cross Caverns, saved!



*Extract from press release (March 15th, 2021) by Stump Cross Caverns*

**Stump Cross Caverns**, an ancient and much-loved Yorkshire Dales visitor attraction, has been saved from permanent closure thanks to overwhelming public financial support.

Following a recent Government funding setback and having been hit hard by COVID restrictions the Caverns owners, the Bowerman family, were driven to desperate measures to keep themselves from closing their doors. A solution to this was to enter their own luxury VW campervan into a two-part crowdfunding appeal.

But thanks to the kindness and generosity of the local community, and that of others from around the country who heard about the plight of the caves, the campaign has already reached its £53,000 target, giving them a fighting chance of survival.



*Stump Cross Caverns. Source: Stump Cross Caverns*

Commenting on the campaign's success, which had more than 3,000 donations after its launch, Lisa Bowerman, Owner of Stump Cross Caverns said: "It's difficult to express just how much we value the staggering reaction we've received from the public during our fight to save the caves from closure. An unsuccessful application for a Government grant from the Cultural Recovery Fund was a massive blow and left us with no other choice but to reach out to the public for support. Thanks to their unbelievable generosity we no longer have to worry about what the future has in store. Our small, family-run business will remain

open and continue to educate and wow those who experience the splendour of the ancient cave system here at Stump Cross.”

Those missing the caverns or hoping to visit after lockdown can still explore the site from the comfort of their own home thanks to an interactive **online virtual 3D tour**, created by Leeds-based Apollo3D, and featured on the [Stump Cross Caverns website](#).

# Darlington & Stockton Times

- Read Darlington &  
Stockton Times  
article -



# YOUR Harrogate

- Listen to Your  
Harrogate's  
podcast -



## And the winner was...!

WELL DONE CHRIS RILEY 🙌🙌🙌  
YOU HAVE WON OUR BEAUTIFUL  
CAMPER VAN 😊



PLEASE EMAIL US AT  
ENQUIRIES@STUMPCROSSCAVERNS  
.CO.UK

*The lucky winner of SCC's campervan. Photo: SCC Facebook page*

# Are lunar caves our future homes?

by Rahul Rao

Published on *Popular Science*



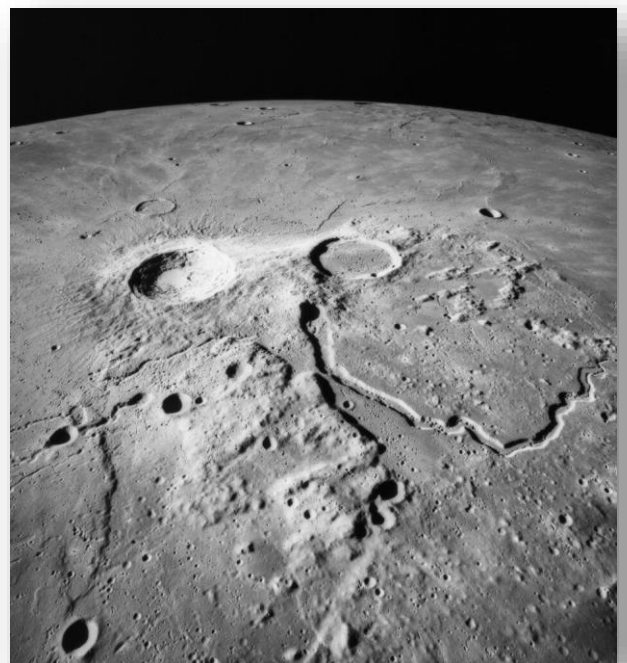
*A representation of a lunar cave. Popular Science*

## POPULAR SCIENCE

[- Read the full article -](#)

We could live in **caves on the moon**. What would that be like? Lunar caves aren't just scientific curiosities—they might be our future homes. The 1902 silent film **Le voyage dans la Lune** (**A Trip to the Moon**) is often considered the world's first science-fiction movie. In roughly twelve surreal minutes, a merry crew of “**astronomers**” dressed like wizards visit the moon by piling into a giant artillery shell and firing themselves from a very large cannon.

Once they crash-land at their destination, the **astronauts** descend into a **cavern filled with mushrooms**. They're captured by the insect-people of the moon and taken even deeper underground—to the court of the moon-dwellers' king. But they escape and hastily push themselves back down to Earth, abducting one of the insect-people in the process, before splashing down in the sea. (...)



*A sinuous rille, as seen by Apollo 15. NASA*

# Cave of Perama (Greece)

acknowledgements to George Kakos

Located in **Ioannina (Greece)**, the beautiful capital in Epirus region, **Parama Cave** is among the rarest caves in the world, occupying an area of 14.800 square metres where the tourist is taken on a 45-minute trip covering over 1.100 metres. As a member of the **International Show Caves Association**, the following article honours its beautiful history.

## CAVE INFO

**Cave name:** Perama Cave  
**Location:** Spilaiou 19, 45500, Perama Ioannina, Greece  
**Tour length:** 1.100 metres  
**Tour duration:** 45 minutes  
**ISCA membership:** Yes!  
**Website (English):** [www.spilaio-perama.gr/en](http://www.spilaio-perama.gr/en)  
**Website (Greek):** [www.spilaio-perama.gr](http://www.spilaio-perama.gr)  
**E-mail:** [info@spilaio-perama.gr](mailto:info@spilaio-perama.gr)

The cave is open all year round, including weekends and public holidays, and the ticket price ranges from 3,5€ to 7€. Visitors will soon feel part of the surrounding thanks to the warm welcome and explanations provided by the guides, taking tourists through the first show cave in the history of Greece, where the first fossilized bones and teeth of cave bears (*Ursus spelaeus*) were found.



