



INTERNATIONAL SHOW CAVES ASSOCIATION

ISCA Newsletter

September -
October
2021

CONTENTS

12 months to go!

We are twelve months away from the **ISCA 9th Congress and NCA Convention**, which will be held from **September 21st to October 2nd 2022**, in **San Antonio, Texas**.

Hosted by **Natural Bridge Caverns**, the ninth congress is expected to become the meeting point for cave enthusiasts who come from every corner in the world, including a wide number of persons, agencies, associations and corporations.

During these days, participants will be able to attend a series of **trips** in order to learn more about some of the most beautiful caves in the **Lone Star State (Texas)**, as well as learning more about San Antonio and some of the towns and cities in the area.



In **2018**, 46 delegations met in **Genga-Frasassi (Italy)**, in order to exchange knowledge and discuss topics related to the world of caves and tourism, including dynamic pricing, science, tourism development, new media and state-of-the-art lighting.

Read more about the **ISCA 9th Congress and NCA Convention** in our newsletter, and don't forget to contact us to learn more about upcoming events.



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**.



Find us on:
facebook®

FOLLOW US!

Our **Facebook page** is the best place to share your materials! Do not forget to **like us**!



Message from the President

by Brad Wuest

Hello ISCA members & friends,

I pray that each of you, your families and co-workers are healthy and safe. I know many parts of the world continue to be challenged with COVID cases due to new variants. Our area has recently experienced a spike due to the Delta variant, which has stressed our hospitals.

It is certainly a challenge managing our show cave businesses in this ever-changing environment. I wish all of you the best as you continue to evolve with the latest health and safety recommendations as you operate your show caves and fulfil the important roles we play of protecting and preserving caves, educating and entertaining guests, and providing jobs and helping the economy of your region.



Brad and his daughter Millie

On a positive note, many show caves from around the world are reporting that they have had a very successful season in terms of excellent visitation and revenue! We have seen the same trend at our show cave, [Natural Bridge Caverns](#). Pent-up demand from people who did not travel or traveled less last year, people spending more now because they spent less while they were staying home during the height of the pandemic, and people traveling in their own countries due to difficulties crossing borders and acquiring visas have all been credited for a surge in people traveling closer to home. I also think the awareness and interest created by the [International Year of Caves and Karst \(IYCK\)](#) is helping, too. I hope your show cave has been able to capitalize on this positive trend.

Visitation at our show cave has slowed down as children return to school. My younger children started school last week and my oldest daughter started her college classes today. For many show caves, school fieldtrips are an important component of our businesses and educational outreach. As we learned from the [International Show Cave Survey](#) ISCA conducted in 2020, show caves worldwide lost 13% (5.44 million) of visitors to school fieldtrips being canceled due to COVID in the first 6 months of 2020. In the United States alone, those figures were 24% (1.05 million). At this time, it's uncertain how much school group visitation will resume in the last four months of 2021 or in 2022.

We will soon be one year out from ISCA Congress 2022 in San Antonio, Texas, USA. The dates are September 21 to October 1, which includes the optional pre and post Congress trips. We will be staying at the Westin Hotel on the beautiful San Antonio Riverwalk. Our general assemblies, meetings and presentations will conveniently be at the Westin Hotel, too. Those who choose to attend the pre-Congress trip will get to see [Carlsbad Caverns National Park](#) and the [Caverns of Sonora](#). For the optional post-Congress trip, we are planning to take you to [Cave Without a Name](#), [Longhorn Cavern State Park](#) and [Inner Space Cavern](#) followed by a rodeo performance!

During the Congress we will host you for a day at [Natural Bridge Caverns](#), dancing at [Gruene Hall](#) which is the oldest dance hall in Texas, and a visit to [The Alamo](#) world heritage site.

A unique aspect of this Congress is that it's blended with our [National Caves Association USA's](#) convention which doubles the attendance, networking, and collaboration amongst show cave operators.

My team is working hard to organize an unforgettable Congress that will be enjoyable, inspiring, and packed full of valuable networking and learning opportunities that will help you and your show cave. We will soon be providing you with more detailed information, a webpage dedicated to the Congress will be launched, and we will open registration. We want all of you to be able to plan your trip and budget for attending the Congress as soon as possible. Please stay tuned for more details. I am so excited to welcome all of you to Texas, USA next year for an amazing Congress!

Please enjoy this wonderful newsletter and if there is anything ISCA or I can do for you, please let me know.

Blessings,

**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

President

International Show Caves Association



INTERNATIONAL SHOW CAVES ASSOCIATION



From the editor

by Juanjo Tíscar (contact: juanjotiscar@i-s-c-a.org)



Me and my pet, Tiza. I'm the one on the left!

Dear ISCA friends,

Even though the summer season is almost over, I really hope your caves keep welcoming as many visitors as possible in the upcoming months.

I wanted to spend these few lines in order to encourage you to participate in the next newsletters by sending information (articles, flyers, photos, videos...) about any event you may consider of interest for the rest of our community.

In the **International Year of Caves and Karst**, every event is taken into account!

Last month my girlfriend and I visited **Palma de Mallorca (Spain)** and found this beautiful spot in **Portocolom**, so we decided to take some pictures before relaxing while looking at the lighthouse in the background. As I mentioned in some of the previous newsletters, the Spanish islands are the perfect place to visit some of the most amazing caves in our country, so don't forget to pay a visit to **Cuevas d'Artà**, **Cuevas dels Hams** or **Coves del Drach** if you ever visit us! By the way, big **THANKS** to the staff working there and their invitation. They do such an amazing work every single day so that tourists leave with the best of the experiences, **congratulations**!



A beautiful cave in Portocolom (Spain)

ENGLISH

SPANISH



Remember my book is **available** for y'all (click on the picture). I really wanted to thank those who purchased it and sent me an e-mail in the last months. It's so nice to see your effort is somehow compensated!

Also, **THANKS** to my family at **Natural Bridge Caverns**, who decided to sell my book on **their online gift store**, too.

If there is any other cave interested in selling it, please, contact me!

2021 dues and Membership Renewal form



INTERNATIONAL SHOW CAVES ASSOCIATION

Dear ISCA members and friends,

Now that the summer season is getting to an end, we wanted to remind everyone about the importance of checking the payment of the 2021 membership dues.

We really know it is a busy period, and we understand it and acknowledge your effort. Taking this into account, we would highly appreciate if you could take a moment and reach us in order to settle these payments.

If you have any questions whatsoever, please reply and I'd be happy to clarify them.

Francesca Serpentine

ISCA Secretary & Treasurer (*Contact: iscasecretary@i-s-c-a.org*)

ISCA Membership Application

Not a member of the International Show Caves Association yet? We would be delighted to receive a **Membership Application** from you!

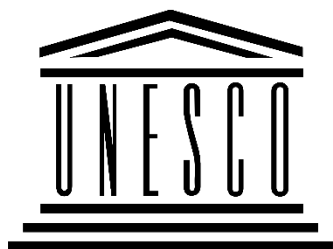
Visit [our website](#) and find out more about the **2021 Membership Renewal form** and **Membership Application**.

Become and ISCA member now!

Francesca Serpentine

ISCA Secretary & Treasurer (*Contact: iscasecretary@i-s-c-a.org*)

Official presentation of the International Year of Caves and Karst 2021 at UNESCO



The **COVID-19 pandemic** prevented show caves and organizations around the world from celebrating many of the **events** which were expected to take place during **2021**. While many of them were **cancelled** or **reduced** the content and capacity of in-person meetings, some others could finally be streamed **online**.

