

# Meteora World Heritage Site

## Thessaly, Greece

*Irini Lyratzaki*

### The site

Situated in the plain of Thessaly, the Meteora site occupies a large part of the Antichasia Mountains and the region of Kalambaka, and includes the rock pillars of Meteora itself and the famous monasteries built on their summits.

The Meteora rock pinnacles form one of the most extraordinary landscapes in the world. Their name derives from the ancient Greek word *meteoros* meaning 'suspended in the air'. Rising over 400 m above ground level, they were created 60 million years ago from deltaic river deposits and have subsequently been transformed by earthquakes and sculpted by rain and wind into a variety of spectacular shapes.

Archaeological evidence testifies to human presence in the area since the Palaeolithic period and excavations in the Theopetra Cave, 3 km from Meteora,

have brought to light evidence of continuous human habitation between the Middle Palaeolithic and the end of the Neolithic periods (40,000-3,000 BC).

Unique samples of medieval monastic architecture adorn the summits of the Meteora rock pillars. The first monasteries were established in the fourteenth century, when monastic communities first began to develop<sup>1</sup>. In all, twenty-four monasteries were inhabited during the fifteenth and sixteenth centuries, although today only six are still active.

The area is sparsely inhabited and population numbers are gradually falling. Several settlements cling to the mountain slopes and local people depend mainly on agriculture and stock-raising; lower down in the plains irrigated crops are the main form of agriculture. Nevertheless, animal husbandry, agriculture and industry no longer provide sufficient income and so in recent decades tourism has become the main economic activity of local people. The natural and cultural values of the area attract increasing numbers of visitors, both Greek and foreign, which means

---

<sup>1</sup> It is thought that hermits inhabited the area long before the monasteries were built.

< *Varlaam Monastery, Meteora.*

greater economic possibilities for the region, but only at the cost of intense pressure on certain sites. The unique values of the region are certainly beneficial, but since they are so vulnerable, they must be very carefully managed.

## Natural values

The area is a mixture of mountains and foothills covered by pastures and oak-dominated forests; the actual vegetation depends on altitude and orientation as much as it does on the degree of human activity. The region is crossed by Litheos River, a tributary of the Pineios River and of great natural interest, in part because of its riparian forests. As occurs with the majority of Greek rivers, it is threatened in many ways and currently is not protected. The rocks of Meteora constitute a unique geologic formation and the region is also rich in natural cavities and caves. Fossils from the Theopetra Cave reveal the presence of a variety of species going back millions of years.

In all 163 bird species have been recorded in the area, of which 120 nest. Ten species are either endangered or listed in the Red Data Book of Threatened

Vertebrates of Greece<sup>2</sup>. One of the four remaining colonies of Black Kites *Milvus migrans* in the country is found in the Meteora-Antichasia Mountains, and the area is also one of the most important habitats in Greece for Egyptian Vulture *Neophron percnopterus*, a species that is threatened throughout much of Europe. Other bird species of the area include White Stork *Ciconia ciconia*, Jay *Garrulus glandarius*, Nightingale *Luscinia megarhynchos*, Little Owl *Athene noctua*, Common Kestrel *Falco tinnunculus*, Little Ringed Plover *Charadrius dubius*, Black Redstart *Phoenicurus ochruros* and Magpie *Pica pica*. Mammal species found at the site include Red Fox *Vulpes vulpes*, European Wolf *Canis lupus*, Beech Marten *Martes foina*, Eastern Hedgehog *Erinaceus concolor*, Black rat *Rattus rattus*, Lesser Horseshoe Bat *Rhinolophus hipposideros* and Weasel *Mustela nivalis*.

As well, several endemic species of flower such as *Campanula kalambakensis*, *Centaurea kalambakensis* and *Centaurea chrysocephala occur*; the latter two species are threatened.

The area of Meteora is a SPA (Special Protection Area) for birds, a Natura 2000 site and a UNESCO World Heritage Site

---

<sup>2</sup> Hellenic Zoological Society and Hellenic Ornithological Society (1992), *The Red Data Book of Threatened Vertebrates of Greece*, WWF, Athens, Greece.

for both its natural and cultural values, as well as a Sacred, Holy and Immutable Site. The monastic community is very interested in environmental protection and does its best to safeguard the unique natural values of the site that have been well documented in several reports and studies, including a UNESCO report (drafted when the region became a World Heritage Site), an environmental study prepared by the National Institution of Agricultural Research and in the final reports of various European Union programmes such as INTERREG, ENVIRREG and LIFE.

