Decorated cave of Pont d'Arc (France) No 1426

Official name as proposed by the State Party

Decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc, Ardèche

Location

Vallon-Pont-d'Arc, Département de l'Ardèche **Région Rhône-Alpes** France

Brief description

The Grotte Chauvet, located in a limestone plateau of the meandering Ardèche River in southern France, contains the earliest known pictorial drawings, dating back to as early as the Aurignacian period (30,000 to 32,000 BP). The cave was closed off by a rock fall approximately 20,000 years BP and remained sealed until its rediscovery in 1994. The cave contains more than 1,000 drawings, predominantly of animals, including several dangerous species difficult to observe at that time, as well as more than 4,000 inventoried remains of prehistoric fauna.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site.

1 Basic data

Included in the Tentative List 29 June 2007

International Assistance from the World Heritage Fund for preparing the Nomination None

Date received by the World Heritage Centre 31 January 2012 8 November 2012

Background

This is a new nomination, which was initially received by the World Heritage Centre on 31 January 2012. On 10 April 2012 the State Party informed the World Heritage Centre that the atmospheric conditions inside the cave constituted such an eminent threat to its preservation, that the dossier qualified for application of the emergency procedure for nominations defined in paragraphs 161-162 of the Operational Guidelines.

The ICOMOS evaluation under the emergency mechanism in 2012 concluded that the climatic conditions inside the cave remained almost unchanged since 20,000 years and that the excellent and pristine condition of the cave did not face any serious or specific danger. ICOMOS recommended that the nomination dossier should be resubmitted according to the regular timeframe for evaluation. In response, the State Party of France withdrew its nomination under the emergency mechanism and submitted the nomination for the following cycle.

Consultations

ICOMOS has consulted its International Scientific Committee on Rock Art and several independent experts.

Technical Evaluation Mission

An ICOMOS technical field visit to the property was undertaken as part of the emergency evaluation from 8 to 9 May 2012. This technical visit considered only the state of conservation of the Grotte Chauvet. A full technical evaluation mission to the property was undertaken from 11 to 14 May 2013.

Additional information requested and received from the State Party

During the emergency evaluation cycle, a letter was sent to the State Party on 24 April 2012 requesting clarification on the nature and seriousness of the dangers that were considered to provide the need for an emergency nomination. A response was received on 27 April 2012. A letter was sent to the State Party on 13 December 2013 requesting to consider a change in the name of the property. The State Party responded by letter on 14

February 2014 proposing an alternative name. This name has been considered more appropriate by ICOMOS and has been integrated in this evaluation.

Date of ICOMOS approval of this report 6 March 2014

2 The property

Description

The Grotte Chauvet is an underground cave which stretches into several branches along approximately 800m of so-called halls and galleries with a width of up to 59m and a ceiling height of up to 17.9m. The cave has a surface area of approximately 8,500 square meters. It is located to the north and left bank of an ancient meander of the Ardèche River, which the river abandoned after it created the natural arch of Pont d'Arc. The arch of Pont d'Arc and the meander, approximately 25km west of the confluence of the Ardèche and Rhone Rivers, has been classified as a site of natural heritage value in 2013. Together with its immediate surroundings in the limestone plateau, which have been designated as part of the historic monument, the proposed property covers an area of 9 hectares and is surrounded by a buffer zone of 1,362 hectares.

The main opening to the cave is located in the Cirgue d'Estre, about 100m above the meander plain and 200m above sea level. This opening had been closed off by a stone fall dated to approximately 20,000 years BP, which sealed the cave until it was rediscovered and opened for scientific investigation in 1994. The two extreme ends of the cave are very narrow and have downward slopes; in the remaining central sections the floor level of the cave is predominantly even.

The geomorphological features of the cave reveal with rare precision the exact description of its geological evolution before any human use or occupation. For the purpose of research and documentation, the spaces of Grotte Chauvet have been divided and named in a series of halls and galleries, which are – from the entrance towards the north – as follows: Salle d'entrée, Salle Morel, Salle Brunel, Salle des Bauges, Galerie du Cactus, Salle des Panneaux Rouges, Galerie Rouzaud, Salle du Cierge, Salle Hillaire, Salle du Crâne, Galerie des Megacéros, Galerie des Croisillons, Salle du Fond and Galerie du Belvédère with the so-called sacristy.

The cave contains archaeological and paleontological evidence, which provides traces of the human use and occupation of the cave, but also to its frequentation by Palaeolithic fauna. More than 4,000 finds have been inventoried, a large majority representing the species *ursus spelaeus* (the cave bear), which may have frequented the cave for hibernation. Other finds point at a variety of other species, both carnivores like the brown bear, wolf, fox, panther, wild cat, hyena and sable, or ungulates such as deer, horses or ibex. The cave floors show further record of a variety of human foot prints.