That is the case of the **International Year of Caves and Karst 2021**, since many of the participants decided to share their actions via their **YouTube channels** and other platforms. Therefore, people from every corner in the world were grateful to attend virtual events and enjoy the most interesting contents online.

Now, the **UIS** has announced that the **IYCK 2021** will be presented at **UNESCO headquarters** (Paris, France) on **September 13 at 9.30h (Paris time)**. Due to restrictions related to the pandemic, only **100 people** will attend the event in person. However, additional **500 people** can participate via **Zoom** and anyone who wishes can join the live streaming which will be accessible on the **official UIS YouTube Channel**.

The UIS International Year of Caves and Karst: UNESCO Protected Areas and UN Agenda 2030
September 13, 2021, at UNESCO Headquarters in Paris

As you know, the International Union of Speleology-UIS, in partnership with 56 member countries and over 230 institutions and organizations around the world, has proclaimed an International Year of Caves and Karst 2021.

An event to present the IYCK 2021 has been organized under the patronage of the UNESCO Director-General by the UIS in partnership with the Permanent Delegation of the Republic of Slovenia to UNESCO. The event will take place on 13 September from 9.30 to 13.00 (Paris Time) on the UNESCO Headquarters in Paris (see program below).

Due to COVID -19 restrictions, the event will be limited to invited guests from UNESCO national delegations and UIS & IYCK partners: 100 people will attend in person, with an additional 500 people able to participate via Zoom.

For everyone else, live streaming of the event will be handled via UIS YouTube Chanel – you are welcome!

The program, September 13, Celebration of the UIS International Year of Caves and Karst 2021: UNESCO Protected Areas and UN Agenda 2030

09:30-10:00. Coffee for participants.

10:00-10:15. IYCK 2021 video.

10:15-10:45. Welcome addresses.

10:45-11:15. Keynote presentation: A World of Karst, Caves and People

11:15-11:30: Break

11:30-13:00. Discussion panel. Panelists will give short presentations on karst and caves in the context of UN Sustainable Development Goals and UNESCO Protected Areas (World Heritage, Global Geoparks, Ramsar and MAB/Biosphere Reserves), followed by discussion and questions from the audience.

Source: UIS Facebook page

Details about the 2022 ISCA Congress & NCA Convention



INTERNATIONAL SHOW CAVES ASSOCIATION



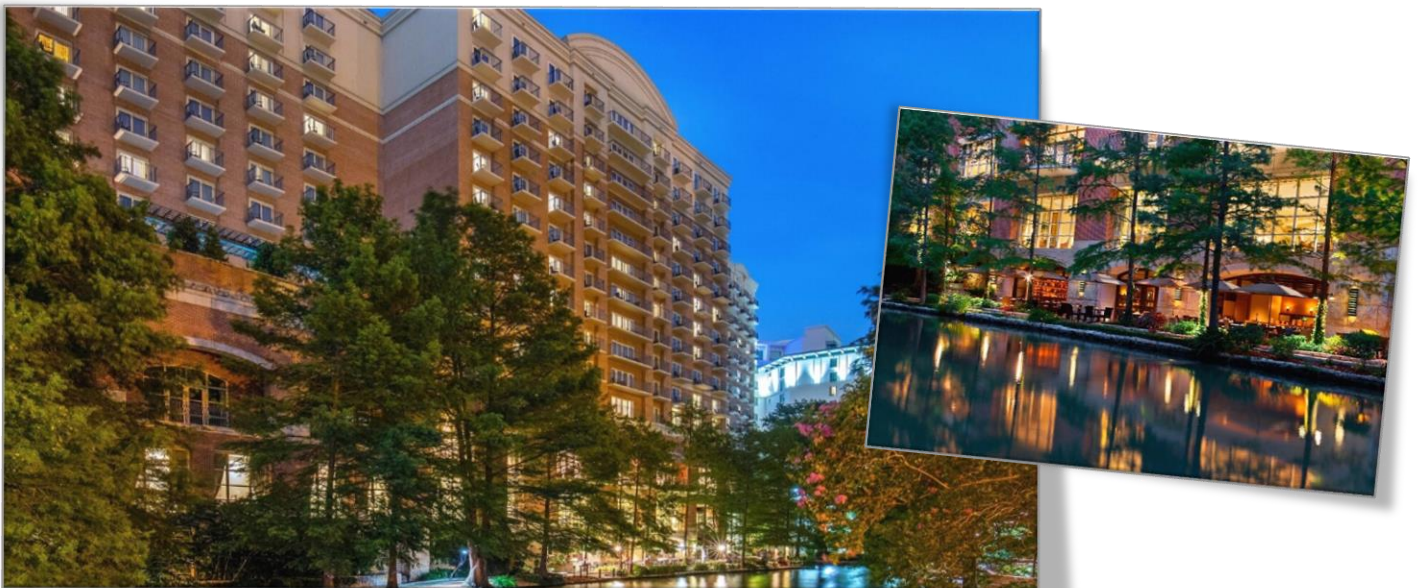
Hosted by:

**NATURAL BRIDGE
CAVERNS**

The 2022 [International Show Caves Association](#) Congress & [National Caves Association](#) Convention will be held in **Texas (USA)** and hosted by [Natural Bridge Caverns](#) from **September 21st to October 1st, 2022** (including pre and post trips).

- Congress dates: **September 25th** (Board Meetings) & **September 26th to September 29th** (other)
- Hotel: [The Westin Riverwalk](#)

More information will be announced soon. You can visit [ISCA](#) and [NCA](#) websites and follow them on **social media** in order not to miss anything.



The Westin will be the hotel where visitors can stay during the Congress

Professor Paolo Forti

interviewed by Juanjo Tíscar



INFO

Full name: Paolo Forti

Date and place of birth: 14 September 1945, Forlì, Italy

Profession: Retired in 2015, former Full Professor of Speleology and Geomorphology at the University of Bologna

Hobbies: Photography, Geographical explorations

Favourite cave: Puerto Princesa Underground River (Palawan, Philippine)

Approx. number of caves visited: Far over 1000 in 70 different countries in five continents

Professor Paolo Forti working inside the "F. Anelli" Speleological Documentation Centre, the library of which was founded by him in 1975 and it is now one of the largest speleological libraries in the world (Photo M. Vianelli).

We are so thankful **Professor Paolo Forti** collaborated in this issue of the ISCA Newsletter.

Q: What three words would you choose to describe the world of caves?

A: Pristine environment, Exploration and Science.

Q: Are you currently working or collaborating on any project?

A: I am still working on several different studies related to cave mineralogy and speleothems. But the last big speleological project in which I was involved for over 25 years was related to the Puerto Princesa Underground River (Palawan), which is also the most important show cave of Philippine (**DE VIVO A., FORTI P., PICCINI L., RUSSO N. (Eds.) 2018 A Cave Between Land and Sea - The Wonders of Puerto Princesa Underground River Skirà, 224 p.**)

Anyway, in my life, the most complex and challenging project in which I was deeply involved was the exploration and the study of Naica caves (Mexico), due to fact that inside them there was a deadly climate (47-49 °C and 100% of relative humidity). This project lasted from 2002 to 2010 and involved over 40 researchers from Universities and Research Structures of 15 Countries of 3 Continent. Just this year a coffee table book was printed summarizing the results of this research.



Exploring caves in the desert of Saudi Arabia (Photo of J. Pint).

Q: Could you name some of your latest publications?

