



Protected Areas and Spirituality

**Proceedings of the First Workshop
of The Delos Initiative - Montserrat 2006**

Edited by Josep-Maria Mallarach & Thymio Papayannis



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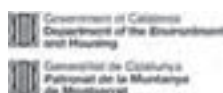
WCPA Task Force on Cultural and Spiritual Values of Protected Areas

Monastery of Montserrat, Catalonia, Spain, 24-26 November 2006

Edited by Josep-Maria Mallarach and Thymio Papayannis



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Summary

This volume presents the Proceedings of the First Workshop of The Delos Initiative. The Workshop was held in November 2006 in the holy mountain of Montserrat, a Nature Reserve and Natural Park located north of Barcelona in Catalonia, Spain. The Delos Initiative is part of the IUCN World Commission of Protected Area's Task Force on the Cultural and Spiritual Values of Protected Areas.

After the introductions (Chapter 1) from the Chair of the WCPA and the Abbot of the Monastery of Montserrat, Chapter 2 features the four opening addresses, all of great significance and very individual in style.

Chapter 3 contains a comprehensive introduction to The Delos Initiative written by its coordinators. It includes descriptions of its goals, objectives, methodology and projects carried out, as well as technical guidance for natural sacred sites and a complete overview of the development of the Workshop.

Chapter 4 includes five speeches which provide a conceptual context for all of the issues discussed: the relationship between Nature and Spirituality; protected areas and sacred sites of indigenous and traditional peoples; spiritual values in the history of protected areas in Spain; the contribution of sacred natural sites to nature conservation; and the particular experience of the Sacred Mountains Programme in several national parks.

The Montserrat case study is presented in Chapter 5. In addition to the standard report, prepared according to the Delos methodology, it features the viewpoints of the main stakeholders in the mountain: the monastic community, the Park Board, walkers and climbers, the company providing services around the main monastery, and a private foundation.

Chapter 6, the longest, includes the presentation of nine case studies: two from Finland, one prehistoric (Kolovesi) and the other contemporary, concerning the Sámi people (Ukonsaari); two from Greece, concerning Orthodox Christianity (Athos and Meteora); one from Andalusia, Spain, concerning lay Catholic brotherhoods (Protected areas of Doñana and the Virgin of El Rocío shrine); one singular case from Scotland, United Kingdom, con-

cerning Tibetan Buddhism (the Holy Island of Arran); one from Rumania, concerning Orthodox Christianity (Vanatori-Neamt); one from Japan, concerning Shugen and Shingon Buddhist schools (Kii mountain range and pilgrimages routes), and, finally, one from Tennessee and North Carolina, USA, concerning the Cherokee Native Americans (Smoky Mountains). These case studies encompass a wide range of highly diverse types of protected areas in three continents belonging to all IUCN categories; they were prepared largely on the basis of interviews with key stakeholders.

Finally, Chapter 7, the Montserrat Declaration, provides a summary of the main findings and conclusions that can be drawn from the lively discussions that took place during the Workshop.

Appendix 1 includes the names of all the participants and the Workshop's coordinators. Appendix 2 consists of the programme of events, followed by an explanation of how the Workshop's organisers decided to compensate for the CO₂ emissions it produced.

This book has been published jointly by the IUCN and the Abbey of Montserrat's publishing house and is a clear indicator of the links that the Delos Initiative is fostering between conservationists and the custodians of natural sacred sites, in this case a monastic community with a millennial history.

Why a 'Delos' Initiative?

The island of Delos in the midst of the Aegean Sea is today an important archaeological site and a protected marine area. In Antiquity, though, it was a sacred site for both Greeks and Romans: it was dedicated to Apollo, the god of light, who, according to myth, was born on the island.

In addition, from 478 BC onwards, after the Persians had been expelled from Greece, Delos became the centre of the Athenian Alliance and the location of its treasury, and was home to religious and peaceful political functions. Under the Roman Empire, it developed into one of the most important trade centres in the Eastern Mediterranean. Its role declined after the establishment of Christianity, although its cultural and spiritual influence has continued right up to the present day.

As a sacred site set in a pristine marine environment, Delos is a symbol: it has no links to any single living faith and is an ancient centre of political alliance and international commerce.



Plate found in Delos. From a pottery shop on the island of Rhodes, second half of the seventh century BC.



1. Prefaces

Nikita (Nik) Lopoukhine

Chair, IUCN World Commission on Protected Areas

I am honored and pleased to write this preface to this inspiring book resulting from the Delos Initiative. Presenting, as this book does, an array of sites dedicated to prayer, meditation and liturgy and demonstrating how these significant areas of sanctity link to biodiversity conservation is, to say the least, timely. The world is facing problems of almost insurmountable magnitude, of which climate change is but one. This book provides examples of places where humans strive to live sustainably and to reflect on their relationship with God and the environment. These examples can act as an important guide for our own daily living.

The work that is being done by the Delos Initiative, within the Task Force on Cultural and Spiritual Values of Protected Areas is providing a very much needed inspiration and guidance for the World Commission of Protected Areas. The critical work of this Task Force assures a more inclusive approach and consideration to spiritual values associated with protected areas.

For many people, these values are of the utmost importance, even in the technologically developed countries, where unfortunately they have been at times neglected.

I grew up mostly in Canada and spent my summers along the shore of Lake Labelle in Quebec. It was and is a place where my family, friends and relatives not only renew our physical strength and relationships, but also our spiritual strength. It is a place instrumental to my becoming close to nature and molding my career in protected areas.

Over fifty years ago on the shores of the lake, my uncles and my father built a chapel dedicated to St. Sergius of Radonezh, a beloved saint of fourteenth century Russia who lived, for some of his life, in a monastic cell deep within a forest. The late Fr. Alexander Schmemmann, then Dean of St. Vladimir's Orthodox Seminary in New York spent his summers on the lake and served the Divine Liturgy on Sundays and Christian feast days. Other priests continue to serve in this chapel each summer.

In early August, the feast of Transfiguration is marked by a procession down to

< Montserrat, Agulles section, one of the favourite areas of climbers.

the lake to bless it. The priest begins the procession by emerging from behind the iconostasis through the Royal Doors of the chapel over which are inscribed the words of the ancient psalm: "Let everything that has breath, praise the Lord". The choir sings hymns of praise, children carry banners and icons, and in my memory, it always seems to be a glorious, sunny summer morning. Returning from the lake, we gather around a table laden with fruit, wild mushrooms and berries, all earth's bounties which are then blessed and for which we give thanks. The underlining significance, of course, is that the flowering and fruitfulness of all creation is transformed by and filled with the glory of the Lord.

I relate this annual summer ritual on the lakeshore in Quebec in the context of the Delos Initiative to suggest that, while we certainly can take inspiration from the selected examples in this marvelous book, let us also not forget the spiritual connections we all have to special personal places where our spirit is lifted and where we can touch the beauty and harmony of nature. All these places – that we touch and that touch us - must be protected. They provide us with the meaning of life.

I am delighted to have the opportunity to pen a few words with Nikita Lopoukhine, President of the World Commission on Protected Areas, to mark the publication of the proceedings of the First Workshop of The Delos Initiative that, under the title of 'Nature and Spirituality', took place in the Monastery of Montserrat on 23-26 November 2006.

The objective of this meeting was to discuss the study of legally protected sites of great natural value that are also recognised as sites of spiritual importance in technologically developed countries. Montserrat is one such sacred site and possesses an outstanding combination of both natural and spiritual values. It boasts a remarkable variety of flora and fauna, as well as fascinating geological formations of singular beauty that have for long attracted the attention of scientists and nature lovers alike. Nevertheless, when humans enter into contact with the natural world, they not only develop a thirst for scientific knowledge, but also unleash a capacity for symbolic reflection. They learn to admire and also to complement their naturalists' vision of the world from the spiritual standpoint

that forms an indispensable part of the human condition.

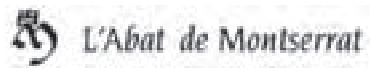
The sum - or, even, multiplication - of the different interpretations of this natural environment, 'inhabited' by humans for over a thousand years, has assumed a special dimension in Montserrat. The conjunction of an exceptional natural monument (the mountain) and the Benedictine Monastery and Sanctuary dedicated to Saint Mary, the Mother of Jesus, has brought about a reality that is rich in meaning and significance, but highly complex as a result to manage. Hence, I believe that it is appropriate to mention here the work put in by the Board of the Mountain of Montserrat in its collaboration with local and other administrative bodies.

As I wrote in the opening greeting for our webpage, for us, the monks, Montserrat is the Benedictine monastery, with its almost thousand years of history. Next to it, a sanctuary dedicated to the Mother of God has grown up and this spiritual presence, along with our devotion to the Gospel according to the Rule of St Benedict, has marked in a unique and significant fashion the life of the mountain. From this basic nucleus stem all the activities that in a more or less direct fashion depend on us, and which include, firstly, the Monastery and the Sanctuary, the monastic life and the faith of the pilgrims

that come to our door, our work, prayers and spiritual study, the welcome we give to all, our live, in community, the hopes and wishes of those who visit, our joys and our sacred days. Secondly, we promote many varied cultural activities, all impregnated with Christian faith: our music and the boy's choir that performs during liturgical celebrations, painting and sculpture, the publication of books, the study of philosophy, theology and humanities, and handicrafts. Finally, from within our community springs the interest in the study and conservation of the natural environment of Montserrat, which, as the 'work of God', biblical faith views as an expression of the beauty of creation that

gladdens our spirits and brings us closer to the mystery of God.

I sincerely hope that the Delos Initiative can continue to deepen and consolidate the work begun here in Montserrat and thus contribute to the understanding of how spiritual values can positively aid conservation and the proper use of natural areas in technologically developed countries. For our part, we are happy to be able to contribute in our modest fashion to this initiative.



Monastery of Santa Maria de Montserrat, nestled on a narrow platform ledge, from Sant Joan. >



“On this wise ye shall bless the children of the people, saying unto them, the Lord bless thee, and keep thee: The Lord make his face shine upon thee, and be gracious unto thee: The Lord lift up his countenance upon thee, and give thee peace. And they shall put my name upon the children of the people; and I will bless them”.



Blessing recited by Father Ramon Ribera-Mariné at the opening of the workshop. It is a slightly adapted version of the 'priestly blessing' told by Moses, the man of God, according to the fourth book of the Bible, the Book of Numbers, 6, 23-26.

Opening of the workshop.

From left to right: M. Rafa, P.Canals, R.Ribera-Mariné, T. Papayannis, R. Luque and J. López.



2. Opening addresses

Ramon Ribera-Mariné,

Prior of the Monastery

It fills me with great pleasure to be able to address a few words to the members of this workshop on the Delos Initiative that is being held in Montserrat. I do so as Prior and on behalf of Father Josep Maria Soler, the abbot of this all-but millenary community who cannot be with us today since at this moment he is attending a series of meetings in the USA.

First of all, I wish to thank the organisers for having thought of us when it came to choosing a place for this meeting. Montserrat has a long tradition as a meeting place for a wide variety of different types of groups. Our religious vocation is clear, as our dress reveals. However, we only ask one thing of those who come to us – that they work for peace. Indeed, people like yourselves, who know and love the natural world, could you have any other aim in mind?

Montserrat has always welcomed dialogue and new ideas. A few examples suffice: by 1499 there was already a printing press here and by the end of the eighteenth century new and important work on history and the natural world was

already being carried out. Likewise, today our museum is home to notable works of modern art. The Delos Initiative is also novel, even for those of us who have been working with and writing about the natural world for many years.

Nevertheless, Montserrat and its mountain, with its pale vertical cliffs is –if it is anything– home to a Holy Image, a symbol of the transcendental, that unites all those that come here (and perhaps even those who merely contemplate the curious forms of the mountain from afar). The verticalness of the site evokes a further reality: the sanctuary and its rather uninspiring secular buildings offer a place of peace and conviviality and will do everything in its power to offer hope to the human race.

Likewise, you may well be able to offer us ideas as to how we can improve our management of the natural and spiritual values of our mountain, which is the legacy that we will have to pass on to future generations.

The Rule of Benedict of Nursia, a sixth-century monk and founder of the Benedictine Order, refers to the treatment of one's guests: they should always be received in the monastery as Christ him-

self. And so, in light of this statement of principles, Montserrat welcomes you and hopes the workshop is fruitful for all concerned.

Jordi López,

President of the Steering Committee of the Board of the Mountain of Montserrat

It is my pleasure to be able to welcome you to Montserrat on behalf of the Board of the Mountain of Montserrat and to thank you for coming to this natural park. We were surprised when the idea of holding this meeting here was first suggested, but as time has passed your presence here has become an element of great satisfaction for us for both institutional and personal reasons. My own links to Montserrat began the day I was brought here to be baptised at the tender age of just one month. Since then I have remained in close contact with the mountain, as the members of the community know. I think that the idea of establishing a connection between a natural area and our own personal interior experiences is extremely positive; the discovery of these personal spiritual elements is of great importance in modern society. I'd like to remind you that the words spoken by Pope Benedict XVI this week, in which he described the monasteries as the lungs of the soul in an urban

world, can be applied just as well to the natural world.

Having begun with a personal confession, I should like to continue briefly in this vein. I too am a biologist and would like to share with you a significant personal experience from my time here: the mystical dimension of the contemplation of the natural world. I remember the nights in Santa Cecília, another monastery near here and a little further down the mountain, when I would contemplate the heavens and would feel aware of their infiniteness and the relative insignificance of humankind. I would note the same sense of infiniteness during my research on cellular structures when I delved deep into a different world via the eyepiece of an electron microscope. Here too I would discover other immensely small enormities and realise that in those cells too there was a harmony that reflected the infiniteness of life. The Universe and living cells merged for me in a highly personal experience here in Montserrat and so I too can claim to be a spiritual son of this mountain. I firmly believe that the reality provided by Montserrat gives modern society a spiritual dimension amidst the organised chaos that we are forced to live with.

In Catalonia the majority of natural areas also contain religious elements such as monasteries or hermitages. They remind us that many of our forefathers lived a

contemplative life in touch with nature. Society needs places such as this where one can find one's inner silence and benefit from spiritual experiences, and these can be found in nature. As well, it is of great help when a community is present that can help with the spiritual reading of today's world.

Thus, projects such as yours are of great value in the modern world and so I keenly await the results of your deliberations and hope that your work is both fruitful and pleasurable.

Miquel Rafa,

Head of projects, Fundació Territori i Paisatge Caixa Catalunya savings bank

I am doubly delighted to be able to be here with you today. Firstly, I would like to welcome you on behalf of Fundació Territori i Paisatge, one of the institutions that has provided financial support for this meeting and, secondly, on a more personal note –as someone who lives nearby–. I am pleased to be able to share with you one of my visual, as well as emotional and spiritual, daily points of reference.

I'd like to briefly explain why we are here. The Fundació Territori i Paisatge is a foundation created by a local savings bank, the Caixa Catalunya, as part of its com-

mitment to community work. Our aim is to help nature conservation from a social point of view: and this means that we have to be aware of the ethical, moral and spiritual needs of our society and our work in nature conservation should not ignore these aspects of the modern world.

In 2004, as part of the Parliament of the World's Religions that was held in Barcelona, we organised a seminar on the role played by the world's religions in conservation, the first such action in the line of work that this Task Force has undertaken with such seriousness and success. Since 2004 we have been working with two spiritual centres, one in the Buddhist monastery of Sakya Tashi Ling in the Garraf Park, and the other in the Christian sanctuary at Gallifa, also located in a designated protected area in Catalonia. In both cases we have reached agreements that will enable these centres of spirituality to improve the way they manage their natural surroundings. We believe that this is a good way of assuring the conservation of the natural and spiritual values present in these two protected natural areas. These are just two of the lines of work we are involved in and we are well aware that in this field a lot still remains to be done. However, we hope modestly that in future years our organisation can continue to work in collaboration with this international Task Force.

We believe that this is a very important task and this explains our presence here. We offer our support and encourage you in the hope that for your own sake and for that of the organisations you represent you will be successful in your aims. Likewise, for all the other organizations and people who are concerned with the conservation of the natural world and for the ethical dimension that is inherent in our work, we wish you the best of luck.

Ramon Luque,

Director of the Directorate-General for the Natural Environment, Ministry of the Environment and Housing, Autonomous Government of Catalonia

First of all, I would like to begin by reminding everyone present that we are in one of the most wonderful of all natural areas in Catalonia, which also happens to be a site of special religious significance for our country.

I recall how I first got to know this marvelous mountain. Like so many other immigrants from other parts of Spain, when we first arrived in Catalonia we asked what should be the first place we visited. Somebody told us that we should begin with Montserrat, which, apart from being a religious symbol, is also a reference point for the country's national identity

and its democratic liberties. Although this is not the time and place to discuss this question further, I feel this fact may be of interest to those of you who come from other countries.

Without doubt, the recognition of the intangible values inherent in protected areas was one of the most important achievements of the V World Parks Congress held in Durban in 2003. This need to recognise and integrate intangible values into our conservation policies in all types and systems of protected areas was reflected in full in the conclusions and recommendations that came out of this Congress. Since then, the work groups that were constituted at the Congress have been active in the development of these ideas.

In the Ministry of the Environment and Housing, which is responsible for the conservation of natural areas in Catalonia, we believe that if we are able to incorporate cultural and spiritual values into the management strategies and plans for our protected areas, and also guarantee their inclusion in the conservation of overall biodiversity, we will encourage many social sectors that have up to now been marginalized or have even expressed their disagreement with our policies to become far more involved in nature conservation. All too often, neither conservationists nor the

Administration have been able to communicate well with those people who feel a special spiritual link with a natural site, which may in fact be the most singular and most precious of all visions of that site.

Likewise, the bonds between a people and its places of recognised spiritual importance can also help preserve natural sites. In some cases certain contradictions may arise when managing such sites, although management is also a good opportunity to promote the natural values of this type of protected area. The fact that people visit this mountain for its singularity as a symbol of our national identity or for its inherent spirituality should be regarded by conservationists as an opportunity to reach out to large numbers of people amongst the population as a whole and transmit to them the natural values of this special place. We should not think of the conservation of the natural values of a site as being unconnected to the preservation of its spiritual value. The recognition of a way of life linked to the traditional activities of sites with special spiritual significance is an essential element in the conservation of biodiversity.

Thus, the government of Catalonia and its Ministry of the Environment and Housing would like to publicly reaffirm its commit-

ment to the conclusions of the Durban Congress and our desire is to re-evaluate the significance of these spiritual values of such import to so many people and to incorporate them from now on into the management of our protected areas. These intangible values must be present in our planning strategies and in our specific management policies.

I'm sure that this workshop will give rise to many conclusions that we can develop and then incorporate into our work in protected areas. We will work hard with local communities, town and city councils, and with those bodies that best represent this integration of ideas. We will enable them to participate in our work and thus create an identity that links our protected areas with the cultural and spiritual values of our country.

I am happy to recognise the partiality and insufficiency of the view of the world as expressed by our conservationists, the scientific community, the so-called experts and the Administration. It is often too scientific and technical and I can't help but agree with the great Catalan ecologist, Dr. Ramon Margalef, who reminded us all of the "impossibility of trying to describe the whole of nature by means of the differential equations that are so dear to many ecologists, when, after all, it may be just as effective to sit

down and watch a river flow or to listen to the whisper of the leaves on the trees”.

Many thanks.

Purificació Canals,

Vice-president of IUCN

Good morning everybody. I'm delighted to be here today to welcome you to Montserrat and to represent the IUCN during this meeting in such a special place. Those of us who work for the IUCN in nature conservation are well aware of the scientific and technical aspects of our work. However, many of us have felt for some time that we need to look for a more human or more spiritual side to our work and we believe that, unless we do so, our work may end up as rather intranscendental. Although there are relatively few of us here today, I am convinced that this meeting will have significant repercussions on the work of the IUCN and I am sure that the ideas on the conservation of natural spaces that we are here to discuss will be taken fully into account.

We are here to discuss the natural areas that for some people are, above all, repositories of extraordinary natural values, but that for others are important as places of great spirituality where one can re-establish links with one's own personal

identity. I believe that this meeting might signal the start of a change in some of our perspectives on conservation, a change that I would very much like to see become explicit at the next World Conservation Congress that is to be held not far from here in Barcelona in October 2008.

It has been decided that at this congress we will not only discuss biodiversity, but the idea of diversity in its broadest sense that includes species and cultures, intangible values and beliefs. I hope that thus this world congress in 2008 will be different and we will be able to reach more people than ever before. There are people who will perhaps never understand that we must protect, for example, the Lynx as a creature that is at the top of the food chain. However, these same people are perhaps much more able to appreciate that the Lynx should be protected as one of God's creatures that has as such an intrinsic value. For these people, the Creation has a spiritual value that goes beyond the role plants and animals play in natural systems. I think that we have rather ignored some of these different elements over the years and that it is time for them to be brought together again.

On a more personal level I would like to explain to you my deep personal links with Montserrat. It was the first place my parents ever brought me when I was barely a

year old and before I could even walk. When I look at old photos, I cannot help but think that an important part of my life in nature conservation began on that day. I'm sure that if we look back we will all find that somewhere we will have had some kind of emotional or spiritual experience in a natural area that has left an indelible impression on us. Our relationship with nature is complex and I am convinced that to fully love and appreciate nature we must be prepared to go beyond simple rationality and listen to our emotions and heartfelt beliefs.

Montserrat is an ideal place for a meeting of this type. If you look down towards the surrounding plains you will see a landscape dominated by built-up areas and large-scale infrastructures. However, if

you look skywards, you will see a well-conserved mountain that, despite not being completely virgin, does have a certain natural balance. We must learn to understand the links between one dimension of the landscape and all others and enable these realities to co-exist as best they possibly can. We must assure that future generations can enjoy these natural areas from a scientific point of view, as well as from a more spiritual standpoint of belonging to nature.

On behalf of the IUCN I would like to close by saying that we are very pleased that our members and supporters should organise meetings such as this one and offer our sincere thanks to all those that have made it possible.





3. Introduction

The Delos Framework

Thymio Papayannis and Josep-Maria Mallarach

In the highly appropriate setting of Montserrat, resplendent in the unique natural beauty of its mountain landscapes and monastery and ancient hermitages, a workshop on nature and spirituality was held on 23-26 November 2006. This meeting of international experts was organised as part of the Delos Initiative, a project focussed on sacred natural sites in developed countries.

1. The Delos Initiative

1.1 Aims

The purpose of the Delos Initiative is to identify the relevance and significance of sacred natural sites in technologically developed countries and to investigate whether and how spiritual values can contribute to both the conservation and proper use of important natural areas and the maintenance of cultural heritage. Its main focus is on protected sites of great natural value that are rep-

resentative of the world's religious and spiritual traditions.

More specifically, the principal objective of the Initiative is to reach an understanding of the views of the major faiths in developed countries on the sanctity of certain natural sites and the relationship of these faiths with the natural world. A second aim is to assess the pertinence and importance of sacred natural sites in people's lives today and thus to attempt to estimate their exact significance.

Finally, the Delos Initiative aims to resolve possible conflicts between the essential nature of sacred sites and conservation and management requirements via the implementation wherever possible of interacting synergies.

The aim is for these objectives to be fulfilled by the Delos Working Group via work based on the experience gained from a representative sample of case studies or pilot sites. Conclusions will be drawn from the analyses carried out and then, after a process of sensitisation, recommendations will be made and/or specific guidance provided.

< Hermitage of the Holy Grotto of Montserrat, in the morning mist, from the Rosary Way.

1.2 Framework and *modus operandi*

Within the framework of the IUCN World Commission on Protected Areas, a Task Force on Cultural and Spiritual Values of Protected Areas (CSVPA) is focussing its activities on the point at which humans and nature interact. The Delos Initiative was launched in September 2004 as part of this Task Force in order to study the contemporary relevance of sacred natural sites in technologically developed parts of the world. More specifically, the Initiative was set up to determine whether the spiritual/cultural values of a site are compatible with its natural values, and whether conservation efforts can create synergy between these different types of values.

The methodology of the Delos Initiative combines complementary bottom-up and top-down approaches. The bottom-up approach is based on an analysis of specific sites that aims to:

- Identify participants and sites in representative countries;
- Examine objectives at local level;
- Debate the results of the analysis with different stakeholders to reach conclusions acceptable to all;
- Generalise results and extrapolate them to a broader level;

The top-down approach applies the basic metaphysical principles that all spiritual and religious traditions share a belief in the symbolic character of nature and in the sacredness of at least some natural theophanies and, thus, profess an awe and deep respect for the natural order as a terrestrial reflection of a celestial or divine order. Hence, the Initiative attempts to:

- Identify the underlying principles of different spiritual traditions;
- Examine their relevance and influence in different contexts;
- Propose and validate relationships and analogies.

The Delos Initiative is coordinated jointly by Thymio Papayannis and Josep-Maria Mallarach with the support of Med-INA and Silene, the two non-governmental organisations they direct. Its web site is located at www.med-ina.org/delos.

The initial small Delos Working Group has expanded into the Delos Network and today includes members from countries in America, Asia, Europe and Oceania. All of its members contribute their work on a voluntary basis.

1.3 Activities

During 2005 and 2006, the following activities were carried out:

- Selection of pilot sites using clear criteria and the designation of a person in charge of each site.

- Bibliographic study of each pilot site aimed at identifying their spiritual and natural characteristics and significance.

- On-site questionnaire answered by key local stakeholders to determine challenges and threats and to identify attitudes and expectations.

- Analysis of the results of the questionnaire and drawing up of conclusions and recommendations. The recommendations were submitted whenever possible to the person in charge of the site's natural and spiritual heritage in order to reach a consensus.

- Organisation of the Montserrat Workshop to present the lessons learnt from the pilot sites, debate the results and issues that have arisen, and plan for the future.

- Presentation of the Delos Initiative in different international and national events such as:

- The International Symposium on Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes, Tokio, 2005.

- The European Nature Conference, Europarc & Europsite, Apeldoorn, The Netherlands, 2005.

- The 11th & 12th Conferences of the Spanish Section of Europarc, in Cangas de Narcea, 2005 and Vall de Boí, 2006.

2. Sacred sites in technologically developed countries

The notion of a sacred site is undoubtedly culture specific. During the work of the Delos Initiative the term was interpreted in a broad sense and thus sites of significance to most of the world's major faiths were included, even when they only represented a small minority of the population, as in the case of the Holy Isle of Arran and its Tibetan Buddhist monastery. Particular attention was devoted to indigenous spiritual traditions such as the Sámi in Scandinavia and the Cherokee Native Americans in the USA that still exist in a number of technologically developed countries.

It is worth highlighting here a high degree of diversity. Some sacred natural sites owe their status to the existence of important religious communities: this is the case of the large Christian monasteries on Mount Athos and Montserrat, which continue to attract a wide range of believers from many different countries. Other sites possess mainly oral traditions and experiences associated with particular groups of people: this is the case of the groups that retreat to nature such as Buddhist or Christian hermits and, above all, indigenous sites.

A few sites are well-known and attract hundreds of thousands of people to major events, as occurs during the most multitudinous pilgrimages to the shrine at El Rocío in the Doñana wetlands. Others are of significance to much smaller groups and are celebrated in more modest or even secret fashion.

In terms of the natural environment, Delos focuses on sites of high biodiversity that already possess protected status at national or international level. Quite a few of the pilot sites examined are national parks or nature reserves, some are World Heritage Sites and one a Wetland of International Importance. Most of the European sites are included in the European Union Natura 2000 network, defined on a basis of ecological criteria applied at a bioregional scale and currently at varying stages of implementation in the individual countries involved.

2.1 Threats and challenges

In spite of their protected status and the significance that the associated faiths may have for society, sacred natural sites in technologically developed countries are today having to face up to a variety of threats to aspects of both their spiritual heritage and biodiversity,

as has been confirmed by the case studies analysed.

Most of the threats can be put down to indifference and abandonment, especially in the case of sites that are of significance to traditional and indigenous peoples, which are often ignored by both government authorities and the public.

As a result, these sites are often degraded –or even destroyed– by large development projects such as ski resorts, hydroelectric stations or motorways. The fact that most of these projects eventually prove to be unsustainable does not seem to prevent them from being planned and executed. Excessive tourist development (Meteora is a characteristic example) and spreading urban development exert pressures that are intolerable in sacred sites and both are exacerbated by inadequate, weak or non-existent land-use planning and control.

Additional threats to the spiritual values of a site can arise as a result of insensitive practices carried out by nature management authorities: this conflict originates from the centuries-old schisms between science and spirituality, and between secularism and religion, sometimes aggravated even more by populist political or ideological considerations.

2.2 Opportunities

Looking on the bright side, a number of recent developments have occurred that may have a positive impact on the management and conservation of sacred natural sites.

One such development is the increasing awareness in the major faiths of environmental issues as a result of the recognition that nature is part of the Divine Creation and that its destruction by human beings is a sin. This has led to active initiatives such as the sustainable management of church properties. Monasteries, as well, have started recognising that asceticism –one of their guiding principles– represents a deeply ecological approach to life and a close collaboration between the Catholic and Orthodox Christian faiths has arisen as a result, in part facilitated by the work of the Alliance of Religions and Conservation.

Likewise, nature conservation organisations –both multilateral and nongovernmental bodies such as the Conventions on Biological Diversity and on Wetlands, IUCN and WWF International– have become much more conscious of cultural and spiritual values and are attempting to implement specific initia-

tives into the management of protected areas and other fields of work. The Durban World Park Congress in 2003 issued a recommendation in the session entitled 'Building Cultural Support for Protected Areas' that all systems of protected areas should recognise and incorporate spiritual values and culture-based approaches into their conservation efforts. The Convention on Wetlands as well has established a Culture Working Group to provide guidance on the incorporation of cultural and spiritual values into the management of wetlands. The 11th Conference of the Spanish Section of EUROPARC held in Cangas de Narcea, Asturias, Spain, 8-12 of June 2005, approved conclusions related to the integration of non-material values, both cultural and spiritual, into the methods and strategies of planning and management of protected areas. It was decided to include a new section devoted to non-material values in the existing Action Plan for Protected Areas of Spain, during the evaluation process.

As a result, it seems that the schism mentioned above is narrowing, mainly thanks to the efforts of enlightened religious leaders and conservationists.



3. The Montserrat Workshop

The Montserrat Workshop was organised by Josep-Maria Mallarach, one of the two coordinators of the Delos Initiative, with the assistance of Jordi Falgarona and Mariona Ortí and other colleagues from the Silene Association.