*Perama Cave. Photo provided by George Kakos*

The cave was discovered by accident during the Second World War, as the inhabitants of the village were trying to find a shelter to protect themselves from bombs. After the end of the war, Konstantinos Kasvikis, a trainer and an amateur speleologist came in Perama and took photos which were published in the local press and in the press of Athens. Afterwards, Ioannis and Anna Petrochilos, two famous greek speleologists, found Perama Cave and they started exploring and mapping the cave in order to be used as a tourist attraction.

Created by nature over 1.500.000 years ago, Goritsa hill is home to one of the most beautiful show caves in the world. There are 19 extraordinary cave formations, including picturesque lakes with stone lilies, where stalactites and stalagmites are reflected in the crystal clear waters.



*Perama Cave. Photo provided by George Kakos*

Visitors can also spend some of their time in the Centre of Information and Promotion of Perama Cave, named “Anna Petrochilou”. It is located at the entrance of Perama village, where a free parking space for passengers, cars and buses is available. The centre offers audiovisual materials focused on ‘The World of Caves’, edited by the Ephorate of Paleoanthropology and Speleology of the Ministry of Culture and Tourism. In addition, special glasses are used to watch 3D audiovisual materials.



*Cave bear. Photo provided by George Kakos*

There is an exhibitions of rare geological and paleontological which dated back from 60,000 BC to 240,000 BC. Minerals stones, semi-precious stones, different stalactites and stalagmites, fossilized bones of prehistoric animals, prehistoric marine organisms and tree trunks, among others, can also be found there.

Visitors have the opportunity to stay in the projection centre, where there is a cafeteria and a tourist train which they can take in order to head to the entrance of the cave.



*Perama Cave. Photo provided by George Kakos*

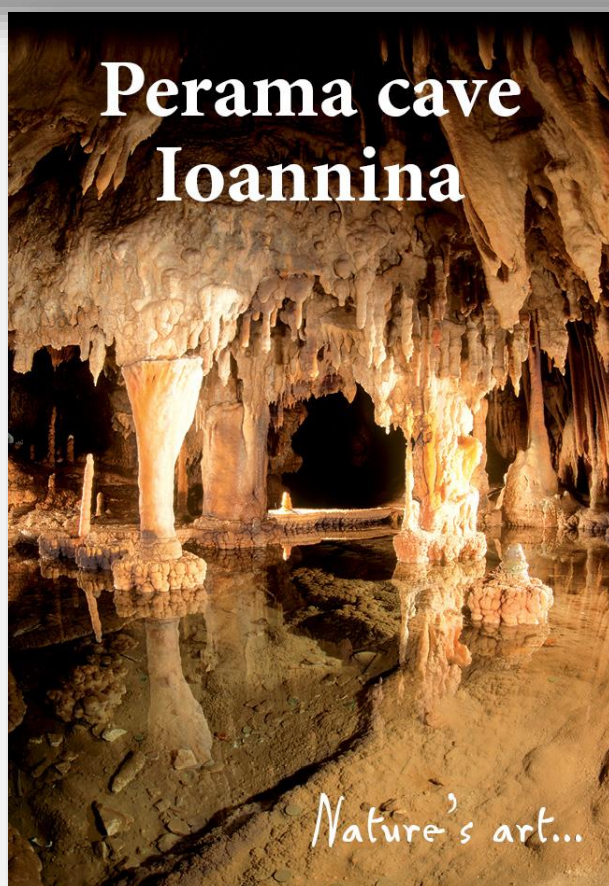
At the cave exit, which is 25 metres higher than the entrance, visitors can admire the outstanding view of the city of Ioannina, as well as the legendary lake Pamvotis, made famous by the legend of Kyra Frossyni and Ali Pasha. From there an external scenic path takes to the entrance of the cave.

Perama, an area with rich historic and cultural heritage, presents strong tourist interest. It is famous for its silverware, handicrafts of unique beauty. Recently more young people have been systematically engaged in silverwork, combining tradition with modernity and breathing new life into this art.

In Perama you will also find hotels and tourist accommodation, restaurants, taverns and cafeterias where you will have the opportunity to enjoy delicious Ioannina pastries, the traditional drinks tsipouro and ouzo, as well as local meats, pies and exquisite wines.



*Perama Cave. Photo provided by  
George Kakos*



# New archaeological discoveries in *Grottes d'Isturitz et Oxocelhaya*, France

extracted from [UPV/EHU](#)

A team from the [UPV/EHU](#) participates in the excavation of the *Isturitz* site, an international project in cooperation with *Grottes d'Isturitz et Oxocelhaya* and funded by the **Archaeological Regional Service of Nouvelle-Aquitaine**. Three thousand archaeological remains have been discovered so far, including fauna and lithics. This unique archaeological context will help us understand the life of those human beings who inhabited the area for millennia. (...)

## CAVE DETAILS

**Cave name:** Grottes d'Isturitz et Oxocelhaya  
**Location:** Saint-Martin-d'Arberoue, France  
**Email address:** [contact@grottes-isturitz.com](mailto:contact@grottes-isturitz.com)  
**Phone number:** + 33 559 29 64 72  
**Type of member:** Full member  
**Website**

At the moment, says **Aritza Villaluenga**, member of the **Department of Geography, Prehistory and Archaeology of the UPV/EHU**, “eight researchers from the UPV/EHU are working on a surface area of 2 square meters with the intention of carrying out a comprehensive study. All archaeological remains are being topographically located, which will allow a virtual reconstruction. In addition, all the extracted sediment is washed in order to recover the bone and dental remains of the **microvertebrates** (mammals, amphibians and reptiles)”, and other findings. The group works “together with an international research team made up of **20 researchers** from **Spain, France, the United Kingdom and Germany**.”

It is believed that some of the findings belong to the **Aurignacian** (33,000-31,000 years) and **early Gravettian** (30,000-28,000 years), a period of time which coincided with the abandonment of some of the largest rooms of the site, just where the study is being carried out.