In addition to the archaeological and paleontological evidence the most remarkable features of the cave are pictorial drawings, which at present are the oldest known human artistic testimonies of this kind. The pictorial representations found in the cave can be divided into three principal techniques. The first and perhaps oldest are engravings, which were implemented either with flint stones or by hand into the soft limestone sections. Secondly one finds red drawings, in particular in the first section of the cave, which were applied in different pigments, predominantly pure hematite or hematite mixed with calcite or ochre. The red drawings are mostly of ground pigment bound with paste and were applied with bare fingers or printed as positive or negative hand prints. The third kind is black drawings, which are exclusively drawn in charcoal. For these representations. pieces of charcoal were used as drawing tools or they were made of grounded charcoal bound by water and applied with help of drawing tools.

Rock art features in Grotte Chauvet combine a variety of anthropomorphic and animal motifs. Over 1,000 figurative images have been inventoried with more expected to be found as some remote areas of the cave have not yet been fully researched and documented for reasons of accessibility and conservation. 55% of the drawings are anthropomorphic representations, a majority of these hands, with the remaining 45% showing zoomorphic imagery. The animal representations are characterized by a majority (67%) of very dangerous species, the observation and study of which was only possible under life risk for the Aurignacian people. These species include mammoth, wild cats, rhinos, bison, bears, and aurochs. 423 detailed and identifiable animal representations have been counted. Some of these have very naturalistic features, including tendencies towards three-dimensionality and indications of movement or action scenes, such as fights among animals. The range of illustrations appears to include reflections of ethological observations.

Since the drawings are not equally distributed in the cave, it is assumed that the Aurignacian people have deliberately ignored certain spaces. 35% per cent of all animal representations can be found in the comparatively small Salle du Fond at the furthest end of the cave. Researchers suggest that Grotte Chauvet was never inhabited or domestically used but was instead of sacred character and it has been hypothesized that it was used for shamanist ritual practice. This hypothesis could be supported by the increase in density and quality of imagery towards the inner parts of the cave which could be related to concepts of an almost theatrical landscape of gradual ritual initiation towards the inner parts of the cave.

History and development

The Grotte Chauvet was initially formed as a result of three subsequent geological events, the Messinian Salinity Crisis (around 5.7 million years ago), the Pliocene Marine Transgression (5.3 -4.7 millions years BP) and the Alpine Elevation in the Pliocene (up to 3 million years ago). In this historic context, the internal shapes of the cave were created through water infiltration in the cavities during the Pleistocene and Holocene. Deposits and karsts erosions are the testimony of floods and flow-off streams. There are indications that animal frequentation of the cave may have started even earlier than human, at around 40,000 years BP.

The finds and drawings obtained in Grotte Chauvet can be dated to two separate phases of artistic production. The first phase is dated to between 32,000 to 30,000 years BP following C¹⁴ analysis, which may in reality even extend to as early as 36,000 years ago. This is usually referred to as the Aurignacian Period, the first Homo sapiens culture in Europe, which left a large number of paintings and engravings behind. The second phase of later human occupation has been carbon-dated to between 25,000 and 27,000 years BP, in the Gravetian Period, bringing forth the graphics of great mastery which suggest multidimensional effects.

A cliff collapse and resulting landslide around 23,000 years BP sealed the cave by closing off its only access. This rapid and accidental closure of Grotte Chauvet, which was retained until its equally accidental rediscovery in 1994 by Jean-Marie Chauvet, Éliette Brunel-Deschamps and Christian Hillaire, preserved an interior environment exceptionally unchanged since the Upper Paleolithic. Since its discovery and heritage designation just weeks after, immediate measures towards its best possible preservation were taken. These included a restriction of visitors for reasons of climatic control. Since then several expert meetings have discussed the best possible approach to its study and preservation.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis is divided into three thematic sections, with each considering a variety of sites with relevant comparative features. The first theme compares cultural manifestations of the Aurignacian people, the second is focused on early archaeological and paleontological evidence which provides testimony to cave frequentation and use in the Early Upper Palaeolithic, and the third theme compares rock art ensembles, in particular those already inscribed on the World Heritage List, which are of the earliest or most significant expressions of human artistic ability or which are known as masterpieces of rock art. These three themes will be considered separately.