Moral support was provided by the Monastery of Santa Maria de Montserrat, with financial assistance from the Governing Board of the Mountain of Montserrat, the Catalan Ministry of the Environment and Housing and the Fundació Territori i Paisatge (that belongs to the Caixa Catalunya savings bank).

3.1 Venue: The Monastery of Montserrat

Montserrat has been considered a sacred or holy mountain since written records have existed and is regarded by many as the spiritual heart of Catalonia. Nestling on a narrow platform 600 m above the valley below, the famous Benedictine Monastery, dedicated to the Holy Virgin, has been at the service for almost 1,000 years of the pilgrims from all over the world who come to worship the Black Madonna. The monastery today retains its centuries-old cultural and spiritual significance reflected

in its publishing house and school of music and its works on biblical, liturgical, theological and historical subjects. For many centuries there were hermits living in scattered and isolated hermitages, or caves, in different parts of the Montserrat massif. For centuries these hermits enjoyed great prestige as wise and holy men. There are 12 hermitages in the mountain, of which two are still used for temporary retreats by the monks.

A few years ago the monastic community of Montserrat chose 'Nature, Culture and Spirituality' as their motto for consumption by the general public. These words encapsulate the combination of important values to be found in and around the monastery and so it was only logical that the monastic community should be interested in hosting the Delos Initiative's workshop devoted to exploring the interaction between these three coexisting dimensions.

Father Ramon Ribera-Mariné, an experienced walker who has published several guidebooks on the footpaths that criss-cross this unique mountain, lent his full support to the project during its preparation and was very active during the workshop itself as a leader of field trips.

< Guest houses of in the Monastery of Montserrat, where some of the participants stayed.

3.2 Objectives and agenda

The most important of the multiple objectives of the Montserrat Workshop was to draw conclusions from an analysis of the pilot sites that would guide the future work of the Delos Initiative. Representative sites were selected on the basis of both their geographical location and their natural and spiritual characteristics and, although most belong to mainstream faiths, some also reflect the challenges posed by indigenous and minority beliefs. An unavoidable and pragmatic criterion was the existence of experts able and willing to analyse the pilot sites on a voluntary basis within a fixed time frame and some case studies had to be postponed until a second phase of work begins.

A further objective was to strengthen the links between members of the Delos working group through personal contacts and lively debate, which had not been possible previously.

The contribution of the Delos working group to other IUCN activities and, especially, to the preparation of the UNESCO/IUCN Guidelines on Sacred Natural Sites, was of special concern during the workshop.

Finally, it was hoped that the workshop would debate the future of the Delos

Initiative and suggest directions for the future.

Adequate time for all these objectives was included in the agenda of the meeting (see Appendix II). The meeting was inaugurated by addresses from members of the Catalan Government, the Monastery of Montserrat and the IUCN, and continued with the keynote speech from Jesús García-Varela on 'Nature and Spirituality'. Four lectures then followed that provided a broad background and an invaluable framework for the discussions of the case studies:

- Gonzalo Oviedo, 'Protected areas and sacred sites of indigenous and traditional peoples';
- Santos Casado, 'Spiritual values in the history of protected areas of Spain';
- Edwin Bernbaum, 'The experience of the Sacred Mountains Programme';
- Liza Higgins-Zogib, 'Contribution of sacred natural sites to nature conservation'.

The presentation and discussion of the pilot sites occupied most of the workshop's time; however, the last day was devoted above all to the discussion of more general issues and the drawing up of conclusions.

Despite its tight programme, participants in the workshop were able to go on guided visits to selected parts of the natural and sacred site (the historical hermitages of Tebas, the area around the monastery of Santa Maria, the Holy Grotto and the Agulles section of the mountain, the latter a favourite area for climbing), participate in some of the religious rites and ceremonies of the Benedictine community and listen to the monastery's boy's choir.

3.3 Case studies

As mentioned above, the core work of the workshop focused on the presentation of ten case studies of sites from seven developed countries. The presentations,

mostly by the experts in charge, included a critical analysis of the natural and spiritual significance of each site, a discussion of potential threats and prospects and usually some initial recommendations for improved management policies.

The Meteora site was presented by T. Papayannis and the Kii Mountain Range by B. Verschuuren in lieu of the experts in charge who were unable to attend the workshop.

The Solovettsky Island case study, which had been prepared during the pilot phase, was not discussed since the author of the case study, Alexander Davydov, could not be present.

Country	Site	Protected Status	Faith	In charge
Finland	Kolovesi	National Park	Indigenous Sámi	M. Määttä
Finland	Äjjis / Ukonsaari Island	Natura 2000	Indigenous Sámi	Y. Norokörpi
Greece	Meteora	WHS, Natura 2000	Christian Orthodox	I. Lyratzaki A. Sorotou
Greece	Mount Athos	WHS, Natura 2000	Christian Orthodox	T. Papayannis
Japan	Kii Mountain Range	WHS, National Park	Shinto + Shugen Buddhism	M. Motonaka
Romania	Vanatori Neamt Natural Park	Nature Park, Natura 2000	Christian Orthodox	S. Catanius
Spain	Doñana Protected Areas	National and Natural Parks, Ramsar Site	Christian Catholic	J. Falgarona J. García-Varela
Spain	Mountain of Montserrat	Natural Park + Nature Reserve	Christian Catholic	J.-M. Mallarach
United Kingdom	Isle of Arran, Scotland	Marine Reserve	Celtic Christian + Tibetan Buddhism	I. Soria
USA	Ocanaluftee River Trail, Great Smoky	National Park	Native American (Cherokee)	E. Bernbaum Mountains

Kolovesi National Park, Finland

Kolovesi National Park lies in the province of Eastern Finland and was established in 1990 to preserve the natural features of the Lake Saimaa archipelago, home to the endemic Saimaa Ringed Seal (*Phoca hispida saimensis*) and forest ecosystems characteristic of southern Finland. The rock paintings in the park are sacred sites associated with the annual cycle of spiritual fishing and hunting ceremonies. The sacred sites were once collective meeting places where spiritual rituals were carried out that reflected and strengthened the social identity of the local people.

Äjjis/Ukonsaari Island, Finland

The Inari Hiking Area is situated in Northern Lapland and the whole area is part of the European Natura 2000 network. It is being set up as a national hiking area, protected by an act of parliament. In the middle of Ukon-selkä open water area in Lake Inarijärvi rises the island of Ukonsaari, Ukonkivi or Ukko (Äjjis in the Inarisámi language), a strange-looking hunchbacked-shaped lump of rock. It is a famous natural sight and was once a very important and well-known site of worship for the indigenous Sámi people and is today one of the most investigated of all their sacred places of Finland.

Meteora World Heritage Site, Greece

Situated in central Greece, these enormous natural megaliths in the west of the Thessaly plain first attracted hermits in the eighth century and by the fourteenth century an Orthodox monastic community was well established there. The astonishing complex of tall sandstone pillars of Meteora, a name deriving from the ancient word *meteoros* meaning 'hovering in the air', rises over 400 m above the surrounding plains. The site is rich in both natural and cultural values and has been declared a Special Protection Area for Birds, a Natura 2000 site and a UNESCO World Heritage Site.

Mount Athos, Greece

The peninsula of the 'Holy Mountain' of Mount Athos lies in Chalkidiki, Northern Greece. Rich in history and with a continuous living Orthodox tradition of over 1,000 years, Mount Athos possesses great natural biodiversity and a unique landscape; it was designated a World Heritage Site in 1988 for natural and cultural reasons. It is characterised by an unusual diversity of ecosystems, ranging from Alpine to Mediterranean, and has rich coastal and marine biodiversity. Mount Athos enjoys a special degree of political autonomy and self-management under the spiritual guidance of the Ecumenical Patriarch of Constantinople.

Although access is limited (women are not allowed), the flow of visitors has been increasing during recent decades. Its monasteries are not only Greek, but also Bulgarian, Russian and Serbian.

Kii Mountain Range protected areas, Japan

The Sacred Sites and Pilgrimage Routes in the Kii Mountain Range are a group of temples and shrines connected by pilgrimage trails that are related to both Shintoism and the Shugen sect of ascetic Buddhism. Since ancient times, the Kii Mountain Range has nurtured a tradition of nature worship, in which mountains, rocks, forests, rivers and waterfalls are revered according to the Shinto interpretation of the world. Over one thousand years ago the region was already regarded as sacred by people from the ancient capital cities of Nara and Kyoto and pilgrimages have been undertaken ever since. All elements in the core area of the World Heritage Site are designated as part of a National Park or as National Historic Sites, Places of Scenic Beauty or Natural Monuments under the Law for the Protection of Cultural Properties.

Vanatori Neamt Natural Park, Romania

Vanatori Neamt Natural Park is situated in north-east Romania in a forested moun-

tainous region with important natural populations of species such as Brown Bear and Wolf.

The park was set up in 1999 and since then has been managed by the National Forest Administration. It was designated as a Natural Park on the strength of the sustainable management of its forests, the conservation of its landscape and local traditions, the reintroduction of European Bison into its natural habitat and the encouragement of tourist activities based on these natural values. The area has also been proposed as a Natura 2000 Site. Vanatori Neamt is famous for its 16 Orthodox monasteries, as well as for the 40 churches and small hermitages scattered throughout the area. In addition the area has acted as inspiration for many important Romanian artists.

Doñana National and Natural Parks, Andalusia, Spain

Located at the mouth of the Guadalquivir river on the Atlantic coast of Andalusia, the Doñana area is the most important wetland in Spain and is protected by its designation as a National Park, a Natural Park, a Ramsar Site and a Wetland of International Importance. The variety of different habitats ensures that the main environmental value of the area is its biodiversity. Just on the edge of the National

Park stands the shrine of the Virgin del Rocío ('Our Lady of the Dew'), known locally as 'The Queen of Marshes', object of some of the most important pilgrimages in the whole of Spain. Over one million pilgrims participate each year, walking or riding through the dunes and marshlands, chanting and praying for days on end during their journey to the shrine.

Muntanya de Montserrat Natural Park, Spain

The Mountain of Montserrat (in Catalan 'serrated mountain') in Catalonia, characterised by a multitude of astonishing rocky pinnacles, has been considered a holy mountain for centuries. It was initially declared a Picturesque Landscape, but was subsequently awarded Natural Park status (including a natural reserve) by the Catalan Government in 1987. Two Catholic monasteries are situated on the mountain's slopes, of which one, devoted to the Holy Virgin, has been an important centre of pilgrimage since the fourteenth century. The Benedictine community at the monastery of Santa Maria has had over the centuries a significant spiritual and cultural influence on the region and today the Natural Park receives almost three million visitors per year, of which the vast majority visit the area of the main monastery.

Holy Island of Arran, United Kingdom

Holy Island is a small island lying off the coast of the Isle of Arran and was the site in the sixth century of the hermitage of St Molaise, an important figure in the early Christian church in Ireland and Scotland. In the twelfth century it also housed a monastic community. For many years the island was uninhabited, but has recently been purchased by a Tibetan Buddhist organisation, which is in the process of setting up a retreat and interfaith conference facility. The island is also home to a breed of traditional livestock, also in need of conservation since the island has become severely overgrazed. Conservation efforts have included the restoration of native woodland and the implementation of more appropriate grazing regimes on the moorlands. A marine protected area has recently been established offshore.

The Oconaluftee River Trail - Great Smoky Mountains National Park, USA

The Great Smoky Mountains National Park is a UNESCO World Heritage Site and Biosphere Reserve and is shared between the states of Tennessee and North Carolina. It experiences a wide range of the climates and habitats to be found in the eastern USA between

Georgia and the Canadian border and boasts extraordinary levels of biodiversity.

The site has particular spiritual and cultural significance for two local groups, the Eastern Band of the Cherokee Indians and the descendants of the Scottish-Irish settlers who created what is known today as 'Appalachian culture'. The discovery of gold in 1828 led to the main part of the Cherokee Indians being forcibly removed to Oklahoma along the infamous Trail of Tears, a journey which many did not survive. After the forced removal, a separate group of Cherokees who had been

allowed to stay behind, settled in the area to form the Eastern Band of the Cherokee Nation.

3.4 Participation

Over 50 people attended the opening session, although numbers eventually levelled off to a stable core group of around 25. The diversity within the group was considerable: in all, eight countries and four continents were represented, with two-thirds of the group connected to scientific/conservation organisations or agencies and the rest to

Participants in the wWorkshop at the Sant Joan lookout point.



religious bodies. There was also a good age balance, with both very young and elderly participants, although only 15 % of participants were women.

Of particular significance was the participation of monks from three monasteries –Montserrat (Catholic-Benedictine), Santa Maria de Poblet (Catholic-Cistercian) and Sakya Tashi Ling (Buddhist-Vajrayana)– located inside protected areas near Barcelona.

The IUCN was well represented by Purificació Canals, IUCN Vice-President, and Gonzalo Oviedo, Senior Advisor on Social Policy.

3.5 Outcomes

The conclusions of the workshop are summarised in the Montserrat Declaration (see page 311), drawn up collectively by all participants as a firm statement of the need for closer collaboration between the custodians of sacred sites and those in charge of the management and conservation of protected areas. The strength of the Statement lies in the diversity of people from a broad array of fields of work and organisations who have endorsed it.

Additional outcomes include guidance on planning for the future development of the

Delos Initiative, growing contacts between monastic communities (for the moment in Catalonia, Greece and Scotland), and the strengthening of the Delos Network, which will replace the initial Delos Working Group.

4. Perspectives for the future

The Montserrat Workshop, held approximately two years after the inception of the Delos Initiative, marks the completion of the first phase of the Initiative. However, it should be stressed that the Initiative might well have ended up as just another innovative research and analysis project if there had been no interest in or further need for its activities. The success of the workshop at Montserrat, however, has confirmed the significance of the initial propositions and the interest it has generated in both spiritual and nature conservation circles will ensure that work will continue into a second phase.

An important future date is the World Conservation Congress of IUCN to be held in Barcelona in October 2008; the intervening period will be useful for broadening and expanding the analyses of the pilot sites, for determining what kind of technical guidance is needed and how to obtain it, and for consolidating views on major issues.

Sometime in 2007 a second workshop

will be organised –probably in Greece– to review the progress of the work under way. The outcome of the activities planned for this workshop will be presented to the World Conservation Congress and laid open for debate and criticism. The results will be evaluated by the Delos Network and a third phase will then be planned, if it is deemed to be necessary and worthwhile.

4.1 Deepening the case studies

During the next biennium, monitoring of the pilot studies analysed during the first phase will continue. This will allow us to identify developments –both positive and negative– that may lead to a better understanding of the specific situation of each case study.

In certain cases, it might be possible to become further involved and to provide advice or even guidance on the implementation of some of the recommendations made regarding, for example, the promotion of integrated management policies and synergy between the custodians of sacred sites and managers of protected areas. This will have to be done with great care and only at the request of those officially in charge of the pilot sites. It will also depend to a large extent on the background of the person in charge of

each site and on the contacts that this person can establish with its custodians and managers.

4.2 New case studies for a more balanced representation

During its second phase, the Delos Initiative aims to add further case studies in order to improve the balance between the faiths and countries in the list of sites under study.

Mainstream faiths found in technologically developed countries as yet not included in the Delos Initiative include Islam, other branches of Buddhism, Protestantism and Judaism. On the other hand, despite being technologically developed, a number of huge countries such as China and India that are undergoing great transitions are still a world unto themselves. Nevertheless, in these countries there are numerous experts working on sacred natural sites and the results can be found in the proceedings of the Xishuangbanna International Workshop (2003). There is thus no need for the Delos Initiative to become involved.

Australia, Canada and New Zealand, however, are quite different cases. Their

protected areas share many features with those already analysed and these countries possess experts who are interested in preparing case studies within the framework of the Delos Initiative.

4.3 Towards technical guidance

During the workshop, some of the participants argued convincingly for the need to go deeper and to start developing serious guidelines for the management of sacred natural sites in developed countries. This position seemed to have general support, although some strong reservations were

raised concerning the legitimacy of attempting to provide guidance to those who have been managing sacred sites since long before the existence of modern protected areas.

The Delos Initiative has already started looking into guidance as part of an effort to incorporate its inputs and perspectives into the UNESCO/IUCN Guidelines on the management of sacred natural sites, which will be developed further in 2007 and published probably in 2008.

However, it was generally agreed that this is a very difficult task that will require

Workshop session. From left to right: P. Canals, T. Papayannis and I. Soria.



important backing and that a pragmatic discussion of the issue, based on experiences gained in representative cases, should be initiated in early 2007.

4.4 The way forward

The World Conservation Congress (Barcelona, October 2008) constitutes a key event for the Delos Initiative. Not only will it allow its views and suggestions to reach a wider public in the field of conservation, but it will also provide the opportunity for in-depth critical assessment of the initiative's achievements, positions and

plans. As such, the Initiative may well play a significant role during the Congress.

For this reason we feel that the activities of the Delos Network during the intervening period should focus on organising its participation and contribution to this major event. During the Montserrat Workshop various possibilities were discussed, including the possibility of organising a parallel event, which would include visits to three sites around Barcelona, all –it is to be hoped– previously analysed as case studies within the framework of the Delos Initiative.





4. Speeches

Nature and spirituality

Jesús García-Varela

*"It is not birds that speak,
but men learn silence".*

Kathleen Raine

At first sight, the title 'Nature and Spirituality' would appear somewhat contradictory, since at times it seems as if it were no longer possible to view the natural world from a spiritual standpoint. In today's world, nature is thought of as a purely material concept that the human race takes advantage of for economic purposes or simply for pleasure. Nature is absorbed into a machine to be used, thereby becoming a simple resource to be exploited. This concept is the result of a dominant materialistic ideology or mentality based on the idea that only that which can be empirically or scientifically proven actually exists. Scientific knowledge becomes 'orthodox' knowledge, which in turn becomes exclusive and totalitarian. This 'scientifist' mentality that believes that scientific reason is

the only way of approaching reality has gradually imposed its hegemony since the seventeenth century¹, hand in hand with a belief in the concept of material 'progress' –poorly defined and born out of our increasing dependence on technological advances– that continues to use and abuse the world's natural energy sources. Nature is exploited and then squeezed dry. This misuse of science and the concomitant 'progress' are the two external pillars of the modern materialist mentality and two important factors in the world's current ecological crisis (which is nothing but a manifestation of the current predicament in values caused by a disregard for the spiritual dimension of life). This ideology has led, logically, to a general lack of respect for the immaterial values found within the natural world in the dimension of what might be called the 'invisible'². Today the dominant vision of the world provides a stark contrast to the more traditional world views or visions found in the Bible and other sacred texts:³ "The World is no longer seen as the work of God."⁴

¹ An early view of this process in the western world can be found in the work of René Guénon, published in 1927, *La crise du monde moderne*. See also: Theodore Roszak, *Where the Wasteland Ends*, above all chapters 5 and 10, and Jacques Ellul, *The Technological Society*. For the origins of the scientific mentality and its founding tenets in the seventeenth and following centuries (Descartes, Boyle, Bacon ...), see Mary Midgley "Putting Nature in Her Place". *Science as Salvation*, pp. 75-83, reproduced in Harry Oldmeadow, *The Betrayal of Tradition*.

² See the complete dossier on sacred sites and threats to their conservation that has been drawn up by the World Wildlife Fund, *Beyond Belief* (2005).

³ Seyyed Hossein Nasr *Man and Nature*, p.17-50, for a lucid vision of the destruction of sacred and spiritual values in nature. See also by the same author *Religion and the Order of Nature*, pp. 29-79 y 191-234 and "The Cosmos as Theophany" in *Knowledge and the Sacred*", pp. 189-220.

⁴ Mircea Eliade. *The Sacred and the Profane*, p.179.

Scientific knowledge, quantitative and centrifugal, is diluted in a myriad of applications, each a poorly defined fragment of reality.⁵ On the other hand, knowledge based on an authentic spirituality is qualitative and centripetal and proceeds via synthesis and symbols. The traditional mindsets that form the basis of the world's many different religions and spiritual beliefs appear at times to be but a distant memory of an all but forgotten dimension. Traditional knowledge recognises the presence of invisible spiritual values within the natural world that demand respect and deep veneration, the latter one of the main tenets of the oldest traditional religions (as explained a couple of years ago at the Europarc Congress).⁶ All spiritual traditions look on nature as a theophany, that is, as a divine manifestation: "The heavens declare the glory of God; and the firmament proclaims his handiwork" (Psalm 19:2).⁷ This is a sacred world with its symbolism and, given the opacity of materialism, spiritual beings have to contemplate the world via manifestations of phenomena and via the metaphysical transparency of the Cosmos.⁸ Nature is a mirror of the divine world and as such is sacred: the desanctification

of nature is one of the chief characteristics of modern times.

Looking from an authentically traditional perspective, the first misunderstanding to resolve is that there is in fact no conflict between nature and God. Without the concept of a divinity we cannot talk of sacredness.⁹ Nature cannot be worshipped in isolation or be attributed spiritual values beyond those conferred on it by a divine Creator. This anomaly occurs in the modern pseudo-spiritualist (or New Age) thought that sprung up in the twentieth century as part of the uncontrollable psychism that has taken advantage of the growing spiritual vacuum present in modern society. It cannot be denied, nevertheless, that many shades and subtleties exist in these modern forms of thought, which range from those that pay homage to nature as the source of all life, to those centred on psychic forces that are more akin to magic than anything else.¹⁰ However, from a traditional point of view nature is the reflection and symbol of the manifestations of the divinity. Nature is not 'independent' of God, but rather one of the most obvious of all divine manifesta-

⁵ Marco Pallis. *The Way and The Mountain*, p. 71.

⁶ *Naturaleza y Mundos Tradicionales*, Europarc Congress 2004, Roses.

⁷ Many biblical references can be found that express the same idea, including: *Psalms* (24:1, 148), *Isaiah* (40:26), *Leviticus* (25:23) and *Wisdom* (7:22-23).

⁸ See Nasr, *Man and Nature*, op. cit., Chap. 3 'Some Metaphysical Principles Pertaining to Nature', pp. 81-113, rev. ed.

⁹ See also the work of one of the most significant voices of Orthodox Christianity: Philip Sherrard, *The Sacred in Life and Art and The Rape of Man and Nature*, above all chapter 4 of the latter: 'The Desanctification of Nature', pp. 90-112.

¹⁰ For conceptions of nature from the post-medieval world to the present day, see: Harry Oldmeadow, 'The Firmament Sheweth His Handiwork' in *Seeing God Everywhere*.

tions. "All of Nature speaks of God"¹¹, the entire Universe is a sign, a reflection of a invisible Reality.¹²

A spiritual vision of the natural world is one of the essential traits of all authentic spiritual traditions. Man lives in harmony with the Cosmos, venerating and respecting it. The men and women of traditional cultures are an integrated part of the natural environment; it is their temple, their place of worship. They are not the owners of the natural world; rather they are its custodians and guardians: "This we know; the earth does not belong to man; man belongs to the Earth".¹³

The second point to take into account in this context is the necessary distinction between the spiritual world and the psychic or supernatural world. We have already mentioned the modern neo-spiritualism whose main characteristic is precisely its choice of the physic dimension as an alternative to the spiritual dimension. This is an important distinction because the physic dimension, restricted only to the human dimension, shuns and

even tries to substitute the divine experience.¹⁴ We live in a modern world characterised by both materialism and psychism. Both are distant from the spiritual world and therefore, from what constitutes the essence of humankind and the world's different spiritual traditions. As Frithjof Schuon has explained so clearly, modern man has 'usurped' religious feeling and replaced it with other idols, one of which is science.¹⁵ The qualitative vision of the world has been lost along the way; we have lost the criteria of spiritual orientation and are stumbling progressively closer to internal self-destruction. This is one of the obvious signs of the crisis of our civilisation that has been remarked upon so often in recent decades.

The ability to penetrate nature's symbols and reach into the essence of its spiritual dimension requires *contemplation*, an archetypal activity that, above all else and as we have mentioned already, explores the divine origins of phenomena. If we contemplate the natural world via authentically spiritual criteria we will see the universal values that are present. A

¹¹ Hugo de San Victor. 'Omnis natura Deo loquitur', *Eruditio Didascalica*, 6.5 p. 176, 1805, quoted in Nasr, *Man and Nature*, p.10.
¹² See chap. 1 of *The Way and the Mountain* by Marco Pallis for an approximation to the sacred character of nature from a genuinely traditional point of view, pp.13-35.

¹³ The indigenous peoples of the North American Great Plains possess the most existential conception of the natural world. This quote comes from the famous speech by Chief Seattle, of which numerous versions exist in many languages, pp. 31-32.

¹⁴ Jung is mistaken when he tries to place the spiritual dimension within the "collective subconsciousness". A profound criticism of Jung's thesis can be found in Titus Burckhardt, *Modern Science and Traditional Wisdom*, in the chapter "Modern Psychology and traditional wisdom", pp. 88-103

¹⁵ Frithjof Schuon 'Usurpations of religious feeling' in *The Transfiguration of Man*, pp. 39-48.

flower is not merely an association of certain physical elements that together create a material object, but something that transmits a permanent state of which the flower is a symbol. The beauty of the flower is a manifestation of an invisible quality — Beauty as a divine Quality. Beauty becomes a representation of the infinite within the finite. “To see the infinite in the finite is to see that the flower we see before us is eternal, because an eternal spring reaffirms itself in its fragile smile”.¹⁶ Likewise, the mountain will be the reflection of divine Majesty, and the ray of light

the symbol of the divine Power. By contemplating the flower, the mountain, the ray or the current of a river we can feel the Presence of God and his distinct Qualities. Beauty becomes then a manifestation of the infinite in the finite and evokes the metaphysical transparency of the phenomena mentioned above. He or she who contemplates sees beyond the dual external vision that separates the subject from the object and can interiorise positive phenomena into his or her soul. To continue with this metaphor, the external beauty of a flower will help whoever

16 Schuon, *Gnosis: Divine Wisdom*, p. 100

Ramon Llull's cave, Serra de Tramuntana, Mallorca, Balearic Islands.



contemplates it to undergo a spiritual transformation that will allow its beauty to be assimilated and recognised. This external beauty will thus be an aid and support for achieving greater internal beauty.¹⁷ The beauty of Nature will therefore have a direct influence on the transformation of the soul.

The contemplative vision of the natural world can be reinforced via two universal spiritual exercises, *pilgrimage and eremitism*. Both practices have been performed here in Montserrat for centuries and are wonderful ways of cultivating a deep spiritual relationship with nature.

Pilgrimages are dynamic events. A trail takes the pilgrim to a sacred site that is both a physical place and a representation of the Centre or Origin: the *pilgrimage* is clearly a symbol for human existence: life viewed traditionally as a *peregrinatio*. We come from the Origin and return to it. On route to holy sites where a sacred presence is manifest, pilgrims travel through the natural world and enjoy the opportunity to perceive the spiritual dimension of nature and be a part of it. Some of the great pilgrimage routes of the western world such as the medieval ways to Saint James of Compostela are still

alive and are –or, at least, should be– at heart journeys of transformation for the soul based on prayer and the contemplation of one's natural surroundings. Likewise, a pilgrimage implies certain values and spiritual attitudes such as solitude, silence, sobriety, strength and perseverance that will coalesce in a unique fashion during the journey. The pilgrim will never be the same at the end of the journey if he has undertaken the pilgrimage in the appropriate frame of mind.¹⁸

If a pilgrimage is a *dynamic* manifestation of spirituality, then a more *static* manifestation of direct contact with the natural world can be found in eremitism. Hermits close themselves off from the outside world, be it temporarily or permanently, and live a life dedicated to prayer and contemplation¹⁹ amidst their own personal temple of nature. The hermit lives the natural world as a theophanic manifestation of everyday life. Nature becomes the perfect support for the hermit's inner life and helps to achieve the vocation of all hermits –the discovery of God. As is well known, eremitism has always been a part of both eastern and western Christianity, from the first century after Christ and on through Saint Mary of Egypt and the Desert Fathers. Within the eastern branch

¹⁷ In this sense, see the marvellous chapter entitled 'Flowers' in Lord Northbourne's *Looking Back in Progress*, pp. 90-106.

¹⁸ The recommendations to pilgrims contained in the annual pamphlets published by the Abbey of Montserrat are of great use.

¹⁹ As a comparison of eremitism with monastic life, few lines as inspired as those of Frithjof Schuon have ever been written: 'Universality and actuality of monkhood' in *Light on the ancient worlds* pp. 137-155.

of Christianity it is worth making special mention of Mount Athos (one of the case studies in the Delos Initiative) and, in the west, of the mountain of Montserrat, which was once and one day will be again –it is to be hoped- an important centre of eremitism. The modern world lies at the antipodes of eremitism and does nothing to either understand or encourage it. Nevertheless, we should not forget that in all traditional worlds the most spiritual of people who isolate themselves in the natural world and dedicate their life to prayer and contemplation have always been considered a blessing and an essential element in the well-being of communities.

Achieving the essence of the natural world, however, should not be a possibility reserved only for hermits or pilgrims; rather, it must be a possibility open for all provided that certain profound spiritual criteria are taken into account.

At the beginning of the twentieth century the Sioux author Charles Eastman ‘Ohiyesa’ wrote that silence was the “voice of the Great Mystery”²⁰, the voice of God, and it is highly significant that silence is one the great absentees from today’s society. To listen, first you have to be silent. All spiritual disciplines highlight

the importance of silence as one of the attitudes that is most needed if any attempts at reapproaching the natural world are to be fruitful.²¹ First we must listen in order to be able to hear the birds, the wind, the rushing water of the streams ... This silence must be more than just a lack of spoken words for if we are lost in the tide of our thoughts, memories, hopes for the future –distracted by mental activity- then we will still not hear. One of the greatest spiritual calamities of our age is this loss of the silence that enables us to establish full contact with nature and our inner selves, a loss that has had many consequences.

Another of the important attitudes that enable us to enjoy fruitful contact with nature is the *power of observation*, that is, the ability to concentrate and appreciate what is occurring around us. We have lost this ability in a world in which we are constantly being disturbed by the intensity of everyday life. Living as if we had no spiritual centre, we are now governed by other, false centres that deprive us of the possibility of achieving the calmness and serenity needed for moments of introspection and self-awareness. Modern society is dependent on qualities that are completely

²⁰ Charles Eastman ‘Ohiyesa’. *The Soul of an Indian*, p. 4.

²¹ We had the opportunity to discuss this point further in our presentation entitled ‘*The immaterial values of the natural world*’ given at the Esparc Congress 2005 held in Cangas de Narcea, Spain.

opposed to observation and thus to contemplation. This inevitably leads to the entrenched tendencies of dispersion, superficiality and trivialness that surround us today.