The third week of excavation is taking researchers to archaeological materials with a higher density, as they will try to reach the **Aurignacian levels** (at least 33,000 years). “It is a context rich in lithic remains and fauna, including species such as the **mammoth**, reindeer, horse, bison and the cave bear)”, confirms **Villaluenga**.



Members of the excavation team while working in the cave. Photo provided by Joëlle Darricau.

# Jenolan Caves will remain closed

The **International Show Caves Association** would like to express our most sincere support to the managing team and staff at **Jenolan Caves**. Unfortunately, one of the most outstanding cave systems in the Australia and in the world, **will remain closed until further notice** due to the closing of the main and unique access to the area.



*The access road to Jenolan Caves, closed due to weather conditions. ROAD WOES*

**April 19, 2021** - Given the damage caused to **Jenolan Caves Road** from the **extreme weather** event in March, **Transport for NSW** has further advised that access will be closed for the foreseeable future. As there is **no alternate access**, we have extended the closure of our precinct. We are unable to provide an opening date yet, but we expect to be back in business by mid-May. **Reasons for the extended closure.**

This closure extension continues to be a tough decision for our business. We understand it will be disappointing, if you were hoping to visit us over the next few weeks. We offer complete **booking flexibility**, and we are happy to assist you, by organising a **voucher** (valid for up to 3 years) or providing a **refund**. We are in the process of contacting affected guests, but if you require **assistance**, please call us on **02 6359 3900** or email [bookings@jenolancaves.org.au](mailto:bookings@jenolancaves.org.au) for **accommodation** and **dining** related enquires. Alternatively, you can call **02 6359 3923** or email [reception@jenolancaves.org.au](mailto:reception@jenolancaves.org.au) for cave tour related enquires.

We are experiencing a large amount of calls and emails, so if you can't get through immediately, please leave a message or email, and we will **get back to you as soon as we can**. We apologise for the inconvenience but have made this necessary decision as we pride ourselves on the safety, comfort and enjoyment of our guests and staff. We look forward to providing you with an update and **welcoming you back to Jenolan Caves soon**.

**More info** at [Jenolan Caves official website](https://www.jenolancaves.org.au).

# International Bat Appreciation Day



The reputation of bats was first hit by a well-known vampire called **Dracula**, but its reputation has fallen even more after some of the information related to **COVID-19**. However, the truth is that these **flying mammals** play a **very important role** in the sustainability of our ecosystems.

In springtime, bats start to emerge from hibernation and some of the **world's largest colonies** leave their dark homes in order to survive. Consequently, **April 17th** is the **International Bat Appreciation Day**, a perfect date to remind us about their extraordinary work as indicator species, pollinators and insectivores.

Unfortunately, not everyone is aware of the **threats** which can hurt and kill bats, and their mission to ensure a healthy planet may be in danger as long as we do not do something to help them.



*Near San Antonio, Texas USA, Bracken Cave is home to approximately 20 million Mexican free-tailed bats. Source: Texas Parks and Wildlife*

## Did you know...?



“Bats lead us to the best opportunities to protect nature anywhere in the world.” (Mike Daulton, BCI Executive Director)

Experts at **Bat Conservation International** try to ensure the worldwide survival of bats. There are hundreds of species threatened with extinction and they are in need of urgent help.

**Membership is the most effective way to protect bats. [Join now!](#)**

# ‘Mollusc of the Year 2021’ Title awarded to Argonauta argo, the Greater Argonaut

In our last newsletter, one of the articles focused on the *Congeria kuscери*, the only known freshwater bivalves inhabiting caves. These species were running for the ‘Mollusc of the Year 2021’ Award, which was awarded to the *Argonauta ergo*, a pelagic octopus found in the Mediterranean Sea.

As stated by [Translational Biodiversity Genomics](#), the Greater Argonaut is characterized “by an extreme sexual dimorphism, with females growing up to 30 cm, and males being usually much smaller (up to 2 cm). Females also have specially-adapted extra wide arms (the famous sails or oars) that secrete the eggcase (the famous shell). Argonauts are also voracious predators, they bite their prey and inject a poison produced in their salivary gland.”

With the 36% of the votes, the *Argonauta argo* will get its whole genome sequenced at the LOEWE-Centre TBG.



The *Argonauta ergo*. By Marco Gargiulo. Posted on [TGB](#)



- Learn more  
about these  
species -



The rest of the species running for the Award. Photos (from left to right): Priscila Salloum, Víctor Tuset, and Bernardo Reyes-Tur. Posted on [TGB](#)



*Congeria kuscери* the only known freshwater bivalves inhabiting caves, were one of the species running for the ‘Mollusc of the Year 2021’ Award

# *Cova dels Òrgues* (Spain): eco-art inside a natural wonder

Declared an **Asset of Cultural Interest**, the recovered cavity of *Cova dels Òrgues* had been abandoned for decades until a private initiative decided to turn it into an underground exhibition of **contemporary art**. The opening took place in the summer of **2020** and it can be visited at weekends through the year and daily in the high season.

## CAVE INFO

**Cave name:** Cova dels Òrgues

**Location:** Paratge de Sant Josep, La Vall d'Uixó, Spain

**Tour duration:** 30 minutes

**Ticket price:** 2€ - Free for children

The cave is **60 metres deep and 15 metres high**, showing a wide range of beautiful **formations**. The most impressive one is a **pipe organ-like speleothem** which gave name to the cave. The entrance, a double door which welcomes visitors as it gives access to the 43-metre-long main gallery, is connected by three access points which are located next to each other. The area has been proved to have been inhabited during the **Bronze Age**, as shown by the remains found inside the cavity.



