

# Values of Protected Landscapes and Seascapes

A series published by

the Protected Landscapes Task Force of IUCN's World Commission on Protected Areas

Series Editorial Team: Thora Amend, Jessica Brown, Ashish Kothari, Adrian Phillips and Sue Stolton



## 2

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Edited by  
Josep-Maria Mallarach



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Volume Editorial Advisory Team: Jessica Brown, Thymio Papayannis, Fausto Sarmiento and Rob Wild

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## Characteristic Mt. Athos landscapes: the case of the Holy Simonopetra Monastery

Thymio Papayannis

### Summary

Mount Athos, The Holy Mountain, is the third of the three Halkidiki peninsulas in Northern Greece. It is well-known for its 20 monasteries with their millenary cultural and spiritual traditions of Orthodox Christianity, as well as for its magnificent landscapes and high biodiversity. Recognised as a World Heritage Site both for nature and for culture and as a Natura 2000 site, it is a multicultural, self-governed area lying within Greek national territory. The Holy Community, which governs the peninsula, is promoting an integrated approach to the management of the Athonite cultural and natural heritage.

Of the 20 monasteries on the Holy Mountain, Simonopetra was one of the first to understand the need for careful planning of conservation measures and the wise use of monastic lands and facilities, including its characteristic and varied landscapes. Assisted by dedicated scientists and experts, it is confronting the ever-increasing challenges of modern times proactively, anticipating its own needs and working out its own solutions. Thus, it is facing the third Christian millennium with fortitude, faith and optimism.

The small open boat, heavily loaded with its 12 passengers, docked early on a winter's evening at the *arsanas* of Simonopetra Monastery. A monk from the neighbouring Dionysiou Monastery, who had rowed ably and forcefully in spite of the turbulent sea, secured the boat and helped the visitors and their escort to disembark. The sky was



Map 1. Athos peninsula in 1867. Simonopetra is located on the west coast, south of Karyes, the capital of Athos.

heavily overcast and darkening rapidly as night approached. As soon as the small group started climbing the stone-paved path, a violent storm with lashing thunder, lightning and slashing rain erupted. The climb became increasingly difficult, but as they turned a corner, the majestic buildings of Simonopetra, perched high on a steep rocky pinnacle, came into view, illuminated by the frequent bolts of lightning.

In spite of the rain, we stopped in awe at the sight of the austere monastic buildings suspended somewhere between earth and sky, etched in profile against the massive rock escarpments that rise to the top of Mt. Athos, known for a millennium as the 'Holy Mountain'. We continued climbing in silence until we reached the heavily fortified gate of the monastery, where a warm reception from its monastic fraternity was awaiting us.

### Mt. Athos at the dawn of the third millennium

#### The spiritual rebirth of Mt. Athos

As we were told by the monks, after the fall of the late Byzantine Empire Mt. Athos lived through a turbulent period. Owing to its role as a sanctuary for the Christian Orthodox faithful, its population increased during the Ottoman occupation of the Eastern Mediterranean and the Balkans. It also served the political plans of the Russian Tsars, who greatly increased the presence of monks in the Aghios Panteleimon Monastery<sup>1</sup>. After the liberation of Northern Greece and the Balkan wars at the beginning of the twentieth century, Mt. Athos lost many of its dependencies and sources of income: in 1922 most of its lands were confiscated and distributed amongst farmers immigrating from Asia Minor and the monastery entered into a long period of decline.

In 1963, however, the Holy Mountain celebrated its first millennium. The consensus at that time was that its continued existence as a spiritual institution constituted a unique event in human history and, after the genesis and legacy

<sup>1</sup> It is revealing that in 1902 the population of Mt. Athos was 7,342, of which 3,276 were Greeks, 3,956 Russians, 307 Bulgarians, 286 Romanians, 51 Georgians and 16 Serbians. By 1972 the total population had decreased to just 1,146, but had risen slightly to 1,290 by 1990. [Pentzikis 2003]

from ancient times of Hellenic humanism, the second of two great gifts to humankind originating from this region.

Moreover, life on Mt. Athos has never stopped and continues today. In the decades that followed the millenary celebrations, a remarkable and hopeful blossoming of Athonite monasticism appeared on the slopes of the Holy Mountain, both amongst its faithful and in its activities. This re-birth –the result of the growing spiritual needs of our times– has continued to grow and has marked the entry of the monastery into the third Christian millennium.

Thus, in recent years, many young people have joined this monastic community and are striving to live according to the ancient traditions of Mt. Athos, transmitting through their beliefs and actions the messages of faith, freedom, respect, solidarity, cohesion, creativity and true existence to contemporary society. Their aim is at all times to combine tradition with contemporary realities in a search for a harmonious blend of conservation and balanced development.