A: In this year, beside some scientific papers, three different books have been printed the first, in English with me as single author, the second with J.M. Calaforra in Italian, and in the third, printed in three languages (Italian, Spanish and English) I was just a co-editor and author of several paragraphs:

1- **Forti P. 2021 - "Fingal's Cave - An historical and iconographic trip to the mythic Scottish cave that became a symbol of the Romanticism" 80 p., edited by the Italian Speleological Society.** It is a book totally based on the materials present in the F. Anelli Documentation Centre of Bologna and describes the evolution of the iconography of this very small basaltic cave which is probably the less visited show cave in the world, but it is without any doubt the most represented.

2- **Calaforra J.M., Forti P. 2021- "Speleotemi peculiari delle Grotte in Gesso ed Anidrite" 140 pp: Memorie Dell'Istituto Italiano di Speleologia, vol 35.** This is a manual describing all the speleothems and cave minerals presently known, which are restricted within sulphate caves.

3- **"Naica" 240 pp. is a Coffee table book with over 200 photos, edited in Italian, English and Spanish by La Venta Esplorazioni Geografiche,** dealing with the epopee of the exploration and study of the giant gypsum crystals of the caves within the Naica Mine (Mexico).

Q: How do you think the pandemic affected Italian show caves?

A: The effect of Covid 19 over the activities of the Italian Show cave was tremendous: practically all of them was closed for over one year and in this period no one tourist had the possibility to visit these caves in the whole Country. Most of the cave guides lost their workplace and still only in the last couple of months the situation begun to improve even if the number of visitors/days is still far less than that of January 2020.

Q: Are you attending any special event in the next few months?

A: I am already sure to take part to the **International Congress of Speleology**, which was postponed from 2021 to 2022 due to Covid pandemic.

RANKING: TOP-CAVERNERS

1. Kyung-Sik Woo - +1,000 caves!
1. Paolo Forti - +1,000 caves!
2. Pavel Gejdoš - 325 caves!
3. Andy Spate - 250 caves
4. Hein-Jacques Gerstner - 124 caves
5. Heros Lobo - 101 caves
6. Rafael Pagés - 100 caves
7. Juanjo Tíscar - 25 caves
8. Nuno Jorge - 18 caves

How many caves have you visited?

Contact juanjotiscar@i-s-c-a.org and let us know!



General view of Cueva de los Cristales, Naica Mine (Mexico). (Photo T. Bernabei, La Venta esplorazioni geografiche).

Q: What is a normal day like in your life?

A: Even though I am retired since 2010, I still go every day in my Department of the University of Bologna for about 4-6 hours. Part of this time is devoted to the “F. Anelli” Speleological Documentation Centre, while other time is spent in studies and research mainly on curious speleothems or rare cave minerals sent to me by cavers from all the world because I am regarded as the world expert in this field having printed in 1997, together with Carol Hill, the book “**Cave Minerals of the World**”. When coming back from the Department I make a one hour walk downtown together with my wife and, once a week or so, I have a dinner with friends. Two years ago, I stopped exploring or even visiting wild caves and now the single natural cavities I still visit are show caves.

Q: How many caves have you visited?

A: I cannot give an exact number of them because in my 59 years of activity I never take a register of the visited caves. Anyway, I think that they are, by far, **over 1000**, and some **200** of them were **show caves**. I can say that I visited wild and/or show caves in 70 different Countries of all the 5 continents. The reason why I was, and still I am, deeply interested in show caves is for the simple reason that they are the best caves in which scientific research can be performed. Moreover, show caves are fundamental for spreading knowledge on karst and to teach correct environmental practices to visitors to save karst and caves. For this reason, thanks to the Italian Speleological Society, from 10 years ago on, I co-operate with the Italian Show cave association to give lessons on related topics to their cave guides and staff.

Q: Which is the cave which most impressed you?

A: Hard to say... caves are so tremendously different from each other and all of them contain elements that make them singular and therefore important... anyway, at least the following three were fundamental in my speleological life.

The first was Santa Barbara cave, a mine cave of Sardinia, which was roughly transformed into show cave, when I visited it in 1967: This rather small cavity is a true jewellery casket being filled by beautiful barite crystals and other rare cave minerals and speleothems. It is thanks to this cave that I started studying cave mineralogy and later became world renown in this research field.

The second was the Puerto Princesa Underground River (Palawan, Philippines), perhaps the biggest underground estuary of the world, which I started studying in 1991 (the research went over for some 25 and at least my contribute ended in 2017 with the publication of the book (edited in Italian and English): A Cave Between Land and Sea - The Wonders of Puerto Princesa Underground River). This very big karst system (today over 35 kms long) is perhaps the most complex ecosystem of the world (it was inserted in the UNESCO World Heritage list as one of the first Karst sites). It is by sure the best show cave I ever visited: in fact even being visited by over 300.000 visitors/years it is still in pristine conditions (no electric lights, no artificial trails... nothing has been changed!).

The last one is Cueva de los Cristales, a small cave intersected by a gallery of the Naica mine (Mexico) at the beginning of the third millennium. This cave became immediately world renown hosting, by far, the largest gypsum crystals of the world. Since then, for over 10 years, as a member of La Venta Esplorazioni Geografiche, I had the possibility to co-ordinate a huge international research team to study all the characteristics of this incredible cave which allow to prepare and print in this year the book “Naica”.

Q: Who would you like us to interview in the next newsletter?

A: **José Maria Calaforra Chordi** (Almería, Spain).

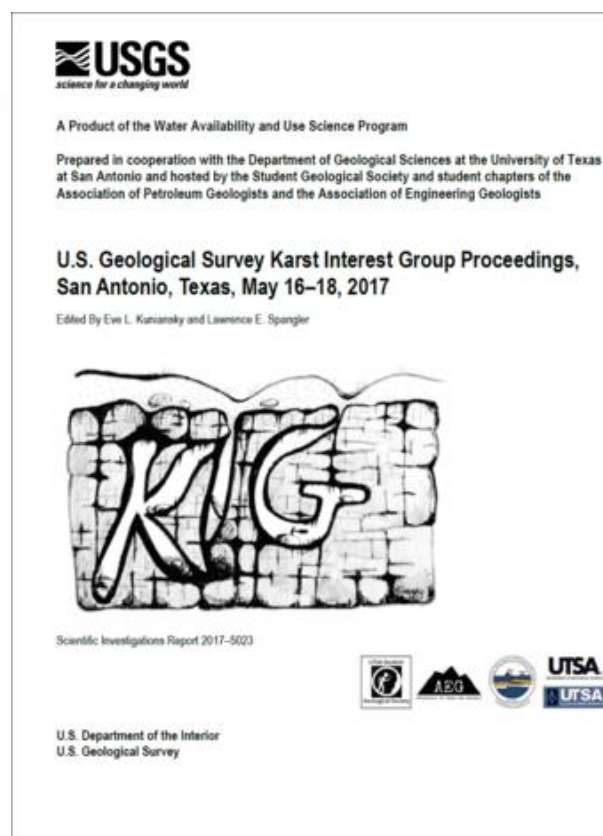
8th Karst Interest Group (KIG) Workshop



The **8th U.S. Geological Survey Karst Interest Group (KIG) workshop** will be held **virtually** on **October 19-21, 2021**. The **purpose** of the workshop is to bring together scientists from different offices of the **USGS, Department of the Interior**, other **Federal** and **state agencies**, **research institutes**, and **universities** to present the results of **scientific work** in **karst areas** or discuss karst related programs in their bureaus or offices. The workshop will consist of **two days of technical presentations and poster sessions**.