The periodical need for *solitude* is another of the important attitudes needed in any attempt to renew contact with our spiritual dimensions. The opportunity to retire to nature must be made available to everyone and protected areas should reserve spaces where this practice can be carried out.

Silence, contemplation and solitude are vital for the perception of the invisible spiritual dimension of nature and without their presence it is very difficult to appreciate the sanctity of the natural world as a manifestation or as an open book in which the work of God can be read.

Sacredness can be perceived by minds that are accustomed to discerning expressions of spirituality in the negative and positive phenomena that occur in the world. Via daily contemplation of the natural world we can regain the possibility of perceiving the divine qualities present in the manifestation: Beauty, Power, Peace, Purity and Mercy. All form the transcendental and immanent dimen-

sions of the Cosmos. Here it is worth recalling that the root of the word 'cosmos' is 'order' and as such it can be understood as a symbol full of the possibilities frequently described in spiritual texts of the 'omnipresence of God'. '*Seeing God everywhere*' and '*seeing everything in God*' are two complementary attitudes and the latter is a necessary consequence of the former. Both in their deepest senses imply an awareness of the essential unity of the divine creation of the world. In the words of Schuon: "Seeing God everywhere ... is just that: seeing that we are not, and that only He is".²² Seeing everything in God is also a way of embodying in our souls the reflections of the divine qualities that are virtues. This was mentioned above when we discussed how the transformation of the soul leads to contemplation.

Once upon a time in the now distant past people were accustomed to performing regular spiritual exercises. They would retire every year for a number of days to the wilds, away from the world, and pray in silence and solitude. It is no exaggeration to say that today such spiritual exercises in the western world are now principally the province of monastic communities, although they have not disappeared altogether.

²² *Gnosis; Divine Wisdom*, p. 124 and the whole chapter: "Seeing God everywhere", pp.109-126.

All in all, opportunities to retrieve one's inner self have been all but lost or are reserved for a small minority: however, the possibility of reaching deep into our beings can be enhanced by a spirituality that is fully in tune with the natural world. Given that we are here today in Montserrat, we feel it is appropriate to add that the Church can play an important role in this process. By this we do not only mean the importance of a "theology of the natural world"²³, a topic much discussed in Protestant Christian circles in the United States, but the vital need for a message or a 'pastoral' for nature to enable believers to fully appre-

ciate the profound spiritual dimension of the natural world. In recent years there has been a significant convergence of ideas on the subject and we hope that they will continue. Good examples of this *rapprochement* are the joint declaration by Pope John Paul II and the Orthodox Patriarch Bartholomew I²⁴ and a recent message from Pope Benedict XVI²⁵, made during the symposium organised by the orthodox churches in the Amazon, that underlined the importance of both an attitude of veneration towards creation and an awareness amongst believers of the need for a spiritual response to the current ecological crisis.

Adam's Peak, Shhri Lanka, sacred mountain for Buddhists, Hindus, Muslims and Christians.



The rediscovery of nature that we are proposing would be incomplete if the spiritual consequences of all of the banal actions of everyday life were not also taken into account. We must move towards a change in mentality -that in turn will bring about a change in lifestyle- via the assumption of new habits and customs. Greater awareness of the natural world without any inner change or change in our souls and ways of life will necessarily only be superficial. The forgotten values of the modern mindset such as sobriety, the control of the continual desire for more material objects and discipline are all linked to this change in mentality and a rediscovery of nature can help bring it about. These values are inherent in the natural world and form part of the harmony of the universe. Living in harmony means a life with a correct balance between our internal and external selves.

This harmonious dimension of life has been lost as we increasingly confuse effects and causes. We live shallow lives, distanced

from the primordial mission of man: to act as a 'pontifex', the bridge between Heaven and Earth, to represent God, to preserve our principles and to remember their importance. In order to achieve this difficult task we must live in harmony with the natural world and if we lose our inner balance, our external aspect will suffer immediately: "Man's inner self is reflected in his external order ... When our interiors are full of darkness and chaos, the beauty and harmony of nature in turn also becomes unbalanced and disordered".²⁶ If we want to change the world or, at least, to ensure that some of the worst manifestations of the current crisis abate, then we must first change our inner selves. We can change ourselves and this is the essential meaning of any type of spirituality. This is a universal need that goes beyond the external differences between religions. Only in this way will a coherent and effective integration of the spiritual values of protected natural areas into current ways of thinking be possible.

²³ There are many references to this in the collective work *Christianity and Ecology*, Dieter T. Hessel and Rosemary Radford Ruether, eds. Neither should we forget the existence in Christianity of the powerful Franciscan current of thought directly connected to a spiritual vision of the nature. See also J. Antonio Guerra for an edition of the work of Saint Francis in *Biblioteca de Autores Cristianos* and the connection to Saint Francis in the Christian mystic of nature that goes back to the Desert Fathers (see Edward A. Armstrong). Let us not forget either that Pope John Paul II proclaimed Saint Francis the "patron of the ecologists" in the papal bull *Bula Inter Sanctos*, 29 November 1979.

²⁴ "Common Declaration on Environmental Ethics" by Pope John Paul II and the Ecumenical Patriarch Bartholomew I, Rome-Venice, 10 June 2002.

²⁵ On 6 June 2006 during the symposium "Religion, Science and the Environment Symposium VI: The Amazon River". See also the address by Metropolitan John of Pergamon during the same symposium: *Humanity and Nature: Learning from the Indigenous* and the declaration on the environment by the Australian bishops: *Australian Catholic Bishops Statement on the Environment (2002)*.

²⁶ Seyyed Hossein Nasr. *Man and Nature*, op. cit., p. 96.

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The reenchantment of nature

Spiritual values and the history of protected areas: the Spanish experience

Santos Casado

The *fin du siècle* at the end of the nineteenth and beginning of the twentieth centuries saw western civilisation having to face up to awkward questions regarding its increasingly evident decadence (Cerezo Galán, 2003); axiomatic of this was the crisis in Spain in 1898 caused by defeat in the war with the United States over Cuba and the Philippines. This decadence was as much moral as it was social, as people found themselves caught up in a decomposition of established sets of values and in the sudden changes taking place in an increasingly industrial and urban world. An obvious refuge for many in face of this sickness of civilisation was nature, characterised by its permanence, organicity, authenticity, purity and innocence.

Nature also provided a base for the renewed spirituality that occurred in midst of the end-of-century traumas. The epoch of the certainties of positivism was over: the mid-nineteenth century had seen the triumph of the

belief in rationality, science and demonstrable –or in the language of the day, positive– facts, which had provided firm foundations for cementing the achievements of a modern society. However, as the century drew to a close, the solid positivist bastions began to shudder as the dry principles of materialist thought began to be challenged and a somewhat confused nostalgia for past ideas blossomed. As had happened a century earlier with the romanticism that derived from the rationalism of the Enlightenment, new irrationalist spiritual movements and styles such as Modernism, Symbolism, Nihilism, Theosophy and Spiritualism arose.

Even some of the movements of the era that in appearance were explicitly materialist and anti-religious chose certain philosophical beliefs founded on concepts relating to the natural world to replace –and in some cases imitate– the old religious beliefs. The Monist philosophy of the German biologist Ernst Haeckel is just one, but perhaps the best known, of many manifestations of nature-centered ‘alternatives’ to religion that can be found in late nineteenth-

century European thought. In the case of Spain, a good example of this trend is that of the biologist Odón de Buen, a materialist with pronounced anti-clerical ideas. It is “to nature”, writes Buen, “that I pay fervent homage and where human knowledge must find its inspiration if it is not to leave the orbit in which human thought must move” (Buen, 1890, page XVI). As a scientist, his motivation was allegedly to be able to offer “a sumptuous temple to Progress” (Buen, [1896-1897], page 8). His contemporary, Ramón y Cajal, Nobel prize-winner for Physiology or Medicine in 1906, also fantasised about the “great church of nature whose roof is the blue sky, whose light is the sun and whose altar is the soil” (Ramón y Cajal, 1899).

The reenchancement of the world

The return to nature, the growing appreciation of its most majestic and savage manifestations and the plans to create protected areas can all be seen as part of an attempt to halt the consequences of encroaching modernity, which was sometimes described as the “disenchantment of the world” after a phrase apparently used by Max Weber during a lecture on “Science as a Vocation” at Munich University in 1918.

Naturally, as we have already commented, from a certain point of view this was merely a revival of the romantic reaction to the modern world that had already occurred a century earlier. Some of these latter-day romantics, as we will see shortly, were forerunners of this rediscovery of the spiritual and romantic values inherent in the natural world. “As any student of Romanticism recognizes, there are good reasons for thinking that in a secularized era like our own, some part of that ostensibly aesthetic attachment to ‘nature’, or to natural phenomena, is an expression of repressed, sublimated, or somehow redirected religious feelings” (Marx, 1999, page 325). According to this view, religious inspiration and aesthetic emotion are closely related in the common appreciation *in situ* of the natural world in its wildness. The influence of aesthetics can be seen in the emergence of modern environmental awareness and, above all, in the origins of protected areas. Aesthetics act on an emotional plane via feelings of awe, admiration and reverence and inject a feeling of belonging and a sense of identity, often in the form of nationalism, as well as thoughts of transcendence and, for some, religious communion, into our relationships with natural spaces.

It is interesting to note how this injection of airs of spirituality into the rude materialism of the industrial age has been used by

both detractors and defenders of religious authority. The former look for freer forms of religious practice and thus to some extent promote secularism by questioning the moral and intellectual hegemony of the established churches. The latter, on the other hand, react to all attempts at secularisation by renewing and –if necessary– adapting the preponderant role of religious belief and obedience as the ultimate origin of individual moral consciousness and of the whole social and political order.

In the mid-nineteenth century Emerson and New England Transcendentalists, stubborn defenders of religious freedom and implacable critics of the established order, believed that in the natural world they had found the way to restore contact with the divine. Henry David Thoreau's *Walden* (1854), which was to become one of the 'holy texts' of the world ecological movement, is undoubtedly the best example of this way of thinking. Thoreau, who despised the "restless, nervous, bustling, trivial Nineteenth Century" (Thoreau, 1854, 1939 edition, page 331), found true wisdom in the gaze of a partridge's chick:

"The remarkable adult yet innocent expression of their open and serene eyes is very memorable. All intelligence

seems reflected in them. They suggest not merely the purity of infancy, but a wisdom clarified by experience. Such an eye was not born when the bird was, but is coeval with the sky it reflects"

(Thoreau, 1854, 1939 edition, page 230).

John Muir, another of the lay saints of the ecological movement, combined a predilection for the wild with a profound sense of religious feeling forged by an strict Calvinist upbringing in his native Scotland that continued to influence his thinking after he emigrated to the United States in 1849. There he developed his radical and pioneering conservationist thought, founded upon a vehement admiration and deep respect for the wild natural world. For Muir nature was a manifestation of the character and the glory of God and as such was worthy of devotion and protection as a means of glorifying the Lord and saving mortal souls. The thoughtless destruction and rapacious exploitation of nature were nothing but sin and depravation (Williams, 2002).

Meanwhile, in Spain new styles of religious manifestations were also to be found in the development and emer-

gence of a new awareness of the natural world.

Few would deny Francisco Giner de los Ríos, frequently thought of as the leading figure in the Spanish philosophical current known as Krausism, the merit of having been one of the first thinkers in Spain to preach a love for nature. His whole work, as well the 'Institución Libre de Enseñanza' (Free Education Institution) he created in 1876, was characterised by a radical desire to promote freedom of thought, which was clearly at odds with the desire of the Catholic church to pro-

long its role as Spain's dominant intellectual and moral guiding force. Giner de los Ríos' religious beliefs were undoubtedly heterodox, but were still nonetheless deeply held and consubstantial with his projects and work. As is recognised today, Giner and the staff and children of the Institución Libre de Enseñanza were some of the first people to hike through the mountains of the Sierra de Guadarrama north of Madrid for pleasure: their first experiences in the 1880s left indelible memories etched in their minds. On a summit at sunset, "to our eyes New Castille was tinged pink; the purple sun

Monastery of San Juan de la Peña, Natural Monument of National Interest, Aragon, Spain.



hid behind Siete Picos, which, merged with the mountains of Riofrío into a single mass, turned pure violet with a delicate white glaze and cast a deep shadow over the flat valley of Segovia, dark and livid as if the ancient lake that once covered the valley was still there.” Behind Giner de los Ríos’ contemplation of this sunset lies a feeling of communion with nature. “I do not recall ever before having experienced such a deep, solemn or truly religious feeling of spiritual absorption” (Giner de los Ríos, 1886).

Nevertheless, the founder of the Spanish national park system was neither Giner nor any of his disciples, but the aristocrat Pedro Pidal, staunchly monarchic and Catholic in his ways. His version of the communion with nature originated from a very different source from Giner’s, for Pidal had visited the United States and had witnessed the wonders of Yosemite and Yellowstone. He wrote very revealingly in exaltation of the “national parks or sanctuaries to the natural world, where the American people are aroused by the eternal beauty of the landscapes and the sublime delights of the forest, meadows and rocks, true temples to our Lord. Here, they oxygenate their souls and lungs and find the strength to continue their jobs in the large cities surrounded by buildings twenty, thirty, forty and even fifty storeys high” (Pidal, 191, page 51). Nature was

thus a temple for regenerating both the spiritual and physical health –the ‘soul’ and the ‘lungs’ – of the men of the twentieth century, all potential victims of the dehumanising ultra-urban modern industrial society characterised by the skyscrapers of New York and Chicago. However, his ideas should not be taken as a criticism or a questioning of the social model of the time; rather Pidal was offering a remedy or a cure. His aim was to restore the inspirational effects of contact with nature as part of a therapy for modern man that would allow him to restore his ‘strength’ and thus be able to return to his rightful place.

If any doubt remained, Pidal goes on to say: “the religion of nature contrasts greatly with the religion of the cities [and] the NATIONAL PARKS not only provide a way of appreciating nature, but also help us to value the urban life that so absorbs us as the centre of society and our work” (Pidal, 1919, page 52).

As a Senator, Pedro Pidal was responsible for the first Spanish national park law (1916), which set up in 1918 two national parks, Montaña de Covadonga in the region of the Picos de Europa (provinces of Asturias and León) and Valle de Ordesa, in the Pyrenees (Huesca province). The two metaphors he chose to describe these parks reflect perfectly his ideas as described above:

“Montaña de Covadonga, true Olympus of the gods, and Valle de Ordesa, true paradise in the heart of the Pyrenees” (Pidal, 1919, page 54).

Natural sanctuaries

If the creation of the first protected areas can be seen as part of an attempt to achieve a certain reenchantment of the world, then it is logical to expect that the actual choice of sites to protect should take into account the dimension provided by spiritual and religious elements: this new idea of protecting the most majestic and wildest parts of the natural world as a way of safeguarding their ability to regenerate personal experiences would be even more effective if there was already a site of spiritual inspiration in the area.

Thus, the first formal (but initially unsuccessful) proposal in Spain to create a protected area was made by a Catalan, Rafael Puig i Valls, a forest engineer of great prestige and well known for his great love for trees. He attempted to propagate his ideas through education and innovative civic events such as collective tree plantings and at one such event, the ‘Fiesta del Árbol’ in 1902 in Barcelona, organised by one of the many association of friends of the trees that existed then throughout Spain, he proposed for the

first time the protection of the mountain of Montserrat. The national park which Puig i Valls conceived for this “jewel” and “wonder” of nature could be justified by the fact that Montserrat was “an ideal for the pious, a marvel for the naturalist, a prodigy for the true believer and a monument for the patriot” (Puig y Valls, 1902, page 45) or, to put it another way, a repository of faith, science, beauty and nationalism.

In other words, it was not only the amazing jagged outline of the mountain that was behind the proposal, for Montserrat was, above all, a centre of spirituality laden with powerful patriotic symbols. At the turn of the century, in a climate of regeneration exacerbated by the disastrous war of 1898, many tried to revitalise the collective soul of the nation. In addition, in Catalonia, as in other urban industrial settings, the tensions caused by the juxtaposition of great economic growth and the appearance of an uprooted but combative working class were to some deeply worrying. To this we can add a broad-based resurgence in Catalan nationalism dating back a number of years that aimed, amongst other things, to rediscover the country through an active outing and hiking movement. As we argued above, for some one of the possible solutions to this mixture of fears and worries, to a large degree part of a widely shared

perception of a crisis in the western world, could be found in nature. The moralising force of contact with nature was seen as a source of patriotic identity, civic values and spiritual elevation and it is in this light that the rhetoric with which Puig i Valls formulated his proposals should be seen.

In the same way as Pidal trusted the parks to oxygenate “the soul and lungs”, for Puig i Valls, another conservationist ahead of his time, Montserrat could provide physical and moral health “for those who are worn out by the demands of life and who need to reinvigorate their bodies and re-idealise their souls”. They would be able to do so in “a place for regenerating life, with pure air that will slake the thirst we all feel on contemplating our country’s noblest monuments and on seeing what our natural heritage is and should be.” Just like Muir, Puig i Valls established a link between the admiration for and care of nature, as well as a religious sense of moral elevation and, even, salvation. To put it another way, “whoever despises or vilifies the works of nature corrupts the divine reason for things and diverts man from his road to religion, science, art and that great synthesis of life, the need to be intelligent and good on Earth and perfect in a better world” (Puig y Valls, 1902, page 45).

Although Montserrat was the object of the first proposal for protection, the first area to receive effective protection was in fact Covadonga in the Picos de Europa. This was due as much to the undeniable beauty of its landscapes and the attraction Pidal felt for these mountains in the heart of his native Asturias (Fernández, 1998), as to a strategic choice of one of the most powerful emotive symbols in Spain, resplendent with nationhood, tradition and religion.

Indeed, the declaration of the National Park left no room for doubts: the text of the law spoke above all of the celebration of the 1200 years since the beginning of the Christian Reconquest at the battle of Covadonga. Various artistic, educational and cultural acts were proposed to mark the occasion, as well as the declaration of the ‘Parque Nacional de la Montaña de Covadonga’ (Ley, 1918). When a subsequent royal decree created the Parque Nacional del Valle de Ordesa, the preamble of the text stated explicitly the idea that “these mountains and valleys should preserve the unique landscape of the Nation, in its primitive natural state as a reminder of its origins and a living witness of its traditions” (Real Decreto, 1918). Thus, it was made clear that, aside from scientific conservation, the protection of natural resources and the promotion of tourism, one of the main objectives of this

decree was the renewal of man's contact with nature and tradition as a means to spiritual, civic and patriotic inspiration and regeneration that all, from the most conservative to the most liberal, agreed was necessary. The decree was clear in its aim "to encourage people to visit the countryside, so important for the revitalisation of the race, the improving of certain customs and the pursuit of science" (Real Decreto, 1918).

On occasion of the declaration of these first two national parks, Pidal continued to discuss his general ideas regarding the virtues of nature as moral and social therapy. "Nature, splendid, exuberant and wild," he wrote, "is a necessary contrast or counterpart to the excessively artificial and urban lives we lead" (Pidal 1919, page 55). Likewise, almost following to the letter the words of the declaration of Covadonga, which were in part inspired by his writings, he emphasises his special predilection for Covadonga, with its combination of emotionally charged elements of natural, religious and historical significance.

"In the Parque Nacional de la Montaña de Covadonga Nature reveals herself as a unique and sublime framework in which the hopes of our Religion merge with the memories of our History and the Sanctuary celebrates its union with the

Great Crusade in a cave. The immortality in the contemplation of Beauty –Religion– seems to derive from the Rebirth and Reconquest of Spain, discoverer and conqueror of worlds –History–..." (Pidal, 1934, page 5).

The 1916 National Park Law was executed via the 1917 Royal Decree, which also foresaw the possibility of applying a different but lesser degree of protection known as a National Site (*Sitio Nacional*). However, this new figure of protection was only ever employed in the case of the *Sitio Nacional del Monte de San Juan de la Peña*, a monastery situated in the Pyrenees of Huesca. The site was and is "a splendid forest of pines, beeches, yews, limes and other trees, with a beautiful understorey of holly", which, furthermore, possesses an "imposing series of Palaeocene conglomerate cliffs, broadly concave and with an ancient and sacred monastery hidden away under a rocky overhang" (Hernández-Pacheco, 1933, page 33). The ancient monastery of San Juan de la Peña, closely associated with a past hermitic tradition, dates from the height of the Middle Ages and owes its origins to the Kingdom of Aragon, whose first kings chose this holy place as their pantheon.

It is indicative that the protected sites of Covadonga and San Juan de la

Peña should both revolve around a cave in a cliff, as if fate through the intervention of some divine command had wanted to emphasise the origin of these two Christian kingdoms in the very mother rock of the Earth itself. Covadonga is the name given to the holy cave in a limestone cliff where, according to tradition, King Pelayo hid an image of the holy Virgin. Later, walls were erected to complete an enclosure that would protect the Virgin and, subsequently, the tombs of Pelayo and Alfonso, the first kings of Asturias. The name 'San Juan de la

Peña' is another geological reference: the old monastery is encrusted in a cave beneath a cliff ('*peña*') and a rocky overhang, both protective and threatening, that also forms part of its roof. The cave has been further excavated and so from the outside the visible human structure seems to consist of nothing other than a small facade closing off a natural cavity, as if in its humbleness it was offering thanks to the mountain for the protection it provides. The monastery also provides a resting place for the remains of the first kings of Aragon.

San Bartolomé, Ojo de Guareña Natural Monument, Castilla y León, Spain.



The secularisation of conservation

Nevertheless, despite the above, it should not be thought that the spiritual side of nature was the only or even most important reason behind the first conservationist ideas in Spain. Various other types of conservationist thought existed at the same time that accepted the concept of natural spaces as beneficial for modern man, but emphasised those elements that today we might call secular, civil or social. These non-spiritual conceptions began slowly to gain importance and today are preponderant.

Thus, if the conservationist thought of the Catalan Puig i Valls at the end of the nineteenth century lies very much within the framework of the cultural movement known as Modernism, then in the first third of the twentieth century there were other conservationist ideas afoot that, to simplify, were associated with the Noucentiste movement promoted by the Catalan cultural elite. A good example was that of Cebrià de Montoliu and his followers in the Sociedad Cívica La Ciudad Jardín, who launched a proposal in 1914 for “protecting our natural and artistic monuments, above all the former” whose “aesthetic, health, social, cultural and even scientific” importance was emphasised above all else without any thought of mentioning spiritual values (Güell & Montoliu, 1915).

In Montoliu's proposal, part of series of wide-ranging ideas on urban development, a more technical language calling for territorial planning based on rational economic and social criteria replaced the previous romantic exhalations and grandiloquent notions of sacred temples and sanctuaries. It is no coincidence that Montoliu's source of inspiration was not so much the American model “of such great proportions”, but the European, and in particular the German, way of doing things as embodied by the Prussian office for the protection of natural monuments and its efficient if “complicated German technicalities” (Güell & Montoliu, 1915). Inspired by this model, Montoliu argued for the setting up in the province of Barcelona of a “plan for forest reserves” whose aim was to “guarantee for the growing urban centres sufficient health and leisure spaces, for the country's fields healthy and regular rivers and rains, and for our science and art the conservation of the natural monuments of most interest” (Güell & Montoliu, 1915). In other words, protected areas were to become part of social, economic and cultural politics.

A similar comparison can be drawn between Pidal and the proposals of Eduardo Hernández-Pacheco, a geologist linked to the Institución Libre de Enseñanza of Giner de los Ríos and politically active in republican –and mostly

anti-clerical– circles. Hernández-Pacheco was the spokesperson for the Junta Central de Parques Nacionales (Central National Park Authority), a body created to execute the law of 1916 that was headed by Pidal. Pacheco argued for a widening of conservationist politics by means of the introduction of other, more modest types of protected areas in tune with European models. He was successful and in 1927 a Royal Order ordained the creation of new types of protected spaces known as *Sitio Natural de Interés Nacional* (Natural Site of National Interest) and *Monumento Natural de Interés Nacional* (Natural Monument of National Interest), which were subsequently applied to over a dozen different sites scattered throughout mainland Spain (Casado de Otaola, 2000).

Pacheco's plans differed in technical details from those of Pidal. Firstly, he aimed to use a more scientific vision, far more aware of a great variety of natural values, to broaden protection criteria. Secondly, he was more realistic and modest in his ideas and tried to circumvent the political and economic conflicts that had arisen with the declaration of the first national parks, which had been mistakenly taken to be virgin territory, free of any human economic interests (Casado de Otaola, 2000). His plans also differed inasmuch as they associated conservation with cultural, civic and democratic values

instead of with the old religious and patriotic ideals. These lay ideas came to the fore, above all, during the early 1930s with the advent of the new republican regime. In 1931 at the time of the change from monarchy to republic, Hernández-Pacheco was preparing the first publication of a series entitled 'Guide to the Natural Sites of National Interest'. On its cover, he opportunistically wrote:

"This book on Spanish nature, published by the *Ministerio de Fomento*, was begun when Spain still laboured under the yoke of the monarchy; it was finished when the sun of liberty began to shine through and the Republic was born, serene and strong, in our nation. All those who have worked on this guide are happy to be able to freely express here their enthusiasm for the Spanish Republic" (Hernández-Pacheco, 1931).

Pacheco achieved the protection of Natural Monument of National Interest in 1930 for a strangely shaped rock outcrop in the Sierra de Guadarrama in the province of Madrid; his aim was to associate the site with the Archpriest of Hita, author of the famous book *El Libro del buen amor*, in which the Sierra is depicted. The rock in question was hereafter referred to as La Peña del Arcipreste de Hita (Rock of the Archpriest of Hita). A number of commemorative inscriptions

were carved on the rocks and a ceremony held *in situ* was addressed by Ramón Menéndez Pidal: in terms of their association with protected areas, the saints and heroes of the past were now being replaced by figures of national cultural significance. As already mentioned, Pacheco was a geologist and logically was also interested in including science amongst the long list of important national cultural symbols and as such, he instigated the building of Fuente de los Geólogos, a spring located in the Sierra de Guadarrama adorned with a simple monument dedicated to four notable sci-

entists, Prado, Macpherson, Quiroga and Calderón. The inscription dedicated to these “sowers of culture and love for nature” can still be read today. The spring was inaugurated in 1932 with a ceremony at which the socialist Julián Besteiro, President of the Republican Parliament and the second-ranking state dignitary (and also close to the Institución Libre de Enseñanza), was present.

Obviously, the whole picture changed after the Civil War. Continuing with the case of Spain as an example of the his-

Lakes of Covadonga, Covadonga National Park, Asturias, Spain.



torical evolution of protected areas, it is interesting to note that Franco's regimen, despite its notable religiosity and profuse ideological use of the Catholic religion, seems not to have attempted to use religious motives to justify the half dozen or so new national parks it declared over a period of 30 years.

The *secularisation* of conservation, a paraphrase of a expression used by the French science historian Pascal Acot (Acot, 1988, page 40), was consolidated after the end of Franco's regime. From the 1980s onwards conservation in general and protected areas in particular make a giant leap forward, above all with the transfer of jurisdiction to the new regional autonomous communities.

Although specific studies are lacking, it could be said that during this period of expansion of conservationist ideas, scientific arguments based on objective criteria came to the fore in the theory and practice of protected areas, even if other criteria and factors were still operating at the same time. Although references to cultural manifestations were often cited as being of importance, these generally referred to material elements such as popular architecture, handicrafts or agricultural landscapes and today the language of conservation seems to leave little room for any symbolic or spiritual concepts.

Nevertheless, the possibility that some protected areas are still being declared with spiritual concepts in mind cannot be ruled out. On occasions, for example, the creation of the Parc Natural de la Muntanya de Montserrat in 1987, these concepts are explicit, although even in this obvious case the rules and regulations of the protected area are not particularly sensitive to the spiritual dimensions of the site (Josep-Maria Mallarach, *pers. com.*, 2006). In other cases of recently declared protected areas, there is no recognition at all of the spiritual dimension, whose relationship with the protected area in question is at best a side-effect of the protection of other more tangible values with which they coincide. It seems that modern aesthetic and scientific criteria now and again rediscover the very sites that are also important to traditional concepts of spirituality.

Spiritual and natural values often coincide in caves and grandiose cliffs that have been conferred religious or patriotic importance: a good example is Ojo Guareña in the north of the province of Burgos, declared a Natural Monument by the Castilla y León regional government in 1996. Its protected status is justified essentially by the presence of a karstic cave system, apparently the largest in Spain, whose sheer size has only recently been fully revealed by fresh explorations.

However, the caves that are visible to the outside world have for time immemorial been a focus of popular interest, centred above all in recent centuries on the chapel of San Bernabé (formerly dedicated to San Tirso) that occupies the entrance to one of the caves. This building, whose importance to local people is palpable during the famous annual pilgrimage, is also symbolically associated with civil authority due to the fact that the local town council once held its meetings in the cave, which was also used to store the municipal archives. The chapel's religious tradition dates back to the height of the Middle Ages, although there is a spiritual continuum going even further back in time in the form of cave paintings and inscriptions from various epochs that depict pre-historical beliefs and practices. In terms of what might be called its civil symbolism, the name of the local municipality –Merindad de Sotoscueva (“under the cave”)– is eloquent testimony of a significant local identity and its important historical past: the seven *merindades* of Old Castile were in fact the original medieval nucleus of the powerful kingdom of Castile.

Visits to this Natural Monument are centred on the chapel and its cave, although recently a small part of the underground cave system has been opened up to the general public. The emblem or logo of the

site depicts, as logic dictates, its best-known symbol, the façade of the chapel.

The amount of attention paid –or rather not paid– to the religious significance of the site in the official information on this protected area is extremely revealing. In both the official exhibition and audio-visual display in the information centre, Casa del Monumento, opened in 2006 in Quintanilla del Rebollar, as well as in the official information brochure published by the Castilla y León regional government (no date, c. 2004), there is only the briefest of mentions of the chapel and its importance and no discussion of any of the religious, spiritual or symbolic aspects of its history. In addition, in the leaflet on the site entitled *Cueva y Ermita de San Bernabé* published by the regional government in 2004, references to the chapel are superficial and few and far between: indeed, the question “Why protect Ojo Guareña?” posed in the leaflet is answered purely in terms of geological, archaeological and biological concepts, with no mention of the chapel and its associated traditions.

