

## MANAGING SUSTAINABLE ROCK ART SITES

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In the 1980s, at least in Europe, rock-art sites, in their own right, became part of the great family of museums. This led to a need for diverse measures in areas open to the public, in terms of infrastructure (roads and access routes, cover, fencing, etcetera) and improved accessibility (trails with moderate slopes, guardrails, facilitated routes, and so on), as well as educational resources (explanations, signage and so forth). On one hand, the measures greatly enhanced enjoyment and cultural recognition of the heritage, but on the other, quite changed the context of landscapes in which rock-art occurs, affecting the relationship between rock surfaces and encompassing environment, as well impinging on scientific research.

This session aims to open a debate on issues facing those (academics and managers) who work in these contexts, analyse problems that have emerged in recent years, examine different cases and prospective solutions—in essence, how to reconcile the dynamics of museum display with the maintenance of the environmental context of rock-art sites.

The issues to be addressed (supported by concrete examples) include the following: visitor sustainability (needs and demands required by museological display of a site) and mitigating the degradation of original environmental contexts, technologies and their applicability in rock-art sites, the original document and proposals for augmented reality and educational comparison.

## The rock art sites between the museum needs and the significance of the place

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infrastructure, sustainable  
educational and tourism  
information systems

The ICOM Professional Code of Ethics is the reference text for the feasibility and objectives for museums all over the world (including minimum standards); areas with prehistoric rock art must also conform to these rules. The international law, as applied to outdoor museums in which rock art is located or rock art parks, has not countered the substantial modifications of the associated natural landscapes. In addition, there are also issues concerning the rock art sites still used by indigenous cultures (particularly in Australia), that cannot be impacted with certain touristic or access infrastructure. It is timely to reflect on these aspects as it is necessary to find solutions that, while respecting a museum's objectives for rock art areas, as expressed in the national and international regulational (e.g.: ICOM and individual national legislation), can avoid the alteration of the associated natural landscape. I believe that new technologies engender solutions to the problems raised by these apparent contradictions. These technologies allow us to equip, thanks to the use of several APPs or QR codes, museum peripheral information installations (including 3D reconstructions) and the sites that, in my opinion, should appear as unaltered as possible. Sustainable educational and tourism information systems are required, that respect the site environment as well as local stakeholders.

## The site museum of the cave of Altamira

Since the end of the 70's the visits to the cave of Altamira have been restricted, due to the fragility inside the cave and the previous exploitation it had suffered. Since then, access to the public has been sporadic. But there was a great demand to see Altamira and different solutions were sought. Finally, a multidisciplinary plan for Altamira was developed. The most visible result of the plan was the new Museum of Altamira, opened in 2001, that offers a new way to experience Altamira through an absolutely accurate replica which we call Neocave. The Neocave is part of a permanent exhibition on the Paleolithic "The times of Altamira" devoted to contextualizing the art of Altamira. The visit is complemented with other available cultural activities such as guided tours (more than 30 a day), workshops, and temporary exhibitions which are not only themed on prehistoric topics but also introduce new avenues of connection to the heritage, linking, for example, rock art with contemporary art. The visitation numbers resulting from the new Museum of Altamira are highly satisfactory. Receiving more than 250,000 visitors per year (288,000 in 2017) it has become a model of visitation for other fragile heritage sites.

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**Keywords:** site museum,  
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management plan, museum  
visitation



Fig.1 - General view of the Neocave at the Museum of Altamira. (photo Museum of Altamira)

## Managing rock art as a living tradition. Two cases from Queensland

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**Keywords:** rock art management, conservation, Indigenous, Carnarvon Gorge, Chalawong

Viewing rock art sites through a western lens lends itself to management that museumises rock art sites rather than highlighting them as aspects of living culture. However, within the Australian context many rock art sites benefit from a level of continuity or connection to contemporary Indigenous communities. This aspect places additional consideration into the management strategies of sites compared to the majority of sites in Europe. In Australia, it is becoming increasingly apparent, that indigenous participation in the management, research and interpretation of sites has many benefits as well as challenges for all the stakeholders. Whilst there is agreement about the need to protect cultural identity and include the indigenous voice some aspects of the site management and legislation are not conducive to encouraging community participation. This being the case, new measures need to be developed to facilitate cultural use. This work critically investigates and proposes new directions for rock art sites through two examples from Queensland, Australia: A small neglected site, Chalawong, and a larger touristic destination, Carnarvon Gorge, to contrast the differing perceptions for stakeholders for a sustainable direction in conservation, tourism and cultural sustainability.