The **KIG Coordinating Committee** will be contacting all registered attendees informing them of the dates for the workshop and information on attending/presenting virtually.

If you have any questions, please contact **KIG_group@usgs.gov** and click on the image below to find our more about past **publications** by **USGS**.



International Association of Hydrogeologists Congresses: Brazil (47th) and Belgium (48th)



**47TH IAH
CONGRESS
BRASIL 2021**



48th IAH Congress
BRUSSELS BELGIUM 2021
Inspiring Groundwater

**47TH IAH
CONGRESS
BRASIL 2021**

ONLINE | 09/21/2020 – 08/20/2021

HYBRID | AUGUST 22ND – 27TH, 2021
ESPAÇO ARCA - SÃO PAULO - BRAZIL

XV LATIN AMERICA
HYDROGEOLOGY
CONGRESS

XXI BRAZILIAN
GROUNDWATER
CONGRESS

XXII BRAZILIAN
MEETING OF
WELL DRILLERS

FENÁGUA 2021
NATIONAL WATER
TRADE SHOW

Find out more about the event!

Join the WhatsApp groups!

Download the IAH 2021 app!

Reminder: watch all the video of the event on the official [ABAS YouTube channel](#).

The COVID-19 pandemic did not allow organizers to celebrate an event which was originally scheduled to take place from September 20th to 26th, 2020, but their effort made it possible to celebrate the **2021 GroundWater World Congress in Brazil**, which gathered the **International Association of Hydrogeologists (IAH)**, the **Latin American Groundwater Association (ALHSUD)** and the **Brazilian Groundwater Association (ABAS)** in order to celebrate the **47th IAH Brazil Congress**, the **XV Latin American Congress of Hydrogeology**, the **XXI Brazilian Congress of Groundwater**, the **XXII National Meeting of Well Drillers** and the **National Water Fair**.

The main theme of the Congress is “**GROUNDWATER 4.0: CONNECTED, VISIBLE AND ETHICAL**”, which aims at building relationships, sharing experiences, learning about research results, improving public policies and having access to all products that industry and service providers create and develop.

Don't forget to participate in the **48th IAH Congress**, which will take place in **Belgium (6-10 September 2021)**. Visit their [website](#) for more information and don't miss our next newsletters in order not to miss anything about the event.

World Tourism Day 2021, Tourism for Inclusive Growth



On September 27th, different organizations, associations and individuals commemorate **World Tourism Day**, which started to be celebrated by the **United Nations** in 1980. Last year, the date's main theme was '**Tourism and rural development**', which focused on the importance of worldwide tourism in preserving and promoting culture and heritage.

Among the thousands of online contributors, the **International Show Caves Association** became one more participant during this special day. **Brad Wuest**, ISCA President and CEO/President at Natural Bridge Caverns (Texas, USA), shared **an optimistic message** regarding the natural, cultural, historical and economic value of show caves around the world.

This year, **World Tourism Day 2021** focuses on '**Tourism for Inclusive Growth**' and it is expected to have an international impact which promotes the recovery and growth of worldwide tourism.

ISCA would like to encourage show caves from every continent to join us in the celebration of WTD 2021 and share with us both virtual and in-person events which may be of interest for many people around the world.



Brad Wuest, ISCA President, celebrates World Tourism Day 2020 at Natural



NSS Virtual Convention



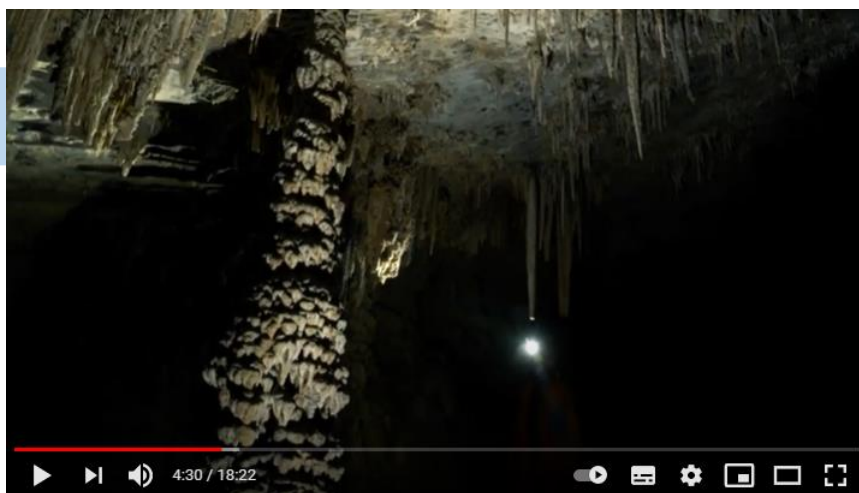
The **National Speleological Society** hosted their second virtual convention. This year's sessions included many caving topics such as photography, video, diving, and conservation, among others. Click on the link below and visit their **YouTube channel** to find out all the videos.