In the context of cultural manifestations of the Aurignacian people, the comparative analysis considers the cave figurines in the Swabian Jura (Germany), the Aurignacian paintings in the cave of Fumane (Italy), the Peña de Candamo Cave, inscribed on the World Heritage List as part of the serial nomination of the Cave of Altamira and Palaeolithic Cave Art of Northern Spain, (1985, 2008, (i), (iii)), the cave of La Clotilde (Spain), as well as several others, in particular in France.

ICOMOS considers that the Grotte Chauvet illustrates a far richer quantity and quality of cultural manifestations of the Aurignacian people than any other site that is compared. Several of the other Aurignacian sites do not include naturalistic drawings and are hardly comparable with the quality of rock art and variety of motifs presented in Grotte Chauvet, which provide a unique insight into the cultural traditions of the time.

The comparative analysis of caves which preserve rich archaeological and paleontological evidence for the understanding of cave frequentation and use in the Upper Palaeolithic compares the Cave of Lascaux, inscribed as part of the Prehistoric Sites and Decorated Caves of the Vézère Valley, France (1979, (i), (iii)), the cave of Foz Côa, Portugal, inscribed as part of the Prehistoric Rock Art Sites in the Côa Valley and Siega Verde, Portugal (1998, 2010, (i), (iii)), the cave of Altamira, Spain, inscribed as the Cave of Altamira and the Paleolithic Cave Art in Northern Spain, (1985, 2008, (i), (iii)), and a number of other well selected examples.

ICOMOS considers that this part of the comparative analysis has illustrated that the Grotte Chauvet contains the oldest and at the same time largest variety of zoomorphic representations in the drawings, which are of exceptional quality and variety in terms of their depiction of species, in particular dangerous species. It has equally shown that the amount of archaeological and paleontological vestiges found in Grotte Chauvet provides clearer evidence to the frequentation of caves in the Upper Palaeolithic, than comparable finds in other caves, including those already inscribed on the World Heritage List.

In the third section of the comparative analysis, the "masterpieces" of rock art are compared with regard to their age and the aesthetic quality of drawings. Here, Grotte Chauvet is compared to Tassili n'Ajjer, Algeria (1982, (i), (iii), (vii), (viii)), Tsodilo, Botswana (2001, (i), (iii), (vi)), Kakadu National Park, Australia (1981, 1987, 1992, (i), (vi), (vii), (ix), (x)), Kimberley, Australia, again to Lascaux, Foz Côa and Altamira (see above), the Rock Carvings in Tanum, Sweden (1994, (i), (iii), (iv)) and the Rock-Paintings of the Sierra de San Francisco, Mexico (1993, (i), (iii)).

ICOMOS considers that the comparative analysis of the "masterpieces" of rock art could have been extended by considering the rock art of Cape York, Australia, which also contains very early evidence of pictorial drawings. The comparison available however has illustrated that the rock drawings in Grotte Chauvet are the oldest carbon-dated pictorial drawings known at present and, given their early creation, have very high artistic and aesthetic qualities, which allow for their consideration among the masterpieces of global rock art.

ICOMOS further notes that the 2002 ICOMOS global thematic study of rock art sites noted the strong potential of Grotte Chauvet for World Heritage Listing.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Grotte Chauvet contains the earliest and best preserved expressions of artistic creation of the Aurignacian people, which are also the earliest known figurative drawings in the world.
- The large number of over 1,000 drawings covering over 8,500 square meters, as well as their high artistic and aesthetic quality, make Grotte Chauvet an exceptional testimony of prehistoric cave art.
- The zoomorphic drawings in Grotte Chauvet illustrate an unusual selection of animals including very dangerous species, which were difficult to observe or approach. Some of these are uniquely illustrated in Grotte Chauvet.

ICOMOS considers that this justification is appropriate because Grotte Chauvet contains not only an unusually large collection of drawings of high artistic and aesthetic quality, but also at present the earliest known human figurative drawings, which have been dated on the basis of C^{14} analysis to 32,000 to 30,000 years BP. In addition, its state of preservation is exceptional as a result of its concealment over 23 millennia.

Integrity and authenticity

Integrity

The nominated property comprises the entire Grotte Chauvet and further includes the structurally relevant parts of the limestone plateau around the cave as well as its entrance situation and immediate surroundings. These combine all the elements of its Outstanding Universal Value as well as the layers above, which are an important component for the protection of the cave features.

The current entrance restriction and air ventilation, which was maintained in the exact characteristics of the time of discovery, ensures the integrity of the property and averts potential dangers of human impact. The management of the property, and in particular its strict access limitations and the strong emphasis on conservation, limit the risk of deterioration to the minimum possible.