Fig.1 - Chalawong (Chullawong), Gatton, Queensland, Australia. (photo Marisa Giorgi)

Fig.2 - Art Gallery Site, Carnarvon Gorge, Queensland, Australia. (photo Marisa Giorgi)

## **Sustainable development plan for the promotion of Daraki Chattan Cave - A Lower Palaeolithic rock art site in Chambal basin, India**

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**Keywords:** sustainable rock art sites, rock art heritage, System Dynamics modelling, Daraki-Chattan Cave, India

Daraki-Chattan Cave (DC) in the quartzite buttresses of Indragarh hill in the Chambal basin, Madhya Pradesh in India is the world's earliest Lower Palaeolithic rock art site. There are 12 more early petroglyph sites in the vicinity. In addition, there is a palaeochannel on the hill, Lower Paleolithic factory sites, painted rock shelters, the Bada Mahadev temple with a natural water fall, all located in the same area. The Bhanpura region also has rock cut caves, temples, sculptures, forts, architectural heritage, religious sites, Gandhi Sagar game sanctuary and a vast lake and immeasurable natural wealth. The present paper endeavours to apply system dynamics as a modelling technique for the optimal utilization of the natural and cultural resources and suggests strategies for the holistic involvement of stakeholders towards sustainable development and promotion of the Daraki-Chattan Cave.



## **Dolmen de Soto (Trigueros, Huelva, Spain). Megalithism and preservation in the southwestern region of the Iberian Peninsula**

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**Keywords:** Andalusia,  
megalith, site conservation,  
megalithic art, Iberian  
Peninsula

The exceptional nature of the Dolmen de Soto (Trigueros, Huelva, Spain), researched and excavated at the beginning of the 20th century by important scholars such as Obermaier and the Leisner couple, not only lies in it being one of the largest megalithic monuments in Western Europe, nor in the relevance of its engravings, but in other aspects to be discussed in this current research. In addition, the diffusion of the associated research and conservation of the site have succeeded in positioning it as a referent in terms of dissemination activities, becoming a focus of attraction for specialists and the general public. The following report presents the different archaeological activities which have been carried out on the Dolmen de Soto, as well as the main strategies taken to achieve the current laudable success of the site. It is therefore, a possible model for sites with similar characteristics. In a similar manner, this paper tries to present an overall view of the conservation of several megalithic monuments in the area of Huelva (a region with more than 200 places of archaeological interest), the majority of them at a disadvantage in comparison to the archaeological site of Trigueros.



## **Towards excellence. The “European Rock Art Heritage” label as a tool for measuring the quality of Rock Art sites open to the public**

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Certification**

Since November 2016, the technical group of experts of PRAT-CARP Cultural Route has been working on a Handbook for the Certification of visitable Rock Art Sites belonging to the Council of Europe Cultural Route “Prehistoric Rock Art Trails”. This handbook defines the series of indicators that are applied to assess the quality of the rock art sites on this Route, as well as the experiences associated with them, in order to add these to the inventory of certified sites before the European Institute of Cultural Routes of the Council of Europe. The experience and expert knowledge of the managers of these rock art sites within the Council of Europe Cultural Route “Prehistoric Rock Art Trails” enables the International Association I.A. CARP to establish a set of standards and good practices with which the member rock art sites can be assessed, before they are awarded their official certification, this includes the quality of the services they offer and visitor satisfaction. This certification will assist in consolidating the cultural, educational and touristic aspects of the sites, motivate continual improvement and define a standard for new sites that join the Prehistoric Rock Art Trails European Cultural Route. The network currently covers sites in Norway, Ireland, France, Italy, Azerbaijan, Spain and Portugal.