2021 NSS Awards

Lost Copper Mines of Connecticut



**Exploring Clarksville Cave****Invisible river****Castleguard Cave
Hindsight 2020**



Cave Conservation and Restoration International Workshops

CaveSim: Middle School Programs



Over, Under, and Through: Geologic Mapping



**2022 NSS Convention
South Dakota**

**2023 NSS Convention
Elkins (West Virginia)**

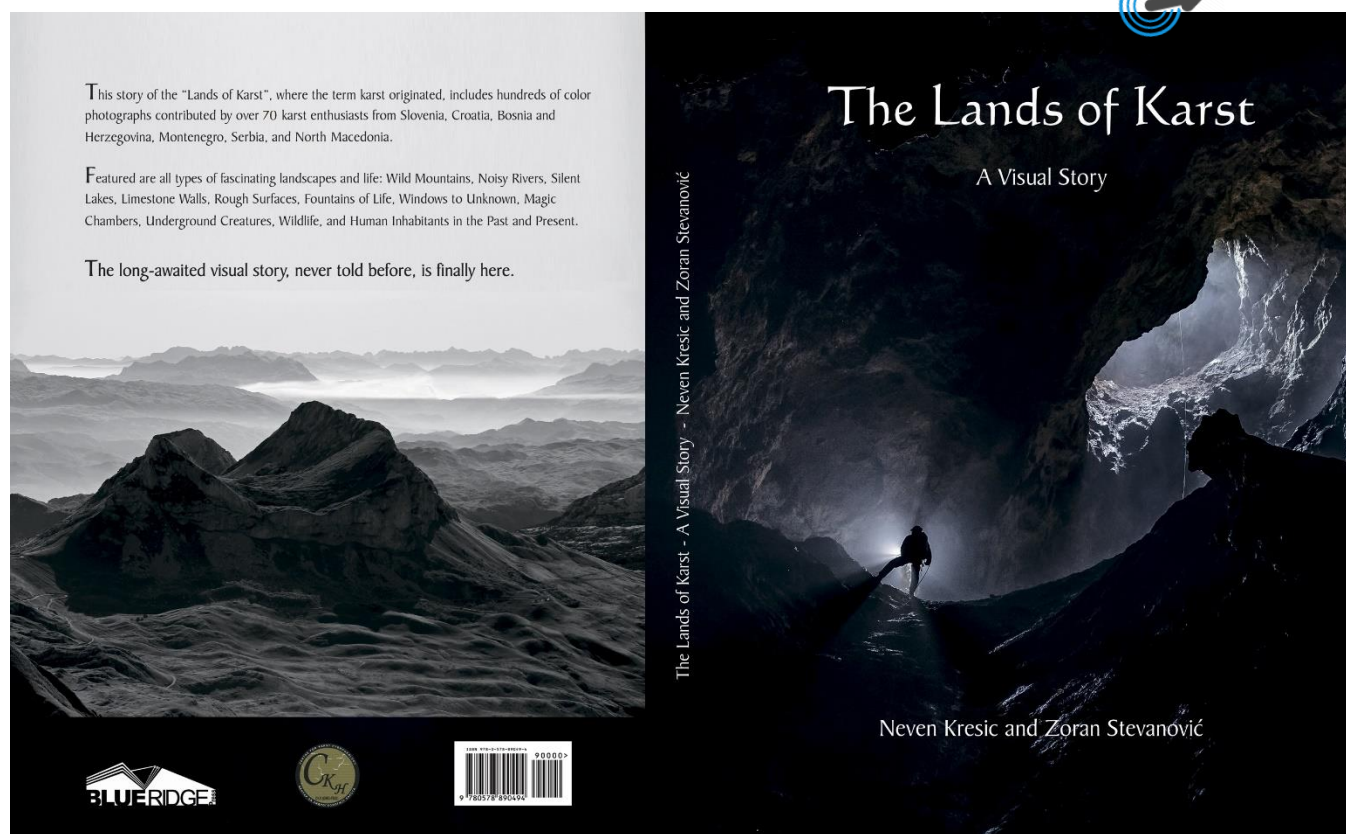


THANKS FOR SHARING!

The Lands of Karst, A Visual Story



A contribution to the **International Year of Caves and Karst 2021 and 2022**, the book comprises several hundred color **photographs** from six Lands of Karst - **Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, and North Macedonia**, which had been recorded by **more than 70 geologists, speleologists, biologists, archaeologists, mountaineers, professional photographers** or simply **amateurs** - karst and caves lovers. The **editors** of this story are **Neven Kresic and Zoran Stevanović**, who following the rule “**a picture is worth a thousand words**” prepared very short informative texts for 10 chapters featuring photographs of noisy rivers, wild mountains, silent lakes, the sea, limestone walls, rough surfaces, fountains of life, windows to unknown, magic chambers, underground creatures, wildlife, and past and present human inhabitants. [Download now](#) or [get a printed copy!](#)



Indiana Cave Capers 2021



The annual caving event sponsored by the [Central Indiana Grotto](#) was celebrated on **6-8 August 2021**. Located near Mitchell, Indiana, the event is a weekend of fun, fellowship, camping out and caving. As an event geared for cavers of all skill levels, there are many led cave trips scheduled as well as opportunities to lead your own.

Follow the [Indiana Cave Capers Facebook Page](#) not to miss any detail!

Karst-O-Rama



**Greater
Cincinnati
Grotto**



[Karst-O-Rama 2021](#), the annual caving convention and fund raiser hosted by the [Greater Cincinnati Grotto \(GCG\)](#), took place at The Great Saltpetre Cave Preserve (GSP) near Mt. Vernon, Kentucky. KOR is like a family reunion that's presented by cavers, for cavers and runs from Friday through Sunday. Activities include guided cave trips, cave equipment vendors, the Guano Grill at the picnic shelter, kids' activities, and caving-related contests, among many others. There is a "Howdy Party" Friday evening for everyone to get reacquainted, and on Saturday evening there is a banquet, program, and door prizes, followed by live music and a great dance party.

Follow [Karst-O-Rama on Facebook](#) and learn more about this great event!

34th International Geographical Congress, Global Karst Critical Zone and Land Use Planning



The **34th International Geographical Congress** was held in **İstanbul, Turkey** from **August 16 to August 20** under the theme **Bridging the Continents**. Visit the following [virtual program](#) in order to click on the different links and discover more about the main areas of discussion. You can also learn more about the [Karst Commission](#), which include highly related contents with the underground world.

You can also visit the [website of the event](#) in order to learn more about other topics of interest.

54th NCA Convention, Lake of the Ozarks, Camdenton, Missouri

The 54th NCA Convention will be held in [Lake of the Ozarks](#), **Camdenton, Missouri** from **October 10 to October 14, 2021**. Don't forget to visit the [NCA website](#) and check the [provisional agenda](#) to discover everything related to such an important event.



Partners and events of the IYCK2021

Hundreds of **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 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 -

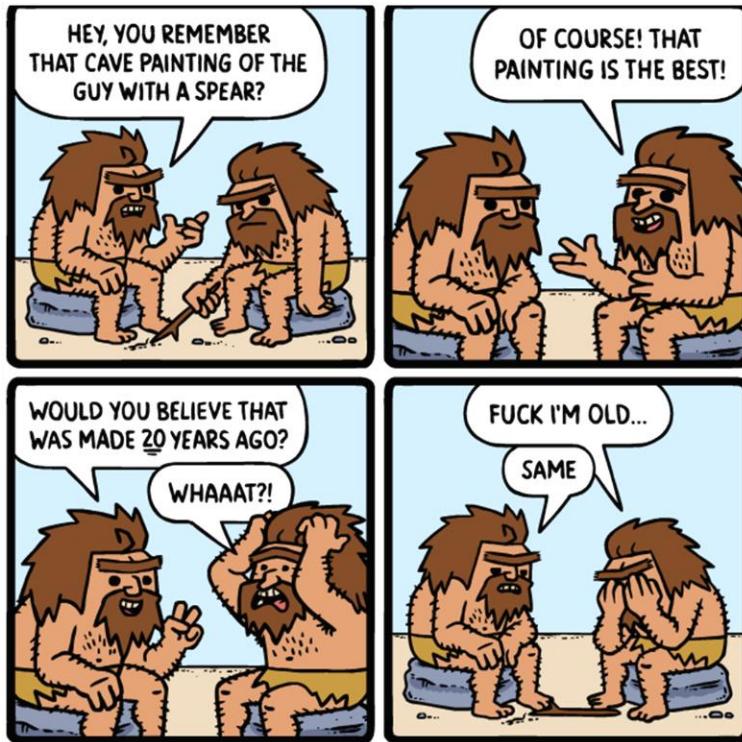
We encourage you to download and use all of the IYCK files and information on the IYCK website. No permission is needed as long as you use it to promote the IYCK and teach the world about caves and karst. Please print, distribute, and share this information.

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:** September and October, 2021.
- **Location:** Speleological and/or karst regions in Poland.
- **Event name:** Speleo-trip Days
- **Event description:** 1-3 days in particular speleological or/and karst regions during which local speleologists (members and friends of the Speleological Section of the Polish Copernicus Society of Naturalists as well as members of speleology and caving clubs) will guide excursions and outdoor meetings for local societies: school groups, educators, authorities and other in order to teach about scientific, natural, environmental and economical relevance of caves and karst areas.
- **More information.**

The funny side of life



THIS COMIC MADE POSSIBLE THANKS TO BRANDON DELAMP

MRLOVENSTEIN.COM

Source: [Joyreactor](#)



Source: [Cartoonistgroup](#)

Latest bulletin by the UIS



The [latest bulletin](#) by the **Union Internationale de Spéléologie** with everything you need to know about:

- The **International Year of Caves and Karst 2021 and 2022**.
- **Andy Eavis**, UIS Past President, honored in the UK.
- **UIS Prizes 2021**: New deadline for nominations.
- **New techniques** for remote location of unknown caves.
- **In memoriam**: Jean Nicod (France), Christian Dodelin (France) and Adolfo Eraso Romero (Spain).
- And more! You can also check the complete collection of UIS **publications** on this [link](#).