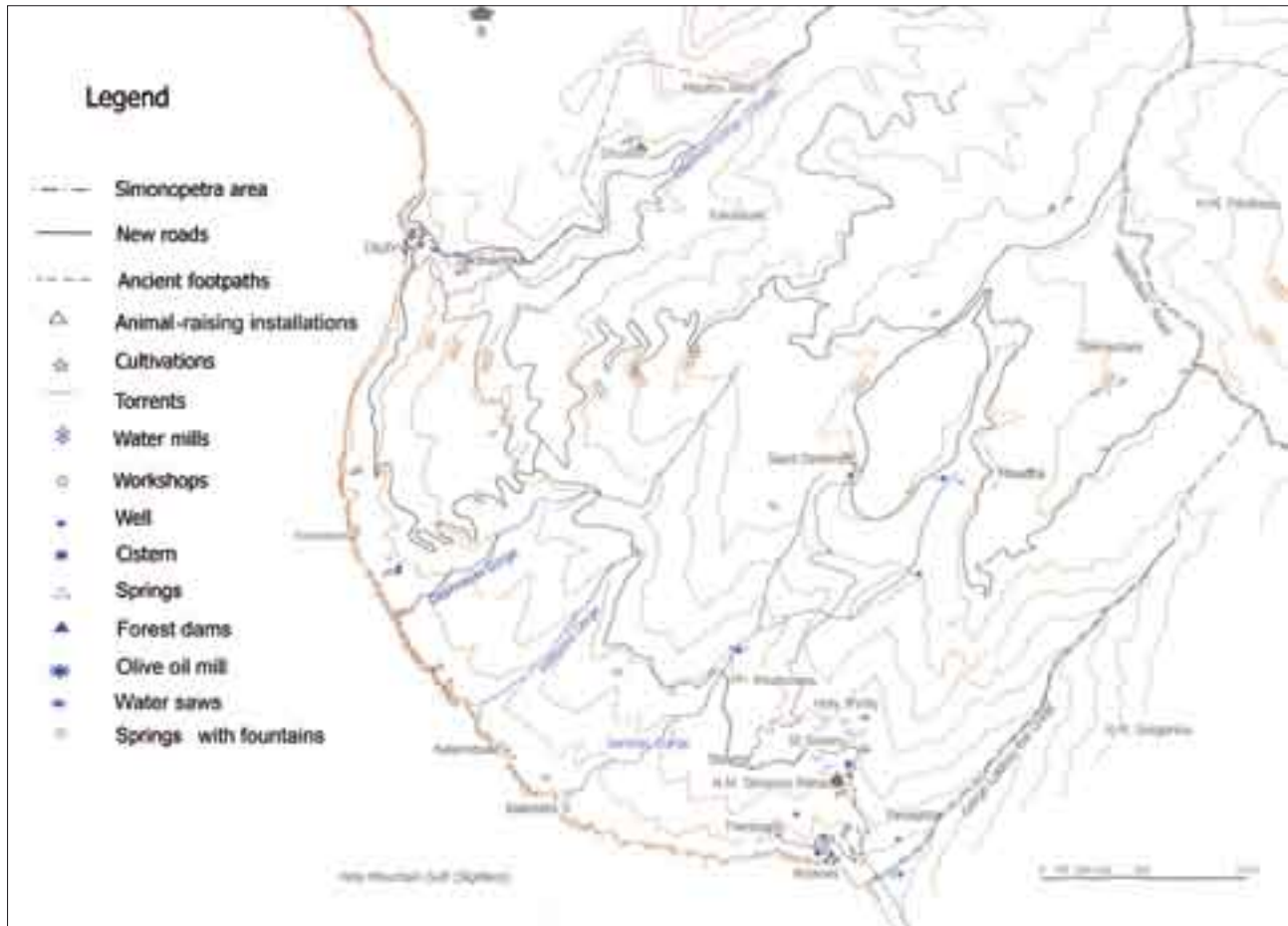
Two factors that must be taken into account when analysing the Holy Mountain today are its communal character based on constituted self-governing monastic communities and its multiethnic and multicultural nature (Tachiaios

2006), both on a local scale within the confines of Mt. Athos and outside in a broader context of the relationships of the monasteries with countries other than Greece. When combined with the respect of millenary traditions, these elements determine the contemporary realities of the Holy Mountain (Elissaïos 2007).

### Status, administrative structures and perspectives

Mt. Athos today constitutes a self-governed body within the Hellenic Republic, as recognised by Article 105 of the Greek Constitution and by the Joint Declaration made during the accession of Greece to the European Union in 1981. It is divided into 20 constitutionally recognised autonomous monasteries founded over the past 12 centuries, whose number will not be allowed to increase any further.

Public administration is performed by the Holy Community and the monasteries, while the spiritual and ecclesiastical authority is maintained by the Ecumenical Patriarchate. The Greek state is represented by a Governor who is responsible for seeing that agreements are fulfilled and for public order and security.



Map 2. Simonopetra territory.