Authenticity

The authenticity of the property is evident and based on its pristine condition, sealed off for 23,000 years and carefully treated and access-restricted since its rediscovery. The dating of the finds and drawings has been confirmed by C^{14} analysis as between 32,000 and 30,000 years BP and is agreed upon by the majority of the scientific community.

Thanks to its current access policy, the property remained entirely authentic following its rediscovery. It is obvious that the rock art as well as the archaeological and paleontological vestiges are almost free of human impact or alterations. The only modification is the installation of completely-reversible, stainless steel bridging elements to allow access to parts of the cave whilst preventing disturbance of floor traces or finds. ICOMOS therefore considers that the condition of authenticity is met in an exemplary manner.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i) and (iii).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that Grotte Chauvet contains the first known expressions of human artistic genius and more than 1000 drawings of anthropomorphic and zoomorphic motifs of exceptional aesthetic quality. These drawings are unique in the range of species represented and the variety of techniques applied, including illustration of

three-dimensionality and suggested movement, and have as such become a reference for the understanding of Palaeolithic artistic capacity and rock art.

ICOMOS considers that the property is a remarkable testimony of the earliest human, artistic expression and it contains a large variety of animal drawings in different techniques and of high quality, which illustrate the creative genius of the Aurignacian artists. ICOMOS further notes that the artistic quality is underlined by the skilful use of colours, the combinations of paint and engravings, the precision in anatomical representation and the ability of the artists to give an impression of volumes, movements and ethology.

ICOMOS considers that this criterion has been justified.

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that the iconographic representations in the natural environment of Grotte Chauvet provide a unique testimony to the development of the artistic traditions of the Aurignacian people. The archaeological, paleontological and artistic evidence in Grotte Chauvet illustrates like no other cave of the Early Upper Paleolithic period the frequentation and use of caves, including cultural and ritual practices of the time.

ICOMOS considers that the cave provides an exceptional testimony to the frequentation and use of caves by the Palaeolithic fauna, and also provides testimony to ritual cave usage of the Aurignacian people. However, it has limited capacity to provide testimony to other forms of cave usage, in particular cave habitation at the time, and therefore cannot be considered a more general testimony for cave usage.

ICOMOS further considers that Grotte Chauvet bears a unique and exceptionally well-preserved testimony to the cultural and artistic tradition of the Aurignacian people and to the early development of artistic human activity in general. In this context, the fact that the cave was sealed for more than 20 millennia makes it an unparalleled testimony, which has transmitted this artistic masterpiece without disturbance.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the conditions of integrity and authenticity have been met and the nominated property meets criteria (i) and (iii).

Description of the attributes

The attributes of Outstanding Universal Value comprise Grotte Chauvet's geomorphologic features, as well as its archaeological and paleontological evidence. These provide traces to the early human and animal use of the cave, as do the highly significant pictorial drawings which comprise both human and animal depictions, made with different painting or charcoal drawing techniques. The more than 1,000 rock art features inventoried today may not yet represent the complete artistic creation or human evidence to be found in Grotte Chauvet, and further features to be discovered will surely contribute to the Outstanding Universal Value.

4 Factors affecting the property

Key factors to the long term preservation of the Palaeolithic paintings and drawings in natural pigments only bound by water, are the environmental and in particular climatic conditions inside the cave. The exceptional state of preservation of these early paintings is a result of the extremely stable interior climate over millennia as well as the absence of natural damaging processes, such as physical or chemical erosion.

Any changes in relative humidity and the air composition inside the cave may have severe impacts on the condition of the drawings and paintings. It is due to this risk that the cave will not be open to the general public, and that future visits of experts, researchers and conservators will need to be restricted to the minimum necessary. Even expert visitors are not permitted to come into close or direct contact with the walls or floor of the cave to prevent physical or chemical damages. Environmental studies of the climatic changes in the cave over the past years have led to a redesign for the cave opening aimed at allowing for better natural ventilation to contribute to a stabilization of the cave microclimate.

Grotte Chauvet is unlikely to be affected by urban development pressures. The closest settlement is kilometres away and the region does not seem to be affected by strong population growth. Although in theory the cave could be negatively affected by extractive, agricultural, industrial and recreational activities, these risks seem contained following the extension of the classification of the property's surroundings as the natural heritage site of *la Combe d'Arc* in January 2013. The legal protection prohibits any construction, limits human activities and prevents any action that could affect the natural filtration of the site.

Potential natural hazards are limited and the cave has not been affected by natural disasters since the landslide which caused its closure. The seismic risk in the Department of l'Ardèche is negligible. Previous floods have occurred in the region but never reached anywhere close to the elevation of the cave and landslides have nowadays become far less likely. Nevertheless, any ground water saturations in or below the limestone massive which may cause future destabilizations are carefully monitored.