Yet, this is no isolated case. In Australia as in Spain “in park services western scientific thought predominates and promotes a normalised secular vision of the landscape” that leads to a “tacit assumption that protected areas have no religious or

spiritual significance” (Byren *et al.*, 2006, pp. 112 and 103). This is all the more surprising given that groups of Australians, both aboriginal and non-aboriginal, are maintaining or establishing spiritual links with certain landscapes and natural elements that are often located in protected areas.

Following on from the ideas, words and actions of the nineteenth century, when western culture entered into crisis as a result of an excessively secular and technical society, perhaps with the advent of this new millennium it is now time to evaluate the possibilities that remain of reenchanting the world, albeit partially, and the help that nature can lend us in this task.

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Sant Bartomeu, a millennial area of hermitages, Montsant Natural Park, Catalonia, Spain.





Protecting Sacred Natural Sites of Indigenous and Traditional Peoples

Gonzalo Oviedo and Sally Jeanrenaud

Introduction

Ideas of the spiritual and sacred are not new within conservation paradigms. Early conservationists were often inspired and awed by what they termed 'the wisdom of wilderness', and 'the infinite capacity of nature to uplift the human spirit'. Such values were frequently invoked and appealed to in the early protected areas movement. However, although early conservation efforts were undertaken 'for the benefit of all mankind', as part of the 'universal human heritage', the sacred natural sites were either overlooked or alienated from their traditional owners as they were assimilated into official protected areas.

The rekindling of interest in the spiritual within conservation paradigms does not preclude scientific knowledge or approaches. Nature is, of course, 'a system' that can be studied, understood, and protected. It is also 'a set of resources' which are to be sustainably and equitably managed. But, it can be contemplated in other ways which may be

more significant to people. It is a mystery, beyond the bounds of contemporary science, which engenders awe; a source of pleasure to be enjoyed; a creative power to be praised – and more. Nature's many dimensions provide opportunities to engage with people in other meaningful ways.

IUCN has been working for some time for the protection of sacred natural sites, through its Secretariat offices and its Task Force on Cultural and Spiritual Values of Protected Areas of the World Commission on Protected Areas, and involving a wide range of partners, globally and nationally – government agencies, indigenous and community organizations, inter-governmental bodies, and others.

Sacred natural sites are natural areas of special spiritual significance to peoples and communities. They include natural areas recognized as sacred by indigenous and traditional peoples, as well as natural areas recognized by institutionalized religions or faiths as places for worship and remembrance. Many sacred sites have survived for hundreds of years and act as important biodiversity reservoirs. However, their contribution to conservation

has been largely overlooked and undervalued by state and conservation agencies, policies and laws, and currently many of such sites face difficult threats which may not be overcome by the efforts of their traditional owners and managers alone. A concerted international effort is needed to support effective protection of the world's sacred natural sites.

The growing appreciation of the contribution of sacred natural sites to environmental protection has prompted renewed interest in them as tools for biocultural conservation. IUCN's Vth World Congress on Protected Areas (Durban, September 2003) paid close attention to the issue and produced relevant outputs and recommendations, which were reaffirmed at the 3rd IUCN World Conservation Congress (Bangkok, November 2004). These have been followed by several field and policy actions; two of which are the *Project Conservation of Biodiversity Rich Sacred Natural Sites of Indigenous and Traditional Peoples*, and *The Delos Initiative for the Protection of Sacred Natural Sites in Developed Countries*.

IUCN and Sacred Sites

IUCN – The World Conservation Union has been working for some time for the protection of sacred natural sites. Its inter-

est in the subject emerged in the context of highlighting non-material values of protected areas; this work led to the realization that many sacred sites had been integrated in formally declared protected areas, due to their biodiversity, ecosystem and aesthetic values, and that such integration, however, had often happened at the expense of the interests of the living cultures linked to the sites, and of the rights and interests of the traditional site owners and users. At the same time, IUCN was involved in many field activities that supported the conservation of specific sacred sites.

Following the UNESCO International Symposium on Natural Sacred Sites (Paris, 1998), where IUCN and WWF among others were represented, these organizations started discussing options to develop collaborative work for the protection of sacred natural sites, building on their field experience, IUCN's work on cultural and spiritual values of protected areas, and WWF's experience in working with major faiths. Both organizations agreed that a new policy approach and a more systematic action were required. The process that followed is described later in this paper.

IUCN's work on sacred sites is done from its Secretariat offices in several regions, and its World Commission on Protected

Areas (WCPA), specifically its Task Force on Cultural and Spiritual Values of Protected Areas (CSVPA). IUCN works with a range of partners and members, globally and nationally – government agencies, indigenous and community organizations, faith-based groups, inter-governmental bodies, and others.

What is a sacred natural site?

Sacred sites¹ may be defined as *areas of special spiritual significance to peoples and communities*. They may include primarily natural areas (such as forests or rivers), or primarily built or monumental areas (such as temples). IUCN focuses on areas which are primarily natural, as they link to its mission, but generally supports the cause of conserving both monumental and natural sacred sites as valuable elements of human cultures.

For the purposes of this paper and of IUCN's work, sacred natural sites may be defined as areas of land or water having special spiritual significance to peoples and communities. Many of such sacred natural sites are areas of great importance

for the conservation of biodiversity. In fact, very often the reasons for protecting the spiritual connections between people and the earth, and for conserving biodiversity in their lands, are inseparable².

The sacramental relationship with nature

As a result of spiritual beliefs, many traditional communities throughout the world have given a special status to natural sites such as mountains, rivers, lakes, caves, forest groves, coastal waters and entire islands. Many of these have been set aside as sacred places. The reasons for their sacredness are diverse. They may be perceived as abodes of deities and ancestral spirits; as sources of healing water and plants; places of contact with the spiritual, or communication with the 'more-than-human' reality; and sites of revelation and transformation. They are sometimes temple sites, the burial grounds of ancestors, places of pilgrimage, or sites associated with special events. Particular plant and animal species may also be considered as sacred by some communities. While

¹ This definition is a working concept proposed only for the purposes of this paper and for facilitating an operational understanding of the issues.

² Oviedo, G. (2001) 'Notes on the Panel's Presentations and Discussions'. Symposium on the Importance of the Protection of Sacred Natural Sites (SNS) for the Conservation of Biodiversity. Mexico City, June 12, 2001. WWF International. Gland, Switzerland.

Box 1. Sacred Mountains: The 'Dragon Hills' of Yunnan Province, China.

The Dai (T'ai), an indigenous ethnic group in South-West China, inhabit the Xishuangbanna region in Yunnan Province. According to their traditional concepts a Holy Hill or *Nong* is a forested hill where gods reside. All the plants and animals that inhabit the Holy Hills are either companions of the gods or sacred living things in god's garden. The Dai also believe that the spirits of great and revered chieftains go to the Holy Hills to live, following their departure from the world of the living. Their management of the Holy Hills through informal and informal norms, ethical rules and spiritual beliefs has resulted in biodiversity and habitat conservation within the area. There are hundreds of well preserved seasonal rainforest areas, which are characterised by species of *Antiaris*, *Pouteria*, *Canarium*, and others. A large number of endemic or relic species of the local flora have also been protected, including about 100 species of medicinal plants and more than 150 economically useful plants. The large number of forested Holy Hills distributed throughout the region form hundreds of 'green islands'. This pattern could help the natural reserves, which were established by the state government in recent years, by exchanging genes and playing the role of 'stepping stones' for the flow of genetic materials (Pei Shengji. 1999. 'The Holy Hills of the Dai'. In UNEP, 1999).

many of the sacred natural sites have historical significance, they are not static in time or space; new sites can be created in response to changing circumstances and environment.

Access to sacred natural sites is often taboo and restricted to a small circle of

people, such as priests or pilgrims³. In Maharashtra in India, customs relating to the management of sacred groves are set down by priests with knowledge of forest deities and their influence on life.

Ancient folklore and stories are told which include details on the supernat-

3 Schaaf, T. (1999) 'Environmental Conservation based on Sacred Sites'. In UNEP (1999): op.cit.

Box 2. Sacred Seas: Customary Maori Fisheries

In Maori culture all elements of the natural world originate from the gods, and are thus imbued with *mana atua* - the presence and the power of gods. Fish, like all living things, are possessed of *mauri* – the physical life force. The fisheries are *mahinga kai* – places of customary food gathering, and because of their origins and utility, they are *taonga* or valued resources. The customary rules and practices by which Maori managed their waters and fisheries reflected the significance of this view. Conservation has always been important to the Maori, and traditional Maori fishing practices included measures intended to maintain the habitat, preserve fish stocks, and regulate fisheries use (Nga Kai O Te Moana. 1993. 'Customary Maori Fisheries', in UNEP, 1999).

ural penalties that will result if the groves are desecrated⁴. In some cases sacred sites provide a range of products used in rituals by traditional priests or shamans, or in healing, such as the medicinal plants used in Indian Ayurvedic medical system. In other areas, the harvesting of plants or the hunting of animals is not permitted in consecrated areas. As a consequence of their taboo status and access restrictions, many sacred places have served as important reservoirs of biological diversity, pre-

serving unique and/or rare plants and animal species. Sacred natural sites such as forest groves, mountains and rivers, are often visible in the landscape as vegetation-rich ecosystems, contrasting dramatically from adjoining, non-sacred, degraded environments. In the Western Ghats (mountains) of India, sacred groves are the only remaining patches of greenery over vast stretches of otherwise devastated countryside⁵.

⁴ Bharucha, E. (1999) 'Cultural and spiritual values related to the conservation of biodiversity in the sacred groves of the Western Ghats'. In UNEP (1999): op.cit.

⁵ Hamilton, L. (1998) 'Forest and Tree Conservation through Metaphysical Constraints'. In UNESCO (1998): 'Natural' Sacred Sites. Cultural Diversity and Biological Diversity. Proceedings of International Symposium, Paris, 22-25 September 1998.

Box 3. Variations in Size and Tenure of Sacred Groves

The Mawal and Mulshi Talukas of Maharashtra are communities who have lived in close association with forests for thousands of years, and have venerated deities associated with sacred groves. Of the 40 groves in the area, most are extremely small. Each grove by itself cannot be said to be of great species richness. Taken together, however, they include most of the plant species that are present in this region of the Western Ghats, which is an acknowledged biodiversity hot spot. Research has indicated that the size of each grove does not correlate with their species richness, suggesting that the number of species is more closely related to the level of protection rather than to size.

Many sacred sites are thus of great value for ecological research and nature protection. In some areas sacred natural sites are valuable genetic reservoirs⁶, and can be useful indicator sites, which are helpful in assessing the potential natural vegetation of degraded ecosystems. They are also useful sources of genetic material that can be used for rehabilitating degraded environments⁷. For example, sacred sites in the savannah of Ghana have been used for reviving degraded ecosystems. Afforestation schemes that included the establishment of fodder banks for live-

stock and the planting of cash crops on the periphery of sacred groves have also helped to enlarge the sacred groves through an additional buffer zone around the holy site⁸. In other areas, sacred sites may play a role in safeguarding critical sites in watersheds, or helping to preserve the ecological integrity of entire landscapes⁹.

Sacred natural sites vary in size, biodiversity value and tenurial status. In some cases, sacred sites are very small areas found on private land. For example,

⁶ Schaaf, T. (1999): op.cit.

⁷ Malhotra, K. C. (1998) 'Cultural and Ecological Value of Natural Sacred Biodiversity Sites in Orissa, India: threats and opportunities'. In UNESCO (1998): op.cit.

⁸ Schaaf, T. (1998) In UNESCO (1998): op.cit.

⁹ UNESCO (2000) 'Culture-Based Environmental Conservation for Sustainable Development'. UNESCO Draft Project Document.

Box 4. Contributions to Livelihoods: Sacred Groves in India and Ghana

In several sacred groves of the Western Ghats of India, people are allowed to collect fallen dry wood, fruit from the forest floor, honey, sap (by tapping *Caryota urens* to make an alcoholic beverage) and other products. In some groves, cattle grazing is permitted. In most groves however, timber cannot be felled without the express permission of the deity, which is obtained through a ritual process known as *kaul* (Bharucha, E. 1999, in UNEP, 1999). In Ghana, the use of products from sacred groves varies between and within communities. It partly depends on the power of the spirit of the grove in question. In the village of Nanhini, no villagers enter the grove of the goddess Numafoa or ignore her taboos. In the same village, a second deity has less influence and so the taboos are not so strictly followed. Each grove has particular governing rules. In some cases, entry to a sacred grove is strictly limited, but in others the area may be exploited or restricted for certain forest resources. In one sacred grove in Nanhini, palms can be tapped for wine, and medicines and other specified products can be gathered, but it cannot be used for farming or hunting (Falconer, J. 1999, in UNEP, 1999).

sacred groves in Uganda are very small forests mainly found on private *mailo* 'land tenure'. In other cases, traditional peoples view whole landscapes as sacred, and it is difficult to identify self-contained sites. Taken alone, the significance of smaller sites may be quite limited for biodiversity conservation, but taken together they can

represent sizeable protected areas. For example, some researchers think that there might be between 100,000 and 150,000 sacred groves throughout India¹⁰.

Although many sacred natural sites contribute to the conservation of biodiversity,

¹⁰ Sudipto Chatterjee (2001) *pers. comm.*; Malhotra, *et.al.*, 1999, *cit.* by Gaikwad, S. S., S. N. Paralikar, Vishwas Chavan and S. Krishnan (2004) 'Digitizing Indian Sacred Groves – 'An Information Model for Web interfaced multimedia database', in: Focus on Sacred Groves and Ethnobotany, Ghate, Vinya; Hema Sane, and S. S. Ranade (eds.), Prisma Publications, Mumbai, India, pp. 123-128.). Yogesh Gokhale (2003) reports the existence of 14,436 sacred groves in 19 states of India, based on preliminary research by Malhotra *et al.* ('Communicating importance of sacred groves to broader audience for conservation of biocultural heritage', WPC, Durban).

it would be false to assume that complex cultural and social traditions are the same as conservation objectives in environmental agendas determined by outside interests¹¹. In the case of sacred natural sites, any conservation effect is probably best seen as one of many effects, or even a side effect, of social and spiritual traditions. Traditional peoples are usually attempting to benefit from the protection and goodwill afforded by the deity in return for not disturbing the sanctity of the sacred area, rather than explicitly managing resources for conservation goals¹².

Ideas of the spiritual and sacred are not new within conservation paradigms. Early conservationists were often inspired and awed by what they termed 'the wisdom of wilderness', and 'the infinite capacity of nature to uplift the human spirit'. Such values were frequently invoked and appealed to in the early protected areas movement. However, although early conservation efforts were undertaken 'for the benefit of all mankind', as part of the 'universal human heritage', sacred natural sites were either overlooked, or alienated from their traditional owners, as they were assimilated into official protected areas.

The rekindling of interest in the spiritual within conservation paradigms does not preclude scientific knowledge or approaches. Nature is, of course, 'a system' that can be studied, understood, and protected. It is also 'a set of resources' which are to be sustainably and equitably managed. But, it can be contemplated in other ways which may be more significant to people. It is a mystery, beyond the bounds of contemporary science, which engenders awe; a source of pleasure to be enjoyed; a creative power to be praised – and more. Nature's many dimensions provide opportunities to engage with people in other meaningful ways.

Sacred Natural Sites of Indigenous and Traditional Peoples and Sacred Natural Sites of Institutionalised Religions

Generally, two types of sacred natural sites can be found in the world: those established by indigenous and traditional peoples in the context of their spiritual beliefs and customary institutions, or created by institutionalized religions or

¹¹ Agrawal, A. (1995) 'Dismantling the Divide between Indigenous and Scientific Knowledge'. *Development and Change* 26:413-439.

¹² Laird, S. (1999) 'Forests, Culture and Conservation'. In UNEP (1999): op.cit. See also Richards, P. (1999) '*Musanga cecropioides*: biodynamic knowledge encoded in mythic knowledge'. In UNEP (1999): op.cit.

Box 5. Whole Landscapes as Sacred Sites

The Atacameño people of Chile conceive places as sacred insofar as they share relationships with other places. The ancestor-mountains (*Tate-Mayllkus*), with the precious water they hold, are sacred insofar as they share relationships with mother earth (*Pachamama*), which they impregnate and make fecund. Both entities represent opposing male and female principles and form a unity (Barros, A. 1998. 'Desert bio-scape: biological and cultural diversity in the Atacama, Chile', in UNESCO, 1998).

faiths¹³. The relationship between the sacred natural sites of indigenous and traditional peoples with the world's major faiths has in some cases a complex and troublesome history. Many traditional sacred natural sites have been appropriated or destroyed because they were considered pagan or idolatrous by newly emerging world faiths. In some instances religious buildings were forcefully superimposed upon traditional sites. While it is important to guard against 'demonising' the involvement of major faiths with

indigenous and traditional peoples, it is important to acknowledge that the erosion of sacred natural sites can be directly related to the expansion of the dominant faiths in many cases.

On the other hand, it is also important to recognise that some institutionalised religions, on their own, and in collaboration with others, have established areas important for biodiversity conservation and have initiated or subscribed to a variety of conservation programmes¹⁴.

13 Some scholars associate the first category of sacred sites to the expressions and practices of animism, understood in anthropology as the belief in the existence of "spiritual beings" embodied in natural elements – plants, animals, or inanimate constituents of nature (concept originally coined by anthropologist Edward Tylor in 1871), or more modernly as "a relational ontology in which the world is found to be, and treated as, a community of persons not all of whom are human" (Nurit Bird-David, 'Animism' Revisited", 2002, in 'Readings in Indigenous Religions', ed. Graham Harvey, 73–105. London: Continuum; cited by Harvey, Graham (2006), *Animals, Animists, And Academics*. Zygon (r) 41 (1), 9-20. doi: 10.1111/j.1467-9744.2006.00723.x. In other words, in 'animist' spirituality there is an intrinsic sacramental dimension in natural sites themselves. The second category of sacred sites corresponds to places dedicated by religious institutions or communities to worship and remembrance, where sacredness is not embodied in natural elements as such.

14 Some of this is reflected in the Delos Initiative. For a broader approach to conservation and religions, see Nigel Dudley, Liza Higgins-Zogib and Stephanie Mansourian (2006) 'Beyond Belief: Linking faiths and protected areas to support biodiversity conservation'. WWF International: Gland, Switzerland.

There are a number of important differences between sacred natural sites of indigenous and traditional peoples and sacred sites of institutionalised religions. These include:

Age of sites. Many indigenous and traditional peoples' sacred natural sites may have their origins in Palaeolithic times, whereas most sacred sites of institutionalised religions are a more modern phenomenon, many of them having been established only within the last few centuries, in connection with the expansion of Christianity and other major faiths.

Relationship with nature. Indigenous sacred natural sites are often associated with a belief in the inherent sacredness of nature, whereas the sacred sites of the world faiths often bestow their own particular symbols upon nature.

Property Relationships. In general, indigenous and traditional peoples cannot be said to 'own' sacred natural sites. Rather, sites are valued and guarded by people through traditional beliefs and practices. World religions, on the other hand, often own sacred sites in terms of legal property institutions.

Offering in Bear Butte State Park, a sacred mountain for the Lakotas, South Dakota, USA.



Links to the landscape. Many traditional sacred natural sites are considered part of broader sacred landscapes, and have intimate connections with all-encompassing concepts such as Mother Earth and nature's sacredness. Sacred sites of institutional religions do not recognize such landscape or cosmological dimensions and links. Sacred natural sites of indigenous and traditional peoples have certain common features throughout the world, while the exact nature of these features varies within and between communities:

- Sense of sacredness associated with place

- Identifiable spiritual authority in charge
- Limited access and restricted use especially for common people
- Contributions to livelihoods
- Relatively undisturbed nature
- Variable size
- Variable tenure
- High degree of acceptance and respect from communities
- Threatened status in many cases
- Search for appropriate protection

Sacred natural sites are important for the vitality and survival of the cultures that created them. There is an indissoluble link between the protection of sacred sites

Box 6. The Ironies of Successful Conservation: Sacred Groves in India

It is ironic that the most successful Asian conservation programmes have in many cases already cut out the middleman – in this case the government. Sacred groves, or 'life reserves', as some locals call them, survive today without benefit from government gazettelement, without government nature wardens, without government education centres and sometimes even without government goodwill. Even when establishing new woodlands near busy towns, it has been as found that when specially carved 'deified' markers are placed next to newly planted trees, and sprinkled with powder used in worship, people start treating the special trees with respect and 'worship' them. Even more importantly, they water the deified saplings. Woodlands flourish because they serve peoples' physical and spiritual needs. Sacred groves reflect a refreshing view of nature for the people, by the people (Sochaczewski, P. 1986. 'God's Own Pharmacies', in BBC Wildlife Vol. 14, No. 1 pp.68- 71).

and the right of peoples, communities and cultures to continue to manage and control the places that connect them to their spirituality and cultural expression¹⁵.

The spiritual connections between indigenous peoples and the earth are more than a reflection of traditional views on nature – they are also integral parts of ethno-cultural identity. In virtually every society, nature provides powerful symbols used to create strong links between the social and the natural. To the people of Orissa in India, the sacred grove is more than a mini-nature reserve. It is the keystone in a way of life. It is both locus and sign of the regeneration of body, land and community. It stands for the integration of the human community in nature¹⁶. To the Hopi people, natural springs are seen as the 'soul' of their people, representing their very identity¹⁷.

Sacred natural sites are often focal points for social and cultural celebrations and religious rituals, establishing social cohesion and solidarity within communities. In many indigenous and traditional communities it is difficult to separate out cultural identity, kin

and social relations, livelihoods, and traditional environmental knowledge from the ritualistic use of the land and protection of biodiversity – they are all strongly interdependent.

It would be misleading to assume a complete ban on using resources from sacred natural sites. Many sacred places provide useful products for livelihoods. In Madagascar, many communities have depended almost exclusively on sacred forests in times of drought¹⁸. Respect for the spirit in nature does not always mean that communities take a no-touch approach to animals. In many cases, it is recognised that it is the nature of things for one organism to feed upon another, creating relations of indebtedness in the process. For instance, in Japan a whale that has been killed is regarded as having given itself up to mankind so that we can live, and in return, the whalers become indebted to the whale. Thus whaling activities become intimately bound up with religious beliefs, and as a gift the prey has to be utilised to the fullest. To

15 Oviedo, G. (2001) 'Notes on the Panel's Presentations and Discussions'. Symposium on the Importance of the Protection of Sacred Natural Sites (SNS) for the Conservation of Biodiversity. Mexico City, June 12, 2001.

16 Apffel Marglin, F. & Mishra, P.C. (1993) 'Sacred Groves: Regenerating the Body, the Land, the Community'. In Sachs, W. (Ed) (1993) *Global Ecology. A New Arena of Political Conflict*. London: Zed Books.

17 Whiteley, P. & Masayesva, V. (1999) '*Paavahu and Paanaqso'a*: The Wellsprings of Life and the Slurry of Death.' In UNEP (1999): op.cit.

18 WWF Madagascar Programme (2001): 'Linking Faiths and Conservation in the Madagascar Dry Forest Ecoregion'. Draft English Executive Summary of Final Report.

Box 7. Sacred Wetlands in West Africa

In the forest and savannah zones of Guinea, traditional beliefs are deeply embedded in everyday village life. Here, several lakes are sacred to local communities, and strict taboos and local rules shape the use of wetland resources. At Lake Wassaya it is forbidden to hunt, there is a very short fishing season, and even the Wassaya's crocodiles are sacred. People wishing to see the lake must first gain permission from a group of village elders. These traditional beliefs are still followed today and have helped maintain the ecological integrity of these wetlands (Ramsar. 2001. 'Wetlands and Spiritual Life', in Ramsar, 2001). For coastal peoples on the Ivory Coast, the great fishing period (May to October) is initiated by an opening rite over the 'Aby' lagoon, sometimes carried out simultaneously in the different areas. The priest of the spirit called *Assohon* opens the fishing in May and closes it in October. Sacred catfish of *Sapia* are sheltered in the Dransi River which is formally forbidden to fishermen. Together with the sacred crocodiles from Gbanhui, all the aquatic species are covered by food prohibitions to villagers. During the day it is forbidden to go to the Yonyongo River because it is dedicated to venerated crocodiles (Zoundjihekpon, J. & Dossou-Glehouenou, B. 1999. 'Cultural and spiritual values of biodiversity in West Africa: the case of Benin and Ivory Coast', in UNEP, 1999).

do otherwise would be an insult to the animal and the creator¹⁹. Resource use often depends on the degree of 'sacredness' of the site or species, as well as the perceived power of particular deities²⁰.

In sacred natural sites spiritual values of the communities are the foundations of their commitment to protect their natural heritage and of their motivation to actively engage in the conservation of such sites. Further, there is an emergence of

¹⁹ Kalland, A. (1999) 'A Japanese View on Whales and Whaling'. In UNEP (1999): op.cit.

²⁰ Falconer, J. (1999) 'Non-timber forest products in Southern Ghana: traditional and cultural uses of forests'. In UNEP (1999): op.cit.

the 'spiritual' as a new motive force within wider debates about sustainability, and a growing appreciation of the need to re-engage with the sacred within international conservation efforts. This was reinforced at the Vth World Congress on Protected Areas (Durban, September 2003) and the 3rd World Conservation Congress (Bangkok, November 2004), and has been recently the motive of many discussions and initiatives within

the conservation community at global, regional and national levels.

Threats to Natural Sacred Sites

Many sacred natural sites enjoy no legal protection and are faced with threats, broadly related to the impact of modernisation and globalisation. These include: agricultural expansion; demo-

Box 8. Sacred Forests: Naimina Enkiyio of the Maasai

"The *Naimina Enkiyio* indigenous forest is the centre of our lives. It means our survival, our spirit, our past and our future. As we are part of it, it is part of us. The forest is the holy temple or shrine of our people, a place of worship and communion with our deity. In the centre is the Cathedral of the Seven Trees, a sacred place where the *Laibons* or prophets bring offerings to *Enkai*, our Maasai God. Many ceremonies essential to our way of life are performed within or at the edges of our sacred forest. *Emowuo Olkiteng*, the beginning of a new age group when boys begin their rite of passage as young adults is marked by initiation rites. *Enkitainoto Olorrip Olasar Lolporror* – when the chosen spiritual leader of the new age group, accompanied by an elder spends the whole night awake standing motionless under a sacred tree deep within the forest. *Emayian oo Nkituak/ Ntomonak* – where Maasai women are blessed and cleansed to enhance their fertility under sacred trees of the forest. *Ilpuli* – in which morans partake of meat feasts deep within the forest to convalesce and restore their strength, commune with God, develop brotherliness and test their courage. Our spirituality is ultimately at one with the forest and everyday life. Our culture has preserved *Naimina Enkiyio* since it is the spiritual centre of our lives". (Reeve, 1994).

Box 9. Culture and Science in Marine Protected Areas: Western Melanesia

Recent collaboration between Torres Strait Islanders and Australian conservation authorities has helped establish a number of indigenous marine protected areas. These have integrated sacred, totemic sites and distinctive coral reef habitats. The experience suggests that cultural and ceremonial sites in the seas can work to enhance marine conservation and, reciprocally, how marine protected area approaches can protect sacred sites and traditional environmental knowledge (Cordell, J. 1998. 'Managing Culture Sites and Marine Protected Areas in Western Melanesia'. In UNESCO, 1998).

graphic changes; erosion of traditional values, particularly associated with widespread diffusion of institutionalized religions brought in by colonization processes, and which considered traditional beliefs as 'superstitious'; modern land reform programmes which have liquidated traditional land ownership; the expansion of the petroleum and mining industries; tourist development; changing social and economic aspirations of communities; immigration patterns, administrative and policy changes – particularly within the last 20 years. Many traditional beliefs and practices that acted as effective controls in protecting the environment are now being overwhelmed by these changes.

To date, sacred natural sites have not been formally reflected in protected area designations and management plans, and existing policy and legal frameworks do not adequately support the sacred natural sites of indigenous and traditional peoples. In cases where sacred sites have been included in official protected areas, they do not usually remain under traditional ownership and management, which creates conflicts between protected area agencies and indigenous and traditional peoples, thus limiting the effectiveness and the survival of these sites. There are also questions of how to manage sacred natural sites on public land ceded by treaty. Several countries are in the process of exam-

Box 10. Finding the right legal frameworks: the Sacred Kaya Forests of Kenya

The sacred *Kaya* Forests are situated in the coastal plain and hills of Kenya, and have a very high conservation value. They tend to be residual patches (between 10-200 ha) of once extensive lowland forests. The *Kayas* owe their existence directly to the culture and history of the coastal Mijikenda ethnic groups, and have been maintained by the Elders as sacred places and burial grounds. However, over the past 30 years a number of internal and external pressures have threatened the remaining forests and groves. National Park status was originally considered as a means of protecting them, but this designation would have denied the Mijikenda peoples access to their sacred groves. Another option was to have the *Kayas* declared as forest reserves under the jurisdiction of Kenya's Forest Department. However, local people were aware of the Forest Department's shortcomings, and were fearful that their rights would be denied. Since 1992 some of the *Kaya* forests have been gazetted by the government, and declared as national monuments under the Antiques and Monuments Act, which comes under the National Museums of Kenya. A special Coastal Conservation Unit, funded by WWF, has been set up at the museum. This is helping to conserve the forests as well as stimulate interest in the cultural values and traditions that sustained these forests. It remains to be seen how effective the national monuments status will be for protecting the forests. (Githitho, A. 1998. 'Destruction of Sacred Forests as a Reflection of Changes in Society: The Kaya forests of Coastal Kenya', in UNESCO 1998; Wilson, A. 1993. 'Sacred Forests and the Elders', in Kemf, E. 1993).

ining the possibility of incorporating provisions for the protection of sacred sites into their national biodiversity laws and policies, but in general, there has been very little achievement to date. However, where existing policies and laws can be reformed, it is antici-

pated that more effective protection of sacred natural sites could bring additional and important benefits at local, national and global levels.

While sacred natural sites are known to be highly important for biodiversity conserva-

tion, there has been no co-ordinated attempt, to date, to accurately assess their contribution to biodiversity; no global inventory of sites exists, and very little is known about the socio-cultural matrix of traditional belief systems that have helped conserve such sites, or how to integrate them into existing protected area networks to help safeguard them without affecting the rights, wishes and traditional practices of traditional owners. The ability to influence international and national policies and legal frameworks in favour of sacred natural sites is also hampered by the lack of knowledge about legal, policy and technical tools, consistent with indigenous peoples' own cultures, values, knowledge and practices.