As a property, the entire peninsula belongs exclusively to the Holy Monasteries, which in collaboration with the state have the right to manage the territory and its buildings, facilities, infrastructure and artefacts. Various forms of subsidiary facilities or dependencies (*skete, kellia, kallivia* and *hesichasteria*) are found within the monasteries' lands.

The basic decision-making organs of Mt. Athos are the Holy Community, consisting of 20 representatives (one from each monastery) who meet twice a week in Caryes, and the body of 40 representatives (Extraordinary Double Holy Assembly), which meet for a minimum of two sessions per year. As well, the law-making gathering of the 20 Abbots has two obligatory sessions a year. The executive body, the Holy Supervision (Iera Epistasia), consists of four members and a number of committees that deal with specific issues (Pentzikis 2003). In recent years, there has been a tendency for these institutions to reach consensus decisions on major issues and to find joint solutions for problems that concern the entire Mt. Athos peninsula.

### **Perspectives and planning of the Holy Community**

In a recent report to UNESCO's World Heritage Committee, the Holy Community presented a clear view of its perspectives and plans for the management of the cultural



*Approaching Simonopetra monastery from the Arsanas.  
Photo: Josep-Maria Mallarach.*

and natural heritage of Mt. Athos (Holy Community 2008). Its main point was that, despite being generally in favour of collaboration with the relevant services of the Hellenic State, the responsibility for such management must remain in the hands of the traditional institutions of the monastic communities on Mt. Athos.

With this in mind, the Holy Community has already completed a Special Environmental Study with the assistance of an expert scientific team, which is being reviewed by the Ministry of Environment, Physical Planning and Public Works. This is a legal responsibility for all major protected areas in Greece and is a prerequisite for the preparation of more detailed management plans. Once it has been approved, the Holy Community, along with representatives from the monastic fraternities and a number of highly qualified scientists, intends to establish a management body for implementing necessary management measures.

In addition, Mt. Athos wishes to cultivate a balanced dialogue, not only with the national authorities, but also with the European Union and international organisations such as the World Heritage Convention that have shown interest and concern for the Holy Mountain.

## **Protection framework**

### **International and European Union framework**

As a result of the initiatives of the relevant national authorities and the work of various scientists, as well as due to its great natural and cultural treasures, the Athos peninsula has long been recognised internationally as of immense importance. However, there has been little consultation with the appropriate institutions on Mt. Athos and this has tended to create the impression of a lack of respect for Athonite autonomy.

Thus, in 1988 Mt. Athos was recognised by the World Heritage Convention as a mixed site for both culture and nature. In early February 2006, the WHC sent a monitoring mission to Mt. Athos, which drafted a number of recommendations (UNESCO 2006], most of which were favourably received in a frank and positive manner by the Holy Community as a basis for further dialogue (Holy Community 2008).

In addition, on the basis of the criteria of the Habitats Directive, the entire Athos peninsula has been incorporated into the EU Natura 2000 Network in accordance with the provisional list approved by the EC and the Hellenic State<sup>2</sup>.

<sup>2</sup> With site code GR1270003.

In terms of the IUCN classification of protected areas, Mt. Athos is classified as a Category V Protected Landscape/Seascape, a category defined as a “protected area managed mainly for landscape/seascape conservation”. The IUCN Guidelines for Protected Area Management Categories defines this category further as “an area of land, with coast and sea as appropriate where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value and often with high biological diversity”. This is not totally applicable to the territory of Simonopetra, where landscape conservation is mainly related to spiritual pursuits and the site is considered sacred. Nevertheless, there are efforts within IUCN and its Task Force on Cultural and Spiritual Values of Protected Areas to incorporate the sacred elements of sites into the categorisation of protected areas. Although this was recognised in the Guidelines for Protected Area Management Categories, it has now become much clearer in a recent publication that provides guidance for sacred natural sites. (Wild and McLeod, 2008]

### National protection status

Unfortunately, there is almost no landscape protection in Greece: the state has signed the European Landscape Convention, but has not yet ratified it. Nevertheless, legislation pertaining to the natural environmental and to archaeological sites and monuments indirectly provides some degree of protection. The main problem, though, is the implementation of legislative provisions, which falls under the jurisdiction of two separate ministries with little or no history of collaboration<sup>3</sup>, while responsibility is shared by various levels of regional and local government<sup>4</sup>. This is totally inadequate for sensitive sites and their landscapes such as Mt. Athos and, in particular, the Simonopetra area, in which cultural and natural aspects are inextricably interwoven.

It should be noted here that the Ministry of Culture (unlike the Ministry of Environment, Physical Planning and Public Works) has shown considerable interest in matters pertaining to the Holy Mountain, especially in relation to the conservation of its aesthetic cultural heritage (architecture, artefacts, icons and frescoes).