The predominant activity related to the natural values of the region is tourism, associated above all with the area around the Meteora cliffs. Opinions vary regarding whether the majority of visitors are interested or not in the natural values of the site, although all agree that local people are not particularly concerned about environmental issues and lack sufficient environmental education. Current directives regarding the Natura 2000 site require zoning and the regulation of activities; however, local people react negatively to any enforcement that implies that their activities will be limited in comparison to the past, when they could use their land in any way they wished.

## Spiritual and cultural values

Archaeology has shown that the area has been inhabited since the Palaeolithic period and at Theopetra, 3 km from Meteora and the only excavated cave in Thessaly, evidence of continuous human habitation from the Middle Palaeolithic to the end of the Neolithic ages has been found. Excavations have brought to light various carbonised seeds that had been either gathered or cultivated, the remains of hunted and domesticated animals and evidence of permanent and seasonal habitation during the Neolithic period. Moreover, two human skeletons have been found in the cave, one dating from the Upper Palaeolithic and the other from the Mesolithic. The most extraordinary find, however, are the rarely found footprints (left feet) of two children. Other remains found in the cave include pottery, different types of statuettes, stone tools made of flint and other rocks, millstones, bone needles and jewellery made from seashells.

The principal values of the area are the Meteora pinnacles and their monasteries, which attract visitors from around the globe, and the legacy of Orthodoxy and Monasticism. Hermits looking for seclusion settled in the caves and rock crevices of the area in the eighth century and gath-

ered together on Sundays and important holidays at the church in Doupiani near the village of Kastraki. The numbers of monks started to increase and the first monasteries were established in the fourteenth century. The monastic community continued to grow and during the fifteenth and sixteenth centuries twenty-four monasteries were active, although over the following centuries the communities declined due to a number of factors such as invasions and raids by bandits. Today only six monasteries are active: Roussanou, Varlaam, Aghios Nikolaos Anapafsas, Megalo (Great) Meteoro or Metamorphosis, Holy Trinity and Aghios Stefanos.

The monasteries are renowned for their unique architecture, iconography and long-term support for various different arts such as the copying of manuscripts, calligraphy, embroidery and wood carving. The cultural and spiritual values of Meteora are well documented. Most of the historical buildings were described in the seventh century by the Ephorate of Byzantine Antiquities. The manuscripts have been classified by the Athens Academy and the icons and other elements of cultural heritage have been studied by the monasteries themselves. Many items of cultural importance are on display in the museums in the monasteries of Aghios Stephanos, Megalo Meteoro and

Varlaam, and in the Byzantine Museum in Athens; others, however, were destroyed during World War II. The values of the Orthodox religion are also recorded in the words of the Holy Fathers.

The cultural values of the region are related to its natural elements. In the past, caverns were –and some still are– places where hermits resided, whilst the monasteries were built on top of the huge rock pinnacles. Moreover, many local customs are related to the changing of the seasons and Mother Nature herself. Certain customs are of pagan origin and have been discouraged by the Church and, more specifically, by the monastic community. Much of the symbolism of these customs has unfortunately been lost and today their festive character is the only element that remains. Many cultural events once took place in the area, above all during holiday periods (Christmas, Easter and Carnival), and today even these celebrations show signs of disappearing.

Religious activities such as pilgrimages, visits to the monasteries and religious ceremonies, masses, confessions, festivals (once or twice a year), as well as the daily services performed in each monastery, are the most important activities that retain a significant cultural and spiritual component. In Kalambaka, many cultural activities, symposiums and conferences

–not necessarily of a religious nature– are also held and the monasteries occasionally participate in the organisation of these events.

Everyday life in the area of Meteora is deeply influenced by the cultural and spiritual values of the site. Through their constant and close contact with monasticism in particular and religion in general, local people live according to these values and try and convey them in turn to visitors. They recognise and appreciate these values, and ensure that they are maintained because part of their income depends on

tourism. Visitors from other parts of Greece appreciate these values because Meteora is considered as a site of pilgrimage. Some foreign visitors are also aware of the spiritual significance of the site, although most regard Meteora above all as a cultural site. The monks have noticed, though, that when guided tours focus on the spiritual qualities of the monuments visitors' ideas change and many seem to begin to perceive Meteora as a sacred place.

Most of the spiritual values mentioned above relate to Orthodoxy and monasti-

*The unique monastic landscape of Meteora.*



cism and are pertinent above all to the monastic community. Nevertheless, it is widely accepted that most of the values are understood by the general public, regardless of class, religion or tradition.

## Pressures and impacts

### Impacts on the natural environment

The environment is under pressure from a number of economic activities, of which tourism (religious, environmental, athletic and cultural) is the most significant. The large number of visitors (around two million a year) creates a huge strain on the entire region of Meteora, including Kalambaka. In the mid-1990s, the Municipality of Kalambaka and a development company put forward a proposal to limit the flow of visitors to the Sacred Site of Meteora. However, the monastic community and local businessmen were not in favour of the proposed measures.