Despite the relevance of sacred natural sites to biodiversity conservation, and evidence of significant local level protection and management, their role has been widely overlooked by state agencies, conservation agencies, environmental conventions²¹ and legislation and wider civil society.

While several activities have been carried out in recent years for protection of sacred sites by organisations like UNESCO,

IUCN, WWF, ARC, and others, no substantial progress has been achieved on the ground. In the context of unequal power relationships, indigenous and traditional peoples frequently lack the means to promote their rights and responsibilities as stewards of their land and resources. They are often excluded from decision-making processes which affect their lands, and they frequently lack information, organisational and financial support to develop and defend their interests.

Protecting Sacred Natural Sites

As indicated before, sacred natural sites have enormous value for biodiversity conservation. They are often places with limited access and restricted use that have preserved species of flora and fauna. Although they have a high degree of acceptance and respect from local communities, their contribution to conservation has been overlooked and undervalued by state and conservation agencies, policies and laws.

Sacred natural sites are important for the vitality and survival of indigenous

21 While conventions such as Ramsar on Wetlands of International Importance, and the Convention on Biological Diversity, have included recently some provisions or instruments relevant to sacred sites, the issue remains marginal and receives no significant support, politically, financially or technically.

and traditional people's cultures. There is a fundamental link between the rights of people to control natural sites - which symbolise their cultural and spiritual identity, and their continuing protection. Understanding of the sacred beyond the frontiers of the dominant world faiths, and to win respect and support for the spiritual visions and commitments of other peoples, particularly of indigenous and traditional peoples – which are frequently overshadowed or derided by the major religions, is fundamental for effective protection of sacred natural sites, as it is for the respect and strengthening of cultural diversity.

One of the possible avenues to support the long-term survival of sacred natural sites is to explore how they can achieve similar status to protected area networks. This goal is to enhance their protected status, but at the same time to support the belief systems and sustain the cultural heritage and integrity of the communities that created them. These efforts will need to consider how to protect large sites in their integrity, how to integrate series of smaller sites, and how to preserve the ecological and sacramental links to the landscape.

Against the background described herein, and building on past and ongoing work, IUCN, in partnership with the Rigoberta

Menchu Tum Foundation (FRMT) started in 2005 a project called 'Conservation of Biodiversity-Rich Sacred Natural Sites of Indigenous and Traditional Peoples'. The project goal is to achieve a strengthened enabling environment to support conservation and sustainable use of biodiversity of sacred sites of indigenous and traditional peoples, focusing on five sub-regions (Meso-America, South America, South Asia, East Africa, and West Africa). The specific objectives of the project are to: (i) Increase awareness globally and nationally, through improved information, knowledge sharing and communications, (ii) Strengthen legal and policy frameworks, globally and nationally, (iii) Improve the institutional capacity of relevant actors to work at the national and local levels, and (iv) Make available lessons and field-tested tools.

The Project engages with the political core of the problem. In the context of unequal social relations, and historical inequities, the project recognises that indigenous and traditional peoples require support to establish and defend their rights to protect and manage their sacred areas, and that the conservation community can and should be a partner and ally in this struggle.

*Sun Dance lodge in the
great prairies of North America. >*

Box 11. Project sites include:

Mexico: Wirikuta, the Huichol Sacred Natural Site in the Chihuahuan Desert of San Luis Potosi.

Mexico: Taheojc the Comcaac Sacred Space, Tiburon Island of Sonora.

Mexico: The Sacred Caves of the Wind and Fertility, “Tam Bokom Mim”, Huehuetlan, Huastecan region of San Luis Potosi

Peru: The Vilcanota Spiritual Park

Guinea-Bissau: The Boloma-Bijagós Biosphere Reserve

Ecuador: Pambamarca, Quito Loma and Puntayachil, sacred sites of the Cayanpi people

India: “Devarakadu”, the Kodagu District Sacred Groves of Karnataka State in Southern India

Kenya: Tiriki ceremonial sites

Kenya: Taita skull caves



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Annex 1: Benchmarks in International Action to Protect Sacred Sites

Issues related to the protection of SACRED NATURAL SITES have gained more attention in the last few years.

- A seminal meeting was the UNESCO International Symposium on Natural Sacred Sites (Paris, 1998).

- In Mexico in 2001, a meeting hosted by WWF and with the participation of IUCN, UNESCO, FRMT, indigenous organizations from Mexico, and Mexican non-governmental organizations (NGOs), decided to explore further coordination and collaboration.

- UNESCO organized an event on Asia-Pacific Sacred Mountains in 2001, and an International Symposium on Sacred Sites in 2003 in Kunming, China, with widely circulated reports.

- The Eighth Meeting of the Conference of the Contracting Parties to the Convention (COP) on Wetlands (Ramsar), held in November 2002, adopted resolutions related to the cultural aspects of wetlands, including specific references to sacred sites. Work on this subject was furthered at the Ninth COP in 2005.

- At the Fifth World Parks Congress, organized by IUCN in 2003, substantial discussions on sacred sites were held, which resulted in various products and gave impetus to new initiatives from IUCN. This was reaffirmed at the Third IUCN World Conservation Congress in 2004.

- The Convention on Biological Diversity (CBD) adopted, at the Seventh Meeting of its Conference of the Parties (COP 7), the *Akwé:Kon Voluntary Guidelines for Cultural, Environmental and Social Impact Assessment Regarding Sacred Sites and Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities* (February 2004).

- The same meeting of the CBD COP adopted a Programme of Work on Protected Areas, which, although not addressing specifically the issue of sacred sites, provides a very important framework in relation to integrating cultural and spiritual values and the rights and interests of indigenous and local communities.

- In Mexico, in May 2005, an International Meeting convened by the Mexican NGO Música por la Tierra, with technical sup-

port from IUCN, produced the Playa del Carmen Declaration, which raises important issues for the protection of sacred sites ('The Playa del Carmen Declaration').

- The Tokyo International Symposium 'Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes', May 2005, issued also a Declaration on the "Role of Sacred Natural Sites and Cultural Landscapes in the Conservation of Biological and Cultural Diversity" (Annex 3) co-organized by UNESCO and the United Nations University (UNU) in collaboration with IUCN, the Secretariat of the Convention on Biological Diversity (CBD), the Secretariat of the UN Permanent Forum on Indigenous Issues (UNPFII) and the Food and Agriculture Organization of the United Nations (FAO).



The Heights of Inspiration: The Cultural and Spiritual Meaning of Mountains as a Basis for Interpretation and Conservation¹

Edwin Bernbaum

Introduction

For assurance of long-term sustainability, conservation programs and messages need to be grounded in deeply held values and beliefs. As the highest features of the landscape, mountains have tended to become associated with the highest and deepest ideals and aspirations of societies around the world, making them ideal places to initiate such programs and messages. The remote Himalayan peak of Mount Kailas, rising aloof above the Tibetan Plateau, directs the minds of millions of Hindus and Buddhists toward the utmost attainments of spiritual liberation. Mount Sinai occupies a special place in the Bible as the imposing site where Moses received the Ten Commandments, the basis of law and ethics in Western civilization. For many in the modern world, Mount Everest symbolizes the highest goal they may strive to attain, whether their pursuit be material or spiritual. In the

United States, pristine mountain environments within such parks as Mount Rainier National Park and Yosemite National Park enshrine cultural and spiritual values basic to American society. As the writings of the early American conservationist John Muir demonstrate, views of mountains as places of inspiration and renewal helped give rise to the modern environmental movement and have played a key role in galvanizing public support for national parks and the protection of wilderness (Bernbaum 1996, 1997).

The Mountain Institute (TMI) is therefore working with the U.S. National Park Service (USNPS) to develop interpretive and educational materials and activities that draw upon diverse views of the cultural and spiritual significance of features of mountain landscapes — from rivers and mountains to forests and wildlife — in mainstream American, Native American, and other cultures around the world. The addition of these materials enriches visitors' experiences of national parks and gives them deep-seated reasons for conserving the environment — both in the

¹ Paper for Vth World Parks Congress Durban, Republic of South Africa, 2003

< *Mount Rainier and wild flowers, Mount Rainier National Park, Washington, USA.*

parks and back home. Since mountains include features of almost all other environments and ecosystems, ranging from jungles and deserts to tundra and glaciers, the project has applications beyond mountainous areas and encourages people to value and protect wilderness and nature in general.

Project History and Methodology

The first, planning phase of the project was to make contacts, select a pilot site, and initiate sample interpretive products. During this phase, from May 1999 to May 2000, we met with the directors and interpretive staffs of the Pacific West, the Intermountain, and Southeast regions of the USNPS, the superintendents and staff of three major parks, the USNPS chief of interpretation, and the manager of the USNPS Harpers Ferry Center. The response far exceeded our expectations. We received strong interest and enthusiastic support from all of them and letters of endorsement from the former and current directors of the USNPS. They saw the project as an innovative way of connecting with the interests of the general public —by providing multiple perspectives on park resources— and the traditions and concerns of specific cultural and ethnic groups, such as Native Americans, African Americans, Asian Americans, and

Hispanics, that have not been coming to national parks.

As a result of these meetings and our site visits, we selected three parks —Mount Rainier National Park, Rocky Mountain National Park, and Great Smoky Mountains National Park— rather than the one initially envisaged, and began developing model interpretive materials with interpretive staff. These three pilot sites represented three major regions of the USNPS that span the country from the East to West coasts with the Rockies in the middle. Their geographic distribution, high profiles in the park system, proximity to urban areas with culturally diverse populations, local Native American tribes, and their different mountain environments made them good places to develop interpretive products that would serve as models with a broad range of potential application to other parks and protected areas in succeeding phases of the project, both within the USNPS and elsewhere in the United States and abroad. Establishing these models at three sites rather than one also helped ensure the success of this phase and provided access to a wide and diverse audience.

The success of the planning phase enabled us to secure funding for the second and third phases of the project — to develop a variety of model products and

activities at the three pilot parks and use them to spread the approach to other parks in the national park system. In the third phase we expanded our operations to Hawai'i Volcanoes National Park, North Cascades National Park, Yosemite National Park, and Santa Monica Mountains National Recreation Area, while continuing work at Mount Rainier and Great Smoky Mountains. Our intent was not to replicate the products and activities developed at the pilot parks, but to present them as examples to stimulate people elsewhere to come up with their own ideas for applying this approach to the particular needs and characteristics of their unique sites and environments. This methodology has the added advantage of developing a wider range of models for use in the fourth phase — expanding the project to parks and protected areas outside the USNPS and the United States. We have recently begun work on this fourth phase with TMI's Asian Program and other partners, developing a Sacred Values and Biodiversity Conservation initiative that focuses on national parks and sacred sites in South Asia. During the second and third phases of the project, we received a Partnership Achievement Award from the USNPS for our work with Mount Rainier National Park.

In dealing with traditional sacred sites on park lands, the preferences of the indige-

nous peoples who revere them, such as Native Americans and Native Hawaiians, take first priority so that interpretive materials present only what they want to reveal about these sites and the beliefs and practices connected with them. The involvement of representatives of these groups, as well as other stakeholders, from the beginning is key. A major purpose of the project is to highlight the importance of park resources to indigenous peoples today, engendering understanding of and respect for their traditions. We encourage the development of interpretive materials and activities that draw wherever possible on the voices of living representatives of these traditions. Too many waysides and exhibits in too many parks and protected areas refer to indigenous peoples in the past tense, leading visitors to believe that they no longer exist or have any connections with the land.

Examples of Interpretive Products and Activities

The following is a sampling of the various products and activities completed or initiated so far in the project. We have prepared and distributed packets with descriptions and illustrations of these samples as one means of spreading the approach to other parks and protected areas. Other means

have included presentations to various audiences and more detailed workshops for interpreters and rangers.

Offsite Traveling Exhibit:

The first finished product at Mount Rainier National Park was an 8x10-foot collapsible display entitled “Mountain Views.” Interpreters are taking this traveling display to fairs, community centers, conventions, and other venues in the Seattle–Tacoma area in an effort to reach a wider audience for the park. The exhibit has, superimposed on a large image of Mount Rainier, three sections: “The

Mountain,” “Mount Rainier National Park,” and “Mountains of the World.” Each section employs images of a number of people with evocative quotes by them. “The Mountain” section, for example, has, as one of its images, a picture of John Muir with an evocative quote from him on Mount Rainier:

“Out of the forest at last there stood the Mountain wholly unveiled, awful in bulk and majesty, filling all the view like a separate newborn world, Yet withal so fair and so beautiful it might fire the dullest observer to

The goddess Pélé, painted by a contemporary Hawaiian artist, Hawaii Volcanoes National Park.



desperate enthusiasm.”

(Muir 1997, 110-111)

The quotes in the “Mount Rainier National Park” section show how ‘The Mountain’, as Rainier is known to people in the Pacific Northwest, has inspired staff from different divisions of the park to work at Mount Rainier. For example, the following words of Chris Trotter, a park ranger:

“It was never a question of if I would ever work here; growing up, ‘The Mountain’ was in my backyard. It was a place to play, camp and hike. Always the nature lover, I knew that I wanted to be a park ranger and work at Mount Rainier.”

In an effort to provide multiple perspectives and connect with the heritages and traditions of African and Asian Americans, the left-hand section, “Mountains of the World,” focuses on three mountains that stand out as cultural icons like Mount Rainier: Mount Kailas in Tibet, Kilimanjaro in Africa, and Mount Fuji in Japan. Along with a painting of Fuji, it quotes a Haiku poem by the famous poet Basho:

*“Delightful, in a way,
to miss seeing Mount Fuji
In the misty rain.”*

(Bernbaum 1998, 220)

The interpretive text adds: “Residents of the Pacific Northwest can relate to similar sentiments on “not seeing” Mount Rainier in frequent mist and cloud.”

A line at the bottom of the exhibit asks viewers to write down their comments on “What does the Mountain mean to you?” Park staff plan to use these comments in future exhibits at Mount Rainier.

Additional Outreach Products:

Mount Rainier asked us to design and produce a bookmark for the park that incorporates inspirational quotes and mountain images as a takeaway for people viewing the offsite traveling exhibit. One side has images of and quotes on ‘The Mountain’; the other has more general images and quotes, such as a picture of Yosemite and the following quote by the late U.S. Supreme Court Justice William O. Douglas:

*“A people who climb the ridges
and sleep under the stars in high
mountain meadows, who enter the
forest and scale peaks, who
explore glaciers and walk ridges
buried deep in snow — these people
will give their country some of
the indomitable spirit of the mountains.”*

(Douglas 1951, 328)

We also collaborated with the interpretive staff at the park to create a PowerPoint presentation for the superintendent to use on a trip to Japan to forge a sister mountain relationship with Mount Fuji. The presentation compares and contrasts Japanese and American views of the two mountains and of mountains and nature in general. We have used this presentation as one of a number of modules we have developed for the park that integrate spiritual and cultural perspectives into PowerPoint presentations for particular audiences, ranging from general to African American and Japanese American.

Experience Your America Exhibits:

Based on the theme of the sacredness of mountains, the Experience Your America exhibit at Sugarlands Visitor Center at Great Smoky Mountains has photographs of 24 mountainous national parks, ranging from Acadia National Park in Maine to Haleakala National Park in Hawai'i and Denali National Park and Preserve in Alaska. Each panoramic photograph has an extended caption with a description of the particular park and an inspirational quote, ranging from conservationists such as John Muir to Native American elders. The exhibit is on permanent display in the foyer of a new theater built at the main visitor center of the most heavily visited park

in the national park system. The chief of interpretation, who initiated the collaborative project, has since moved to Yosemite and wants us to expand the Experience Your America exhibit there to include landscape photographs of all 57 designated National Parks with inspirational, spiritual, and cultural captions by TMI. The theme of the exhibit will be the spirituality of nature; it will be housed at the Yosemite Museum — one of the most popular in all of the national park system. Here is an example of the caption for Great Smoky Mountains:

Great Smoky Mountains — 1934

Here, in the grandest expression of the Appalachians, sixteen mountain peaks rise over 6,000 feet in elevation. The largest federally protected mountain ecosystem east of the Rocky Mountains, Great Smoky Mountains National Park preserves the greatest diversity of plant and animal life in the temperate regions of the United States. Amid this natural grandeur stands an impressive collection of 19th century log and frame buildings — architectural remnants of southern mountain culture.

"The Great Smoky Mountains are a sanctuary for the Cherokee people. We have always believed the

mountains and streams provide all that we need for survival. We hold these mountains sacred, believing that the Cherokees were chosen to take care of the mountains as the mountains take care of us".

Jerry Wolfe, Cherokee Elder, 2000.

Oconaluftee River Trail:

A meeting convened in February 2001 by TMI and the Museum of the Cherokee Indian in Cherokee, North Carolina, initiated a collaboration among Great Smoky Mountains National Park, Friends of Great Smoky Mountain National Park, the Eastern Band of the Cherokee, the Museum of the Cherokee Indian, and TMI that will use wayside exhibits and a booklet to link Cherokee spiritual and cultural traditions and stories to features of the natural landscape along the 1.5-mile Oconaluftee River Trail that runs into the Qualla Boundary (the tribal lands of the Eastern Band of Cherokee). The waysides will be in English and Cherokee and will make use of artwork by local Cherokee artists. Since many Cherokees, both adults and school children, walk this trail for exercise, the signs will provide an opportunity to strengthen and pass on their traditions to the younger generation. The project will also help them to reach

the wider public through park interpretive materials. Subsequent meetings have enabled the collaborating partners to raise funds and form a working group that has selected and begun work on the following themes for five waysides along the Oconaluftee River Trail:

1. The legend of a supernatural snake with a jeweled eye on Rattlesnake Mountain, visible at the beginning of the trail.
2. The story of the creation of the Cherokee mountains and valleys by the great buzzard (buzzards are often seen circling above this spot).
3. Traditions of the Long Man, the personification of the Oconaluftee River, with his head in the mountains and his feet in the sea, unifying the various features of the environment
4. The going to the water purification ritual and its use in traditional stick ball games played next to the river.
5. The story of how certain trees, such as the spruce and the laurel, came to stay green all year round.

In addition, two orientation panels will provide a trail map and introduction at both ends of the trail, pointing out the impor-

tance of Cherokee stories and traditions for encouraging people to respect and care for nature. Two additional waysides on Clingman's Dome, the highest mountain in the park, will present the following themes:

1. The creation of the mountains and valley story with a panoramic view over the Smokies.

2. Clingman's Dome as a sacred place of healing and a sanctuary for the Cherokees, relating traditions of a magic lake that heals wounded animals and historical stories of Cherokee refugees finding refuge on the mountain when others were forcibly removed to Oklahoma on the Trail of Tears.

Traditional Hawaiian Artwork for Kilauea Visitor Center:

This broad-ranging collaboration integrates indigenous Hawaiian perspectives of the volcanoes Kilauea and Mauna Loa and the volcano goddess Pele into traditional artworks commissioned for the newly renovated Kilauea Visitor Center at Hawai'i Volcanoes National Park. The project comes out of park meetings with the Kupuna Committee of Native Hawaiian elders advising the park on cultural matters and advances a mutual interest in emphasizing the importance of Native Hawaiian views of park resources. As a

result of collaboration with TMI, a call for proposals went out for a major work of sculpture depicting the important Native Hawaiian concept of *wahi kapu* — sacred places — as it relates to Mauna Loa and Kilauea, as did a call for submissions of traditional Hawaiian paintings of Pele. The Kupuna Committee is selecting the works for installation in the Kilauea Visitor Center, and the Volcano Art Center had a month-long exhibit of 62 of the paintings submitted (as many as could be accommodated). The sculpture will be placed in a prominent place just outside the entrance to the visitor center and the painting will be hung in a special alcove inside next to a panel with quotes from Kupuna Committee elders on the importance of Pele in Native Hawaiian culture.

Interest from artists throughout the Hawaiian Islands was very high and the submissions greater than originally anticipated. In fact, the Park was overwhelmed with a 'tsunami' of Pele paintings — 140 in all — and the Kupuna Committee selected one by a local artist. The main newspapers in Hawai'i, based in Honolulu, ran front-page articles on the project. TMI played a key role in raising funds for the artwork and consulting on the process. The participants in the project include: Hawai'i Volcanoes National Park, the Kupuna Committee, Volcano Art Center, County of Hawai'i Department of Re-

search and Development, and TMI. An important byproduct of the project has been the formation of a committee of Native Hawaiian members of the interpretive staff to act as a liaison with the Kupuna Committee and to work closely with the park and make sure that Native Hawaiians have input from the beginning in all future interpretive projects.

Spirit of the Mountains Wayside:

As a result of talking with us and seeing examples of products at other parks, interpretive staff at Santa Monica Mountains National Recreation Area came

up with a wayside exhibit that presents traditional Chumash views of Boney Mountain and encourages the general visitor to experience the mountain in a deeper, more spiritual way. In order to connect the wayside with a living tradition, they consulted with the Chumash and put a picture of Charlie Cooke, a current hereditary chief, in the upper right-hand corner with the following quote by him:

"Boney Mountain is a sacred spiritual area, a shaman's retreat, and a place for vision quests. It is a place for meditation. From up there, you can see everything."

Panel in Santa Monica Sacred Mountains, California.



Santa Monica Mountains National Recreation Area

National Park Service
U.S. Department of the Interior



Boney Mountain is a sacred spiritual area, a shaman's retreat, and a place for vision quests. It is a place for meditation. From up there, you can see everything.

Charlie Cooke, A Hereditary Chumash Chief

Spirit of the Mountain

Boney Mountain stands as a majestic beacon filling the day and night sky. The mountain's spirit pervades the plants, animals and sense of place around you. It is in the cycle of the seasons, and the past and present generations of people. Whether alone or with others, this place anchored by the mountain invites you

to pause, reflect, and look inward. Taste the salt maling in on the morning sea breeze. Smell the pungent sage warmed by the afternoon sun. Witness the magical interplay of dark and light shadows. What insights, ideas and feelings does the spirit of the mountain evoke for you?

The interpretive staff titled the wayside “Spirit of the Mountain” and added the following text in the lower left-hand corner, superimposed on a large image of the mountain itself:

“Boney Mountain stands as a majestic beacon filling the day and night sky. The mountain’s spirit pervades the plants, animals and sense of place around you. It is in the cycle of the seasons, and the past and present generations of people. Whether alone or with others, this place anchored by the mountain invites you to pause, reflect, and look inward. Taste the salt rolling in on the morning sea breeze. Smell the pungent sage warmed by the afternoon sun. Witness the magical interplay of dark and light shadows. What insights, ideas and feelings does the spirit of the mountain evoke for you?”

TMI played a minimal role in the concept and design of the wayside, which was done almost entirely by park staff in collaboration with the Chumash Tribe. The genesis of the exhibit shows how this approach to interpretation can be spread through examples that stimulate people to come up with their own products and activities.

Mountains and People, People and Mountains:

TMI has begun work on the design and production of a publication for interpreters, teachers, naturalists, environmental educators, and the general public. Titled “Mountains and People, People and Mountains,” the handbook complements natural history information by bringing evocative quotes, beliefs, folktales, and cultural practices from American, Native American, and other cultures around the world to bear on various features of mountain environments, such as peaks, forests, eagles, and bears. It is based on the seasonal interpreters’ handbook at Rocky Mountain National Park used by staff to prepare evening campfire talks, guided walks, and other visitor-related activities. It is organized around the same categories of flora, fauna, and natural features, and for each category it provides quotes, stories, and traditions arranged for easy reference in the following groupings:

- Native American, Hawaiian, and Alaskan
- Judaism, Christianity, and Islam
- European and European American
- African and African American
- Latino and Chicano
- Asian and Asian American

The content can be adapted to various teaching environments from classroom to trail to home. Quotes, ideas, and stories can be easily selected to help relate to particular audiences and provide multiple perspectives on features of the natural environment.

Conclusion

We have learned a number of valuable lessons from work on various phases of the project. One of the quickest and most effective ways of implementing this approach is to integrate inspirational and cultural themes into products and activities that parks are already planning or have in production. For example, Great Smoky Mountains already had funding and plans in place to mount a major photographic exhibit on 22 mountainous national parks in their main visitor center. As a result of discussions with us, they decided to shift the theme of this exhibit to the sacredness of mountains and wilderness and had us work with them to prepare panels and select quotes. We have found it advisable to initiate a variety of different products and activities at a number of parks and let each one mature at its own pace, not burdening the already busy interpretive staffs. It is important to keep people excited and energized; in fact,

one of the important outcomes of the project has been the personal inspiration and renewal that interpreters get from working on it. The strategy of using products and activities developed at pilot sites as evocative examples works well to inspire people to come up with their own ideas on how to implement this approach in their parks. Encouraging creativity and innovation, rather than straight replication, has had the additional benefit of creating even more models to stimulate thinking at other parks and protected areas.

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Belief in Protected Areas: Overlooking the Spirit in Conservation

Liza Higgins-Zogib

Introduction

The natural world is simply full of sacred places, and protected areas are no exception to the rule: from the ancestor spirits that inhabit the trees and water sources of many of Madagascar's parks and reserves; to the millions of Hindu and Buddhist pilgrims who trek through protected areas to reach their place of worship; to the Holy Mounts sacred for Jews, Christians, and Muslims alike. There are thought to be hundreds of thousands of such sacred sites around the world, inside and outside official protected areas, all of them contributing to global conservation efforts. These are places that millions of believers hold in reverence. Moreover, practically all religions and belief systems, from the mainstream to the local, encourage their followers to respect and care for the natural environment. Yet despite less than five per cent of the world's popula-

tion declaring themselves 'atheists', the many threats to the environment and its natural resources continue to grow at an alarming rate.

Perhaps it is because the relationship between faith and nature conservation is riddled with complexity that it has not been included in the conservation debate until recently. But even though the importance of this issue has been raised now by a number of influential institutions¹, it is still a fact that the spiritual values of important natural sites are frequently not considered when planning for conservation and sustainable land-use. In addition, conservationists (protected area managers, policy makers, NGO staff, etc.) often lack the skills or knowledge needed to deal effectively with sacred sites and the people for whom they are sacred.

Although 'we' (the conservationists) are slowly coming to terms with the fact that the 'human' aspect of the environment must be taken into consideration in our conservation work, the 'spiritual' aspect is

¹ Including but not limited to: The Convention on Biological Diversity; UNESCO; WWF and IUCN.

< Hindu Trishula (Lord Shiva's trident) in front of the mountains of Lachung, Sikkim, where the land is still protected and managed by indigenous management systems.

still largely ignored. All over the world, issues like poverty and development, equity, and justice are increasingly being tackled (with varying degrees of success) in conservation projects and programmes. But there are relatively few conservation projects that deal adequately with issues of spirit and religion, even in places where these issues are in the forefront of peoples' lives and relationships with their natural environment.

We could view this oversight as a problem –but we could also regard it as a great opportunity to build further support for the conservation movement. This paper highlights the importance of the sacred in conservation (in protected areas in particular), and reflects on the problems of ignoring the spiritual dimensions of the natural world.

The link between Sacred Sites, Faiths, and Protected Areas

Protected areas are still referred to as the backbone of conservation. And in practice, work on protected areas still constitutes a large part of the international conservation agenda and expenditure. Organisations like WWF still spend most

of their resources on this core subject. As such, in the recent WWF/ARC report entitled *Beyond Belief: Linking faiths and protected areas to support biodiversity conservation*² we attempted to explore in detail just to what extent the interplay between faiths and protected areas is important.

The report includes a survey of a hundred protected areas around the world that contain important values to one or more faiths, as well as more detailed case studies from Kenya, Tanzania, Egypt, Lebanon, India, Nepal, Sri Lanka, Indonesia, China, Mongolia, Europe, Finland, Australia, and Colombia. *Beyond Belief* calls on protected area owners, managers and supporters to recognise the importance and legitimacy of sacred values in nature and to work cooperatively with faith groups to ensure that non-material values are also effectively preserved. It also calls on the faith groups themselves to put the fine statements they have made about protecting the environment to practical use by supporting global efforts to help conserve the abundance of creation through the designation and good management of protected areas.

There are many links between spiritual traditions and protected areas. Long before offi-

² Dudley N., L. Higgins-Zogib and S. Mansourian (2005); *Beyond Belief: Linking faiths and protected areas to support biodiversity conservation*, WWF/ARC, Switzerland

cially protected areas as we now know them existed, people were protecting their sacred lands. Indeed sacred sites are probably the oldest method of habitat protection and they still form a large and mainly unrecognised network of sanctuaries around the world. Some researchers suggest that there may be as many sacred sites as there are protected areas. If expert opinion is to be believed, which indicates the possibility of there being over 100,000 sacred groves in India alone, then this is certainly the case.³

Sacred Sites exist in hundreds, perhaps thousands, of the world's 'official' protected areas. This means that people have a special regard for hundreds or thousands of protected areas not necessarily because of their importance to biodiversity, but because of their 'less-tangible' spiritual values.

The links between sacred places and conservation are not restricted to traditional or indigenous belief systems. They in fact occur all over the world and across all faiths, from the 'mainstream'⁴ to the localised. The conclusions and recommendations of the report are summarised below:

Beyond Belief – Conclusions

- Faiths have been involved in some of the earliest forms of habitat protection in existence, both through the preservation of particular places as sacred natural sites and through religious-based control systems such as the *himas* system in Islam⁵.
- A proportion of these sites (probably a large proportion) are also highly successful at conserving natural ecology and biodiversity.
- Links between faiths and conservation of land and water exist throughout the world and involve every faith system that we have examined.
- Many areas of sacred significance and faith-based land management systems are currently under threat because of cultural breakdown, pressures on land and resources and poor governance that permits deleterious use.
- There is still a lot to be learned about where sacred sites exist, what level of risk they face, and about how exactly they relate to biodiversity conservation.

³ http://ecoheritage.cpreec.org/04_02__sacred_groves.html

⁴ Palmer, Martin with Victoria Finlay (2003); *Faith in Conservation*, The World Bank, Washington DC. In alphabetical order: Baha'i, Buddhism, Christianity, Daoism, Hinduism, Islam, Jainism, Judaism, Shinto, Sikhism, and Zoroastrianism

⁵ *Hima* is an ancient system of community based protected areas, common property, pre-Islamic, which at some point of History became integrated with the Islamic sacred law. *Himas* usually include critical resources, such as water, wells, wetlands or pastures.

- Sacred natural sites and other places of importance to faith groups exist as protected sites both inside and outside official 'protected areas' as recognised by IUCN The World Conservation Union and the Convention on Biological Diversity.

- Bringing a sacred area into a national system of protected areas can increase protection for the site but sometimes only at the expense of some of its spiritual values. The existence of a sacred site within a protected area can also create challenges for managers. But other cases show a good integration between the needs of faiths and conservationists.