ICOMOS considers that the main threats to the property are environmental, in particular climate changes inside the cave.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The limit of the property can be expressed at two different levels, subterranean and on the land surface. At the subterranean level, the extension corresponds to the complete length and height of the cave and its various galleries. The area comprises ca. 8,500 square meters and galleries of up to 400 meters in individual length.

Since the property is located below more than 20 meters of soil, the property also includes the vertical soil layers above and to the sides of the cave which may affect its structural stability. The State Party acquired around 9 hectares of land surface above the cave to ensure strict conservation policies for a surface projection amounting to ten times the size of the cave itself. ICOMOS considers it a correct decision to include these larger areas into the property boundaries given the immediate structural interdependence with the subterranean cavity of Grotte Chauvet. ICOMOS hence considers that the property boundaries are of appropriate size.

The buffer zone of Grotte Chauvet covers 1,362 hectares, and corresponds to the classified natural heritage site of *la Combe d'Arc*. It includes not only the entire rain catchment areas that may affect ground water streams around Grotte Chauvet but also the complete surrounding hydrological basin. ICOMOS considers that the buffer zone is well selected, provides adequate protection and allows the continued controlling of all environmental conditions.

ICOMOS considers that the boundaries of the nominated property and its buffer zone are adequate.

Ownership

Following recent land acquisition from private owners, the complete property is now in state ownership and administrated by the Ministry of Culture, represented by the Regional Office for cultural affairs of Rhône-Alpes. The buffer zone remains in partially private and partially public ownership.

Protection

The Grotte Chauvet is protected at the highest national level as a historic monument, a protection status which was attributed merely weeks after its re-discovery in early 1995. This legal protection extends to the related ground surface of 9 hectares and corresponds to the boundaries of the nominated property.

Likewise the buffer zone benefits since early 2013 from the highest possible national protection based on natural characteristics. The buffer zone in addition benefits from previously-issued special regulations concerning the protection of biotopes (of 1990 and 2007) and as a special conservation zone under Natura 2000. ICOMOS considers that the protection of both property and buffer zone is of adequate status and is effective in its implementation of the regulatory framework. It should be retained in its current status and extension. Any deletion or alteration decreasing the protective status should be prevented and modifications of the nominated area should only be allowed if increase of the territory seems necessary.

ICOMOS considers that the legal protection in place and the protective measures implemented for the property and the buffer zone are adequate.

Conservation

When the Grotte Chauvet was rediscovered in 1994 it represented such an exceptional State of Conservation, that the responsible authorities took almost immediate and the strictest possible measures for its future conservation. Conservation measures have not been applied to the fragile paintings, drawings or other Palaeolithic remains but are focused on preventive conservation, in particular of the environmental and climatic conditions of the cave. Most efforts are directed at reducing all kind of risks that could potentially change the climatic conditions, including but not limited to human access.

Several monitoring systems have been installed in Grotte Chauvet which form an integral part of the preventive conservation efforts. These include 24-hour surveillance of the cave entrance to prevent unauthorized human access. The responsible authorities equally installed a permanent system recording internal environmental parameters, such as relative humidity, temperature, Radon concentration and CO_2 levels. The preventive conservation efforts are supervised by an expert conservator in the Rhône-Alpes regional directorate for Archaeology.

No active conservation has been carried out in Grotte Chauvet and it is intended to retain all paintings and drawings in the fragile but pristine condition in which they were discovered. The only change which occurred after the cave's rediscovery was the excavation works undertaken at the cave entrance and the adjoined narrow gallery, to allow for human access. A gate was introduced to close the cave to unauthorized visitors. Later the gate was changed and the entrance was opened a little further to prevent cave climate disruptions by providing the same amount of ventilation and air exchange that must have existed before the cave's rediscovery.

Inside the cave a new stainless steel walkway of 60cm width and 350meters length was installed but remains completely reversible. It allows researchers to transit the cave galleries without risk of causing damages to the delicate remains on the cave floor and walls. Other additional walkways produced of anodized aluminium and titanium are flexibly-installed in areas of research focus. The climatic recording devices inside the cave are all installed against this walkway frame and not directly attached to the cave walls. These are categorically protected from any human impact, including during the annual research season.

