



Workshop

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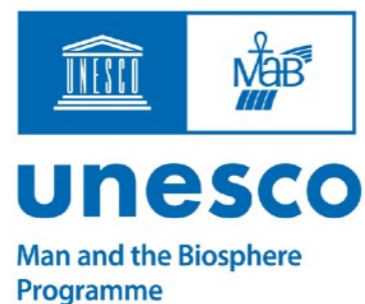
# Geoheritage management in UNESCO designated sites

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Azores, Portugal | November 2023



## Sponsoring



Permanent Delegation of Portugal to UNESCO  
Ministry of Foreign Affairs

## Support



Geoheritage Specialist Group  
World Commission on Protected Areas  
International Union for Conservation of Nature



## Organisation





## General planning

October - November 2023

23/Oct

2/Nov

3/Nov

4/Nov

5/Nov

6/Nov

13/Nov

Online  
session

Arrival to  
Terceira  
island

Lectures and  
field trip in  
Terceira  
island

Field trip in  
Terceira  
island

Transfer to  
Graciosa  
island and  
lectures

Field trip in  
Graciosa  
island

Transfer to  
Terceira  
island

Return from  
Terceira  
island

Online  
session



## Lecturers

**Carla Silva** has academic training in the areas of biology, geology and pedagogy, and has worked since 2005 in the Azores Government on environmental education and nature conservation projects. She monitors and supports the management of regional protected areas and international designated areas, as Natura 2000, Ramsar Sites, World Heritage Sites, Biosphere Reserves and UNESCO Global Geoparks. [carla.sg.silva@azores.gov.pt]

**Eva Lima** is a geologist, expert in land and environmental planning and geoconservation. Has been carrying out studies and works in geoconservation in the Azores archipelago since 2006. She was part of the operational team of the Azores Geopark, from the preparatory work as a geologist and, more recently, as a scientific coordinator. At the moment she is a senior technician at the Regional Environmental Inspectorate, of the Regional Government of the Azores. [evalima@azoresgeopark.com]

**Irene Bollati** is Associate Professor at the Earth Science Department (University of Milan, Italy). She has been working on geoheritage sites monitoring through multidisciplinary techniques (e.g., dendrogeomorphology), and on geomorphological and geoheritage mapping. She collaborates with the Sesia Val Grande UGGp for geoheritage conservation and promotion. In 2022 she became the National representative of ProGEO. [irene.bollati@unimi.it]

**Joana Rodrigues** is a geologist and MSc in geological heritage and geoconservation. For the last 16 years she has been working at the Naturtejo UNESCO Global Geopark (Portugal). She is the representative of Portuguese Network of UGGps in the European and Global Geoparks Networks and member of the Advisory Committee of the Global Geoparks Network. Currently she is also a PhD student at the University of Minho, researching on science communication applied to geosciences. [joana.rodrigues@naturtejo.com]

**John Gunn** is a speleologist who undertakes research and consultancy on cave and karst conservation, geomorphology and hydrogeology. A retired Professor with an honorary post at the University of Birmingham (UK), he is a member of IUCN World Commission on Protected Areas and its Geoheritage Specialist Group and is Chair of the Cave and Karst Working Group. [j.gunn.1@bham.ac.uk]

**José Brilha** is a geologist and Full Professor at the University of Minho (Portugal). He is member of IUCN World Commission on Protected Areas and its Geoheritage Specialist Group. He was founder and Editor-in-Chief of the journal "Geoheritage" and President of ProGEO. Currently, he develops applied research on geodiversity, geoconservation, protected areas, and geoparks. [jbrilha@dct.uminho.pt]

**Mohammed Sameh M. Antar** is a palaeontologist and natural heritage planning and management consultant. He is the national focal point of UNESCO's nature World Heritage and is a member of the of IUCN World Commission on Protected Areas. He was founder and manager of wadi Al Hitan site, and he Developed an Intensive Course on Leadership in Geological Heritage Conservation in Arab Region. Currently, he is developing Management Plan for two Royal Reserves in Saudi Arabia.

[wrpashark@yahoo.com]

**Manu Monge-Ganuzas** is a geologist and Environmental Technician at the Basque Government (Spain). He is Vice-President of ProGEO, President of the Geoheritage Commission of the Spanish Geological Society, and member of IUCN World Commission on Protected Areas and its Geoheritage Specialist Group, and advisor of the Spanish government for the geosite inventory. Currently, he develops research and management on holistic nature conservation on protected areas.