UIS BULLETIN
Union Internationale de Spéléologie
Volume 63-1 - June 2021

**INTERNATIONAL YEAR
OF CAVES AND KARST 2021**


UIS Member

**The world has embraced this cause making
people change the way they see caves and karst
JOIN US TOO!**

ALSO IN THIS ISSUE

- Andy Eavis, UIS Past President, honored in the United Kingdom
- Brazil joins the Cave Animal of the Year campaign and starts the work of organizing the 19th ICS in 2025
- New techniques for remote location of unknown caves
- The loss of Adolfo Eraso Romero and Christian Dodelin and more...

[Contents](#)  



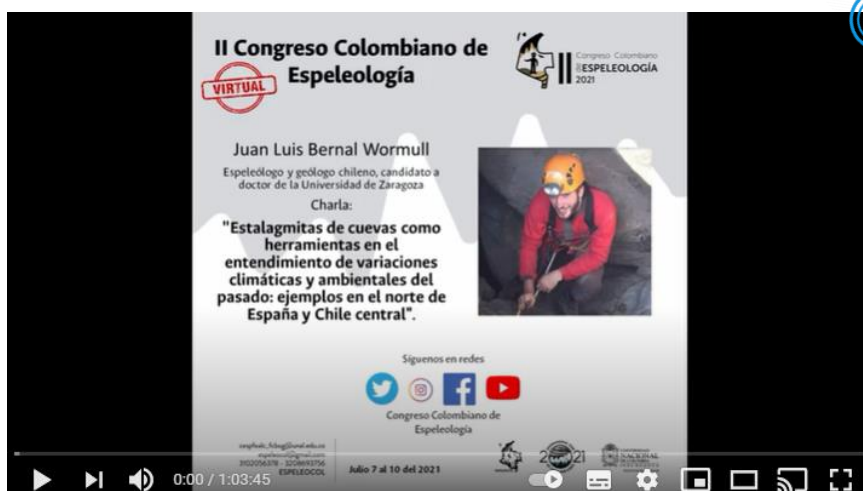
2nd Colombian Congress of Speleology



The most important speleological event in **Colombia** was held **online** from **July 7th to July 10th, 2021**. Organized by **ESPELEOCOL**, which aims at promoting, coordinating and disclosing scientific studies and research which contribute to the conservation and sustainability of speleological resources, the event provided viewers with a series of online videos dealing with varied topics. You can find some of the most interesting (mostly in Spanish) in the links below:



- Click on the images to watch -



Stalagmites as a tool to understand weather and environmental variations in the past

by **Juan Luís Bernal Wormull**

La Cueva de las Moyas, Bogotá, Colombia: cartographic and speleological update

by **Gonzalo E. Valdivieso**





Protection and conservation of the speleological heritage in La Nación

by [Manuel Gómez](#)

Nutrition and physical training of an speleologist

by [Addy Loira](#)



Speleotourism and sustainability in Latin American caves

by [Alfonso Figueiredo](#)

IAAPA Expo Europe 2021 - Barcelona

**IAAPA®**

The Global Association
for the Attractions Industry

Conference: September 27 - 30 / Trade Show: September 28 - 30

Location: Barcelona, Spain

IAAPA Expo Europe is the largest international trade show and conference and the primary meeting point for the attractions industry in the **Europe, Middle East, Africa (EMEA) region**. Thousands of **operators and managers** gather to discover the latest innovations, technology, and services related to the leisure business.

The Conference programme includes keynotes, industry presentations, panel discussions and workshops covering industry trends, best practices and outlooks. **Special Events, EDUTours** and **networking receptions** offer connection opportunities.

IAAPA Expo will be the **meeting point** for operators, suppliers, investors, and developers from amusement and theme parks, integrated hotels and resorts, water parks attractions, family entertainment centres, historic/cultural/tourist attractions, museums and science centres, hotel resorts, shopping malls, zoos, aquariums and more!

Schedule



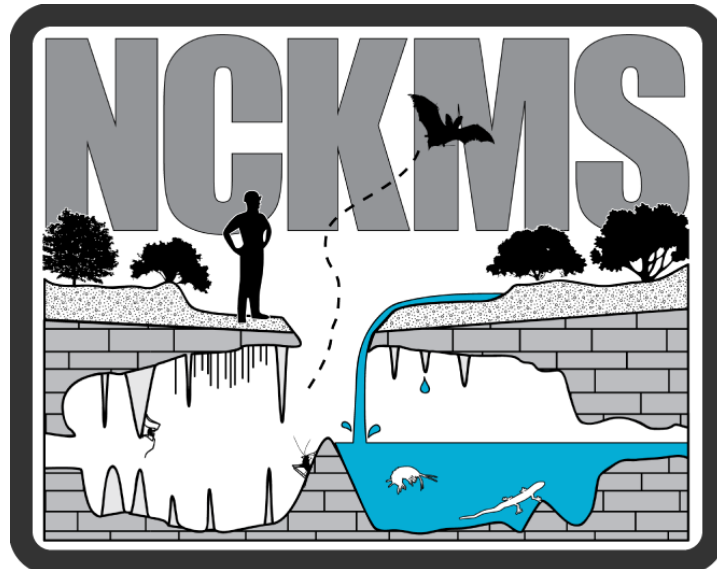
Location



Pricing



National Caves and Karsts Management Symposium (NCKMS)



San Marcos, Texas, will be hosting the **23rd biennial meeting** of the **National Cave and Karst Management Symposium (NCKMS)** on **1-5 November 2021**.

NCKMS meetings are scheduled at different locations across the **United States** in order to highlight local karst resources and management issues. The last and only one held in Texas took place in New Braunfels, in 1989. Since then, there has been an obvious growth in the state's number of caves and visitors looking for subterranean experiences.

During the event, some of the main topics deal with research, resource management, stewardship activities, education communication, and sustainability, and the different sessions, field trips, and workshops also provide examples in both show cave and wild cave resource management. **Austin Water – Balcones Canyonlands Preserve** will be the host of the event, which includes activities such as a boat tour of Spring Lake and a tour of nearby **Natural Bridge Cavers**.

We invite all our readers to visit the **NCKMS website** in order to learn more and find all the information related to the event, as well as a **Contact Us** section in which the organization is ready to solve any doubt.



Speleocinema 2021 Mondoñedo: International Speleological Cinema Days



EspeleoCine 2021 Mondoñedo



The **Federación Galega de Espeleoloxía e Canóns** (Galician Federation of Speleology and Canyoning) organizes the **Xornadas Internacionais de Cinema Espeleolóxico – EspeleoCine 2021 Mondoñedo** (International Speleological Cinema Days), which will be held in **Mondoñedo** (Lugo, Spain) on **December 3rd, 4th, 5th, 2021**.

The aim of the event is to spread caving and the cinematographic practice in underground cavities. Attendance will be **free of charge** for anyone interest in the world of caves...and **cinema**!

Find all the information about the event [here](#), and don't forget to visit the [FGE website](#).