Researchers entering the cave are given full-cover protective clothing – limiting the introduction of alien substances into the cave – as well as footwear specifically dedicated to the cave visits. The team of researchers is in the process of developing new strategies for the study of rock art which aims at allowing the maximum scientific knowledge to be gathered within minimum access time and hence minimum impact to the cave environment. Previous scientific seasons have allowed for the compilation of an inventory of approximately 4,000 archaeological and paleontological vestiges (mostly bones) and approximately 1,000 figurative drawings and paintings. As new discoveries are made during every season these inventories are constantly expanded.

ICOMOS considers that the vestiges and rock drawings in Grotte Chauvet are exceptionally well preserved and that the State Party has managed to successfully control the climate in the cave, which remains basically unchanged since 20,000 years, including its CO_2 and Radon concentrations. The fact that the measured values of Radon and CO_2 are dangerous to human health in case of long-term exposure, constitutes an additional aspect of climatic protection as it will limit researchers' access not only by means of legal but also health restrictions.

ICOMOS considers that the state of conservation of Grotte Chauvet is exceptionally pristine. ICOMOS further considers that the preventive conservation mechanisms in place are adequate and supports the policy that no direct conservation interventions are envisaged.

Management

Management structures and processes, including traditional management processes

The management system rests on the cooperative arrangements between national, regional and local institutions concerned with management processes affecting the Grotte Chauvet. This process is guided by the Ministry of Culture, which is not only the property owner but also the key responsible agency for the conservation and management of the cave. The ministry has created three full-time positions dedicated to the conservation and management of the property. An overarching management framework, the Comité de gestion, is responsible for the implementation of the management plan. The State Party should however pay specific attention to ensure that the large number of stakeholders involved in the management of the property will not slow down its functioning.

A number of cooperation projects with and by other institutions were formed to support the management efforts. The Rhône-Alpes region is a key partner participating in the Grand Projet Grotte Chauvet (Grand Projet de Rhône-Alpes "Grotte Chauvet"), which is dedicated to the management of the cave in the wider context of regional factors related to development, transport, cultural activities and tourism. The Département de l'Ardèche also participated in these efforts with its resources.

Only months after the re-discovery of Grotte Chauvet it became obvious that the cave would never be opened to the public. Following wider discussions on possible alternatives for interpretation and presentation, the idea of a facsimile reconstruction emerged and the Grand Projet Espace de Restitution de la Grotte Chauvet (ERGC) was established. The aim of this project lies in the creation of a facsimile reconstruction of the cave and its paintings and drawings, with a discovery and interpretation area to attract visitors. This shall be at a distance which excludes any potential impact on the Grotte Chauvet and will be located to its north outside the buffer zone. ICOMOS considers that the management arrangements for the Grotte Chauvet, its buffer zone and the future facsimile visitor centre are adequate in their respective focus.

It should be highlighted that apart from this initiative to allow for better public access to a representation of the cave, the management is strongly focused on preventive conservation and research. Both areas seem adequately equipped with financial resources and while conservation is coordinated by ministry staff members, trained in archaeology, conservation and heritage curatorship, the continuous investigation support has been tendered and is undertaken by expert consultants.

To prevent the key risk of climatic changes in the cave, human access is strictly controlled and, apart from the researchers, access permission can only be granted by the curator and the prefecture of the responsible department. According to the nomination dossier less than 200 people visit the cave annually, a number which in ICOMOS' view should under no circumstances be exceeded.

Policy framework: management plans and arrangements, including visitor management and presentation

The management plan is based on five strategic objectives emphasizing the protection, conservation and research of Grotte Chauvet, the administration of surrounding processes in view of holistic World Heritage protection and the promotion of the Grand projet Grotte Chauvet-Pont d'Arc. The plan further elaborates strategic management activities including concrete actions to be implemented between 2012 and 2016. The actions are presented with approximate timeframes, financial requirements and performance indicators which make the management plan a precise working tool for the forthcoming years.

The construction and opening of the comprehensive facsimile and interpretation centre of Grotte Chauvet features prominently in several strategies of the management plan. Intended as a visitor attraction which allows for public experience of a Grotte Chauvet representation, the planned complex combines a cave facsimile, a discovery and interpretation area and a variety of visitor services. The location was selected to the north of the buffer zone and will not increase visitor movements in the vicinity of Grotte Chauvet. The agreement of all professional and political stakeholders to channel visitor flows and marketing activities towards a facsimile rather than attempting to exploit the property, and the retention of strict access limits to Grotte Chauvet is commendable.

Apart from interpretation and presentation, several other management tools are intended to be improved. The Schéma de cohérence territoriale (SCOT), an urban planning and management tool, is planned to be applied to this rural area. A fire risk detection and prevention assessment is currently being undertaken, and water and water quality management, which form an essential factor in the property's environment, are considered. An accessibility plan restricting access and movement not only in but also around the cave is also included.