[manu-monge@euskadi.eus]

**Murray Gray** is Honorary Professor at Queen Mary University of London (United Kingdom) and visiting professor at University of Minho (Portugal). Since the 1990s, his research and writing have been on geodiversity and geoconservation, including his book *Geodiversity: Valuing and Conserving Abiotic Nature* (2nd ed., Wiley Blackwell, 2013). In 2022, he gained a Special Award from the Geologists' Association for his work on geodiversity.

[j.m.gray@qmul.ac.uk]

**Özlem Adiyaman Lopes** holds a Ph.D. degree, from the Paris Sorbonne University (France) in partnership with the Hacettepe University (Ankara, Turkey) and Blaise Pascal University (Clermont Ferrand, France). She has scientific research expertise in the fields of Earth Observation data processing and interpretation as well as structural geological and geochemical analysis of the active tectonic and volcanic zones. Since 2016, she works for the UNESCO Natural Sciences Sector and is responsible for the implementation of the international collaboration projects and global initiatives related to the International Geoscience and Geoparks Programme (IGGP). [o.adiyaman@unesco.org]

**Rachel Wignall** is a national Geology Adviser for Scotland's nature agency, NatureScot. She has extensive experience of managing threats to geological sites, assessing climate change risk to geoheritage, and geosite condition monitoring. She is a fellow of the Geological Society of London and a member of the IUCN Geoheritage Specialist Group. [rachel.wignall@nature.scot]

**Salomé Meneses** has a degree in Geology and Natural Resources from Faculty of Sciences of the University of Lisbon. Was Director of the Capelinhos Interpretive Centre; author and co-author of articles on Azorean geoheritage; trainer in several courses and training actions on geoheritage and geodiversity within the scope of the Azores Geopark. She is the Executive Coordinator of the Azores UGGp and a senior staff at the Designated Areas Division of the Regional Government.

[salomemeneses@azoresgeopark.com]

## 23 October 2023 (Monday)

Online session | Time: 15:00 (CET) | Duration: 3h

Welcome address (10 minutes)	António de Sousa Abreu Director of Ecological and Earth Sciences Division of UNESCO Natural Sciences Sector
	Tim Badman Head of Heritage and Culture, IUCN
Geodiversity: the oft-forgotten half of nature (40 minutes)	Murray Gray
Q&A   Coffee break (20 minutes)	
Geological heritage and geoconservation (40 minutes)	José Brilha
Q&A (15 minutes)	
Case studies (30 minutes)	
1. Management of underground geoh heritage in the Castleton Site of Special Scientific Interest, Peak District National Park, England	John Gunn
2. The complex management of geomorphosites in UNESCO Global Geoparks at the borders of protected areas - A case study from the Sesia Val Grande UGGp (Italian Alps)	Irene Bollati
3. Effective management of Wadi El Hitan, a World Natural Heritage site	Mohamed Sameh Antar
Q&A (15 minutes)	
Closing remarks (10 minutes)	Özlem Adiyaman Lopes

## 3 November 2023 (Friday)

### Terceira island

UNESCO designated areas in the Azores  
(40 minutes)

Carla Silva

Inventoring and characterization of geoheritage  
(40 minutes)

José Brilha

Q&A | Coffee break (30 minutes)

Principles for management of geosites  
(60 minutes)

Rachel Wignall

Q&A (20 minutes)

Geological heritage in The Azores archipelago  
(30 minutes)

Eva Lima

Lunch

Field trip  
(afternoon)

## 4 November 2023 (Saturday)

### Terceira and Graciosa islands

Field trip in Terceira island and transfer to Graciosa island  
(morning)

Lunch

How to include geoconservation in Biosphere Reserve's planning: some case studies  
(50 minutes)

Manu Monge-Ganuzas

Q&A (20 minutes)

Geoheritage interpretation and communication  
(50 minutes)

Joana Rodrigues

Q&A | Coffee break (30 minutes)

General discussion and preparation for the next online session  
(30 minutes)

José Brilha

## 5 November 2023 (Sunday)

### Graciosa and Terceira islands

Field trip in Graciosa island

Transfer to Terceira island  
(late afternoon)



**13 November 2023 (Monday)**

**Online session | Time: 15:00 (CET) | Duration: 3h**

Presentation and discussion of case-studies prepared by participants  
(150 minutes)

José Brilha (moderation)

Concluding remarks  
(30 minutes)

Özlem Adiyaman Lopes  
José Brilha

## Informations

Earth Sciences Geoparks Section  
Division of Ecological and Earth Sciences  
UNESCO

7 place de Fontenoy 75352 Paris 07 SP, France

Tel.: +33 (0) 145 68 14 33  
e-mail: [o.adiyaman@unesco.org](mailto:o.adiyaman@unesco.org)