





Cave research WORKSHOP

Speleology and cave register.



Picture: Dominik Froehlich, Entrance of Lomechan Cave at Silali Volcano, Baringo Conty Kenya

Organized by: National Museums of Kenya Earth Sciences Department.

With the support of TETIDE: Social Promotion Association with the aim of safeguarding the underground and epigean karst environment, promoting the enhancement and promotion of the territory, also providing technical support for the training and professional qualification of operators and speleological guides as well as involving and guiding institutions, social and economic forces towards legislation, programs, agreements, and projects, consistent with the aims of the Association.







WHERE HERITAGE LIVES ON

WIKICAVES ASSOCIATION: Wikicaves, an international voluntary association, aims to promote global speleology development by facilitating web-based collaboration, sharing cave-related data, enhancing accessibility to natural cave information online, and supporting the protection and scientific study of caves and their surroundings.





CEGEA The Cave Exploration Group of East Africa (CEGEA) was formed in Nairobi in 1964 by a small band of dedicated caving enthusiasts with the objective of undertaking and encouraging the exploration, recording, preservation, and conservation of caves throughout Eastern Africa. In addition to pursuing the exciting and physically demanding sport of cave exploration in the limestone caves and fascinating lava tunnels in the volcanoes of the region, the CEGEA further aims to promote the science of caves (Speleology) that covers a wide

range of interests, such as cave surveying and photography, the study of the flora, wildlife and insects that inhabit them, geology, pre-history, and present-day use.

Nestled within the heart of the Rift Valley lies the remarkable Mount Suswa, a captivating double-crater volcano of scientific intrigue. Since its establishment in 2005, the **Mount Suswa Conservancy** has beckoned enthusiasts and researchers alike to delve into its geological wonders. Trekkers are invited to traverse its striking crater and delve into the intricate network of lava caves, offering a unique opportunity for scientific exploration. Operated exclusively by the Masai community inhabiting Mount Suswa, the Conservancy channels all camping fees towards not only safeguarding the ecological integrity of the park but also supporting the indigenous lifestyle intertwined with this natural marvel.









Location: National Museum of Nairobi and Suswa Conservancy

Program



Wensday 20 March 2024/ Start at 10:00 AM duration 3 hours.

10:15 Welcome introduction: Dr. Emmanuel K Ndiema Official opening of the workshop.

10:25 Workshop introduction **Ferdinando Didonna** (TETIDE) presentation of the participants.

11:00 Speleology: cave formation: by **Ferdinando Didonna** (TETIDE) Duration 35 minutes.

11:30 CAVES in African history Dr. Emmanuel K Ndiema

12:00 Kenyan Caves: present from CEGEA Duration 35 minutes

13:00 Questions and answers first part of the workshop

15:00 PM duration 3 hours.

15:00 Lava tube caves on the volcanoes north of Baringo lake RL Dr. Joerg Dreybrodt

15:30 Platform access and preparation Wikicaves

16:000 Grottocenter training on cave register by **Clément Ronzon** zoom connection.

Questions and answers second part of the workshop



Thursday 21 March 2024 Start at 15:00 duration 3 hours.

15:00 Sustainable caving: minimum impact caving theory and practices by Ferdinando Didonna

15:40 Kenyan Coastal Caves as new paleoscientific research frontier Dr. Job Kibii

16:00 Grootocenter training on cave register by **Clément Ronzon** zoom connection.

17:00 Questions and answers third part of the workshop: Closing Remark by Dr. Emmanuel K Ndiema



Saturday 23 March 2024 Start at 05:00 duration 12 hours.

Filed visit to caves in Suswa conservancy, in coordination with Suswa Conservancy



Tuesday 26 March 2024/ Start at 16:00 PM duration 2 hours.

ON Line class Zoom follow up with Clément Ronzon and Ferdinando Didonna Dr. Emmanuel K Ndiema USE of the grotto center platform







WHERE HERITAGE LIVES ON

BIO TUTORS:



Dr. Emmanuel K Ndiema is a Senior Research Scientist at the National Museums of Kenya and now leads the Earth Sciences Department. His expertise extends to digital heritage, where he emphasizes the benefits of digitizing archaeological records. He has been pivotal in integrating data from different departments for better access and understanding the need for robust hardware, software, and training to handle digital traffic sustainably.

His approach to **digital speleology** includes utilizing GIS and remote sensing, which he was trained in at the Kennedy Space Center in Florida through a NASA-funded fellowship. Dr.

Ndiema's experience in the Turkana Basin has been instrumental in mapping and preserving Africa's heritage. His dedication to retelling African history using modern analytical methods underscores the relevance of digital tools in unveiling historical narratives that resonate with Kenyan society today.