Tourists rarely visit the area for its natural values alone. Their closest contact with the natural environment of the area is with the fauna and flora surrounding the monasteries. Locals are not particularly environmentally concerned either, probably due to a lack of environmental education. A characteristic and illustra-

tive example of this is their continued negative reaction to the zoning imposed by the recent NATURA 2000 directives.

Apart from tourism, which is almost the only economic activity of most local people, there are few other human activities that negatively affect the environment. The local population has abandoned most traditional activities except stock-raising, which, owing to a lack of proper management, has resulted in over-grazing. Similarly, the uninhibited use of pesticides and fertilisers in agriculture has had devastating results in the area as both lead to soil and underground water nitrate pollution.

As ICOMOS observed in 1988: *“The major threats to the site are both natural and anthropic. The former includes the possibility of damage caused by the not particularly powerful earthquakes that occur frequently. The latter include disturbance by low-flying aircraft [and] the uncontrolled felling of the Platanus forests in the valleys. As a result of excessive disturbance and changes in agricultural practices the [so important for the area] vulture species require access to safe artificial feeding sites”.*

### Impacts on the spiritual and cultural heritage

After Mount Athos, Meteora boasts one of the biggest and most important groups of

monasteries in Greece. The summits of its huge pillars became the home to monks who found in Meteora a sanctuary where they could isolate themselves from everyday life, protect themselves from danger, and above all, find a way to get closer to heaven.

Modern life, though, has altered the monks' customs. The excessive numbers of tourists entering the site every year undoubtedly leave their mark. Spiritual tourism has both negative and positive aspects. On the one hand, it provides a relatively good income for the monasteries that has probably enabled them to preserve their valuable treasures. On the other hand, the monasteries' improved financial position has had a negative impact upon the monks' ascetic way of life as it has resulted in greater comfort and less spirituality, which flies in the face of the spirit of monasticism.

The large number of visitors wishing to consult the monks constitutes an additional strain. In order to preserve its monastic way of life, the community has scheduled a controlled visiting programme and has had to restrict access to several parts of the monasteries.

Since the declaration of the site as sacred, hang-gliding and rock climbing have also been firmly restricted to certain

cliffs so as to help preserve the spiritual character of the area.

## Conservation perspectives and sustainability

### Conservation of the natural heritage

It is not yet clear who is in charge of environmental protection in the area. The Forest Inspection office is in charge of the overall management of the region, while the Archaeological Service is responsible for the area surrounding the cliffs. Few environmental NGOs have ever been active here and, given the locals' lack of enthusiasm, there has never been any great move towards the protection of the environment.

An environmental study by the National Institution of Agricultural Research has proposed the establishment of a central Administrative Body, but it is still unknown if this step will be taken.

### Protection of the cultural and spiritual heritage

The monasteries have been described by UNESCO as a unique phenomenon of cultural heritage and they form one of the most important places on the cultural map of Greece.

The sixteenth-century frescoes found in this group of 24 monasteries constitute a fundamental stage in the development of post-Byzantine painting. Since 1972 the monasteries have been restored and conservation work is still being carried out annually by specialists including archaeologists, restorers, craftsmen and labourers. The monasteries are in an area within which building work is prohibited or limited.

The main authorities with responsibilities over the area are the Metropolis of Trikkis and Stagoi, the monastic community, the Greek Ministry of Culture and, more specifically, the Seventh Ephorate of Byzantine Antiquities. Other authorities involved are the Municipality of Kalambaka, the Prefecture of Thessaly, ICOMOS and the Society of Thessalic Research.

## Recommendations

Aesthetically, Meteora is one of those places where natural and artificial elements come together in perfect harmony to create a natural work of art on a monumental, yet human scale. Within this landscape of awe-inspiring shapes, volumes and textures, one has that rare sensation of feeling both small and large at the same time in the presence of these outstanding natural works of art.

Nevertheless, this extraordinary natural and spiritual site requires immediate and drastic action if it is not to be completely destroyed by unsustainable human activity. A holistic and integrated plan for the entire region is essential. Sacredness and uncontrolled development are in no way compatible and so a middle road should be found. All stakeholders (the monastic community, conservationists and the municipal authority) must agree on a management plan for the whole area. Although visitors generate income for both the locals and the monasteries, their flow must be regulated in order to preserve the spiritual character of the site and the environment. Activities such as the meetings being organised by universities, the National Institution of Agricultural Research and development companies can all contribute to this cause in a general and coordinated way by having a positive impact on public awareness, a necessary step towards the effective implementation of any integrated plan.