- The spiritual values of a site are frequently not considered when planning conservation and conservationists (protected area managers, policy makers, and even NGO staff) often lack the skills or knowledge to deal effectively with sacred sites and the people for whom they are sacred.

- Sacred areas can usefully be integrated into protected area systems using any recognised management models and governance types and can be suitable for both large and small areas and for terrestrial and aquatic sites.

- Decisions about whether or not to seek to convert a sacred natural site or a land or sea area important to a faith into an official protected area therefore need to be made on a

case-by-case basis, after consultation with the custodians of the sacred site.

- Success in co-managing for faith and nature is almost always a matter of developing effective and trusting partnerships between the different stakeholders involved.

- Making such areas an explicit part of biodiversity conservation strategies has the additional and very important function of bringing conservation issues into the mainstream thinking of faith groups.

- Further guidance is needed about how this integration can best be achieved, and some suggestions are outlined in the following section of recommendations.

Beyond Belief - Recommendations

- Many sacred natural sites can and should contribute to biodiversity conservation strategies, although whether this contribution should be inside an official protected area or as part of wider landscape/seascape conservation strategies needs to be determined for each case in turn.

- Given the influence of faith communities, including the direct ownership of land and resources, conservation organisations should be working much more closely with faith groups to identify ways of collaboration.

- Decisions about individual sites need to be taken by all the stakeholders, that is by faith groups in terms of their own desires and perceptions of what impacts will affect the sacred nature of the site and by conservation specialists about whether the site will be a useful addition to protected area systems.

- By protecting natural areas with sacred significance we are also in many cases protecting a culture and traditions that have existed for centuries. For this reason, the protection of sacred sites can sometimes be an effective way of also protecting a people, culture or ethnic group, while also recognising the role that they play in protecting nature.

- Where a sacred site exists within a protected area, care of the site should always be an important element in management plans and practice.

- There is still much to be learnt about the links between sacred sites, biodiversity, and protected areas and further research is required, particularly with respect to:

- the location and status of sacred natural sites
- the influence of mainstream faiths on land and water and options for conservation

A sacred tree sporting a zebu skull in the Montagne d'Ambre National Park, Madagascar.



- the biodiversity value of sacred natural sites

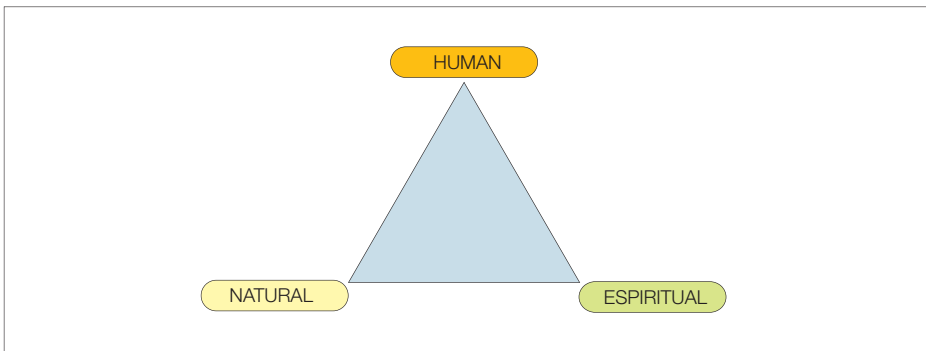
- The value that protected status for sacred sites can bring to faith groups should not be neglected.
- Current guidelines are useful but remain only general; further guidelines are needed specifically for major stakeholders, including faith groups, protected area managers, and governments.
- Such guidelines need to be based on direct field experience and we propose the establishment of a learning portfolio of new and existing protected areas containing sacred natural sites that specifically looks at the challenges of managing for both values together.

The forgotten triangle

The overriding trend currently within conservation organisations that work at a local level is to ensure local participation in projects and activities. It has been recognised beyond doubt that if local support is not attained, then conservation efforts will be of limited impact and their sustainability questionable. However, in many cases when we approach people we only have our conservation objectives in mind. When we think about a place we view it through our conservation lenses and as such we are not necessarily in tune with how people themselves view their place. Here I argue that if we want to be truly relevant at local level, we must first get this right.

In most instances, people tend to view the world in a three-dimensional manner. This can be visualised as such:

A three-dimensional worldview



It could certainly be argued that the modern worldview has moved away from this model; increasingly, the spiritual dimension has much less of a role to play and even the role of the natural dimension is ever-diminishing as the human/materialistic aspect has taken over. But essentially I argue that these three aspects always remain, despite the emphasis that may be placed by any individual. We can never get away from the 'natural'. Granted we may no longer live so closely connected to the land –but we still rely on the air we breathe and the natural resources we consume to maintain our lives and our increasing standards of living. Similarly, we can never really get away from the spiritual either. Few are those who have never thought about the bigger questions in life (Who am I? and Why am I here?) or who have not wondered about or wished for something higher on their deathbed.

Whatever the case, in terms of conservation and the important cradles of biodiversity that we are all striving to protect, the great majority of people we need to work with maintain this three-dimensional worldview on a more or less equitable level.

These three dimensions are integrated and cannot be separated. As humans we need

social interaction, we depend on the natural world for our very survival, and instinctively we need some kind of explanation as to why we are here. Yet despite the logical integration between the three dimensions, we often fail to take them all into consideration in our conservation endeavours.

Let us take one of many examples. The Heart of Borneo⁶ is a place of high conservation value: the last remaining intact tropical forests in a region of such biodiversity. Straddling Brunei, Malaysia, and Indonesia, the threats to the area are huge... and growing. There are many indigenous and local communities living in the area who depend on forest resources for their livelihoods and practice their religion on the land. There are many sacred places in the area –probably many of which remain unknown to the scientists and conservationists working there. So, in order to fully appreciate the place and its peoples; in order to grasp how the people there understand their place; and therefore in order to work with them to ensure that their place remains their place of livelihood and worship, we need to understand all three dimensions –the natural, the human and the spiritual.

⁶ See http://www.panda.org/about_wwf/where_we_work/asia_pacific/our_solutions/borneo_forests/index.cfm

Unfortunately the conservation movement as a rule, shaped by the rational Western scientific method, has all too often ignored 'less-tangible'⁷ aspects of nature. Yet to truly be relevant to people, we must start approaching our work in a more holistic, all-encompassing manner.

If we think again about the three-dimensional worldview, we can identify our place within it. The conservationists have traditionally concentrated on the 'natural'; the development agencies have focussed on the 'human'; the theologians have appropriated the 'spiritual'. But in all of these cases, where an exclusive focus is taken, the results are certainly of limited value. What good is conserving an area when people outside it are hungry? What use is there in accruing material wealth, when the heart and soul are not content? So, it all works together and I argue that the future conservation model must necessarily be a holistic one that takes all three dimensions into account.

One inspiring example of how the modern, rational model can work alongside the traditional, spiritual model comes from Indian medicine. Modern methods and traditional Ayurveda (the ancient science of health and living) work in parallel and are both fully

recognised by the state. In the same vein the ancient plant science of Vrکشayurveda is now becoming appreciated as an invaluable complementary knowledge system that people can relate to.

The spiritual breakdown

Sacred natural sites are often places where voluntary protection is afforded by the local communities who hold the place in reverence. Many sacred places outside official networks of protected areas are more rigorously protected than those run by the state. Even so, sacred places the world over are coming under an increased level of pressure hailing from large-scale development projects, perverse lending policies, poor state planning and management, and other outside influences. But problems are also emerging as a result of growing local demand for natural resources and what we might call a cultural and spiritual disintegration. The world is getting smaller. Few are the natural places that remain untouched by human presence or unsullied by mounting global problems such as climate change. And few are the places that remain culturally intact and far from the global stamp of similitude.

⁷ I use the term 'less-tangible' as opposed to 'non-tangible' for spiritual values because the spiritual, in terms of place or other, is absolutely tangible to the person who experiences it.

In the remote areas of Lachung and Lachen, Sikkim, India, there are indigenous natural resource management systems that have never been documented. Under the *Dzumsa* system, ruled by the head *Pipon* (head man), the two valley communities of this Eastern Himalayan state keep a tight reign on all of their land and the socio-political and environmental processes and systems that govern it.

However, even in these remote parts, the influence of a rapidly modernising India is increasingly felt among these communities. In Lachung there is a steady outflow of Lachungpa⁸ youth to Sikkim's capital, Gangtok, or further afield, in a bid for new levels of education and employment⁹. While this may be a natural and healthy development, the endogenous systems and knowledge that have remained present through history and resisted the challenge of integrating into the folds of the Maha Bharat (Great India) are slowly starting to decline.

This type of cultural disintegration is happening everywhere. From the diminishing influence of the monasteries in the Buddhist world, to the breakdown of aboriginal communities, to a more general world-shift

towards a global economy and 'californicationized' aspirations. Because people with strong spiritual beliefs have traditionally been the voluntary protectors and guardians of the natural world, this cultural disintegration is certainly taking its toll on the natural environment.

A 2002 SWOT analysis on the potential role of sacred sites as tools for biodiversity conservation concluded that one of the main threats and weaknesses in this field was cultural change:

"Sacred natural sites are subject to changing value systems and cultures and therefore may 'lose or gain their sacred value' and with this any conservation function that might exist. Modern development and changes of societal systems may significantly reduce their number and integrity. Moreover, transmission of traditional knowledge is collapsing."¹⁰

Conversely it may be argued that strengthening endogenous knowledge systems, cultural diversity and spiritual heritage could well contribute considerably

⁸ The people of Lachung are referred to as Lachungpas and the people of Lachen, Lachenpas.

⁹ Ghose D., S. Chatterjee and L. Higgins-Zogib (2006). Interview with ex-Pipon, Lachung and personal observation.

¹⁰ UNESCO (2003); International Workshop on *The Importance of Sacred Natural Sites for Biodiversity Conservation*, Kunming and Xishuangbanna Biosphere Reserve (People's Republic of China), 17-20 February 2003, UNESCO/MAB, Paris.

to the conservation of biodiversity and natural systems of the planet.

It is the spiritual heritage of place that renders it so special and so important to preserve. People throughout time have been much more inclined to safeguard their natural environment when it is linked with their deep-rooted belief systems. Although it would be unfair, and indeed untrue, to make any kind of sweeping statement that indigenous knowledge for natural resource management is always the right/best way, there are countless cases where endogenous knowledge of natural place and resources has proved to be a welcome and even superior addition, to scientific conservation measures. This is true for example in Aboriginal Australia, where the use of indigenous fire techniques has proved critical not only in terms of fire management, but also in terms of encouraging growth of certain useful species and in general maintaining a healthy equilibrium in the landscapes.

Protected areas have a role to play here. When well-managed they do not solely conserve biodiversity, but also the cultural and spiritual values that go with the place. While protected areas are not always the answer, they can be instrumental in safeguarding the sanctity of sacred places from, for example, large-scale developments that could otherwise jeopardise the area.

Protected areas: where the spirit cannot be ignored

The importance of getting it right becomes very apparent when you consider the extent to which ‘belief’ lives and breathes in protected areas. Detailed in the following table are just a few examples of protected areas where the spirit cannot be ignored and where getting it wrong would have disastrous effects for the place and the people. In all of the cases conflicting ‘place-views’ are at play. A place-view is how an individual or group views a particular place. As we have seen earlier in this paper, most people living in and around important places of biodiversity view it in the three-dimensional way –human/nature/spirit. But as we have also seen, when others do not take the time to also try to see a place in such a way, then conflicts can arise and the place as a result becomes threatene.

The following table summarises a few pertinent examples of where the spiritual place-view runs up against other place-views resulting in problems both for the biodiversity and the cultural and religious values of the area. These problems are common the world over wherever sacred sites and protected areas meet.

▪ *Pacific*

Australia

Protected area name and other data: Kata Tjuta National Park (within which lies Ayers Rock – or Uluru). Declared: 1977; size: 132,566 ha; IUCN category: II and World Heritage Site.

Faith and significance to the faith: Traditional. The traditional owners of Uluru-Kata Tjuta are the Anangu Aboriginal people. The National Park, and in particular the Uluru monolith, is of religious significance to the Aborigines¹¹. In Aboriginal mythology Uluru is the Intelligent Snake from the universe who emerged from a rainbow and slithered down to Earth; in other traditions it arose suddenly out of a larger sandhill¹². Uluru is depicted by Aborigines as a symbol of fertility. It is shaped like a horseshoe lying on its side. The lower part of the 'U' undulates and is filled with eggs. Thus the figure symbolises both male and female and is considered to be the father and mother of all forms of life. The Anangu believe that Mount Uluru is hollow, and that it contains an energy source that they call 'Tjukurpa', the 'dream time'. They believe that the area around it is inhabited by ancestral beings whose activities are recorded at many separate sites¹³.

Conflict of place-view: The Park was returned to Aboriginal management in 1985. Although visitors are asked not to climb the rock, many still do. When this results in injury or death, it is particularly trying for the indigenous hosts as they subsequently observe a 'worrying time'.

This place-view conflict arises from ignorance. Visitors simply do not understand that Uluru for the local people has the same significance as a church, a temple, or a mosque. The result is detrimental to the spiritual values of the site.

¹¹ Mountford, C. and A. Roberts (1965); *The Dreamtime*, Rigby Ltd, Adelaide

¹² Roberts, M. J. and A. Roberts (1975); *Dreamtime Heritage*, Rigby Books, Adelaide

¹³ Layton, R. (1989); Uluru: an Aboriginal history of Ayers Rock, Reprinted edition with additions, Aboriginal Studies Press, Canberra (ACT)

■ *Pacific*

Papua New Guinea

Protected area name and other data: Various, Papua New Guinea; IUCN Category VI

Faith and significance to the faith: Traditional. Papua New Guinea's population of 5.5 million people live largely in rural areas and most follow a subsistence lifestyle based on farming, hunting and collection of forest and sea produce. More than 50,000 years of human habitation in New Guinea has resulted in a rich and holistic understanding of the natural environment. Each of the country's 820 language groups has developed its own mechanisms for protecting and using its resources and these in turn have fostered the creation of untold thousands of traditional protected areas and protective practices which include:

- Restriction or prevention of gardening, hunting, gathering, or general access in the domains of forest spirits or *masalai*.
- Controlled reefs that are recognised as the domain of water spirits.
- Areas that have been restricted to respect the site of past sickness, historic events, or to mark the death of an elder.
- Areas where seasonal restrictions on the hunting of species have been installed or where certain animals (such as clan totems) may not be hunted.

The constitution of the modern state of Papua New Guinea recognises customary ownership of ninety-seven per cent of the land area of the country. Community control of inshore fisheries is also tacitly acknowledged though legal recognition is much less clear. Customary protected areas remain powerful in many parts of the country and offer examples of conservation through an informal system¹⁴.

14 RAPPAM (Rapid Assessment and Prioritisation of Protected Area Management) report (2006), WWF

Conflict of place-view: It was revealed during a recent survey of protected areas in Papua New Guinea that logging concessions had been granted over no less than twelve of the fifty-one protected areas assessed. The communities concerned were not aware of these developments.

The place-views at play in this situation are at totally opposing ends of the spectrum. The community objective is to be able to continue to live, hunt, and garden on the traditional lands of their ancestors. The objective of the government departments in question is to make money from the country's natural wealth, in this case timber. Fortunately there is another place-view in the country that has adopted a middle ground. The view of the nature conservationists is that we must start to bridge the gap between place-views to make room for development, spirit and the natural world.

It is hoped that strengthening the protected area system in Papua New Guinea and helping to develop the capacity of local clans to better protect their areas within a climate of increasing threats to the nation's natural resources will respond to the issues raised by conflicting place-views.

The following is a vision for the TransFly ecoregion (Papua New Guinea and Papua, Indonesia) that starts to build the bridges.

"We, the peoples of the TransFly, are proud of our land, our stories, our heritage, and our natural environment. Our children learn to look after our land through the law of our ancestors, with careful management and by joining hands across borders. May our monsoon forests and savannas continue to teem with birds, our rivers with Barramundi and Saratoga, and our swamps with crocodiles. Let our spirits fill our children's dreams and may we dwell in communities of wealth and beauty."

■ *North America*

USA

Protected area name and other data: Devils Tower National Monument, Wyoming, USA; America's first declared National Monument, 1906; 545 ha; IUCN category III

Faith and significance to the faith: Traditional. Native American Indian. Long before Western settlers laid eyes on the dramatic monolith now known as Devils Tower, this was sacred land for native American tribes including the Arapaho, Crow, Cheyenne, Kiowa, Lakota, and Shoshone.¹⁵ Native names for the monolith include Bear's Lair, Tree Rock, and Bear's Lodge and in 2005 an initiative to recognise the name 'Bear's Lodge' as an additional designation was thwarted for fear of jeopardising the tourist trade. There are several traditional legends about the rock. One of these tells of two Sioux girls who were out collecting flowers when they were chased by bears. Taking pity on the girls, the Great Spirit (Supreme Being) made the earth rise up on the spot where they were, leaving the bears clawing down the sides of the rock. This is an area where people still come to worship and pray for their ancestors.

Conflict of place-view: The protected area is managed by the US National Park Service who allowed the Native Americans to come back to worship this place after having been banished completely for many years. But despite this attempt by the Park Service, conflicts persist. The bears' claw marks in the monolith have made the rock ideal for rock climbers. And of the 400,000 visitors to the area every year, hundreds come to climb. This activity is of course sacrilegious for those who hold the place sacred. Again the Park Service has attempted to reconcile the differences by instating the 'June voluntary closure' to rock climbers¹⁶, as this is a particularly special time in the Native American calendar. This has apparently reduced the number of climbers by eighty per cent. Efforts

¹⁵ http://en.wikipedia.org/wiki/Devils_Tower_National_Monument

¹⁶ <http://www.nps.gov/deto/>

of the Park Service however are not always appreciated by the local, non-Native American residents of the area, who also see this place as theirs, who cannot understand the religious significance of the rock, and who often take offence at the prayer bundles left by the Native Americans and at their attempts to reclaim the land.

There are many distinct place-views interacting and conflicting at this site: the Park Service; the local communities; the visitors; the climbers and tour operators; and the Native Americans for whom the place is sacred. All view the place in very different ways and without some major efforts to reconcile these, the conflicts will continue to the detriment both of the place and its spiritual values¹⁷.

■ *Asia*

Japan

Protected area name and other data: Sacred sites and pilgrimage routes in the Kii Mountain Range; declared 2004; size: 495 ha; World Heritage Site, 2004.

Faith and significance to the faith: Shinto and Buddhism. Three sacred sites –Yoshino and Omine, Kumano Sanzan, and Koyasan– are linked by popular pilgrimage routes to the ancient capital cities of Nara and Kyoto.

The sacredness of the site has resulted in important ancient trees and groves being preserved, including: an ancient *Podocarpus nagi* at Kumano Hayatmam Taisha, planted according to legend in 1159; the Nchi primeval forest, part of the Kumano complex, has been protected since ancient times as a sanctuary; giant trees of up to 500 years old around a cemetery in Koyasan; natural silver fir forests along a pilgrim route, protected since the fifteenth century; 108 ha of protected *Magnolia sieboldi*; and a group of ancient cedar trees said to be ca. 3,000 years old¹⁸.

¹⁷ McLeod C. / Earth Island Institute (2002), Bulfrog Films, DVD, see www.sacredland.org

¹⁸ Evaluation report to the World Heritage Centre carried out by ICIMOS, May 2004.

Conflict of place-view: 15 million tourists visit the area every year, of which around 26,000 come from outside Japan. Infrastructure for the tourists and pilgrims (car parks, museums, and other facilities) has increased accordingly. Evidently the intents and purposes of the hikers differ from those of the pilgrims. And both these place-views differ again from those of the World Heritage and protected area management. Like many protected areas that have to deal with heavy pilgrimage or uncontrolled tourism, there are imminent threats to the biodiversity and sanctity of the places in question. These must be managed carefully, with everyone's interests and place-views taken into proper consideration.

■ *Asia*

Cambodia

Protected area name and other data: Mondulkiri Protected Forest, Mondulkiri Province

Faith and significance to the faith: Traditional. The forests of Mondulkiri used to be part of a logging concession until the country's logging ban in 2002. The indigenous people who live here worship burial forests and spirit forests, where foreigners are rarely allowed to venture. These are places where ancestors dwell and can be offended by the wrong use or non-respect of the forests; the result is bad luck for the entire village (bad crops, disease, etc.). These places are still very much part of the villagers' lives. Worship and offerings are performed regularly.¹⁹

Conflict of place-view: Only a few years back (prior to the country's logging ban in 2002), the logging company that was given the concession was very much

19 Higgins-Zogib L. (2006). Interviews with villagers in Mondulkiri Protected Forest, and personal observations.

active in the forests. Although informed of the burial and spirit forests, these were not always respected. The villagers complain of bad luck befalling the village after the forests had been disrespectfully penetrated and disturbed by the loggers. The area is now under the jurisdiction of the Ministry of Agriculture, Forests, and Fisheries, unlike most of the other protected areas in Cambodia, which are governed by the Ministry of Environment. Sacred places were never taken into consideration in the land-use planning of the area. Now two major international NGOs work in the area, WWF and WCS²⁰. Due to a relatively recent concern by conservation NGOs about local communities, livelihoods, and development issues, the indigenous peoples are now consulted and considered partners in conservation. Spirit and burial forests and other sacred natural elements of this protected area are therefore taken into account and respected .

Success in co-managing for faith and nature is almost always a matter of developing effective and trusting partnerships between the different stakeholders involved. In some of the protected areas detailed above the conflict is so deeply rooted in history and common sentiment that the gaps in understanding are often very difficult to bridge. But the values of these places are worth that additional effort to ensure at least a common understanding of the whole range of issues.

20 World Wildlife Fund for Nature and World Conservation Society.

Some conclusions

"The 'natural' and 'cultural' heritage of national parks is not separate. This is an artificial 'white-fella' separation. They are still boxing the whole into sections; we need to integrate management into a holistic view of the landscape". (Phil Sullivan, Aboriginal Heritage Officer, National Parks and Wildlife Service, New South Wales, Australia).

What Phil Sullivan has put his finger on is that 'they' –or rather, 'we' the conservationists- haven't got it quite right yet when it comes to managing protected areas that have important sacred values to faith groups.

If we are to be truly relevant in a protected area or landscape, if we are to really engage local stakeholders, and if we are to respect the rights of indigenous peoples, different faith groups, and cultures, then we must learn to understand the environment as others understand it. We must, as Phil Sullivan puts it, move away from the 'white-fella separation' and think holistically about all the values of an area, both tangible and 'less-tangible'.

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5. The case study of Montserrat

The point of view of the monastic community

Ramon Ribera-Mariné,
Prior of the Monastery of Montserrat

Montserrat has multiple facets and many realities co-exist here in peace, although not necessarily without a certain tension on occasions. Those of us who live here are used to the difficulties that those who visit have in appreciating the full variety of the site with all its inherent ambiguities. My aim with these words is to stimulate debate and to provide an answer to the question “What is Montserrat?” for those interested in the spiritual value of natural protected areas. The search for an answer to this question was also the motive behind the choice of route for the walk we have just completed. Now it is time to discuss this question indoors, comfortably sat down!

I would like to begin with a couple of reflections.

1. To be honest, I do not look on myself as an authority on anything that could warrant addressing this forum. I am neither a biologist nor a naturalist; rather, I am a

simple monk and man of God, a student of Semitic languages who has ended up as the prior of the community of monks on Montserrat. I have lived here for over 38 years and have written a number of books about this mountain, and I have thought long and hard about nature and geography in general. I am, when it comes down to it, an amateur.

2. I will refer to Montserrat as the ‘mountain of Montserrat’, instead of the ‘holy mountain’, because the main problems of the place are physical: not everyone in civil society or the Administration is aware of the extreme fragility of this natural wonder, which we must pass on to future generations. Only a few days ago we witnessed what I would call (non-professional opinion) an attack on a *natural reserve*!

Two further initial considerations (I did say that the reality of Montserrat was complex!) before I begin.

Firstly, the mountain of Montserrat has been a *sacred mountain* since ancient times and has always had this special transcendental value. This should not surprise anyone, given the unique outline of

the mountain, with its natural rock pinnacles full of symbolism. The names given to these strange petrified shapes offer some clues as to the mountain's symbolic value, although we must humbly confess that we know nothing of its pre-Christian spiritual connotations. What we do know, however, is that for over a thousand years (since 1025) and without interruption, a Christian monastic community has been present on Montserrat and during this time has attracted multitudes of people from the surrounding towns and from even further afield.

Secondly, Montserrat lies within the densely populated and expanding Barcelona conurbation. As you will have noticed, this active industrial area also boasts large commercial areas, as well as our remarkable mountain and tourist attraction, which is on a par with many of the great sights of Europe. This helps to explain why Montserrat receives over two million visitors annually: major infrastructures are needed to welcome such large numbers of people, above all because their presence is very seasonal.

Montserrat is not and never has been a remote *sacred mountain*, isolated from the whims of history, as the fact that it has been sacked on more than one occasion demonstrates.

We have just visited three different sites on the mountain and looked at some of the different realities that co-exist here. I'd like

now to take you back there and add a few simple remarks.

A. View from the terrace of the Sant Joan Nature School.

a. Above the Sanctuary there is an area containing a number of old hermitages (an area traditionally known as Tebaida, after the Egyptian hermitages in the region of Thebes). Around 50 years ago a proposal was made to fence off these hermitages and restore them to their original use. Fortunately, the idea never prospered owing to its unpopularity. The mountain of Montserrat has always been perceived as open to all and the monks that have been living here for a thousand years have always accepted this notion in full! Nevertheless, there are two hermitages (Santa Creu and Sant Dimes) that we consider to be an integral part of the monastery and which are inhabited temporarily by hermits (monks or other people connected to the community). Sant Dimes (closed to the public) also boasts an automatic weather station!

b. A chapel was built on the site of the hermitage of Sant Benet at the beginning of the twentieth century. After repeated attacks by vandals, at the beginning of the 1980s it was converted into a hut for climbers. Due to the nature of Montserrat,

climbing groups have been a very important part of the mountain over the last 75 years and they must be taken into account. Our community has always appreciated that the mountain belongs to them also.

c. The mountain is crossed by a long-distance footpath, which reminds us that for 150 years hiking has been a popular activity in Montserrat. Half a sport, half a cultural activity, walking as practiced by the Catalan walking clubs is well established in our country. The mountain, which lies at the heart of a geographical and political region, is criss-crossed by many excellent footpaths.

d. You will have become aware that the Sanctuary consists of a variety of buildings of differing ages, all clustered around the Holy Image, a site of pilgrimage that often seems too small for so many visitors. There is also the Monastery complex, where the monks live, and various areas designed for pilgrims and visitors that provide services (cells, hotels and restaurants) and souvenirs of the mountain.

B. View from Pla de les Taràntules (the area of Tebes):

a. This area is visited by hundreds of thousands of people every year, who

take advantage of the wonderful rack-and-pinion railway to reach this spot. Some of those that come here walk the two tracks that meet here or the path of Sant Jeroni to visit in comfort the upper parts of the mountain and enjoy the magnificent views.

b. The old Saint Joan restaurant is a reminder of problems we have had in the past. One such problem is the amount of rubbish that has accumulated at this spot, a blemish that has been exacerbated by delays caused by legal questions of ownership and distant disputes in town councils.

Another problem I recall is that of the squatters who illegally occupied some of the hermitages (or coves, as they are known), from where they would descend on unsuspecting tourists and climbers. Fortunately, this problem has been partially resolved, although we are aware that it will not be by any means the last such problem.

c. With the destruction of the hovels inhabited by some of the squatters, an insult to all civilised people, the former sites of the hermitages of Sant Joan and Sant Onofre have been uncovered. The idea of restoring the site by preparing information panels and opening up a walking circuit around the hermitages in

the area (for example, Santa Magdalena and its lookout point, and the curious Jacob's Ladder) would seem to be a good one, although it is above all a cultural project with a historical perspective.

C. A third site is a visit to the Path of the Rosary and the Holy Grotto:

a. The one place, even more so than the Sanctuary, where the two currents discussed during this assembly come face to face is along the Path of the Rosary, a path hewn from the rock and constructed at great cost to provide access to the Holy Grotto. According to a legend dating from the Renaissance, the original image of the Mother of God was found in this chapel. It is still used for religious purposes by a multitude of people, who visit to fulfil their vows, often barefoot or with push chairs. I would like to highlight, above all, two groups of people who visit here: young families and couples, and people who have just arrived in Catalonia, either from other parts of Spain or Latin America. This site still maintains its former aspect, but has been restored and is perfectly integrated into the surrounding environment.

b. The Holy Grotto is one of those rare places in our society that you can only reach on foot along a steep mountain path. For the unaware, the walk can

turn into a veritable pilgrimage! A question that has yet to be resolved is the lack of services at the cave: there is but one source of drinking water in this spot which according to the day and hour can fill up with large numbers of visitors.

c. Some of the sculptures –paid for by popular subscription– are of notable artistic value and blend in beautifully into the landscape. I consider to be of particular value the sculpture of Saint Domenec, the Cross and the Mystery of the Resurrection.

I've led you on a quick tour of Montserrat, with sites chosen by this member of the family who have been living in this place for a thousand years, caring for the Holy Image to a background of the changing seasons and the rhythmic cadence of the day and night.

The mountain is visible and recognisable from afar and, aside from its natural value, is the throne and palace, the visible reference (in a sacred sense) of an invisible reality. One hundred and twenty-five years ago a poet gazed upon the mountain and taught us to look upon its remarkable forms as having been chiselled out by the angels, and as a reference point (a star in the east or a Sinai) for a whole nation.

A key question remains: How can we transmit all the values of this mountain to future generations? I make no apologies for repeating that I am referring to the mountain as a whole and its entire rich and varied heritage: the pale-coloured mountain clothed in green; the cultural and historical treasures left behind by previous generations; the spiritual treasure of

the site that is the Holy Image; and the peace and quiet that one respires here. The task of us monks as custodians of this natural wonder is to ready the mountain for the large family of men and women that come to visit us. And I firmly believe that this assembly can help us in this task.

Father Ramon Ribera-Mariné briefing participants in the Workshop beside the Sant Joan station of the rack-and-pinion railway train station.