International Speleological Cinema Days



Federación
Galega de
Espeleoloxía

Mammoth Cave: A Hotspot of Subterranean Biodiversity in the United States

Niemiller ML, Helf K, Toomey RS. Mammoth Cave: A Hotspot of Subterranean Biodiversity in the United States. *Diversity*. 2021; 13(8):373. <https://doi.org/10.3390/d13080373>

- Read the full article -

Ganxiao Dong: A Hotspot of Cave Biodiversity in Northern Guangxi, China

Huang S, Wei G, Wang H, Liu W, Bedos A, Deharveng L, Tian M. Ganxiao Dong: A Hotspot of Cave Biodiversity in Northern Guangxi, China. *Diversity*. 2021; 13(8):355. <https://doi.org/10.3390/d13080355>

- Read the full article -

Linking Hydrogeology and Ecology in Karst Landscapes: The Response of Epigean and Obligate Groundwater Copepods (Crustacea: Copepoda)

Di Cicco M, Di Lorenzo T, Iannella M, Vaccarelli I, Galassi DMP, Fiasca B. Linking Hydrogeology and Ecology in Karst Landscapes: The Response of Epigean and Obligate Groundwater Copepods (Crustacea: Copepoda). *Water*. 2021; 13(15):2106. <https://doi.org/10.3390/w13152106>

- Read the full article -

Bermuda's Walsingham Caves: A Global Hotspot for Anchialine Stygobionts

Illiffe TM, Calderón-Gutiérrez F. Bermuda's Walsingham Caves: A Global Hotspot for Anchialine Stygobionts. Diversity. 2021; 13(8):352. <https://doi.org/10.3390/d13080352>

[- Read the full article -](#)

Spatiotemporal Variations of Radon Concentration in the Atmosphere of Zhijindong Cave (China)

Weng X, Luo W, Wang Y, Zeng G, Wang S. Spatiotemporal Variations of Radon Concentration in the Atmosphere of Zhijindong Cave (China). Atmosphere. 2021; 12(8):967. <https://doi.org/10.3390/atmos12080967>

[- Read the full article -](#)

Diversity and Seasonal Dynamics of Airborne Fungi in Nerja Cave, Spain

Jurado V, Del Rosal Y, Liñan C, Martin-Pozas T, Gonzalez-Pimentel JL, Saiz-Jimenez C. Diversity and Seasonal Dynamics of Airborne Fungi in Nerja Cave, Spain. Applied Sciences. 2021; 11(13):6236. <https://doi.org/10.3390/app11136236>

[- Read the full article -](#)

Paleohydrogeology of the Karstic System of Fuentetoba Spring (Soria, Spain): An Interdisciplinary Approach

Sanz Pérez E, Fonolla C, Menéndez Pidal I, Rosas Rodriguez P. Paleohydrogeology of the Karstic System of Fuentetoba Spring (Soria, Spain): An Interdisciplinary Approach. *Sustainability*. 2021; 13(13):7236. <https://doi.org/10.3390/su13137236>

[- Read the full article -](#)

Postojna-Planina Cave System in Slovenia, a Hotspot of Subterranean Biodiversity and a Cradle of Speleobiology

Zagmajster M, Polak S, Fišer C. Postojna-Planina Cave System in Slovenia, a Hotspot of Subterranean Biodiversity and a Cradle of Speleobiology. *Diversity*. 2021; 13(6):271. <https://doi.org/10.3390/d13060271>

[- Read the full article -](#)



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Latest publications



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

[Cave Talk: August 2021](#)

[Cave Talk: September 2021](#)

Learn more about the **NCA** on CAVERN.COM



**Union Internationale
de Spéléologie**

The latest bulletin by the **Union Internationale de Spéléologie** with everything you need to know about the **International Year of Caves and Karst 2021...** and more!

[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 and we will publish your materials as soon as possible

Cave Lighting workshop, postponed!

Dear managers and owners of show caves!

Dear colleagues, friends and speleologists!

With a heavy heart we have to postpone the workshop "A kind of passion - Holistic tourism concept for show caves" from 21.10.21 - 24.10.21 to probably 23. - 27.10.2023 due to given reasons.

The planning is in full progress and we expect a great event with numerous participants at the new date. Of course, we will inform you as soon as we have new information.

Those who can hardly wait, like us, already have the opportunity to register without obligation.

Best regards,
Katharina



CAVE 4.0

Self-guided adventure tours in show caves and show mines



How do you guide individual visitors through the various locations of your own facility in a targeted, effective and safe manner?

This is where Cave Lighting can bring its expertise into play.

Light as your guide

Light is one of the most natural guiding tools for humans. When in doubt, people walk along the brightest path instinctively. Targeted lighting can therefore play a key role in helping visitors find their way around show caves and mines on their own. Instead of illuminating a facility completely and uniformly, visitors can be guided through the spaces by different light signals. For example, different areas being lit at overlapping times to instinctively guide the public to follow. Particularly in larger spaces, lighting that is coordinated with direction guidance can ensure groups remain together, which is harmonious with highlighting specific Points of Interest.

Audioguide

Already commonplace in many museums, self-guided tours can also be accompanied by an audio guide. Built into your new cave app an audio guides can be quickly downloaded onto any smartphone. Allowing more languages to be supported for increasing visits. One way they could be used within your space is having self triggering audio guides when guests are using the app. Using intelligent triggers placed throughout the space, these can communicate information with individual visitors.

Intelligent control

Individual Lighting and Sound solutions can best be realised as a collective unit when thinking about using Lighting as a guiding tool. For instance, the soundscape can subtly create a loop with a natural end whilst the lighting directs you to the next zone, creating a human centric control system. By zoning your space and running a human centric control system you can operate high and low season programs which additionally reduce energy consumption and reduce cave lamp flora, as well as supports much better socially aware control of all visitors.

Environment-friendly and budget-friendly

With modern, intelligently controlled lighting systems, energy costs can be significantly reduced thanks also to energy-efficient LED technology. The environment also benefits from modern lighting systems that don't have unnecessary generic illumination.

Especially for individual tours or smaller groups, the duty cycle of the lamps can be significantly reduced, which can also contribute to a reduction in lamp flora.



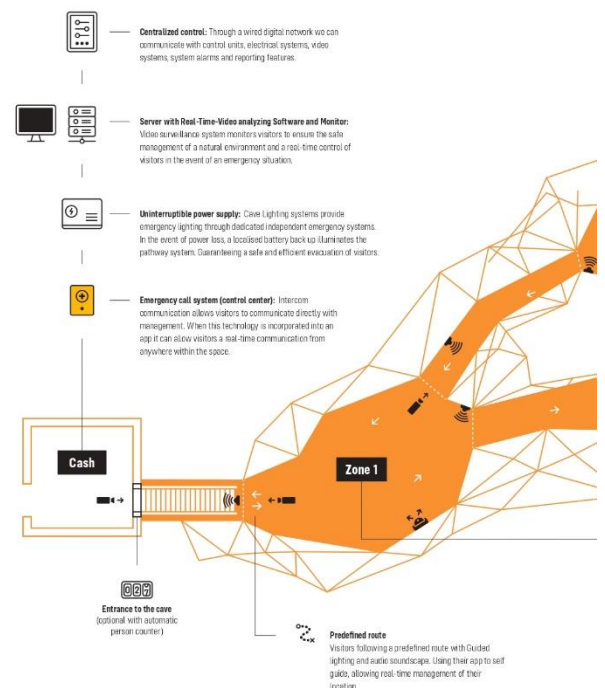
Two steps ahead:
Give your cave an update!