Dr. Ferdinando Didonna brings over three decades of extensive experience in speleology to our training program. As a distinguished forest engineer, Mr. Didonna's expertise is unparalleled in the field, with notable achievements as an instructor for esteemed organizations such as the **Italian Speleological Society SSI, member of the National Speleological Society (NSS US) and vice president of the caving conservation organization TETIDE.ORG.** Throughout his career, he has led numerous expeditions worldwide,



showcasing his profound knowledge and dedication to cave exploration. Beyond his exploration endeavours, Mr. Didonna is deeply committed to cave conservation. He has played a pivotal role in initiatives like the *Animali di Grotta* awareness campaign and the GEA ICEKE caving register project, emphasizing the preservation of cave ecosystems. Additionally, his involvement with TETIDE, an organization dedicated to cave exploration and conservation, further highlights his dedication to safeguarding these delicate environments. As a participant in our training program, you will benefit from Mr. Didonna's wealth of experience and passion for speleology. His expertise will undoubtedly enrich your learning experience, providing valuable insights into cave exploration, conservation practices, and collaboration within the speleological community.







WHERE HERITAGE LIVES ON

Msc. Clément Ronzon: Clement holds a Master of Science Degree (MSC) in General Engineering and has dedicated most of his professional career to software development, particularly focusing on web Software as a Service (SaaS) platforms. Currently he works in the FinTech sector. His passion for speleology ignited in 2003 when he first explored natural caves with the speleo group Vulcain in Lyon, France. Recognizing the intersection of his software engineering skills and his newfound passion, he embarked on developing the initial version of GrottoCenter in 2008. In 2012, Clement played a pivotal role in the **creation of the Association Wikicaves** to manage and



maximize the potential of the GrottoCenter project. Additionally, he co-founded a speleological group, G-PES Grupo Pionero Espeleologico de Sonora, in Northern Mexico in 2014. Since 2019, Clement has resided in Yucatan, Southeast Mexico, where he remains actively involved in speleorelated activities with a local group called Ajaú. Throughout his journey, Clement has exemplified a dedication to advancing the field of speleology through technological innovation and community engagement.



Dr. Joerg Dreybrodt Born in Frankfurt, Germany. Phd and Diploma in Physics at the Universities of Heidelberg and Wuerzburg in Germany. Member of the German Speleological Federation and the Swiss Society of Speleology. Caving experience since childhood with projects in Austria, China, India, Laos and Myanmar. Founder of the Northern Lao – European Cave Project in 2001 and of the Myanmar Cave Documentation Project in 2009 with focus on Eco-Tourism and Karst Conservation in cooperation with local authorities and international conservation NGO and GO, i.e GiZ, FFI and OIKOS.

Since 2017 Speaker of the Workgroup Sustainability of the German Speleological Federation accredited to UNEP within the NGO Major Group. Member of the IUCN/WCPA Karst & Caves Specialist Group. His research focus shifted in 2020 from the karst plateaus in Asia to the **Lava tube caves of East Africa** with visits to Kenya, Rwanda, and Uganda. Publication of eight books, two documentaries and many international conference presentations about karst and caves. His current residence is Zurich, Switzerland.







Dr. **Job Kibii** is a leading senior research scientist and Head of Palaeontology and Palaeoanthropology at the National Museums of Kenya. He holds the distinction of being the first indigenous African to earn a PhD in Archaeology and Palaeoanthropology from the University of the Witwatersrand in South Africa. With a focus on cave systems, Dr. Kibii's research investigates the deposition of fossils and the behaviours of early human ancestors. He has led significant excavations in sites like Malapa, Gondolin, Pangani, and Kimengich, contributing to the discovery and analysis of hominid specimens, including *Australopithecus sediba* and *Australopithecus africanus*. His work sheds light on human evolution and early hominin behaviours.



Grottocenter Mobile application which is now available on the Google Play Store. It allows you to work on the karst, with or without an internet connection. If you are connected to Grottocenter, this allows you to update the information on the site, either directly or later, when you have internet access. Please download it, test it and leave a review on the Play Store

https://play.google.com/store/apps/details?id=org.grottocenter.mobile&pcampaignid=web share



Participants in the Cave Research Workshop, organized by the National Museums of Kenya's Earth Sciences Department in collaboration with Tetide and Wikicaves Associations, will gain comprehensive knowledge and practical skills in speleology and cave conservation. Led by experts such as Dr. Ferdinando Didonna and Dr. Emmanuel K Ndiema, Mr. Clément Ronzon, and Dr. Joerg Dreybrodt, Dr. Job Kibii the workshop covers topics ranging from cave formation

and Kenyan cave exploration to sustainable caving practices. Through engaging presentations and field visits, attendees will deepen their understanding of cave research methodologies and conservation techniques.

CERTIFICATES WILL BE EXPDITE ONLY UPON FULL ATTENDECY