The view point of the Board of the Mountain of Montserrat

*Jordi López,
President of the Executive Committee of
the Board*

I would like to try and explain from the point of view of an administrative institution, the Board of the Mountain of Montserrat, which is part of the Catalan Government, why it is important and justifiable to promote and finance certain specific policies here on Montserrat. First, however, I'd like to recall the theory of Gaia, as proposed by James Lovelock, which is becoming relevant in this place that is part today of a society dominated by chaos. Montserrat is like a metaphor emerging from amid the chaos.

Four aspects of Montserrat are of particular interest to the Government of Catalonia. Prior Ramon Ribera-Mariné has already reminded us that Montserrat is an exceptional place from natural, cultural and spiritual points of view. Nevertheless, these three concepts exist in a specific context and moment in time and generally interact pacifically and successfully, although at times they clash and tensions arise.

I would like to explain what the Government is doing for Montserrat, and how we

support the projects concerning natural, cultural and spiritual aspects of Montserrat that will benefit a reality that is far more than just the sum of its parts. Once again I would like to remind you of the theory of chaos and offer a holistic vision of Montserrat. What can we do in each of these different dimensions?

Nature. We have to ensure that future generations inherit the wonderful natural heritage of Montserrat whilst guaranteeing that it is accessible to current generations. Montserrat is not only a mountain to be admired from afar; rather, it should be enjoyed in full *in situ*. It can be reached by public transport from Barcelona and for this reason the Natural Park is subject to great human pressure. Public use must be organised, not with prohibitions, but with controls and effective small-scale actions such as those that have been carried out at Can Massana and Sant Joan designed to make visits to the mountain much more enjoyable.

Culture. For centuries Montserrat has been home to a community that lives and breathes Culture with a capital 'C': it always has, it is still doing so and I hope that it will continue to do so in the future. It is part of the heritage of our country. The

Monastery of Montserrat also has one of the best landscape painting art galleries in Catalonia. At the same time, Montserrat acts as symbol of identity for Catalonia as a country and the Catalans who live there, as the Director of the Directorate-General of the Natural Environment mentioned this morning. Montserrat is a living symbol that allows people from the different walks of life who make up this country to recognise their common sense of identity.

Spirituality. Montserrat is home to a group of people who provide us all with living testimony of their beliefs. Here, I must also recognise that I speak as Director of the Directorate-General of Religious Affairs, my other position of responsibility. From this point of view, Montserrat is of the utmost significance to our society and the people who live here offer us so many important fundamental values. Someone once said that they were “living stones” and I agree that this is a good definition of the spiritual values and ideas of identity that are found in Montserrat.

Territory. Everything that I have explained takes place in a physical space where many other things also occur. Montserrat is an economic entity and point of reference, as well as a tourist attraction. It generates tangible financial benefits for many people who live in the area. At the moment we are promoting agricultural parks in the area

surrounding the mountain that may be very beneficial for local people, and we hope that they will be seen as an opportunity and not a restriction. Montserrat is a place to be lived in and, above all, to live in as a part of a group. It lies at the confluence of four municipalities and three *comarques* (counties): the initiative ‘Portals de Montserrat’ (Gates of Montserrat), a company set up jointly by the four municipalities that cover the mountain, is a demonstration that cooperation at local level can work.

Otherwise, Montserrat also represents a chance to resist the increasing pressure from built-up areas. In face of the spread of the concrete that is devouring much of the rural landscapes of the Barcelona Metropolitan Area, the Board of the Mountain of Montserrat helps local town councils to take decisions such as refusing to grow further –the case of the town of Marganell- that seem to go against social dynamics and whose aim is maintain the value of the natural heritage of this magnificent mountain.

Montserrat is a place where people can exercise the responsibility they have to live in harmony with all the physical and human elements of their surroundings. Public bodies must take decisions that maintain this harmony that is only possible if there is a permanent state of cooperation between the private and public sectors. We must all

work together to make this collective project that is Montserrat work. This implies a number of different specific actions such as the work we will carry out to renew the whole water supply system for Montserrat and some of the towns at the foot of the mountain.

A society such as ours in Catalonia, which has experienced a sudden recent increase in cultural diversity and religious plurality, must not repeat the errors in integrating immigrants that have been committed in other countries. We must talk to people from other cultures who hold different

beliefs to ours. Dialogue will always be possible if we have a truly positive attitude towards this question and prepare not only our minds, but also our hearts –or our souls, some might say. In this sense we need places such as Montserrat to be able to enjoy the spiritual dimension of our lives (that everyone will choose to fill as they see fit) and to help us connect to all the people of different cultures and traditions that go to make up the diverse and plural reality that is Catalonia today.

Many thanks.

Art Nouveau sculptures representing one of the mysteries of the Rosary at Montserrat.



The standpoint of a company providing services

Josep Altalló,
Managing Director of
L'Agrícola Regional, SA

A convenient way to begin is to ask exactly how we define Montserrat. We view Montserrat as a multi-faceted reality with different overlapping meanings for different people. The main facets of this wonderful mountain can be summarised as following:

- A unique natural park
- Historically, one of the most important cultural sites in Catalonia
- The sanctuary of the patron saint of Catalonia and a place of pilgrimage, peace and prayer
- A monastic community
- A symbol of identity
- A tourist destination.

L'Agrícola Regional, S.A. (LARSA) is a private company belonging to the monks of Montserrat that provides services and manages the buildings, facilities and the operations within the confines of the sanctuary. The company was set up in 1920 to manage the heritage of the site, although it has also gradually become involved in the management of the visitor

facilities. Currently, LARSA is in charge of the running of all the facilities around the Monastery of Santa Maria, which are open 365 days a year. LARSA, has over 300 direct employees (with on average 210 working every day) and an annual income of 18 million euros.

LARSA aims *"to offer services to the visitors who come to Montserrat as part of the welcome provided by the Monastery and the Sanctuary. The running of these services must be profitable and provide finance for any necessary investments. As well, it must collaborate in the maintenance of Montserrat as a whole"*.

Services for visitors

- The accommodation includes hotels and apartments with 700 beds and 120,000 overnight stays per year; the bars and restaurants provide 300,000 meals and around one-million bar services annually.
- Cultural: an art gallery, with a good collection of landscape painting, an interactive exhibition and an open-air museum. The art gallery receives some 110,000 visits per year, while about the same number of people visits the interactive exhibition.

Furthermore, 7,000 children visit in school groups and 4,000 people follow guided tours every year.

- The souvenirs shops have some 8,000 products on offer and issue 600,000 entrance tickets per year.
- The Montserrat Reservation Centre is a fully fledged outgoing and incoming travel agency.
- Annually, the technical office issues 3,500 maintenance work orders and oversees work to the value of 1-2 million euros.
- Some of the other services provided by LARSA to this area include the annual supply of 4 GW of light and 140 million litres of water from the Llobregat River, all extracted, treated and then pumped up 750 m to the monastery of Santa Maria. As well, the company accumulates 600 tons of road sweepings per year and provides security and cleaning services for all the buildings and facilities in and around the sanctuary and the monastery.

Product management

- We manage everything from the bar and stores, to the queues and tourist circuits. We look after visitors during their whole stay and hope that this 'captive public' will

one day become a 'faithful public' to Montserrat.

- LARSA has had long experience in managing the site and works within a framework based on culture, nature and spirituality in the development of its brand and image.

Management of the visit

A typical visit consists of the queue at the car-park and then visits to hear the choir singing and see the Image of the Virgin, followed by the purchase of the local curd cheese. From a tourist point of view, this product could be considered as mature. However, we aim to develop new products that include:

- The Museum as part of the attraction of the visit
- Temporary exhibitions
- An open-air museum (circuits)
- An interactive exhibition 'Inside Montserrat'
- Special products for schools
- Packages for travel agencies such as 'Montserrat in a day', 'Vespers at Montserrat', etc.
- Packages for individual visitors: 'Guided visit to Montserrat', 'All of Montserrat',...
- Tailor-made guided visits for groups
- Services for companies with special accommodation needs.

Management of the product

In terms of the general public, we operate two basic strategies: the management of quality via word of mouth and the management of communication via selective advertisements in the media aimed at our target market.

For those with special interests, we offer pastoral services to pilgrims and congregations, as well as acting as travel agents for specialised groups (schools, hikers and cultural tourists) and the general public.

The main markets for Montserrat are tourists visiting Barcelona and the Costa Brava and they are usually targeted by offering Montserrat as a 'complementary destination'.

Our travel agency works in the commercialisation of the product via the development and promotion of packages. As well, we manage everything from the rack-and-pinion railway to the car-parks.

Three main bodies work in a concerted fashion to promote Montserrat as a tourist destination: Turisme de Catalunya, Turisme de Barcelona and Turespaña.

Price management

We face two problems when it comes to setting the prices in our hotel, restaurants and shop facilities. Firstly, our location, halfway up a mountain and part of a religious site, increases costs and, secondly, we have to offer and maintain services such as light, the boys' choir, cleaning services and garden maintenance that are not covered directly without charging entrance fees.

Our approach is based on four strategies:

- Control basic prices, thereby keeping them lower than in other tourist destinations.
- Stimulate demand in order to combat rising prices.
- Offer a good price for packages.
- Take into account the market prices with which we must work and control our costs appropriately.
- Negotiate on the basis of the added value and value for money we offer.

LARSA bases its communication strategy on its long experience with nature, culture and spirituality.

For the general public, we offer the people, activities and location of Montserrat,

and provide a good global image of the services (brand) we offer.

For a more motivated public, we offer the Monastery (pilgrimages, congregations, etc.), a travel agency for specialised groups (schools, hikers, cultural tourists, etc.), specialised material and different treatment.

For tourist groups, we target visitors' countries of origin by visiting trade fairs and collaborating with catalogues and familiarisation trips for travel agents. We also produce specialised material in col-

laboration with external tourist boards. More locally, our communication strategy is based on packages for individuals and incoming travel agencies, the production of display material and catalogues distributed to hotels, promotions and, above all, lots of information on schedules, changes and new features.

Up to 20,000 people gather at the Monastery of Montserrat during the main Christian festivals and celebrations



The view point of the Catalan Federation of Hiking and Climbing Clubs

*Xavier Ariño,
President of the Catalan Federation of
Hiking and Climbing Clubs*

I would like to wholeheartedly thank the organisers of this Seminar for the invitation: walking and climbing groups are not usually as well received in the other protected areas in Catalonia as we are here in the Natural Park of the Mountain of Montserrat.

Montserrat is a very special mountain, a fact that makes the relationship between us climbers and walkers and the mountain also very particular. We feel a special attraction –and in some cases an addiction- to this place and there are even specialist Montserrat climbers who we call ‘Montserratsins’! The truth is that Montserrat from the outside seems inaccessible, but once in, you never want to leave! For historical reasons and due to the sheer wonder of the place, Montserrat has always been considered as the ‘cradle’ of Catalan walking and climbing groups. I’d like now to briefly describe how walking and climbing evolved in Montserrat and in this way

help you to understand the situation we find ourselves in today.

Around 150 years ago organised walking groups began to explore and enjoy the mountain of Montserrat. Towards the end of the nineteenth and the beginning of the twentieth centuries a number of scientific naturalist societies emerged who, besides walking, aimed to try and find other values in outdoor activities. At the same time climbing as we know it today also began to be practiced and led to rivalry on the sheer faces of the much admired rock pinnacles of the mountain. Other outdoor groups went further than simple physical activity and looked for other reasons to come to the mountain: a century ago the society ‘Societat del Sol’, for example, went beyond walking and climbing and practiced nudism in the heart of the mountain in an attempt to establish a more intimate relationship with nature.

After the end of the Civil War (1936-1939), during which period climbing did not advance, new ideas began to arrive from other countries and, in turn, new techniques began to be developed in Catalonia that were subsequently exported to other countries. The rock faces of Montserrat have very few cracks and crevasses and it was neces-

sary to find new forms of progression and safety techniques, which were to become the precursors of many of the climbing techniques that are in use today.

In the 1960s climbing underwent great technological and terminological changes and at the same time the practice of climbing began to assume a more spiritual side. Climbers began to remark that climbing was a “way of life” and a way of “finding oneself”. Climbs were sought out that enabled the climber to better himself, both physically and spiritually. This is clearly indicated by a popular climbing guide published at the beginning of the 1970s that is still a good read even today. I’d like to read you a fragment: *“Climbing is a way of expressing yourself. The summits are catalysts that attract irresistibly and allow the climber to find God, himself and other men. As a means of expression, climbing demands that the climber is at one with himself and requires good physical condition and techniques, as well as spiritual and corporal strength. Climbing fulfils the man, and sport reinforces his social dimension.”*

This was written by Salvador Plans, a climber and one of the monks of Montserrat and shows how climbing has always been linked to the Monastery and the monks, as Prior Ramon Ribera-Mariné has already explained. The monks have helped the sport develop, as well as partic-

ipating in rescues and helping to promote climbing at difficult times.

The 1980s were years of change for climbing in Montserrat. New styles emerged and sporting dimensions began to take precedent over philosophical values: the spirituality of the sport was being lost. The tendency over the last few years is towards massification. Adventure sports are promoted from all sides and people come to Montserrat as if it were a fun park, without having passed through a learning process as was the case with the climbing clubs of the past. Today the mountain is used in a much more frivolous manner.

As well, during this period of time things have changed in the mountain itself, some for the better, some for the worse, and we have experienced forest fires, floods and landslips, and seen new infrastructures built. In 1987 after the great forest fires, Montserrat was declared a natural park, although from our standpoint almost nothing has been done since then. Only in the last three or four years have things started to change. We have seen how the area around the Monastery has spread and how new infrastructures have been built to favour mass access by more and more tourists to the mountain. However, all this has been done without a thought for the mountain, which is not in good shape. We walkers and climbers have kept the paths

in good condition, but did not expect to be abandoned to quite such an extent.

Over the last few years it seems that things have started to improve, although good intentions –of which there are plenty- are not enough. More people and material destined to satisfy the needs of the mountain and its users are needed. Montserrat has become a virtual island within increasingly built-up and industrialised surroundings, a situation that can only be seen as a threat to the mountain. Some species of wildlife are already endangered and not just because of the presence of climbers and walkers; rather, it is the change in land-use

in the surrounding area that we are beginning to regard with worried eyes.

Nevertheless, our groups must remain optimistic and proactive. We are currently involved in a project aimed at regulating our activities in the Natural Park and, in collaboration with the Park Board and the Fundació Territori i Paisatge, with expert advice from the Catalan Institute of Natural History, we are attempting to identify an equilibrium between use and conservation in the Natural Park so as to be able to continuing climbing for many more years to come.

Thank you very much.

Rock climbing has developed its own particular styles in Montserrat.





Montserrat

Catalonia, Spain

Josep-Maria Mallarach

Introduction and history of the legal protection of the site

The mountain of Montserrat is an outstanding landmark and is considered by many to be the spiritual heart of Catalonia (Spain). It is located about 50 km north of the city of Barcelona and within the Barcelona Metropolitan Area, a conurbation with a population of almost 4.5 million people. The mountain itself rises up over 700 m from the floor of the Llobregat river valley to its summit (Sant Jeroni, 1,236 m) and is characterised by a vast array of astonishing rock pinnacles.

Montserrat ('serrated mountain' in Catalan) has been considered a holy mountain since at least medieval times. In 1902, the forest engineer R. Puig i Valls proposed that Montserrat should be declared a national park, the first such formal proposal ever made in Spain. He argued that this "jewel of nature" was "ideal for devout people, a natural wonder for naturalists, a prodigy for believers and

a monument for patriots". However, he was unsuccessful in his bid and it was not until 1950 that Montserrat was declared a Scenic Landscape and a body was set up to take charge of its protection. Finally, in 1989 the Parliament of Catalonia enacted a law creating a governing body for the protection of the mountain of Montserrat.

In 1987 a devastating forest fire burned a large portion of the mountain's forests and threatened the monasteries and other facilities. In the same year, in a decree passed by the Catalan government, the mountain was declared a Natural Park (IUCN category V) with a single Natural Reserve (IUCN Category III) in its midst. However, to emphasise that Montserrat was different from the existing protected areas in Catalonia, it was decided that the new Natural Park was to be run directly by the Presidential Department of the Catalan Government, and that its management Board would be presided by the Catalan president, while the head abbot of the Monastery of Santa Maria would be its vice-president.

The existing protected area covers about 8,100 ha and includes a buffer zone of

< Path to Sant Jeroni, one of the many different types of steps that link the main monastery to the old hermitages in the upper part of Montserrat.

4,260 ha. A natural reserve of 1,760 ha covers the core area above the cliffs; the entire massif is included in the European Natura 2000 network. In light of requests from three of the four municipalities which share jurisdiction of the mountain, a project to enlarge the park by some 5,000 ha is currently being prepared.

Furthermore, the town councils of El Bruc, Collbató, Esparreguera and Olesa, with backing from the Diputació de Barcelona (Barcelona Provincial Council), are promoting the idea of protecting the land lying at the foot of the mountain via the declaration of an agricultural park (*Parc Rural del Montserrat*). This would be of great use both for conserving this singular site against urban encroachment, and for reinforcing the symbolism of peace and quiet that reigns in the extensive olive groves that surround the base of the mountain.

Within the framework of the Delos Initiative we visited Montserrat several times between October 2005 and September 2006 and met and discussed with over a dozen key stakeholders, including the prior, steward and hospitalier of the Monastery of Santa Maria, the parson of the Sanctuary, the president of the Steering Committee and the manager of this body, the director and biologist of the park's management team, the manager of

the company in charge of most public facilities, scientists, and representatives of pilgrimage organisations, ecologists, hikers and climbers. We had fruitful discussions with all on the basis of the questionnaire that was developed in 2005 and what follows is based upon those discussions and a study of available bibliographical sources.

Natural heritage

The mountain of Montserrat is about 10 km long and 5 km wide, and covers some 45 km². The jumble of hundreds of marvellous rock pinnacles (made up of Tertiary conglomerates and sandstones) that give Montserrat its unique silhouette makes the mountain a site of outstanding geomorphological significance. About 27% of the Natural Park and 47% of the Natural Reserve include geological heritage sites of national importance.

Most of Montserrat is dominated by rocky formations covered by Mediterranean vegetation, well adapted to this harsh environment, and evergreen holm oak forests dominate in areas where there is enough soil. The number of vascular plant species recorded from the park is surprisingly high, with over 1,200 vascular taxa identified, of which 40 are considered rare or endangered. Within the Natural Park a certain

number of endemic and/or rare plant species are found: *Erodium foetidum* subsp. *rupestre*, *Paronychia kapela* subsp. *serpyllifolia*, *Ramonda myconi*, *Linaria origanifolia*, subsp. *cadevallii* and *Saxifraga callosa* subsp. *catalaunica*. Furthermore, the park is home to 29 animal species considered rare, endangered or vulnerable, including the Spanish Ibex (*Capra hispanica*), which was introduced a decade ago; unfortunately, its current expansion is beginning to create problems for some of the fissure-loving plant species. Wild Boar are quite common and, largely because of the presence of nesting Bonelli's Eagles (*Aquila fasciata*), the site was included in the Natura 2000 network.

Natural risks are significant and quite common over much of the mountain and include landslides, rock falls –sometimes huge–, rain storms and less frequently forest fires. These natural risks have historically always been present; however, the increasing number of visitors means new security problems arise when these unpredictable events occur.

Spiritual and cultural heritage

Since the era in which the first written documents appeared Montserrat has been venerated as a holy mountain. However, it was during the eighteenth century that the

spiritual character of this mountain began to spread over Europe and beyond. Thicknesse wrote about the mountain in English and Von Humboldt in German. Goethe considered Montserrat as a “symbol of the august peace of the spirit”, while the poet Schiller affirmed that “Montserrat suckles the man from the outer world to the inner world”. Similar reverences in Catalan and Spanish are much more numerous: it suffices to quote a great twentieth century Catalan poet, Joan Maragall, who wrote that the whole of “Montserrat is a temple, a liturgical mountain.”

Nesting on the mountainside on a narrow platform at 725 m of altitude we find the famous monastery of Santa Maria, next to the sanctuary where the holy image of the Virgin, patroness of Catalonia, is venerated. For many centuries this shrine was the main centre of pilgrimage within the kingdom of Aragon (which included Catalonia), above all between the fourteenth and eighteenth centuries, and to this day, with just short interruptions due to wars, it continues to be one of the best-known shrines to the Holy Virgin in the whole of the Catholic world. For almost one thousand years, a Benedictine monastic community has been at the service of the pilgrims from all over the world who come to worship the Black Madonna, a twelfth-century masterpiece of sacred art. The image of the Virgin,

affectionately named 'La Moreneta' (the Little Dark One), has been considered miraculous ever since it was first carved. Over the centuries the monks have developed what are perhaps the most elaborate ceremonies of homage to the Holy Virgin anywhere in the Christian world. The tradition of *Laus Perennis* (permanent prayers), in which monks and hermits take turns to pray, day and night, was alive in Montserrat until the eighteenth century. The boy's choir, the *Escolania*, is famous as one of the oldest such choirs in Europe and every day altar boys participate in religious services in the Basilica, singing the *Salve Regina* and the *Virelai* hymn to the Virgin.

Lower down the mountain lies the modern Benedictine convent of Sant Benet. Of the old Romanesque monastery of Santa Cecília, only the temple and some small remnants of the monastery still stand today.

For most of the last millennia, there have been twelve hermitages dotted around the slopes of the upper part of the mountain, many of which nestle in astonishingly out-of-the-way places. Most of these hermitages had beautiful gardens tended by the hermits themselves, many of whom were renowned as wise or holy men. Currently, only two hermitages are still used by the monastic community; two others are

Relationship between protected areas and sites of spiritual significance of in Montserrat.



used as shelters by climbers, while a few more are temporarily used by squatters. The tradition of pilgrimages on foot to venerate the holy image of Santa Maria dates from medieval times. In those days there were no other ways of reaching the sanctuary and religious zeal led many pilgrims, including kings and princes, to climb to the monastery bare-foot. Today, although the majority of people use a mechanical form of transport (rack-and-pinion railway, coach or car), there are still thousands of pilgrims that walk up to the sanctuary along some of these historical trails. The Catalan pilgrim's way to Santiago of Compostela starts at the Monastery of Santa Maria.

Over the centuries the monks of the monastery of Montserrat have had a significant cultural and spiritual influence on Catalan life. It can boast over the last four centuries a significant school of liturgical music, one of the oldest publishing houses in Europe, which has published thousands of books and many influential journals, a library with over 300,000 volumes, including a number of highly interesting and rare manuscripts, and a museum with one of the best collections of landscape painting in Catalonia. The cultural activities of the monks has centred on biblical studies, liturgy, theology, monastic history, musicology and pastoral themes, having had during the last centu-

ry a significant influence in conserving the Catalan language. The area surrounding the Monastery is also an open-air museum with a number of especially interesting trails –the Via Crucis, Degotalls and Rosary– that lead from the Monastery to the Holy Grotto, where, according to tradition, the image of the Virgin was found. These trails pass by a number of interesting sculptural groups dating from the nineteenth century that blend in with the natural rock formations.

Development pressures

Catalonia is the most important tourist destination in continental Spain and currently receives about 15 million visitors a year. Local tourism to Montserrat started during the late 1800s, but the area only began to receive foreign day-trippers during the 1960s, when foreign mass tourism first began to take off in Catalonia. The monastery area now receives around 2.3 million visitors a year (tourists and pilgrims), whose numbers inevitably disturb both the monastic calm and the integrity of its natural surroundings. Visitor numbers peak at around 14,000 a day. The rest of the mountain is visited by about 500,000 people a year, mainly hikers and climbers, the latter drawn to the many sheer rock walls that are intensively used as climbing schools. Due to its location

and the quality and beauty of its cliffs and pinnacles, Montserrat was the birthplace of climbing in Catalonia. Following the lead of areas such as the Montsant Natural Park, an ongoing dialogue between climbers and the natural park managers is underway to define which areas are most appropriate for climbing, and areas where it should be restricted.

Of those that visit the mountain by vehicle, 70% come by car, coach or bus, 20% by train and 10% by cable car. Montserrat is a magnet for a variety of reasons. It is estimated that around 30% (some 600,000 people a year) of visitors come solely for religious purposes; most tourists who come with tour operators only stay for three hours in the main monastery area. The monastic tradition of hospitality is contrary to restricting access to the site, and the monks claim that some who come as tourists later return as pilgrims. They feel that one of their duties is to offer visitors, no matter who they are or where they are from, the chance to come into contact with a spiritual way of life. They point out as evidence of this desire the fact that large numbers of visitors listen in complete silence to the chants of the boy's choir every day.

On the other hand, all the public services around the Monastery are managed by a

private enterprise with over 300 workers. *L'Agrícola Regional* (LARSA) was created in 1912 by the monastic community, as a protection against the anti-clerical government of Spain, which during the eighteenth century confiscated all the properties of the Church and banned most religious orders for a while. Today, it takes care of all the facilities around the monastery of Santa Maria: one hotel, two apartment buildings, four restaurants, shops, museum, waste management, security, guided tours and environmental education packages in different languages, etc. It is presided by the Abbot and directed by the Steward of the Community, although the manager is a lay person. Most workers of the Monastery come from the four surrounding municipalities, and many of them are relatives. Montserrat has also been besieged several times over the centuries for political, military, cultural and even spiritual reasons. In 1812 the French army completely destroyed the monastery of Santa Maria and all the hermitages on the mountain. During more recent decades conflicts have included the intentionally provoked forest fire of 1987, which, due to strong winds, severely damaged the mountains forests. The monastic communities have always handled these problems in a discrete and effective manner.

Relationships between the Monastery of Santa Maria and the surrounding villages and towns have always been complex and multi-faceted. On the one hand, there is the appreciation and love of the mountain felt by local people, as shown by the fact that homes looking up to Montserrat are always regarded as more valuable. On the other hand, during the first few years after the Natural Park was created there was some resentment because it was felt that the Monastery was absorbing too much of the Park's resources. However, this situation has improved considerably over the last four years as a result of dialogue. One of the main strategies of the Park's managers aimed at improving cooperation with the local town councils is the *Portals de Montserrat* (Gateways to Montserrat) project that aims to create facilities in all four park municipalities so that all can benefit economically from the tourist trade. A good example of this is the climbing museum that is to be inaugurated soon in El Bruc. The attitude of the local town councils toward nature protection is clearly positive and three of the four, in collaboration with a private foundation, have in fact lobbied to extend the Park's boundaries.

Around 75% of the Natural Park either belongs to the monastic community (exceptional in Spain) or the Catalan government. Private property is quite frag-

mented and is mainly found in the low-lying areas that are more vulnerable to pressure from developers.

The relationship between the park managers and the monasteries is complex due to a number of political and historical factors. The current park management plan was drafted by the Catalan Ministry of Culture and a number of people feel that a natural park is not an appropriate designation for Montserrat, since, regardless of its geomorphological and natural significance, its main heritage is spiritual and cultural. Some feel that it would be more appropriate for the mountain to be designated a Spiritual or Cultural Park, or even a Natural Sanctuary, legal figures that do not exist under Catalan law. Many people visiting Montserrat do not even know that it is a natural park.

Currently the Park employs 20 people: a manager, director, biologist, two administrative staff and 15 car-park wardens, but no rangers. A large number of the public services are provided by LARSA, a company –already mentioned– that employs around 300 people under lay management and the stewardship of the Monastery of Santa Maria.

Throughout its history the Benedictine community has always respected the mountain's natural heritage, given that

they see it as a theophany or a manifestation of God. Several places on the holy mountain have biblical names taken from the Holy Land and the Egyptian deserts, birthplace of Christian monasticism. The hermits, who have lived in close contact with nature for so many centuries, have successfully fostered this attitude. Both hermits and monks have consistently referred to Montserrat as a *santa muntanya*, a holy mountain, over the centuries. It is also significant that the motto that the Monastery chose to define Montserrat is 'Nature, Culture, Spirituality'.

One of the main threats to the integrity of Montserrat is urban encroachment around the base of the mountain. There is one urban area inside the boundary of the protected area, which will require special measures if it is to be integrated into the landscape. On the other hand, there is a striking lack of rangers, who are much needed as a means of controlling sporadic damage to some of the hermitages and some of the other most vulnerable elements of the mountain's spiritual, cultural and natural heritage.

Overcrowding occurs occasionally, mainly during festivities, and some days it is impossible to reach the monasteries by car due to traffic jams. From both a natural and a spiritual point of view this is a problem, because many visitors do not

visit the site for spiritual or religious reasons and tend to behave in a way that is not coherent with the sacred nature of the mountain. During festivities public facilities often become overstretched.

Conclusions

The concurrence of elements of such cultural, spiritual and natural significance in Montserrat provides a unique opportunity to try and develop positive synergies from the combination *in situ* of all these values, thereby strengthening the overall heritage of a place that has been recognised over the centuries as a holy mountain. This distinctive blend of spirituality and nature –a sanctuary and two monasteries perched high up a mountainside– is one of the core values of the site and the key to promoting synergy in the park.

Both the processes involved and the outcome of these synergies have the potential to exert a significant positive influence on many other protected areas that possess an outstanding spiritual heritage, whether they be in Catalonia or elsewhere in Europe, where Christianity is a significant force. The integration of all these values will not only broaden public support, but may also encourage a much-needed change

in personal and social attitudes towards nature based on these newly perceived intrinsic values.

Despite the generalised social recognition of the outstanding spiritual values associated with Montserrat, the Decree that created the Natural Park has a number of serious lacunae regarding, for instance, the goals set for the Park's single Natural Reserve, which neglect the fact that the mountain has been the most important site for the retreat of hermits in south-west Europe for over a thousand years. This initial legal weakness has led to a number of other deficiencies in the integration of the

spiritual and cultural heritage into the Park's plans and management programmes, although a willingness to improve all these deficiencies exists on all sides.

The Monastery of Santa Maria should take a leading role in the development and fulfilment of the recommendations that follow, since it is: a) the main spiritual authority on the mountain; b) the main landowner in the Natural Park; c) the owner of most of the public services provided; d) the oldest permanent settler of the mountain; and e) its abbot is the vice-president of the Park's governing body. This task is fully consistent with the fact

Sant Salvador Hermitage, Montserrat.



that the main aim of the Benedictine community is “to ensure that the mountain, the Monastery and the Sanctuary remain places where people can gather and worship”.

The Board of the Natural Park should play a leading role in the conservation of the natural heritage and in coordination with other stakeholders such as town councils, walkers, climbers and tour agencies. Nevertheless, it should be pointed out that its management team is not sufficiently well-staffed to fulfil all its responsibilities in the existing protected area and will be even less so when the Natural Park and its buffer zone are enlarged.