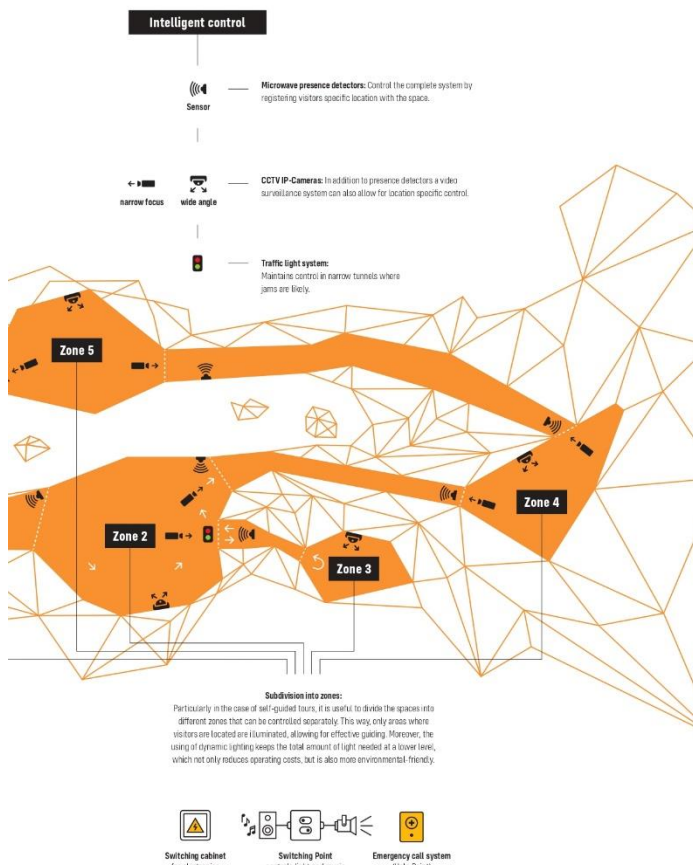
Descending into the depths, discovering a completely different, unknown world for once - that can become the highlight of any vacation. But how could operators make their caves even more captivating that they attract new visitors in the future and drive them to want to experience the world of caves? We would like to present to you, Cave 4.0. Our new control system bringing fresh, socially aware concepts to cave tours. Self-guided adventure tours that are digitally accompanied could also be an exciting new format for your facility, making your offering more attractive, more diverse, more flexible and future-proof!

Advantages at a glance:

- ✓ Self-guided exploration for individuals and small groups without guidance and time restrictions as an alternative format to conventional guided tours.
- ✓ Reduction of operating, personnel and energy costs
- ✓ Hygiene and interactions of groups can be better controlled and observed.
- ✓ Visitors can be safely guided through the cave with different lighting scenes and automated video and audio guiding.
- ✓ Reduction of lamp flora and harmful environmental effects on employees, e.g., in radon-contaminated caves.

Tours without cave guide Conceptual model (simplified)





Passionate about caving

As a team, Cave Lighting brings together over 100 years of experience with the underground world. Show caves are our profession. Whether as passionate nature lovers, experienced cave explorers, trained engineers or creative lighting designers, together we bring the expertise to effectively consult and support you through every phase of your project.

We can take you from the initial concept through the planning and implementation to completion and maintenance of your project. We can also plan, implement and provide long-term support for the construction of GRP guideways.

Dare to take the first step

Make your space more diverse, attractive, flexible and future-proof with Cave 4.0. From planning to implementation - we will be happy to advise and support you with our expertise in the realization and design of your new digital offerings.

Contact



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GmbH & Co. KG

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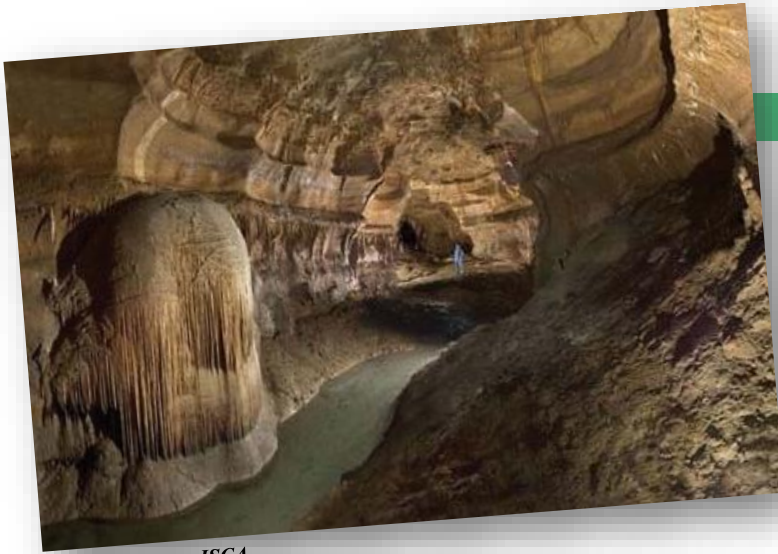
EXPORT AWARD
HESSEN



– Award Winner 2021 –



What caves are these?



Source: ISCA

CAVE #13

Hint 1:

The cave is a National Natural Landmark in the USA.

Hint 2:

The stairwell into the cave was built in 1939.

CAVE #14

Hint #1:

There is a waterfall in the park where the cave is located.

Hint #2:

It was opened in 1927 just after a hotel was built above it.



Source: Trip Advisor

SEND YOUR ANSWERS

JULY/AUGUST ANSWERS:

Cave #11 was François Leguat Giant Tortoise and Cave Reserve (Mauritius)

Cave #12 was Kawiti Glow Worm Caves (New Zealand)

Send your answers!

Contact: juanjotiscar@i-s-c-a.org

36th Brazilian Congress of Speleology

The [Sociedade Brasileira de Espeleologia](#) will be held on 20-23 April 2022. [Details here](#).



Karst Record IX (KR9) Conference, rescheduled to 17-20 July 2022

This conference will bring together scientists and students to share the latest progress in the rapidly developing field of cave- and karst-based (palaeo) climate research. More info [here](#).



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.



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



2021 - International Year of Caves and Karst

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

7th – 10th October, 2021 – TAG Fall Cave-In

10th – 14th October, 2021 – 54th National Caves Association Convention

19th – 21st October, 2021 – Karst Interest Group (KIG) 2021 Workshop

26th - 30th October, 2021 – 6th EuroSpeleo Protection Symposium

29th October - 2nd November, 2021 – Speleo Kamaraton

1st November – 5th November, 2021 – National Cave and Karst Management Symposium 2021

19th November – 21st November, 2021 – 2nd National Moroccan Caving Congress: Karst, Arts, Spéléologie et enjeux de développement

3rd December – 5th December, 2021 - Speleocinema 2021 Mondoñedo

2022-2023

Spring 2022 – 14th International Symposium of Pseudokarst

20th - 23rd April, 2022 – 36th Brazilian Congress of Speleology

22nd - 25th June, 2022 – EuroKarst 2022 (Malaga)

24th - 31st July, 2022 - 18th Int. Congress of Speleology

21st September – 1st October, 2022 – ISCA 9th Congress and NCA Convention (San Antonio, Texas)

2022 – NSS Convention 2022 (Custer, South Dakota)

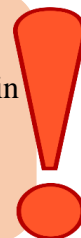
2023 – Cave Lighting Workshop

Deadline!

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



Contact: juanjotiscar@i-s-c-a.org



Links of interest



INTERNATIONAL SHOW CAVES ASSOCIATION



Are you a cave enthusiast? Join ISCA!



INTERNATIONAL SHOW CAVES ASSOCIATION

Join us and become an ISCA Member

Visit 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: juanjotiscar@i-s-c-a.org

Issue: September & October 2021