*The formation giving name to the cave. Cova dels Òrgues.*

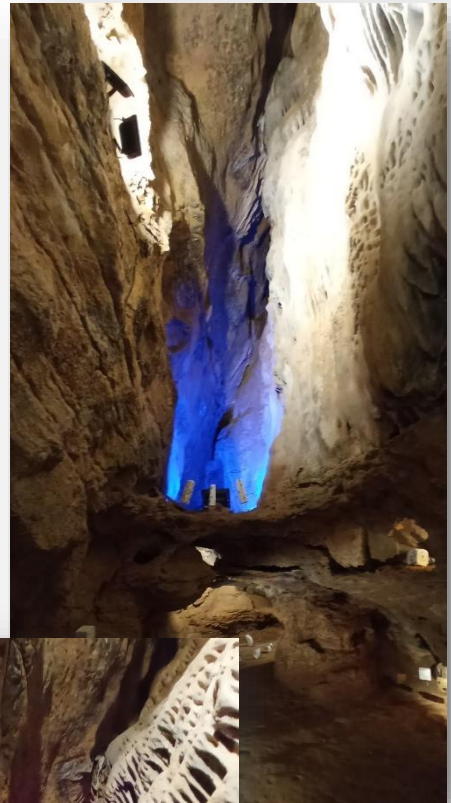
It also served as temporary shelter for many of the families who lived in **La Vall d'Uixó** during the difficult years of the **Spanish Civil War** (1936-1939). Years later, the cavity, owned by a local family, was **abandoned** for years, using a gate to deny access to the curiosity of those willing to visit it. It was then used as a private warehouse and storage room.

Today, **Eduardo Patón** has turned this space into a perfect combination between nature and art, where fixed and temporary exhibitions of local and international artists can be observed. The relationship between art and nature is described in terms of eco-art, where environmental problems, politics, culture, the ecosystems and natural processes play a major role.

Original creations by different authors will be available to purchase at the same time that they create a new cultural and tourist place which complements and enriches the visit of those who also decide to spend some time in *Coves de Sant Josep*, located only a few metres from the magnificence of *Cova dels Òrgues*.



*Cova dels Òrgues.*



# Cave Science *Pills*: upcoming lectures

Two weekly lectures about **scientific research themes** carried out in **Italian caves** are organized by the **Italian Speleological Society**, the **Italian Show Caves Association**, and the **Speleopolis Association**, and sponsored by the **International Union of Speleology**, the **International Show Caves Association**, and the **Italian Alpine Club**.

- Visit their  
website for  
more  
information -



The presentations are in **Italian**, but easy and understandable language is used so that everyone can follow and understand the contents. In addition, **English slides** are used so as to make it easier for everyone. The small lectures are recorded and translated and will form an online archive to be used for didactic purposes. You can follow the lectures on any of the **Facebook and Youtube links** included on their website.

## MAY, 2021

### Thursday 6, 9:00-10:00 pm

- **Pietro Gutgesell**: Karst process in Palaeozoic limestones: the karst area of Timau.
- **Alice Busetti**: Karst development in the gypsum of Friuli Venezia Giulia: hazards related to a rapid evolution.

### Thursday 13, 9:00-10:00 pm

- **Valentina Balestra**: Environmental monitoring in caves: goals and equipment.
- **Daniela Cinus**: Show cave environmental implications: from microclimatic indicators to ambient impacts.

### Thursday 20, 9:00-10:00 pm

- **Stefano Marighetti**: Where do Asiago Plateau waters go? (Veneto)
- **Isabella Serena Liso**: Hydrogeological surveys in active caves of Apulia.

### Thursday 27, 9:00-10:00 pm

- **Veronica Chiarini**: Show cave management and monitoring: experiences with the ADRION - Adriatic caves Interreg Project in Emilia - Romagna.
- **Veronica Nanni**: Human dimension and show caves.

## JUNE, 2021

### Thursday 3, 9:00-10:00 pm

- **Guido Leone**: Underground water circulation into the karst aquifers of Apennine Chain.
- **Vittorio Catani**: Vulnerability of underground hydric resources in karst environment.

### Thursday 10, 9:00-10:00 pm

- **Lisa Foschi**: Microbiological world of moonmilk: the Black Cave (Abruzzo).
- **Federico Biagioli**: The microbiota contaminations in show caves, management implications and possible uses as bioindicators.

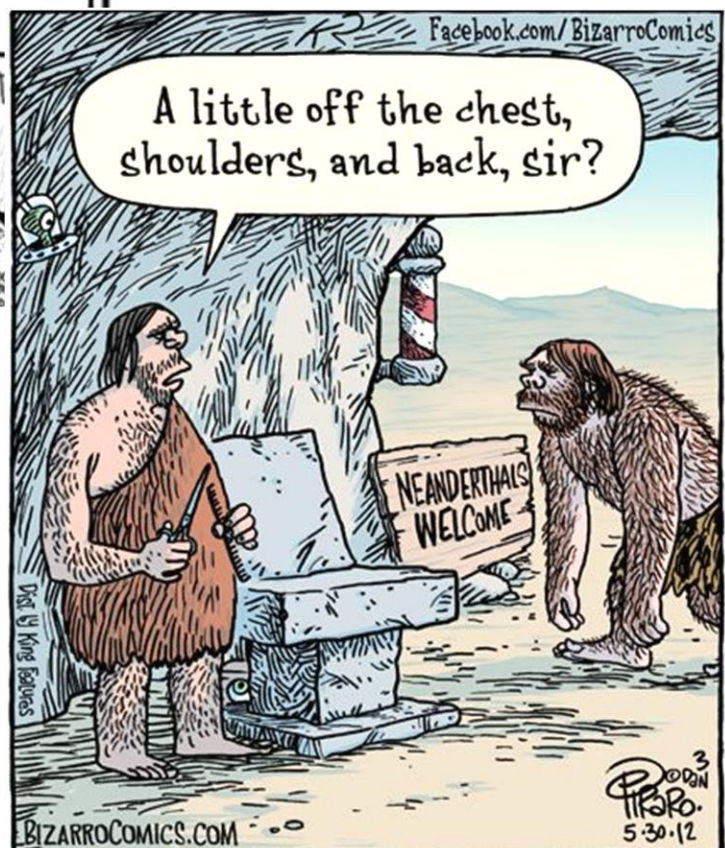
### Thursday 17, 9:00-10:00 pm

- **Iaria Vaccarelli**: Cave Microbial Survey: cavers support subsurface microbiology.
- **Lorenza Rugnini**: As long as light exists, there is life: cyanobacteria biofilm in subsurface environment.