### Athonite framework

As mentioned above, the Mt. Athos authorities believe that all protection initiatives and measures must respect the autonomy of the area and must be initiated and controlled by

the appropriate monastic organs. In addition, they should be based on the principles of Byzantine monastic tradition, which recognise the sacredness of the natural world as an integral part of the Divine Creation; in this sense, Mt. Athos has been considered as ‘the Garden of the Virgin Mary’ ever since its origins. In addition, both autarchy and self-dependence are part of this monastic tradition and are expressed in the management and use of natural resources and in daily affairs (Papayannis and Elissaios 1994). The major challenge here is how to create a synergy between the spiritual background of Mt. Athos and the requirements of natural and landscape figures of protection (such as those promulgated by UNESCO, IUCN and EC), while at the same time taking into account the daily needs of the monastic communities and their dependencies.

In accordance with the clear legal status of Mt. Athos, and under the supervision of the Holy Community and with the assistance of public services, the 20 monasteries have responsibility for and jurisdiction over the conservation of the cultural and natural heritage of their properties. Thus, the forests and the natural environment are managed and conserved directly by each monastery and most have had approved management plans -mainly concerning forest exploitation- prepared by expert foresters. There is also a special service for the entire peninsula, the Forestry Ephorate. Hunting is forbidden, although poaching by forestry



*The Holy Monastery of Simonopetra and the Arsana, from the sea. Photo: Father Theodossios*

<sup>3</sup> The Ministry of Culture, on the one hand, and the Ministry of Environment, Physical Planning and Public Works, on the other.

<sup>4</sup> Regional Secretariat appointed by the Government, elected prefectures and municipality authorities.

and construction workers is sometimes a problem. This has possibly led to the disappearance of large herbivores such as deer. The unauthorised entry or approach of any boat closer than 500 metres to the coast is also forbidden, a prohibition that thus rules out commercial fishing.

The opening of new roads and the entry of motorised vehicles now requires permission from the Holy Community, which, in a highly positive development for the area, is only granted very occasionally. Responsibility for the conservation and restoration of monuments and sacred objects lies with the monasteries to which they belong and to assist in this task the Hellenic State has founded the Centre for the Safeguarding of the Athonite Heritage in Thessaloniki, which approves all relevant scientific studies and supervises the execution of all work carried out in the peninsula. In addition, the relevant services of the Ministry of Culture are available to help wherever required; there are, however, certain grey areas concerning jurisdiction between ministerial services and the institutions on Mt. Athos, which can at times create friction, although this is usually resolved in an amicable fashion.

## The territory of Simonopetra

The Holy Monastery of Simonos Petras (Simonopetra) was founded by Simon the Athonite in 1267 AD in the south-west of the Athos peninsula on a 13 km<sup>2</sup> oval-shaped piece of land with a coastline of 4.8 km. Its mean elevation is 446 m a.s.l., rising to a high point of 889 m a.s.l., with an average slope of around 30 per cent.

The monastery itself was erected amidst a spectacular landscape dominated by a majestic 300-metre-high rocky pinnacle. With the buildings overlooking the Aegean Sea and seemingly suspended in mid-air, this was a daring architectural feat for the late Byzantine period. Although the buildings have been enlarged and newer ones added over the seven centuries of the monastery's existence, a paradox still remains: because of their striking architecture the monastery buildings dominate the natural environment, but they are, nevertheless, fully integrated into the landscape and constitute one of its major elements, as well as being a diachronic source of inspiration for artists.



*Well-tended vegetable garden terraces below the Monastery. Photo: Josep-Maria Mallarach.*

## Natural heritage

Simonopetra and its surroundings have a great variety of geomorphological features and ecosystems stretching from a purely Mediterranean coastal zone to the dense forests in the mountainous areas. Forests cover 70% of the area and can be classified in three zones, each with a high diversity of plant species and endemisms: the eumediteranean zone with broadleaf evergreen tree species, the thermobiotic zone with mixed forests of oak, chestnut, lime, maple, fir and black pine, and the psychrobiotic zone with broadleaf deciduous trees such as beech and mountain maple. Of particular interest are the xerothermic formations of the coastal rocky area with tree spurge *Euphorbia dendroides*, the mountain torrents with *Laurus nobilis* (and also in front of the monastery) and certain sites in the high mountain where ancient groups of trees have been left intact and which are now protected (Ganiatsas 2003).

Faunal biodiversity is also high and includes mammals such as wolves, foxes, hares, jackals, wild boars and roe deer, snakes, turtles and many insects. In addition, 105 bird species have been observed, of which 24 are protected in accordance with EU Directive 79/409 on the protection of wild birds. Monk seals (*Monachus monachus*) have been noted along the coastline in what is a symbolic symbiosis between the monastic community and a highly endangered species in the Mediterranean Basin. Further offshore, dolphins and various other cetaceans are seen.