Involvement of the local communities

To improve the involvement of the local community, citizen workshops were undertaken in the region of Rhône-Alpes. They encouraged the local community to participate in the planning and implementation of the Grand Projet Espace de Restitution de la Grotte Chauvet (ERGC) but also raised awareness of the management requirements within the buffer zone and natural heritage site of *la Combe d'Arc*. These workshops are amply documented and have brought forth preference indications for activity fields suggested by community representatives.

ICOMOS considers that the current management processes and cooperation work effectively and that the elaborate management plan is a helpful planning tool under implementation. The indicators provided will allow for full quality assurance after the first cycle of implementation in 2016, and the management plan will have to be adjusted for future management processes, past its current validity.

ICOMOS considers that the management system for the property is adequate and that the management plan provides a good basis for the implementation of specific action plans and protection strategies.

6 Monitoring

Environmental and climatic monitoring in Grotte Chauvet is continuous, based on permanently-installed devices which are adjoined to the walkway structures inside the cave. Through these, the conditions of the cave can be observed and controlled despite the strict access prohibition which would otherwise make regular monitoring activities difficult. The data generated is observed and interpreted by two specialist laboratories.

The technical sensors continuously measure the humidity, temperature and hydrological conditions as well as CO_2 and Radon concentrations in the air. In addition to this data, researchers conduct annual inspections of the

microbiological situation. The responsible authorities further document the visitor numbers per year, attempting to keep them as low as possible.

Monitoring of the effectiveness of the management system will be carried out based on the indicators attributed to the different activities in the management plan. These combine process and result-based indicators aimed at ensuring that actions are completed within the prospected time frames but also affirming that these actions illustrate the envisaged impacts and results.

ICOMOS considers that the permanent monitoring of the cave is of high importance and that the annual monitoring procedures and indicators for management quality assurance are satisfactory.

7 Conclusions

ICOMOS considers that Grotte Chauvet is an exceptional testimony to the earliest-known creative production of the Aurignacian people, which illustrates Outstanding Universal Value. The great potential for Outstanding Universal Value had already been highlighted in the 2002 ICOMOS Global thematic study of rock art sites and has been fully demonstrated in the nomination dossier.

Grotte Chauvet does not only contain an unusually large collection of paintings and drawings of exceptional artistic and aesthetic quality, it is also the earliest known example of human figurative drawings, based on its C^{14} analysis dating to 32,000 to 30,000 years BP. In addition, its state of preservation and authenticity is exceptional as a result of its concealment over 23 millennia. Annual research inside the cave allowed for the compilation of an inventory of 4,000 archaeological and paleontological vestiges and approximately 1,000 figurative drawings. These numbers continue to increase as new discoveries are made each season.

Conservation attempts are exemplary in their strong focus on preventive conservation. No additive conservation measures have been applied to the fragile paintings and ICOMOS commends this approach of no intervention. Most efforts are directed at reducing all kinds of risks that could potentially change the climatic conditions, including but not limited to human access.

To ensure an adequate property size and its long-term legal protection, the State Party acquired 9 hectares of land surface above the cave, which correspond to the extension of the property. ICOMOS considers that this larger surface area constitutes an essential element of the protection approach. ICOMOS agrees with the property and buffer zone boundaries suggested and confirms their adequacy for the property protection.

The Management System is based on partnership of the national, regional and local authorities which respectively contribute human and financial resources. It seems clear that the cooperation follows agreed upon and shared objectives. A number of these are outlined in the elaborate management plan which further includes management activities as well as concrete actions to be implemented between 2012 and 2016. The actions are presented with approximate timeframes, financial requirements and performance indicators which make the management plan a precise working tool for the forthcoming years.

ICOMOS considers that the property fulfils all requirements for World Heritage listing by demonstrating Outstanding Universal Value, including the conditions of integrity and authenticity, and by having set up adequate protection and management standards. The key emphasis in the years to come will be to keep the status quo in terms of climatic conditions in the cave, but also rigor of management and protection mechanisms, and to provide an interpretation facility to interested visitors.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc, Ardèche France, be inscribed on the World Heritage List on the basis of **criteria** (i) and (iii).

Recommended Statement of Outstanding Universal Value

Brief synthesis

The decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc is located in a limestone plateau of the meandering Ardèche River in southern France, and extends to an area of approximately 8,500 square meters. It contains the earliest known pictorial drawings, carbondated to as early as the Aurignacian period (30,000 to 32,000 BP). The cave was closed off by a rock fall approximately 20,000 years BP and remained sealed until its rediscovery in 1994. It contains more than 1,000 drawings, predominantly of animals, including several dangerous species, as well as a large number of archaeological and Palaeolithic vestiges.