# The funny side of life



Source: [GoComics](#)



Source: [BizarroComics](#)

# 28th International Karstological School

## “Classical Karst” (IKS)

The **28th International Karstological School “Classical Karst”**: *Regional karstology - Local and general aspects*, which will be held online, will take place from **14th to 18th June 2021**.

Since **1993**, the **International Karstological School “Classical Karst” (IKS)** has been organised annually, covering many aspects related to karst research. The basic idea of the event is to present the state-of-the-art of the annually selected topic and to promote discussion between participants via a set of invited and topic-related lectures, a poster session and field trips to the **Slovenian Classical Karst area**.

**28th International Karstological School** will be focused to the **regional karst studies**. Karst is distributed in most continents and climatic regimes. Most of what we know on karst is based on regional studies. These have direct implications in **development challenges** of a particular region, however, their broader relevance and validity of regional results may be questionable. Results of regional studies thus, may or may not be generally valid. Regardless of what your topic is (**geomorphology, geology, hydrology, biology, speleology, ...**) we encourage you to present your regional study and discuss its results in view of their relevance to other **karst systems**.

On the initiative of the **International Speleological Union 2021** is the **International Year of Caves and Karst**. Therefore, this conference will follow its motto: **Explore, Understand, Protect**.

The **official languages** of the 28th IKS are **English** and **Slovenian**.



*The organizer of the 28th IKS: Karst Research Institute ZRC SAZU*

# Monitoring Human Impact in Show Caves.

## A Study of Four Romanian Caves

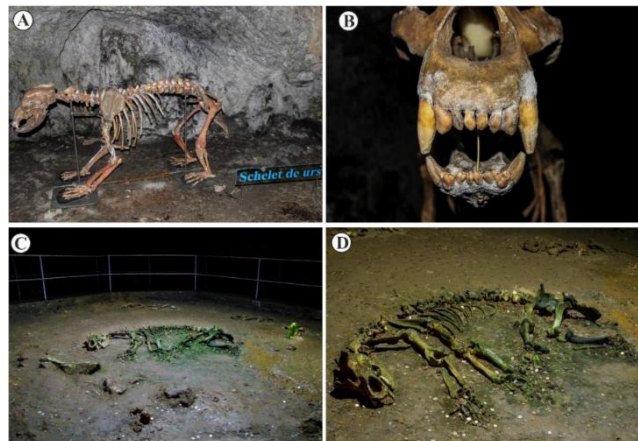
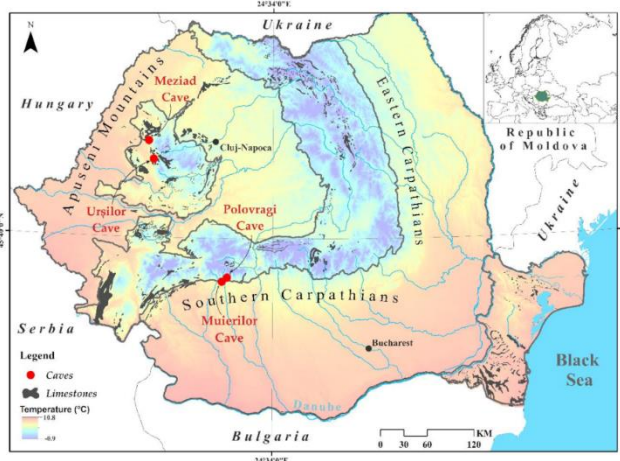
Constantin S, Mirea IC, Petculescu A, Arghir RA, Măntoiu DȘ, Kenesz M, Robu M, Moldovan OT. Monitoring Human Impact in Show Caves. A Study of Four Romanian Caves. *Sustainability*. 2021; 13(4):1619.

**- Read the full article -**

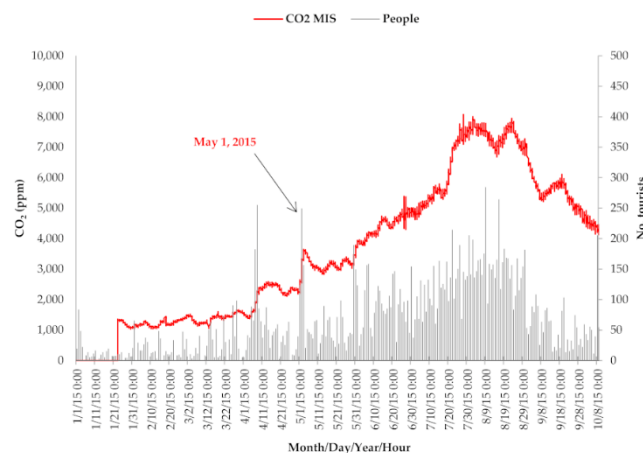
(1) Background: Show caves are unique natural attractions and touristic traffic can trigger their degradation within a short time. There are no universal solutions to counter the effects of the touristic impact upon the cave environment and both protection protocols and management plans have to be established on a case-by-case basis.