## Human activities

Throughout the ages human activities have had a decisive impact on the land, especially after the founding of the monastery. For example, priority in the forests has been given to the growth of chestnut trees whose timber can be exploited, while certain medium-sized patches of forest have been cleared or turned into terraces in order to grow food for the monastic fraternity. Fire has played a major role by directly damaging large parts of the monastery's forests and indirectly by the implementation of necessary fire protection measures. In recent years, these have included the construction of water reservoirs in the forests, the opening of roads, the acquisition of equipment (such as fire trucks) and the training of monks to fight fires.

On the other hand, the complete lack of nomadic herding in the area (especially of goats) has benefited floral diversity and has allowed rapid plant regeneration after each forest fire, as has happened since the catastrophic fires of August 1990.

Beyond the fortified walls of the monastery itself, auxiliary buildings have been erected to serve the needs of the monastic fraternity, the workers and the many pilgrims

that visit Simonopetra. These include watermills, stores, workshops, barns, boat-sheds, cisterns and other facilities, some of which are of historical interest and are being carefully maintained. Scattered throughout the monastery area there are also sacred places such as the hermitage of St. Simon that have small churches and cells attached, all of which have been restored.

Agricultural activities covering just 50 ha are located both in the proximity of the monastery and in certain dependencies farther away, and include vegetable gardens, orchards, vineyards and olive groves. Due to the sloping terrain, many of these groves and gardens have to be terraced over the centuries and today their stone terrace walls are well maintained. Although today many tracks have been constructed for motorised vehicles, all these small plots of land were once accessible along a network of footpaths; indeed, most of the footpaths in Simonopetra were cobbled and constituted in themselves an important historical and landscape element. A characteristic example is the path leading from the *arsanas* to the main monastery buildings. Recent efforts have been made by the monastery to maintain and improve the footpaths and this work is still continuing.

In the past the Simonopetra monks fished close to the shore with simple nets, although this activity has been discontinued in recent years.

## The landscapes of Simonopetra

Because of its morphology and location, Simonopetra is viewed as part of the general Athonite landscape dominated by the Holy Mountain. It ranges from the rocky seashore to the forested crest of the peninsula at almost 900 m a.s.l., with a mean gradient of approximately 30 per cent that becomes much steeper in places. When viewed from the sea, the only landmark is the monastery itself, with its striking architecture. On the difficult walk from the *arsanas* to the monastery along the steep footpath, it is possible to view the building complex and its surrounding landscape from a variety of angles. On the road from Daphne, the small harbour town on Athos, one sees only the natural forested slopes until –after a turn in the road– a magnificent view of the monastery becomes apparent.

It is not strange, therefore, that artists have always found inspiration in Simonopetra and its landscapes, and have depicted them over the centuries in engravings, paintings, photographs and the cinema. A characteristic example is the 1744 drawing by Brother Basil Barskij, which shows very descriptively (but, in terms of dimensions and perspective, somewhat inaccurately) a view of the Simonopetra landscape from the sea. Another highly attractive view is the watercolour painted in 1856 by Edward Lear.

In recent years, a considerable number of artists have depicted the monastery in various media, most of which focus on the main building. However, only a few have been able to show in a truly sensitive manner –and from various perspectives– the integration of the buildings into the natural environment and the resulting landscape.

### Other cultural aspects

Aside from its cultural landscapes and the traditional architecture of its buildings, Simonopetra is a cultural centre of great importance. In spite of the fires and attacks that in past centuries destroyed a large part of its cultural wealth, the monastery still maintains a rich collection of artefacts, 25,000 documents (of which 100 are manuscripts), icons and holy relics, and other fine examples of religious art, as well as a great number of ethnological artefacts related to the life and activities of the monastery over the past seven centuries. Its library of theological texts is perhaps the most extensive and best organized on Mt. Athos.

Over the past two decades, with the support of the Hellenic State and the EC, most of this cultural wealth has been maintained, restored as needed and stored in appropriate facilities to keep it safe but accessible by visitors. Most of this work has been carried out or supervised by Simonopetra monks, who have acquired the necessary skills and expertise.



Watercolor by Edward Lear.

It should be noted here that almost all of this cultural wealth –besides its aesthetic and historical value– contains a great inherent spiritual significance and forms part of the living experience of the monastic fraternity. This is evident in the cultivation of the Byzantine musical tradition in the monastery, with results that are of both high aesthetic quality and of daily liturgical significance. Icon painting is still practiced, again in the Byzantine spirit, along with the restoration of icons. This is a spiritual and cultural activity that does not have economic significance for the major monasteries on Mt. Athos, except for some of the smaller dependencies.

## Use and management of the natural and cultural heritage

### The use of space and natural resources

Before Hosios Simeon decided to erect a monastery atop a rocky pinnacle, it is probable that hermits lived in caves or small cells in the area. It is not clear why he selected such a particularly wild location, although possibly it was for symbolic and spiritual reasons or for the security it provided, or even a combination of both. In any case, the monastery buildings were attached to a rocky crest and gradually encircled it from all sides during the various construction phases. Aesthetically, the main building complex of Simonopetra seems to both grow from the rocky earth and rise inexorably towards the sky.