The cave contains the best-preserved expressions of artistic creation of the Aurignacian people, constituting an exceptional testimony of prehistoric cave art. In addition to the anthropomorphic depictions, the zoomorphic drawings illustrate an unusual selection of animals, which were difficult to observe or approach at the time. Some of these are uniquely illustrated in Grotte Chauvet. As a result of the extremely stable interior climate over millennia, as well as the absence of natural damaging processes, the drawings and paintings have been preserved in a pristine state of conservation and in exceptional completeness. **Criterion (i)**: The decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc contains the first known expressions of human artistic genius and more than 1,000 drawings of anthropomorphic and zoomorphic motifs of exceptional aesthetic quality have been inventoried. These form a remarkable expression of early human artistic creation of grand excellence and variety, both in motifs and in techniques. The artistic quality is underlined by the skilful use of colours, combinations of paint and engravings, the precision in anatomical representation and the ability to give an impression of volumes and movements.

Criterion (iii): The decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc bears a unique and exceptionally well-preserved testimony to the cultural and artistic tradition of the Aurignacian people and to the early development of creative human activity in general. The cave's seclusion for more than 20 millennia has transmitted an unparalleled testimony of early Aurignacian art, free of post-Aurignacian human intervention or disturbances. The archaeological and paleontological evidence in the cave illustrates like no other cave of the Early Upper Palaeolithic period, the frequentation of caves for cultural and ritual practices.

Integrity

property comprises The nominated the entire subterranean space of the cave of approximately 8,500 square meters and all structurally relevant parts of the limestone plateau above the cave as well as its entrance situation and immediate surroundings. These spaces contain all the attributes of Outstanding Universal Value and the property is of adequate size. Strict preventive conservation policies including access restrictions have allowed for the maintenance of an almost identical situation to the time of discovery. These access restrictions and the continuous monitoring of the climatic conditions will be key factors for the preservation of integrity of the property and for averting potential dangers of human impact.

Authenticity

The authenticity of the property can be demonstrated by its pristine condition and state of conservation, having been sealed off for 23,000 years and carefully treated and access-restricted since its rediscovery. The dating of the finds and drawings has been confirmed by C^{14} analysis as between 32,000 and 30,000 years BP, and the materials, designs, drawing techniques and traces of workmanship date back to this time. The rock art as well as the archaeological and paleontological vestiges are free of human impact or alterations. The only modification is the installation of completely-reversible, stainless steel bridging elements to allow for access to parts of the cave whilst preventing disturbance of floor traces or finds.

Management and protection requirements

The decorated cave of Pont d'Arc, known as Grotte Chauvet-Pont d'Arc is protected at the highest national

level as a historic monument. Likewise, the buffer zone benefits from the highest level of national protection since early 2013. The buffer zone accordingly will not permit future development.

The focus of management is the implementation of a preventive conservation strategy based on constant monitoring and non-intervention. Several monitoring systems have been installed in the cave which form an integral part of these preventive conservation efforts. Any changes in relative humidity and/or the air composition inside the cave may have severe affects on the condition of the drawings and paintings. It is due to this risk that the cave will not be open to the general public, but also that future visits of experts, researchers and conservators will need to be restricted to the absolute minimum necessary. Despite the delicateness of paintings and drawings, no conservation activities have been carried out in the cave and it is intended to retain all paintings and drawings in the fragile but pristine condition in which they were discovered.

The management authorities have implemented a management plan (2012-16), based on strategic objectives, activity fields and concrete actions, which are planned with time frames, institutional responsibilities, budget requirements and quality assurance indicators. The latter will allow for full quality assurance after the cycle of implementation in 2016, following which the management plan will have to be revised for future management processes.

After it became clear that the cave would never be accessible to the general public, the idea of a facsimile reconstruction to provide interpretation and presentation facilities emerged. The Grand Projet Espace de Restitution de la Grotte Chauvet (ERGC) was established, with the aim of creating a facsimile reconstruction of the cave with its paintings and drawings, and a discovery and interpretation area to attract visitors.

Additional recommendations

ICOMOS further recommends that the State Party give consideration to the following:

 Creating a long-term legal framework that retains the current access restrictions for visitors to a maximum annual number and which continues to prevent direct physical contact with the walls or floors of the cave.



Map showing the boundaries of the nominated property



Salle Brunel



Salle du Fond



Engraved owl



Black bison



Red panther