(2) Methods: The study includes four show caves from the Romanian Carpathians, where monitoring of the number of visitors, paralleled by the monitoring of the main physicochemical parameters of the air and water (CO<sub>2</sub>, temperature, humidity, drip rate, conductivity, and pH) was implemented.

(3) Results and Conclusions: The results of the study have: established a set of basic principles to be enforced by the management of show caves and issued a set of preventive measures and instructions to be followed by the personnel and stakeholders of the caves.



The location of the Romanian show caves. Cave bear skeletons. CO<sub>2</sub> concentration. Source: [paper](#).



# Microhabitat selection of a Sicilian subterranean woodlouse and its implications for cave management

*Nicolosi, Giuseppe; Stefano Mammola; Salvatore Costanzo; Giorgio Sabella; Rosolino Cirrincione; Giovanni Signorello; and Marco Isaia. 2021. Microhabitat selection of a Sicilian subterranean woodlouse and its implications for cave management. International Journal of Speleology, 50: 53-63.*

[- Read the full article -](#)

Don't miss this paper focused on human activity in subterranean environments and its consequences towards the elements of the ecosystem. "Over a year and with approximately two visits a month, we investigated the effects of the presence of visitors on the subterranean endemic woodlouse *Armadillidium lagrecai* in the strict natural reserve of Monello Cave (Sicily, Italy). We found that natural microclimatic fluctuations, and not direct human disturbance, were the main factors driving the distribution of *A. lagrecai*. Specifically, *A. lagrecai* select for more climatically stable areas of the cave, where the temperature was constantly warm and the relative humidity close to saturation."

# Microbiological study in a gneissic cave from Sri Lanka, with special focus on potential antimicrobial activities

*Silva, Ethige Isuru P.; Pathmakumara Jayasingha; Saman Senanayake; Anura Dandeniya; and Dona Helani Munasinghe. 2021. Microbiological study in a gneissic cave from Sri Lanka, with special focus on potential antimicrobial activities. International Journal of Speleology, 50: 41-51.*

[- Read the full article -](#)

"This study presents the first cave microbiological investigation in Sri Lanka, with a special preference for bioprospecting of novel AMC. The cave sediment characterization demonstrated the presence of close to strong acidic conditions (pH 3.1 – 3.3) and thus indicates the possibility of isolating acidophilic microorganisms. Eight cave wall/ceiling fungal strains were isolated from Sthreepura Cave - Kuruwita and identified using both morphological and ribosomal Internal Transcribed Spacer (ITS) region sequence analysis. Interestingly, four fungal isolates (*Penicillium panissanguineum*, *P. cremeogriseum*, *Aspergillus bertholletius* and *Trichoderma yunnanense*) were found to be the first records in Sri Lanka."

# Water Quality and Hydrogeochemical Characteristics of Some Karst Water Sources in Apuseni Mountains, Romania

Hoaghia M-A, Moldovan A, Kovacs E, Mirea IC, Kenesz M, Brad T, Cadar O, Micle V, Levei EA, Moldovan OT. *Water Quality and Hydrogeochemical Characteristics of Some Karst Water Sources in Apuseni Mountains, Romania*. *Water*. 2021; 13(6):857.

[- Read the full article -](#)

“Human activities and natural factors determine the hydrogeochemical characteristics of karst groundwaters and their use as drinking water. This study assesses the hydrogeochemical characteristics of 14 karst water sources in the Apuseni Mountains (NW Romania) and their potential use as drinking water sources.”

## Groundwater Modelling in Karst Areas

Zanini A, Feo A, Petrella E, Celico F. *Groundwater Modelling in Karst Areas*. *Water*. 2021; 13(6):854.

[- Read the full article -](#)

This paper focuses “on recent advances and future developments in the modeling (both conceptual and numerical) of flow and transport in karst aquifers. This includes mainly numerical simulations of saturated/unsaturated flow, seawater intrusion, recharge processes and statistical approaches.”

## Communication Networks as a Catalyst for Holistic Sustainability on Karst Landscapes

Willenbrink E, North LA, Nguyet VTM, Polk J, Graham J. *Communication Networks as a Catalyst for Holistic Sustainability on Karst Landscapes*. *Sustainability*. 2021; 13(6):3360.

[- Read the full article -](#)

“Equitable access to communication and education is a key aspect in ensuring sustainability in any natural area. Karst landscapes are especially susceptible to environmental degradation from natural and anthropogenic forces and can benefit from sustainable economic, social, and environmental practices. This study took place in Phong Nha-Kẻ Bàng National Park (PN-KB), a highly developed karst landscape in central Vietnam. (...) The research findings suggest that a lack of consistent communication between PN-KB’s residents, rangers, and governing officials has left the landscape vulnerable to extensive degradation and susceptible to catastrophic climatic events. Increasing communication between the stakeholder groups within the park will bolster economic opportunity and ensure equitable access to information and resources, both of which will promote sustainable practices and karst landscape protection.”

# Updated Distribution of the Mysid *Antromysis cenotensis* (Crustacea: Peracarida), a Protected Key Species in Yucatan Peninsula Cenotes

Liévano-Beltrán LA, Simões N. Updated Distribution of the Mysid *Antromysis cenotensis* (Crustacea: Peracarida), a Protected Key Species in Yucatan Peninsula Cenotes. *Diversity*. 2021; 13(4):154.

[- Read the full article -](#)

Presentation of the actual knowledge of “52 new geographic location records for the peracarid crustacean *Antromysis cenotensis* Creaser, 1936, endemic in cenotes of the Yucatan Peninsula, Mexico. This species is currently considered threatened and, therefore, is protected by Mexican law.” The results were analysed after “several expeditions carried out between 2017 and 2020 in 75 locations within the cenote-ring, the interior, and coastal plains of the peninsula. A comprehensive literature review provided 84 geographic location records since the species was described in 1936. A map with 136 geographic location records that better describe the current species distribution is also included. With this information, plus some notes on the ecology of the species, a comprehensive literature and data review, and a brief analysis regarding the possible factors associated with the confirmed absence of the species in some locations in the state of Yucatan.”