Initially, the monastery was only accessible from the sea by boat, a fact explaining why the *arsanas* and its marvellous tower (1567) were built. This required a steep climb of about 40 minutes on foot or by donkeys and mule. The introduction of motorised traffic to Mt. Athos in the twentieth century has meant that this access has become less used for day-to-day purposes, although the footpath is well maintained and still provides visitors with magnificent views of the landscape. A good road was constructed between Daphne and Simonopetra to connect the monastery to its facilities in the harbour at Daphne. The road was widened recently and a number of undesirable scars were left on the landscape. However, there are remedial measures that can be taken to alleviate this aesthetic problem.

Secondary dirt roads were also opened in the twentieth century to connect the main building complex with dependencies such as the Dontas farm on the border with the Xiropotamou Monastery and to facilitate the transport of timber to Daphne. This road network may not be as dense as in other parts of Mt. Athos, but is still quite excessive. Its impact on the natural environment is not too serious, although parts of the road network have erased existing footpaths. In addition, this road network is difficult to main-

tain and needs certain improvements, although once a stretch of track is abandoned, it reverts rapidly to its natural state. That is why 'hard' infrastructures should only be contemplated very sparingly.

The monastery today owns and operates five motorised vehicles for the transport of people and materials, as well as a fire truck.

The provision of water to the main monastery and its other facilities and dependencies has been a major issue ever since its foundation. There are no rivers or lakes within its territory, just four torrents whose flow is intermittent and affected by hydrological works carried out in past centuries. The entire area contains numerous water management constructions, while in the monastery itself a number of cisterns have been discovered. The most characteristic architectural element of these constructions is the aqueduct, visible from the sea, whose upper two storeys were added during the early Ottoman years. In Simonopetra, water was once used as an energy source for oil presses and timber sawmills. Today, water is channelled from surface run-off and from springs into a 180 m<sup>3</sup> reservoir located high in the mountains and then piped to the main monastery building. Yearly consumption is approximately 8,000 m<sup>3</sup>.

In terms of energy, Mt. Athos is not connected to Greece's main power networks, as per a consensus reached by the Holy Mountain Community. Its needs are covered in a decentralised manner mainly by petrol, which is provided tax-free and at a modest price by the state, a situation that is apt to change. Still, mainly for environmental reasons, some of the monasteries have experimented with renewable energy sources. Simonopetra has made considerable advances in this field and has constructed a small 33-kw hydroelectric plant and a 46-kw photovoltaic park, designed by a Simonopetra monk of German origin, who has published a scientific paper on the subject. These are interconnected by a small auxiliary electric power generator. Of the total yearly electrical energy consumption of 260,000 kwh, 50 per cent is produced by the hydroelectric plant, 40 per cent by the photovoltaic park and 10 per cent by the generator. The system automatically stores exact data regarding the mode of production and consumption.

### Organising management

Simonopetra, like the other 19 monasteries on Mt. Athos, is coenobitic and is managed by the fraternity of monks in an organised and integrated manner. The core of the current monastic fraternity (approximately 25 monks) originate from the Meteora monastery of Metamorphosis on the edge of the Thessaly plain in central Greece, which they abandoned in 1973 due to pressure from tourism.

Head of the monastery is the Abbot (Hegumenos, or 'leader'). Elected for life by the fraternity in a secret ballot, his role is to act as both chief administrator and spiritual father to each monk. He is assisted by a small number of officials, who are also elected by the monks. Beyond their religious responsibilities, individual monks are assigned specific tasks for a given time period (*diakonima*).

The destructive fire of August 1990 –that threatened even the main building of the monastery and seriously damaged St. Simon's cell– gave an impetus to a systematic planning process, which has continued to be implemented and monitored with care over the following two decades. This process –under the guidance of the Simonopetra fraternity and with contributions from relevant experts– concerns not only the natural environment and, in particular, the forests, but also the restoration and extension of buildings and facilities (Working Group 1990).

### Landscape management

Among the tasks assigned to selected monks are the responsibility for forest management and the care of the natural environment. The father appointed to this task, an individual who is highly experienced in this field, works closely with a forester in implementing a management plan covering the entire forested area of the monastery. This plan was developed in the early 1980s (Pantekis and Langas 1980)



The engraving by Brother Basil Barskij shows the landscape of the Simonopetra Monastery at 1744.

and was radically revised after the destructive forest fires of August 1990 by means of an EU-funded project for the ecological management of the Simonopetra forests (Dafis et al. 1992). The project includes already implemented actions providing guidelines for forest management in Simonopetra such as:

- active and passive protection against forest fires;
- the restoration of burnt forests mainly through natural regeneration and small-scale reforestation with native species that are today extinct (such as wild fruit and other trees that were considered as useless in the past and cleared to create a monoculture of chestnuts), thereby increasing biodiversity;
- the total protection of certain sensitive parts of the forest from timber exploitation, as well as an increase in the tree-cutting cycle (mainly chestnuts) from 20 to 40 years;
- the restoration and enhancement of all elements of human presence in the forests, from footpaths and small stone bridges to fountains, cisterns and terracing in order to reinforce the balance between nature and human beings.