It has been asserted that when the environment is protected, a site's spiritual and cultural values are improved and its special character is enhanced. Visitors upon reaching a site such as Meteora could be notified that they are entering a sacred area and that they must behave accordingly, that is, respect the spirituality of the place and its environmental values. A visi-



tor centre run by monks and conservationists at the entrance to the Sacred Site could undertake this task of informing visitors. Visitors must comprehend that there is a close relationship between the spiritual nature of the site and the state of conservation of the environment. They should be told why the first hermits chose Meteora as a place of residence. The cliffs at Meteora instil in visitors a sense of the presence of the Creator and encourage contemplation and a sense of calm. All these messages should be conveyed to visitors by appropriate signs, leaflets and posters placed at the entrance to the Sacred Site.

The Municipality has every intention of orientating its work towards the preservation of both cultural and natural values. However, it lacks funds since none are ever forthcoming in the State budget. The great wealth that tourism has brought to the area and the feeling that its entire social structure is based on tourism makes it difficult for the Municipality to take drastic measures in favour of protecting environmental and cultural values.

Residents must be informed about or trained in environmental questions regarding their region and how conservation relates to the spirituality of the site. Local

*Varlaam Monastery, Meteora.*



people should be encouraged to develop a mentality that will integrate these values into their everyday activities. Local businessmen should learn that balanced economic development will eventually lead to greater profits in the longer term. Training can be started at local schools and in seminars organised jointly by the town authorities and the monastic community and aimed at both children and adults.

It has been proposed that greater investment could be made in the general area of Kalambaka to encourage people to think of the religious monuments as Orthodox pilgrimage sites. Likewise, Meteora and its treasures could be further promoted by creating a religious park in Kalambaka. These projects could be highly beneficial for the area's development and could be very positive for the country at European level.

Given the high degree of credibility it has among its faithful, the Church will find it easier than secular organisations and institutions to encourage people to become more actively involved in environmental conservation. Appropriate signs, referring to the relevance of spirituality and nature conservation, could be placed at the entrance and inside each monastery (with references from the Bible, for example). During the guided tours at the monasteries conducted

by nuns and monks, special reference to environmental issues and the sacredness of the site should be made by those who wish to contribute to this cause. Relevant printed material could also be handed out to the tour guides that accompany tourist groups so that they can incorporate it if they choose into their guided tours.

The NATURA 2000 directives that relate to zoning regulate the economic activities that can be carried out within the site; they must be applied if sustainable economic development is to be successful.

The various different forms of tourism in the area (religious, environmental, athletic and cultural) could combine in an axis upon which rational investments aimed at advancing the whole area's resources (financial, as well as natural and cultural) are made.

Nevertheless, if all the above is to occur, existing knowledge of Meteora must be enhanced by taking into account not only the immediate surroundings of the monasteries, but also all other aspects (natural and cultural) of the region as a whole. Greater knowledge would assist stakeholders when priorities in management decisions have to be established and would inspire locals to protect the intrinsic values of their area.

Recently, the Municipality has completed a study on the development of tourism in the area that has taken into consideration all types of parameters (environmental, religious and political). Unfortunately, a lack of funds is once again an obstacle to further development. If protection of the spiritual and the environmental values of the area is to become a part of the tourist attraction, then it is imperative that the old “more tourism – more money” attitude is abandoned for once and for all.

## Bibliography

- Dafis, S., Papastergiadou, E. *et al.* (1996), Directive 92/43/EEC The Greek ‘Habitat’ Project NATURA 2000: An Overview. Life Contract B4-3200/94/756, Commission of the European Communities DG XI, The Goulandris Natural History Museum – Greek Biotope/Wetland Centre, Thessaloniki, Greece.
- Giannopoulos (1926) Meteora: Historic and topographic study, K. Paraskevopoulou, Volos, Greece.
- Hellenic Zoological Society and Hellenic Ornithological Society (1992), The Red Data Book of Threatened Vertebrates of Greece, WWF, Athens, Greece.
- Meliadis, I., Radhoglou, K. *et al.* (2000), Environmental study of a special protected area. Management Plan of ‘Antichassia Mountains – Meteora’, NAGREF (National Agricultural Research Foundation), Thessaloniki, Greece.

## Web sites

- [http://www.wcmc.org.uk/protected\\_areas/data/wh/meteora.html](http://www.wcmc.org.uk/protected_areas/data/wh/meteora.html)
- [http://www.travel-info.gr/Greece\\_guide/thessalia/Meteora/Meteora.htm](http://www.travel-info.gr/Greece_guide/thessalia/Meteora/Meteora.htm)
- <http://www.greecetravel.com/meteora/monasteries.html>
- <http://www.kalampaka.com/gr/meteora/index.asp>
- <http://www.kalampaka.com/gr/other-sights/antixasia.asp>
- <http://www.ornithologiki.gr/en/sppe/en045.htm>