# The Chemoautotrophically Based Movile Cave Groundwater Ecosystem, a Hotspot of Subterranean Biodiversity

Brad T, Iepure S, Sarbu SM. The Chemoautotrophically Based Movile Cave Groundwater Ecosystem, a Hotspot of Subterranean Biodiversity. *Diversity*. 2021; 13(3):128.

[- Read the full article -](#)

“Movile Cave hosts one of the world’s most diverse subsurface invertebrate communities. In the absence of matter and energy input from the surface, this ecosystem relies entirely on in situ primary productivity by chemoautotrophic microorganisms. The energy source for these microorganisms is the oxidation of hydrogen sulfide provided continuously from the deep thermomineral aquifer, alongside methane, and ammonium. The microbial biofilms that cover the water surface, the cave walls, and the sediments, along with the free-swimming microorganisms, represent the food that protists, rotifers, nematodes, gastropods, and crustacean rely on. Voracious water-scorpions, leeches, and planarians form the peak of the aquatic food web in Movile Cave. The terrestrial community is even more diverse. It is composed of various species of worms, isopods, pseudoscorpions, spiders, centipedes, millipedes, springtails, diplurans, and beetles.” An updated list of invertebrate species thriving in Movile Cave is provided herein.

# Latest publications



Thanks to the NCA and its Executive Director, **Bob Holt**, for bringing us the latest updates:

**Cave Talk: May 2021**

**Cave Talk: April 2021**

Visit **CAVERN.COM** and learn more about the National Caves Association.



**Union Internationale  
de Spéléologie**

A special bulletin by the **Union Internationale de Spéléologie** with everything you need to know about the **International Year of Caves and Karst 2021**.

**Download now!**

More about the UIS **HERE**



The **European Speleological Federation (FSE)** publishes its first **EuroSpeleo Newsletter** in year 2021.

Please, **forward** this document as widely as possible to caving clubs and individual cavers.

**Share yours!**

**Is there any other publication you would like to share?**

Send it to **[juanlotiscar@i-s-c-a.org](mailto:juanlotiscar@i-s-c-a.org)** and we will publish your materials as soon as possible

# Call for Papers: Carbonate Critical Zone Petrology, Mineralogy, and Geochemistry in Karst Systems

Dear Colleagues,

As the guest editors of the *Minerals* Special Issue on “Carbonate Critical Zone Petrology, Mineralogy, and Geochemistry in Karst Systems”, we would like to cordially invite you to contribute (either alone or with a colleague/post-doc, etc.) with research paper or review to this Issue.

**Special Issue:** Carbonate Critical Zone Petrology, Mineralogy, and Geochemistry in Karst Systems

**Guest Editors:** Dr. Jason Polk and Dr. Ilenia D’Angeli

**Submission Deadline:** 30 July 2021 (More time can be granted if necessary)

**Website:** [https://www.mdpi.com/journal/minerals/special\\_issues/cczpmgks](https://www.mdpi.com/journal/minerals/special_issues/cczpmgks)

Should your response be positive, we would appreciate receiving within the next two months a short tentative **abstract** (150–200 words) describing the topic covered in your contribution. Papers can be submitted at any time up until the deadline as they will be published \*on an ongoing basis\*.

*Minerals* is an MDPI open-access journal (indexed in Web of Science, current Impact Factor 2.380). \*JCR category rank\*: 6/21 (Q2) in Mining & Mineral Processing; 11/30 (Q2) in Mineralogy. The Article Processing Charge (APC) is 1800 CHF (Swiss Francs) per accepted paper.

There are numerous **benefits** to publishing in *Minerals*: (1) open access and high visibility—unlimited access, broad database coverage, and various promotional activities and academic event presentations; (2) rapid turn-around—The median values of the “Article Processing Time” (from submission to publication) is 42 days in 2019.

Please feel free to **contact** the Editorial Office ([minerals@mdpi.com](mailto:minerals@mdpi.com) or [kimura.xia@mdpi.com](mailto:kimura.xia@mdpi.com)), if you have any questions or concerns.

We very much hope that you can accept this offer and we look forward to hearing from you!

Drs. Jason Polk and Ilenia D’Angeli

Guest Editors of Special Issue “Carbonate Critical Zone Petrology, Mineralogy, and Geochemistry in Karst Systems”



*minerals*

# International show cave meeting and workshop by Cave Lighting

INTERNATIONAL  
CAVE MEETING

GIANT ICE CAVE  
DACHSTEIN

WORKSHOP  
HOLISTIC TOURISM CONCEPT

# A KIND OF PASSION

10/21/2021  
TO 10/24/2021  
OBERTRAUN-AUSTRIA  
INVITING OUR CAVE FRIENDS!





#SPELEOMEDIC

**SPELEOLOGY OF THE MEDITERRANEAN**

CALL FOR PARTICIPATION:

WITH THE PARTICIPATION OF  
THE SPELEOLOGICAL SOCIETY OF ITALY & TETIDEFurther information [HERE](#)**INTERNATIONAL ASSOCIATION OF HYDROGEOLOGISTS  
CONGRESSES****BRAZIL, 47TH IAH CONGRESS – BELGIUM, 48TH IAH CONGRESS**

22 – 27 AUGUST, 2021 // 6 - 10 SEPTEMBER, 2021

**47<sup>TH</sup> IAH  
CONGRESS  
BRASIL 2021****48<sup>th</sup> IAH Congress**  
BRUSSELS BELGIUM 2021  
Inspiring Groundwater**KARST INTEREST GROUP (KIG) 2021 WORKSHOP**

19-21 OCTOBER 2021

Registration [HERE](#)**6TH EUROSPELEO PROTECTION SYMPOSIUM**

26-30 OCTOBER, 2021

# What caves are these?



Source: Tripadvisor

## CAVE #9

### Hint 1:

This cave is located in the Iberian Peninsula.