The diet of the monastic fraternity is frugal and mainly vegetarian, based on bread, olives, olive oil, vegetables, pulses and wine; fish is only allowed on certain feast days. The consumption of meat is not allowed in the monastery,

other than for strictly medicinal purposes. The production of vegetables, fruit, wine and other natural products in the monastery area is not fully organic, since certain mild fertilizers and pesticides are used in moderation. Composting is not performed and solid organic waste is thrown out.

Seeds of certain threatened local races of, for example, pears and apples have been collected in a seed bank, along with old varieties of olives, tomatoes and other vegetables. Aromatic plants are collected and used for medicinal purposes and for brewing excellent herbal infusions.

### **Cultural management**

For the maintenance, restoration and extension of buildings, the monastery appoints knowledgeable and talented architects, assisted by expert engineers, to prepare the necessary studies and to supervise work carried out. In the execution of projects, however, the monks themselves are directly involved and monitor their progress on a daily basis. A similar approach has been adopted for infrastructure projects (road network, power, water supply, sewage, etc.).

As already noted, particular care is given to the safeguarding and restoration of the spiritual and cultural heritage of the monastery (artefacts, icons, music, manuscripts and books) and monks work with acknowledged experts in each field and have been trained and acquired considerable experience. These activities have expanded to cover



*Simonopetra Monastery with Mount Athos at the background. Photo: Matthias Kutter*

the broader cultural heritage of the Holy Mountain, with the establishment in Simonopetra of cultural forums on Athonite photography, painting, cinema, publications and other art forms.

## Future perspectives

### Changes and challenges

Fifteen years ago, Brother Elissaios explained<sup>5</sup> that Mt. Athos is not a museum, but a living entity taking from each historical period what it needs and adopting it to its own millenary traditions. In this sense, the Athonite monastic communities are not isolated from the real world and are in touch with contemporary realities and trends and, in addition, provide guidance through teaching, compassion and paradigm.

One of the changes that has occurred is that the majority of converts to Athonite monasticism are no longer uneducated people from rural areas, but are nowadays highly educated—many with university degrees—people from urban backgrounds. Thus, they lack the skills for managing the land and forests and the ability to face the hardships of climate and a lack of mobility, which they have to acquire through a difficult period of adaptation. Moreover, in rural areas of Greece farmers today have central heating and other modern amenities in their homes and use vehicular transport rather than donkeys or their own two feet. On the other hand, the educated monk of today has the ability to handle the technological systems necessary for the protection of documents and artefacts, the management of alternative energy systems and contemporary communications. The challenge facing Simonopetra is to make good use of modern technology without becoming dependent on it and without letting it undermine essential monastic traditions.

Another challenge is the increase in the number of pilgrims and visitors, which has resulted from the fame of Simonopetra, its unique beauty and the genuine need for guidance felt by many human beings. This increase has been a constant drain on human and material resources and has at times affected the everyday running of the monastery. There have been efforts, however, from the Holy Community to put a daily limit on the number of pilgrims and to distribute them more evenly among the 20 monasteries. To the visitor numbers can be added the many workers and technicians that are required on an almost permanent basis, which amount to an average of 100 persons per day in Simonopetra.

In addition, a new problem with spiritual implications has arisen, related to an intensification of activities on Mt. Athos: due to the restoration of buildings and the protection of the cultural heritage, noise, traffic of all vehicle types, pollution and interference has increased. This has resulted in a loss of the quiet atmosphere that is a basic prerequisite of monastic life.

Other related environmental problems on Mt. Athos have been intensifying, especially regarding the needs of motor vehicles, the transport of material and waste management. Measures have already been put in place to control the number of vehicles allowed in the area, while the possibility of exporting waste to treatment facilities outside of Mt. Athos is being considered, although currently this is only practiced in Caryes, the capital of Mt. Athos.

Forest exploitation has become less profitable due to labour and transport costs and has led in certain cases to unsustainable practices. The idea of limiting the extraction of timber to the needs of the monasteries and halting its export, whilst at the same time finding alternatives to compensate for lost income, is a possibility that has been gaining ground.

Some external impacts should also be taken into consideration. Climate change will have serious implications on the Athonite ecosystems and their biodiversity and will significantly decrease the availability of freshwater. These are developments that should be carefully studied and monitored so that any necessary measures aimed at mitigating water shortages and adapting to new water cycles can be planned well in advance. On a cultural level, the homogenisation resulting from globalisation may affect Mt. Athos, although its spiritual traditions are strong and can resist its pernicious effects. It is hoped that the slow changes occurring in Athos can be assimilated into its traditions whenever necessary.