## A Conservation Study of Prehistoric Rock Art in South-west Ireland

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**Keywords:** South-west Ireland, North Atlantic rock art, conservation, photogrammetry, site management

The aim of this study is to assess the condition and preservation of prehistoric rock art in the Cork/Kerry region. This requires an understanding of how and where rock art is found, and current provision for its recording and legal protection. The impact of various natural and human agencies on the physical survival of rock art will be assessed, with reference to examples identified in fieldwork. Practical solutions to these problems will be discussed, drawing on best practice in rock art conservation from other parts of the world. The study will include an environmental case-study to examine the conservation of an individual rock panel, and to assess the contribution that new methods of photogrammetry can make to the recording and monitoring of these surfaces. Rock art conservation ultimately depends on awareness leading to an understanding and appreciation of this cultural heritage among landowners, forestry, other developers, and the general public. A number of educational initiatives have been undertaken to raise awareness of rock art in the landscape, and will explore various options for public/touristic presentation. The results aim to contribute to the development of a broad conservation strategy for rock art in Ireland, elements of which might be adopted by central and local government heritage agencies.



Fig. 1 - Clearagh, Co. Cork, Ireland

Fig. 2 - Derrynablaha, Co. Kerry, Ireland



## Managing ideas, emotions and experience around open-air rock carvings: visions from Rock Art Archaeological Park of Campo Lameiro (Pontevedra, NW Spain)

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intelligent leisure,  
archaeological tourism

Rock Art Archaeological Park of Campo Lameiro (Pontevedra, NW Spain) is an example of the efficient and sustainable management of Galicia's rock carvings. From its opening in 2011, the RAAP proposed a different, innovative approach that involved all the links of the value chain integral to the management of rock art: conservation, research and dissemination. Today RAAP is a singular museological space that combines the production of rigorous information and contents (factory of knowledge) in an attractive, educational and entertaining (intelligent leisure) format. As such, visiting the Park is an experience for the senses. The story that we offer to our visitors occurs in three different scenarios (permanent exhibition, archaeological area and a recreation of Bronze Age settlement), and tries to explain how the rock carvings were used in the process of social landscape construction. This was achieved through various approaches, such as guided visits, workshops, dramatizations and experimental archaeology.

Applying this approach, RAAP has become a unique museum that presents its contents in an evocative way, based on ideas, emotions and experience. As a result, these ancient figures carved on open-air rocks have been transformed into an attractive cultural product for archaeological tourism, whose benefits have spread within the territory and the local community.



## The National Parks and the National Prehistory Museum of Valle Camonica

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restoration, virtual tour, new  
technologies, accessibility

The National Park of Rock Engravings (Naquane locality), which opened in 1955, was the first archaeological park not only in Valle Camonica but also in Italy. During the last century, several other parks were opened along the Valley that was inscribed for the rock art in the World Heritage List in 1979, first Italian UNESCO Site. In recent years, new archaeological sites and the MUPRE-National Prehistory Museum were added to the network of accessible rock-art areas so that the cultural attractions now available for schools and tourists are greater and no longer limited to rock art but also linked to the archaeological contexts of the Valley. Nowadays, apart from the standard maintenance of this heritage, new challenges have to be faced. This paper will present some of the solutions to the old and new challenges such as, landscape restoration and virtual tours (National Park, Naquane), new technologies for education (e.g. the touchscreen in MUPRE) and accessibility for all (e.g. the new path at Cemmo National Park which is now accessible to those with impaired mobility).



Fig.1 - National Park, loc. Naquane. (© MIBACT)

Fig.2 - National Park, loc. Cemmo. The new path. (© MIBACT)



**Pedestrian pathways  
and correlative  
explanatory  
discourse: the case  
study of Passos  
/ Santa Comba  
Mountain (Portugal)  
post-glacial schematic  
paintings**