### Hint 2:

There's a wine cellar inside the cave!

## CAVE #10

### Hint #1:

It is the world's largest water cave.

### Hint #2:

Some Iranian mountaineers rediscovered the cave in 1963.



Source: Tehrantimes

## SEND YOUR ANSWERS

### MARCH/APRIL ANSWERS:

Cave #7 was Cueva de Altamira (Spain)

Cave #8 was Wind Cave (South Dakota, USA)

You can send your answers, too!

Contact: [juanjotiscar@i-s-c-a.org](mailto:juanjotiscar@i-s-c-a.org)



# ISCA Calendar

## PLEASE NOTE

Some of these events may suffer variations.  
You may contact the organization for confirmation.  
Do you want to add or modify an event?  
Contact us! [juanjotiscar@i-s-c-a.org](mailto:juanjotiscar@i-s-c-a.org)



## 2021 - International Year of Caves and Karst

3rd - 7th May, 2021 – [Australian Cave and Karst Management Association Conference](#)

6th June, 2021 – [Int. Day of Caves and the Subterranean World](#)

28th June - 2nd July, 2021 – [NSS Convention 2021](#)

14th - 18th June, 2021 – [28th Int. Karstological School "Classical Karst": Regional Karstology](#)

22nd - 24th June, 2021 – [EuroKarst 2021: The EU Congress on Karst Hydrogeology and Carbonate Reservoirs](#)

7th - 9th July, 2021 – [2nd Columbian Congress of Speleology](#)

11th - 14th July, 2021 – [Karst Record IX \(KR9\) Conference](#)

16th - 20th August, 2021 – [34th Int. Geo. Congress: Global Karst Critical Zone and Land Use Planning](#)

22nd - 27th August, 2021 – [47th IAH Congress \(Brazil\)](#)

28th August - 4th September, 2021 – [19th International Symposium on Vulcanospeleology](#)

September 2021 – [Fort Stanton Cave Science Conference](#)

6th - 10th September, 2021 - [48th IAH Congress \(Belgium\)](#)

30th September - 3rd October, 2021 – [26th International Cave Bear Symposium](#)

19th – 21st October, 2021 – [Karst Interest Group \(KIG\) 2021 Workshop](#)

21st - 24th October, 2021 – [Cave Lighting Workshop](#)

26th - 30th October, 2021 – [6th EuroSpeleo Protection Symposium](#)

29th October - 2nd November, 2021 – [Speleo Kamaraton](#)

## 2022

Spring 2022 – [14th International Symposium of Pseudokarst](#)

20th - 23rd April, 2022 – [36th Brazilian Congress of Speleology](#)

24th - 31st May, 2022 - [18th Int. Congress of Speleology](#)

29th September – 8th October, 2022 – **ISCA 9th Congress and NCA Convention** (San Antonio, Texas)

2022 – [NSS Convention 2022](#) (Custer, South Dakota)

**14 PSEUDOKARST**  
online

### Deadline!

Send your materials **before June 20th, 2021** in order to appear in upcoming ISCA newsletters.



Contact: [juanjotiscar@i-s-c-a.org](mailto:juanjotiscar@i-s-c-a.org)



# Reminder! Mark in your calendar!

## 2022 ISCA Congress & NCA Convention



INTERNATIONAL SHOW CAVES ASSOCIATION



Hosted by:

**NATURAL BRIDGE  
CAVERNS®**

- Download our [previous newsletter](#) and find more information about the ISCA Congress and NCA Convention -

In **2018**, 46 delegations gathered to celebrate the 8th Congress of the **International Show Caves Association**. Our friends from all over the world visited **Genga-Frasassi (Italy)** and enjoyed the beauty of this lovely Mediterranean country. Caves and karst, again, played a major role in an event where knowledge is of common interest. In **2022**, the event will be celebrated together with the **National Caves Association Convention** in **Texas (USA)**, as it will be hosted by **Natural Bridge Caverns**. Since its foundation in **1990**, the **International Show Caves Association (ISCA)** has celebrated eight congresses. **Are you going to miss this one?**



*Participants in ISCA's 8th Congress (Genga-Frasassi, Italy, 2018) – Photo by Franziska Oedl*

# Links of interest



INTERNATIONAL SHOW CAVES ASSOCIATION



Union Internationale  
de Spéléologie



# Join ISCA!



## INTERNATIONAL SHOW CAVES ASSOCIATION

Join us and become an ISCA Member

Visit [www.i-s-c-a.org](http://www.i-s-c-a.org) for details.

There are many membership benefits!



## INTERNATIONAL SHOW CAVES ASSOCIATION

### ABOUT INTERNATIONAL SHOW CAVES ASSOCIATION

The [International Show Caves Association \(ISCA\)](#) was founded in 1990 and is headquartered in [Frasassi/Genga, Italy](#),

ISCA is an international organization of persons, associations, corporations, and government agencies who own, manage or operate [show caves](#) that are open to the public. ISCA provides a critical forum for show caves to network and collaborate on matters that pertain to their caves. ISCA aims to promote, encourage, and support the cooperation of show cave operators, speleologists and cave enthusiasts through the sharing of information and to promote the preservation and conservation of caves, while increasing public interest in the world of show caves by way of unique marketing and the evolution of methods to enhance the show cave experience.



*Thanks to everyone who collaborated.*

*Editor: Juan José Tíscar Moya – Contact: [juan jotiscar@i-s-c-a.org](mailto:juan jotiscar@i-s-c-a.org)  
Issue: May & June 2021*