### Organised response and planning

Since the Byzantine era a basic tenet in Christian Orthodox monastic tradition has been the communion of human beings with nature seen as Divine Creation. The harmony between humanity and nature is still a characteristic of Athonite monasticism and has been preached especially in Simonopetra in accordance with the teachings and the activities of HAH The Ecumenical Patriarch Bartholomew, who has repeatedly proclaimed that destroying the natural environment is a sin against God.<sup>6</sup>

<sup>5</sup> During a lecture in the Goulandris-Horn Foundation in Athens on 14 March 1993.

<sup>6</sup> The views of HAH The Ecumenical Patriarch are clearly presented in the book: Fr. Chryssavgis, J. 2003. *Cosmic Grace, Humble Prayer. The Ecological Vision of the Green Patriarch Bartholomew I*. Wm. B. Eerdmans Publishing Co., Cambridge, UK.

As commented above, Simonopetra has been concerned about environmental matters for the past two decades as the various studies, projects and measures it has undertaken show (Lorimy 1996). Now is the time for a major new step forward, which should consist of an integrated and systematic approach to the management of the monastery's natural and cultural heritage.

Within the framework of the Special Environmental Study for Mt. Athos, Simonopetra has the possibility of developing its own management plan covering all aspects of land and cultivation, forests and vegetation, biodiversity, water, energy, waste, building and infrastructure. Such a management plan should also take into account the principles of sustainability, which include not only environmental but also social and economic dimensions. Its preparation should be facilitated by a team of experts; however, the energetic participation of the monastery is also necessary, as it will be in charge of its implementation and for reasons of sustainability and continuity. This step is perhaps the most difficult of all and will require time and persistence.

Within this framework, a number of specific questions should be addressed and discussed. One possibility is the establishment of a certification for the timber production from the monastery's forests in accordance with the FSC<sup>7</sup> or another credible system, which would ensure the sustainability of the practices used. Ecological methods of energy production and high economy in its use in a monastic environment would also be a key issue. The problem of waste management at source should also be considered.

On another level, there should be serious concern regarding the aesthetics of the entire territory of the monastery, which is an integral part of the 'Garden of the Virgin Mary'. This should address issues of landscapes, buildings, the integration of the necessary facilities into the natural environment, the maintenance of anthropic landscape elements and the management of vegetation wherever needed. In this context, the landscape study carried out in the early 1990s should be reviewed and updated, taking into account the new data and proposals that have been collected (Malamidis et al. 1993).

### Wider contribution

Such a far-sighted and realistic programme will provide invaluable experience that may have consequences in a wider context. In Mt. Athos itself, the representatives of the monastery should continue to participate actively in the appropriate organs, facilitating the development and implementation of an integrated approach to the manage-

ment of the natural and cultural heritage of the entire peninsula. This will be facilitated by the creative dissemination that is evident in the area.

In a broader context, Simonopetra should catalyse and take an active part in a dialogue on the ecological management of monastic lands, starting with its own dependencies in Ormylia (Halkidiki) and in France - the monasteries of St Antoine le Grand, located within the Parc Naturel Régional du Vercors, and of Solan, near Avignon. There are already other communities of monastic families and quite a few Orthodox monasteries in Greece, Romania and Russia, as well as in various Balkan countries (such as in the FYR of Macedonia, with which Simonopetra maintains strong links), that would be interested in exchanging views and experiences.

Thus, the Holy Monastery of Simonos Petras has potentially a double responsibility at the beginning of the third millennium: to achieve a living, harmonious co-existence between humanity and nature through a sensitive approach to the anthropic and natural environment in its territory and to disseminate its knowledge and experience for the benefit of all.

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### Acronyms

EC	European Commission
EU	European Union
IUCN	The World Conservation Union
WHC	World Heritage Convention

### Glossary of local terms

#### Archimandrite

Title of the Abbot of a monastery.

#### arsanas

Storage and repair building for small boats.

#### Athonite

Pertaining to Mt. Athos, the Holy Mountain.

#### Coenobitic monasticism

Communal monastic life (from the Greek words for 'common life').

#### diakonima

Task assigned for a given period to a monk.

#### Ephorate

A service or committee with a defined task.

#### Gerontas

Abbot of a monastery, a respected monk, or a monk with administrative duties.

#### Holy Community

Highest administrative body in Athos.

#### Holy Epistasia

Executive administrative body of the Holy Community.

<sup>7</sup> Forest Stewardship Council at [www.fsc.org](http://www.fsc.org)

**Hegumenos**

The leader or Abbot of a monastery.

**metochion**

Building complex or farm at a distance from the monastery, a dependency.

**Simonopetra**

The Holy Monastery of Simonos Petras, literally the 'Rock of Simon'.

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