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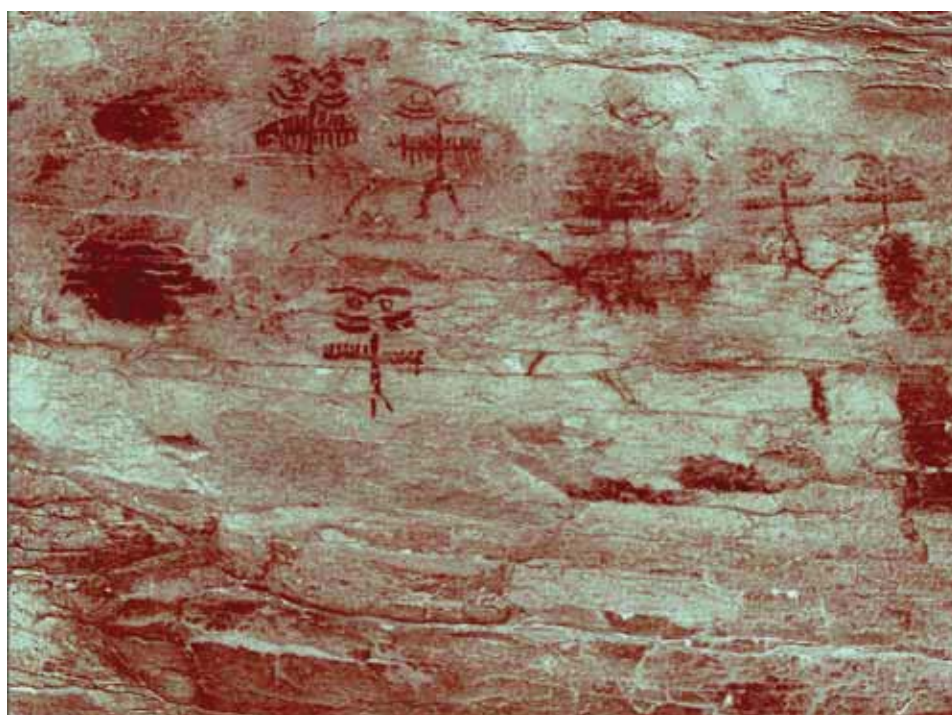
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**Keywords: rock painting  
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Mountain, pathways, Portugal**

The Passos/Sta Comba mountain in Mirandela (northeast Portugal) is the most extensive ensemble of post-glacial schematic paintings in Portugal. Although it was discovered in the late eighties, surveying and recording has been slow to progress, mainly due to peculiar conjunctural factors. In fact, it wasn't until the discovery of the Palaeolithic art of the Côa Valley, and contrary to what happened in Spain, as both the academic community and the political institutions in Portugal had little priority for rock art heritage. Even so, this set of schematic painting has been scientifically published. Some attempts (formulated in projects and programs) related making the mountain accessible to a wider public have always been bogged down with issues related to "ways to enjoy and simultaneously preserve" the fragile rock painting heritage. Nevertheless, people (e.g. while Geocaching or trekking) continue to visit some of the rock shelters without any guidance and frequently complain about the absence of guided visits, access information, pathways, and explanatory panels. This study presents and invites for debate ways of opening up the painted rock shelters to the public and how to minimize the associated conservation risks, with the hope of formulating a successful management plan for this purpose.



## The Departmental Museum of Marvels in Tende (Alpes-Maritimes, France): management, protection and valuation “from a distance” of the petroglyph site of the Mount Bego area

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**Keywords:** museum, Mount Bego, rock art management, conservation, site significance

Open since 1996 by the Department of Alpes-Maritimes, the Museum of Marvels (Musée des Merveilles) is closely linked to the Mount Bego valleys: Merveilles and Fontanalba. The Museum of Marvels drives ongoing research, conservation and facilitates knowledge dissemination. Every year, the museum welcomes between 25.000 and 30.000 visitors, providing them with a great mix of knowledge, experiences and emotions. Through multiple approaches, this paper aims to analyze the museum’s role in the management, protection and significance of the Mount Bégó rock engravings. Despite the remoteness of the archaeological sites (a few tens of kilometers and at a higher altitude) the Museum of Marvels remains a “site museum” (if not an “on-site” museum) and an essential actor in the knowledge of this important rock art heritage. This is achieved through the use of multiple and complementary platforms for dissemination such as, multimedia and interactive installations in the permanent exhibit, temporary exhibitions, cultural education targeting the general public and schools, scientific and knowledge-sharing publications, research by the Conservation and Research Centre, and much more. That is how knowledge becomes a significant element for management, conservation and site significance, even “from a distance”.



Fig.1 - Museum forecourt. (© CD06 - Musée des Merveilles)

Fig.2 - Permanent exhibit of the Museum. (© CD06 - Musée des Merveilles)