Recommendations

In light of the above analysis and diagnosis, we recommend:

1. An increase in the cooperation between authorities responsible for the protection of the natural heritage and those responsible for the spiritual and cultural heritage should be encouraged in order to be able to draw up as soon as possible a single joint management plan for the whole Natural Park and its Natural Reserve that is acceptable to the key stakeholders. This plan should fully integrate the spiritual and cultural values of the mountain by means of some of the proposals that follow here.

2. Appropriate planning instruments should be used to create zones devoted to silence, prayer and the contemplation of nature that link both monasteries, the pilgrimage trails and the ancient hermitages. One portion of the existing Natural Reserve could be set aside as a Hermitage Reserve and would include the possibility of rehabilitating a certain number of small hermitages as retreats for lay or religious people. One hermitage with its surrounding gardens, water channels, cobbled trails and ladders could be restored and used as an interpretation centre for the age-old tradition in Montserrat of living as hermits.

3. A strategic plan should be drawn up to gradually implement messages regarding the spiritual aspect of the natural world and the respect it deserves. This would be implemented at all levels, from within the facilities of the Natural Park, through to the monastery of Santa Maria and the convent of Sant Benet, the local town councils and all other aspects of the park’s functioning (educational programmes, web pages, the rack-and-pinion railway, tour operators, guides, signposting, and so forth). These messages should be planned in such a way as to help people discover the relationship between nature and spirituality via signs and realities such as the monastery’s bells, the hermitages

and little chapels scattered around the mountain and the peaceful atmosphere that reigns in the park, for three main groups of people: Christians who come for explicit religious reasons, people of other faiths or beliefs who have a general interest in spiritual matters and, lastly, people who feel attracted to Montserrat for a variety of reasons including its aura as a holy mountain and the possibilities for climbing and walking.

4. Use should be made of the opportunity provided by the enlargement of the Natural Park to increase cooperation with the four municipalities in the Park (Collbató, El Bruc, Marganell and Mo-nistrol). One of the goals of this cooperation should be to promote positive synergies between aspects of the mountain's spiritual, cultural and natural heritage in all the messages designed for the general public (at the entrance of the Park, in the interpretation centres, and so forth). These messages should underline the essential concepts of respect, silence and tidiness that the Park wants to promote and their practical significance and implications.

5. A gradual integration of environmental and sustainability criteria into all public and private facilities already existing in Montserrat should be promoted to attempt to reduce dependence on fossil

fuels, to encourage the use of renewable energies, to increase the collection of rain water, and to reduce water consumption, the use of toxic materials and noise and light pollution. As well, ethical and environmental criteria should be included in all future decisions regarding the purchase of equipment and materials and the contracting-out of services. All new facilities that are built must be exemplary in this respect. The ethical and moral implications of these decisions must be explained.

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<http://www.mcrit.com/Montserrat/documents/parrural.pdf>
- Visiting Montserrat:
<http://www.montserratvisita.com>
- Abbey of Montserrat:
www.abadiamontserrat.net

Monastery of Santa Maria de Montserrat





6. Cases Studies

Ukonsaari Island

The Inarijärvi protected area and the Inari Hiking Area. Lapland, Finland

Yrjö Norokorpi and Eija Ojanlatva

Introduction

The Sámi are Europe's northernmost and the Nordic countries' only officially indigenous people, their homeland spanning Norway, Sweden, Finland and Russia. No official figures exist and estimates of population numbers vary from 50,000 to 100,000, depending on how people are classified. The Sámi languages are part of the Finno-Ugric branch of the Uralic language tree; nevertheless, the Sámi are genetically different from other Nordic peoples.

The Inari Sámi people are part of a distinct language group and have lived in the vicinity of Lake Inari for two thousand years. There are currently only around 300 speakers of Inari Sámi, who represent about four percent of the total population of the municipality of Inari. This number increases, however, if all those who have a parent or grandparent whose first language is or was Inari

Sámi are taken into account. Immigrants into the area include Northern and Skolt Sámi, and Finns.

The Inari Sámi eke out a living from fishing, hunting, reindeer herding, gathering plants and berries and, since the eighteenth century, agriculture. In the past, as well as being hunters, they were also well known as magi and shamans, as were many ancient Finns before the beginning of the Christian period. We know too that in their pre-Christian culture religion was closely connected to nature and that their natural surroundings were full of spirits and hidden knowledge. They believed their entire land to be sacred and revered certain places - fells, hills, stones and springs- as holy sites. Many sites still have names that refer back to their ancient sacrificial origins and some such as Ukonsaari in the Inarijärvi protection area, the best known and most appreciated of all, still retain a great degree of cultural and spiritual significance.

Natural heritage

The Inarijärvi protected area is situated in the municipality of Inari, Northern Lapland,

< Island of Ukonsaari, covered with by yellow birches, of amidst an extensive lake complex and green conifer forests.

and covers 900 km² of the total 1,043 km² of Lake Inari; it is the third largest lake in Finland and the sixth largest in Europe and has a maximum depth of 92 m. The Inari Hiking Area (1,215 km²) is larger than the lake and has been designated as a national hiking area, protected under a national Recreational Act. The area is managed by the stated-owned organisation, Metsähallitus Natural Heritage Services (Forest and Park Services).

The rocky bed of Lake Inari lies less than 200 metres a.s.l.. The bedrock of the area is composed primarily of ancient granite gneiss (over 2,500 million years old) and, in the southern part of the area, more recent granulites (1,900 million years old). Lake Inari has large areas of open water and many islands, which together create a varied and distinctive landscape. Other eye-catching features of Lake Inari include its steep moraines that have created rocky shores; nevertheless, around a third of the lake's shoreline consists of gentle grassy or sandy slopes. The landscape is stark and is dominated by one of the few such lakes in the sub-arctic zone. Its clear waters hold a wide variety of fish, including indigenous lake trout and Arctic Char and a wide variety of whitefish.

The following habitat types listed in the EU Habitats Directive are found in the Lake Inari Natura 2000 site: oligotrophic waters

containing very few minerals of sandy plains (*Littorelletalia uniflorae*), transition mires and quaking bogs, siliceous rock with pioneer vegetation (*Sedo-Sclerathion* or *Sedo albi-Vernicion dillenii*), natural or similar old-growth forests with Scots pine, and wooded mires with Scots pine and downy birch.

In the heart of Ukonsehkä and about 11 km east of the village of Inari, a strange-looking rocky island called Ukonsaari (N 68° 55', E 27° 20') or Ukko (Äijih in the Inari Sámi language) protrudes from the open waters of Lake Inari. This island is 100-metres wide, 300-metres long and over 30-metres high, and stands out clearly from the surrounding islands, thus commanding a far-reaching view in every direction. Its steep cliffs, boulders, crevasses and small caves make it a famous natural site and it is known to have been a very important and sacred place of worship for the indigenous Inari Sámi people.

Spiritual and cultural heritage

In the Sámi culture, the pre-Christian religion had close links with nature and the natural world was full of spirits and hidden knowledge. As with other ancient Nordic peoples, the Sámi also worshipped natural forces such as the sun, water, wind and thunder. The god of thunder, Ukko

(Äijih), was the most powerful of all the male Sými deities and his most important sacrificial site was Ukonsaari (Äijih). In Inari Sámi, Äijih means 'old', 'wise man', 'grandfather' or 'thunder'. His counterparts in other mythologies include the Norse Thor, the Germanic Donar, the Celtic Taranis, the Slavic Perun, the Roman Jupiter and the Greek Zeus. At some holy sites, such as Ukonsaari, only men were allowed to enter and women had to dress up as men to go there. Ukko had power over the weather –and, in particular, over thunderstorms– harvests and people's destinies. Powerful shamans and sorcerers were believed to be able to communicate with the God of Thunder and had to placate him through sacrifices.

Ukko's wife was called Akka or Galgu. Kalkuvaara (Galguvárri) hill lies on the northern shore of Lake Inari near the village of Inari and commands a good view of Ukonsaari. Akka was the goddess of fertility and as the Earth Mother represented the female side of nature. Other gods included Piäväž, the sun god, who was worshipped in autumn and at midsummer, and Čäcialmai, the water god, who was revered on midsummer night from the shores of the rapids. Pieggalmal, the wind god, was worshipped at Tuulispää Fell. From atop Tuulispää there is a good view of Ukonsaari, which may have been a sacred site for around 7,000 years since

a rise in the level of the land left the island at its current height above water. The area has been inhabited for around 10,000 years.

A seita (Sieidi) was a particularly exacting and demanding god who was deemed to be so sacred that it could only be approached on all fours. It generally consisted of a stone or boulder that stood out from its surroundings, or an arranged group of standing stones. Seitas were sometimes also made of wood and were divided into fish and deer seitas, worshipped to ensure success when fishing or hunting. There are known to have been at least 17 seitas in the Inari region, although barely half remain, as they were systematically desecrated when Christianity came to Lapland.

The Inari Sámi also recognised a host of different local spirits, who were empowered with caring for things such as reindeer, *kotas*, forest animals and fish. These spirits were generally benevolent, a good example being Joulustaalo (juovlâstáálu), the precursor of the modern-day Father Christmas, who used the animals of the forest as a means of transport. There were, however, also malevolent spirits such as the Staalo sprite (Stáálu), the nightmare-inducing Painajainen (Peinijâž) and the spectral Kummitus (Komme).

Conversion of the Sámi to Christianity in Inari began in the 1550s. There were seven village-based *siidas* in Kemi Lapland, of which Inari was the furthest north and most affluent. The tax register from 1570 for Inari records 17 taxpayers, six of whom already have Christian names. The church began to firmly establish its institutional presence in the Inari *siida* from the beginning of the seventeenth century onwards. The first church building was completed in 1647 in Pielpajärvi winter village, two kilometres from Kalkuvaara hill and about eight kilometres west of Ukonsaari island, and was probably built on a former sacred site.

By 1661, all the Inari Sámi had been baptised. In the face of threats from the priest concerning the fires of Hell and eternal damnation, by 1669 everyone had renounced the old religion. The old symbols of their pagan faith were efficiently rooted out by representatives of the new spiritual authority and many holy sites and shaman drums were destroyed.

Close to Ukonsaari there are two old burial islands, Iso- and Pieni Hautumaasaari, where for centuries bodies were buried away from predators and placed under the protection of Ukko. These practices continued during Christian times until 1904.

In 1873 on a research trip to Ukonsaari, the Englishman Arthur Evans –the same Evans that was to become famous for his research into Knossos on Crete– discovered a cave, at the entrance to which he claimed to have found some antlers arranged in a semi-circle. He carried out a one-day archaeological excavation on the island and, in addition to a number of animal horns and bones, also uncovered a fragment of head jewellery –three hollow beads hanging from a circular trinket– decorated with silver filigree that would have once been a woman's circlet. This type of jewellery would not have been native to Finland or any other Nordic country, but would have come from the region of the Kama and Vychegda rivers in Russia. The trinket dates from 1100 to 1200 A.D (late Iron Age) and today belongs to the Ashmolean Museum in Oxford, although it is currently on a several-year loan to the main exhibition in the Sámi Museum at Siida.

Subsequently, Anja Sarvas (1968) carried out archaeological research at Ukonsaari for three days in 1968 and found a sacrificial cave at the western end of the island. Her excavations uncovered animal bones, antlers and teeth.

For six days in the summer of 2006 archaeological excavations were carried out jointly by archaeology students from

the University of Oulu, the Giellagas Institute, Metsähallitus and the Siida Sámi Museum. Detailed 3D digital maps were obtained of the island and surveys were carried out to assess the significance of Ukonsaari to the Sámi as a holy site.

The archaeological excavations among the rocks and stones at the western end of the island uncovered a number of sacrificial artefacts. These consisted primarily of bones, antlers and teeth from deer or reindeer and goats or sheep. Also found were some kopeks minted by Vasili Shuiski between 1606 and 1610 and a typical fragment of Sámi copper plate.

The bones were radiocarbon-dated to between 1430 and 1630. Older bones decompose too quickly in these acid soils to be dated. These findings suggest that for a period of time the Christian faith and the old traditions and religion co-existed in the area around Lake Inari.

Ukonsaari was still regarded as a sacred site in Inari even at the end of the nineteenth century, despite the local population's two-hundred-year-old acceptance of Christianity. Local legend says that it was common practice among people sailing on the open waters of the lake to throw a coin into the water and to ask

Sacred site of Aji/ Ukonsaari in autumn.



Ukko for a following wind. Many visitors still stand on the highest point of the island and throw a coin down on the rocks below and ask Ukko to grant them a wish.

In summer 2006 a survey was carried out to see what Ukonsaari represented to the local residents of the village of Inari. The locals, both Sámis and Finns, expressed their respect for Ukonsaari as an ancient site of worship. Some of the interviewees said that some local people still revered the site as a sacred place, despite their Christian beliefs. Its historical and cultural significance is still highly appreciated.

Ukonsaari Island was put forward for inclusion in a provisional list of cultural sites for the UNESCO World Heritage Convention by Finland's National Board of Antiquities (NBA) in 1990.

Pressures and impacts

No surveys have ever been carried out among visitors who visit Ukonsaari in order to gaze upon Lake Inari's best-known landmark and the other holy sites of the ancient Sámi.

On the western shore of Ukonsaari the Finnish Maritime Administration has constructed a jetty, where locals and visitors alike can alight from their boats. From

here a set of steps installed by Metsähallitus guides visitors safely and directly to the hilltop and protects the island from erosion. A visitor counter installed on the lower steps of the stairway in early summer 2006 had by early October recorded 7,500 visitors.

In the Inari–Ivalo area just two travel companies organise trips to Ukonsaari. Between June and September the cruise ferry M/S Inari makes daily trips to Ukonsaari, while in winter these companies take some 1,000 tourists per season to the island by motor scooter. Some people also sledge or ski to the island themselves and in all almost 10,000 people visit the island per year.

The main problem at the site is the steady erosion of the island's soils and landscape, as people are allowed complete freedom to move around the upper part of the island. Some people feel that the island loses some of its sacredness by being built upon and walked over.

Conservation perspectives and sustainability

Ukonsaari is managed and cared for by Metsähallitus Natural Heritage Services, who are responsible for the fulfilment of

Finland's nature conservation plans. Along with other official bodies and museums, Finland's National Board of Antiquities (NBA) is responsible for the preservation of antique relics and the country's architectural and cultural heritage (that includes cultural-historically valuable natural sites). The NBA is a cultural and research institution and a conservation authority, and offers citizens, decision-makers, museum administrators, researchers and students a wide range of services.

The Sami Parliament is the highest political body of the Finnish Sámi. It falls under the jurisdiction of the Ministry of Justice, but is not part of the state government. The Parliament is in charge of the Sámi peoples' national and international relationships, protects the Sámi languages and culture, and promotes their status as an indigenous people. The cultural committee of the Sami Parliament prepares proposals, motions and statements on matters concerning the social culture of the Sámi, decides on the use of funds allocated in the state budget for supporting Sámi culture and organisational functions, and monitors the use of cultural grants.

Metsähallitus is currently drawing up a management plan for the Inari hiking

area (including Ukonsaari). Key interest groups, namely Metsähallitus, the Sami Parliament, the Municipality of Inari, the NBA, the Environment Centre of Lapland and local tourist companies, are considering various alternatives for the future of tourism on Ukonsaari. The three proposals are:

1. Tourism continues in its current form, whereby everyone has free access to the island.
2. Everyone has unrestricted access to the island, although movement once on the island is limited to existing walkways. Structures and information boards are improved to ensure that restrictions are adhered to.
3. It is totally forbidden to dock on the island, and the jetty and other structures are removed. The scenery of Ukonsaari can be enjoyed from a boat-cruise around the island.

The Act of Antiquity makes it possible to forbid landing on the island. The Sami Parliament supports a total ban on landing to preserve the sanctity of the island and to protect its natural heritage. The tour companies, on the other hand, would prefer to continue their present activities.

Recommendations

The following is recommended:

A management plan for the Inari hiking area will take into account the three possible options for tourism. Decisions will be taken after a broad-based participation process involving all different interest groups. It is probable that a decision to forbid landing on the island, supported by the Sámi Parliament, will be adopted. Positive synergies between spiritual, cultural and natural heritage in all messages designed for the public are to be promoted in Inari. The Siida Nature Centre will prepare audio-visual presentations of the holy sites of Inari for its visitors and special guided tours will be planned and arranged to Ukonsaari and other sacred sites in Inari by travel entrepreneurs.

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<http://www.siida.fi/anaras/>
- Sámi Museum Siida – New archaeological finds from Ukko Island in Inari
http://www.siida.fi/english/kalenteri/en_ajankohtaista.htm

Ukonsaari, offerings cave.





Doñana National and Natural Parks

Sanctuary de la Virgen del Rocío. Spain.

*Jordi Falgarona Bosch & Jesús García Varela,
with the collaboration of Jaume Estarellas
Fernández.*

Description of the site

Legal framework

In all 141,5871 ha of land in the vast area known as Doñana are protected under two types of categories. The Doñana National Park (IUCN Category II) was created in 1969 and after a number of additions today covers 54,252 ha, while the Doñana Natural Park (IUCN Category V), created in 1989, covers 53,835 ha in four separate zones located in the area surrounding the National Park.

At the heart of the protected area there are a series of natural and scientific reserves (IUCN categories I, II and IV). All of the National Park (since 1982) and the Natural Park (since 2005) is a Ramsar Site and a Wetland of International Importance. Likewise, as part of the Natura 2000 network, these protected areas

were declared Special Protection Areas for Birds (SPA) in 2002 and were included by the Junta de Andalucía (Andalusian Regional Government) in their proposed network of Sites of Community Importance (SCI). Furthermore, in 1980 all of the National Park and part of the Natural Park was designated a Biosphere Reserve by UNESCO.

In 1962 the World Wildlife Fund transferred 6,794 ha of land in Doñana to the Spanish State in order to create the Doñana Biological Station (IUCN Category I), which today is run by the CSIC (Spanish National Research Council).

Body responsible for the protected area

On July 1 2006 the Spanish State handed over total control of the administration of both the National and Natural Parks to the Junta de Andalucía (Andalusian Autonomous Government) as established by sentence 194/04 of the Spanish Constitutional Tribunal. As a result of a previous sentence emitted by the Constitutional

¹ The total surface area of the protected areas varies from one source to another. Here we have taken the figures included in Decree 97/2005 April 11 that established the limits of the Doñana National and Natural Parks.

Tribunal, the running of Doñana since 1995 had been shared by national and regional governments. However, the difficulties involved in managing such a large area with conflicting conservation criteria and different administrative bodies became more and more apparent as time passed. Thus, Law 8/1999 of 27 October² on Doñana was passed in order to unify the management criteria of the whole area and provide an opportunity and a practical tool that would enable all the different bodies operating in the area to work together.

Natural heritage

Natural systems

The vast complex of coastal habitats in Doñana –one of the most important fluvial-coastal systems in Europe –consists of three great ecological systems: the marshes, transformed to a greater or lesser extent, the beaches including the mobile dunes, and the Mediterranean forests and scrubland growing on a more or less permanent sandy substrate.

This juxtaposition of a number of different habitats³ ensures that the main environmental value of the area is its biodiversity. Doñana is home to 875 species of plant, 20 species of freshwater fish, 11 amphibians, 22 reptiles, 37 terrestrial mammals and 360 birds (including 127 regular breeders)⁴.

In terms of the flora, the different ecosystems present in Doñana are closely associated with the main ecologically dynamic environments, the sand dunes and the marshes.

The marshes –the largest wetland in Europe– are one of the most valuable ecosystems in Doñana and, lying so near the Straits of Gibraltar, are in a strategic position to receive many thousands of birds, either as winter visitors or on migration to and from Africa. It has been calculated that up to six million birds pass through Doñana during each migration period. The marshes are also important for their breeding colonies of water birds, which in some cases are the most important in Europe. Some of the most outstanding birds found in Doñana include the Spanish Imperial Eagle

² This law's entry into the statute book was delayed by an appeal by the Spanish State and only ratified by sentence 194/04 of the Constitutional Tribunal mentioned in the text. Decree 97/2005 of April 11 meant that in practice Law 8/1999 could be put into practice in both the National and Natural Parks.

³ Of these habitats, 16 are included in Annex I of the Habitats Directory 92/43/CEE.

⁴ Of these, 16 species of fauna are recognised in Annex II of the Habitats Directory 92/43/CEE.

(*Aquila adalberti*), here in one of its most important Spanish populations, Common Bittern (*Botaurus stellaris*), Glossy Ibis (*Plegadis falcinellus*) and Small Button-quail (*Turnix sylvatica*), a bird on the brink of extinction.

Lastly, Doñana also boasts populations of Egyptian Mongoose (*Herpestes ichneumon*) and the mythical Pardel Lynx (*Lynx pardinus*), endemic to the Iberian Peninsula.

Main activities linked with the natural heritage

In the National Park the main management activities revolve around research and the conservation of habitats and species. On the other hand, in the Natural Park control of the exploitation of the area's natural resources and public access are as much priorities as are the management activities carried out in the National Park.

The most important conservation projects include the restoration of natural habitats, a management plan for water supply, the control of pest and introduced species, and conservation plans for the Pardel Lynx and Spanish Imperial Eagle. Research projects are coordinated and promoted by the Doñana

Biological Station.

Agriculture is a highly important factor in the Doñana area and the most important crops, both in terms of surface area and economic viability, are rice, a traditional crop that has a complex relationship with the birds of the marshes, the ever-expanding cultivation of strawberries and irrigated fruit trees. Of less importance is stock-raising, although this activity still has a significant role to play in the maintenance of biodiversity in *dehesas* (wood pastures) and other pastoral environments. The commonest forms of stock-raising are semi-extensive or extensive concerns dedicated to raising autochthonous races of cattle, fighting bulls and *retinto* cattle.

Hunting is permitted within the Natural Park and the main targets are water birds and, to a lesser extent, Red Deer, Wild Boar, Rabbits and Red-legged Partridges. Freshwater fishermen largely fish for eels and prawns.

As well, within the Natural Park sector 2 there are two commercial fish farms.

Today, there is also a clear tendency to promote rural and activity tourism as alternatives to the typical beach tourism; within Natural Park there are

over 100 companies working in this sector.

Opinions of the local population and visitors regarding the area's natural heritage

Visitors to Doñana are in favour of preserving the area's natural values, although, aside from specialist visitors such as birdwatchers, most are ignorant of the exact nature and number of habitats and species that make Doñana so special. In some cases, visitors are disappointed by their visits because their experiences in the protected areas do not correspond to their

expectations, in the sense that most do not ever see the most talked-about species such as the Pardel Lynx or Spanish Imperial Eagle. In general, these visitors are in favour of preserving “everything”, but are mostly unaware of the socio-economic and cultural repercussions that this would have on the local population and the underlying reality behind the conflicts that often arise between local people and conservationists.

The local population is generally reasonably aware of the uniqueness of the natural values of Doñana and they feel

Map showing the trails used during the pilgrimages in relation to protected areas of in Doñana.



that it is part of their lives, although they are perhaps rather less aware of the fragility of the familiar natural elements that are part of their surroundings. In part, this can be explained by the relative invisibility of the processes involved in the progressive deterioration of the aquifers and the fall in numbers of some species.

The growth of more intensive forms of economic development such as irrigated agriculture and tourism has created a great deal of employment and boosted local incomes, factors which local people associate with a rise in living standards. This has led to attitudes that question conservation strategies wherever the protection of the natural heritage is seen to be incompatible with economic activities or implies a need for the regulation of certain types of economic exploitation.

The emphasis placed by the parks' managers on the protection of certain key species such as the Pardel Lynx has inevitably led to a situation in which the local population target these species in their protests against management policies. The restrictive regulations that the protection of these species requires and a lack of participative tradition has fomented within the local population a negative view of

these animals and a general lack of interest in the overall protection of the natural values of the area.

Cultural and spiritual values

Introduction

Within Doñana and the surrounding area 88 different sites of archaeological interest have been identified, ranging from recent pre-history to modern times and including sites possessing interesting Roman remains. Within the Monuments and Elements of Cultural Interest it is worth highlighting the sites of historical interest in Moguer and Palos de la Frontera (connections with Columbus) and Villa de Rociana.

The traditional uses made by local people of Doñana's natural resources, which have always co-existed in harmony with the area's ecological dynamics, are an intangible value that have helped mould the area's landscapes. In this case, the main such activities are agriculture, traditional forms of stock-raising, and the exploitation of the forests for wood charcoal, cork, wood and honey. In some cases these activities have generated a number of ethnologically relevant buildings and a network of drovers' roads that is still used for cattle and pilgrimages alike.

Relationship between spiritual values and specific social groups

The social groups linked with El Rocío include lay bodies such as Almonte Town Council and the 100-plus brotherhoods (*hermandades*) that have always been independent of the official church.

Many brotherhoods have undergone a series of changes over the years as they have evolved and as their spiritual values have grown. Initially, the popular fervour devoted to La Paloma Blanca (the White Dove) was a local ritual practiced by the people of the marshes who depended on the natural resources of the area for their livelihoods. Eventually, this local popular cult extended to other social groups ever further afield, and from the 1980s onwards the celebration of the cult of El Rocío became ever more festive and part of the social calendar of the Andalusian upper bourgeoisie and miscellaneous minor celebrities. A certain sense of unease exists within the genuine brotherhoods at this trivialisation of the celebration of the pilgrimage to El Rocío, although most believe it to be a question of isolated cases that are overstated by the media.

Bodies in charge of the cultural and spiritual heritage

The ultimate responsibility for the cultural, monumental and traditional values of Doñana falls upon the Consejería de Cultura de la Junta de Andalucía (Department of Culture of the Andalusian Autonomous Government). More indirectly, all cultural manifestations that are related in some way to natural elements also come under the control of the Andalusian Department of the Environment, above all those that involve questions of public access.

In the case of spiritual events, the responsibility for the organisation and coordination of the multiple activities and pilgrimages to the Sanctuary at El Rocío falls on the shoulders of La Hermandad Matriz from Almonte, who also own the Sanctuary. The other brotherhoods take responsibility for their members and for events on a more local scale, for example when pilgrims pass along their particular paths.

The main civil responsibility for the management of the natural and cultural heritage and for the needs of the tens of thousands of pilgrims who flock to El Rocío every year lies with Almonte Town Council, which, moreover, owns the land the Sanctuary stands upon. However,

given the complexity and diversity of the events that are organised at El Rocío, many different bodies have a role to play. The Sanctuary itself has been catalogued as a Picturesque Monument, and as such falls under the control of the Department of Culture, whereas the use of the drovers' roads by pilgrims is the responsibility of the Department of the Environment as managers of the protected area.

Main activities related to the cultural values

Aside from visits by tourists to sites and buildings of cultural interest, the main culturally significant activities are all connected with extensive stock-raising, the holding of traditional local festivities such as the 'Saca de las Yeguas', when the semi-wild horses of the marshes are herded into Almonte, and the breeding of local races of cattle. Other traditional activities include local ways of harvesting cork and pine kernels, and bee-keeping.

The activities connected with the cult of the Virgin del Rocío are those that most affect the protected areas of Doñana and take place throughout the year: the Pentecostal Pilgrimage, the best known and most popular and thus the most problematical; the 'Rocío Chico', a

smaller and more local pilgrimage that takes place in August; pilgrimages by various smaller brotherhoods (up to four at a time), that include the floral tribute that all brotherhoods must offer each year to the Virgin; the traditional individual pilgrimages that require motorised back-up and are therefore strictly controlled; and La Fiesta de la Luz (Festival of Light) at Candlemas in February, which involves all the local brotherhoods and is organised by the Hermandad Matriz.

Every seven years during the Rocío Chico, local people celebrate La Venida, in which the image of the Virgin is carried in procession from La Aldea to Almonte, where it is kept until the following spring (Pentacost). This festivity is, above all, more local in scale and local people follow the procession from dawn to dusk without horse and carts or dancing.

The pilgrimages to El Rocío take place principally along four different routes (caminos rocieros), three of which seriously affect the protected areas (Moguer, San Lucar and La Raya Real; the fourth route, Los Llanos, comes from Almonte and does not affect the protected area). A fifth route from Hinojos is much less used and only affects the National Park very indirectly.

Attitude of the local population and visitors to the spiritual values

Generally, all the visitors that come to Doñana looking to enjoy the area's natural and cultural values visit the Sanctuary and village of El Rocío, although interestingly, the visitors that come specifically to visit the Sanctuary rarely show any interest in other aspects of Doñana, natural or cultural.

The various activities linked to the veneration of the Virgin del Rocío are generating increasing interest in Doñana as a site of religious pilgrim-

age and festivities, both inside and outside Spain. The local population responds by participating in all the activities that are related to these events.

The local population has always professed an intense devotion to the Virgin del Rocío and participates keenly in all the various religious acts that are related to the Virgin and the Sanctuary. These activities take place throughout the year and thus it is fair to say that for part of the local population life revolves around the Virgin and the Sanctuary.

Mass in the middle of the dunes during the pilgrimage.



Pressures and impacts

The growth of the most important human activities in Doñana

Doñana has enjoyed constant economic growth over recent decades based on the appearance of new forms of intensive agriculture that today complement older, more traditional forms of agriculture such as viticulture, and commercial and industrial expansion centred around the chemical industry in Huelva (established at the end of the 1970s). Today, the economic sectors that employ most people in and around Doñana are the ever-expanding agricultural and tertiary sectors.

Main economic activities that affect the area

Local tourism is based essentially on urban development along Doñana's coastline, above all around the town of Matalascañas and, to a lesser extent, Mazagón. Despite lying outside the protected area, both towns still exert a considerable influence on the Doñana parks.

Intensive agriculture includes strawberry, rice, fruit and olive cultivation, as well as smaller extensions of industrial crops such as cotton, beet and sunflowers.

Two fish farms operate within the parks, of which one has installations covering around 3,000 ha that are used for the breeding of gilthead and sea bass.

Stock-raising (mainly local races of cows, fighting bulls and *retinto* cattle) is important as a means of preserving emotional links with the traditional landscape of the marshes, rather than as an activity possessing great economic relevance.

There is no industrial activity within the protected areas, although in recent years there has been a move in the region towards the development of industrial estates alongside major roads outside population nuclei. However, in some cases these industrial installations have had a negative impact on the parks and have polluted the protected areas via the simple dispersion of effluent in water channels running into Doñana.

Effects of current economic activities on the environment

Although no industrial activity takes place within the protected areas, the impact of this sector on the parks is potentially great. The massive spill of highly toxic water and mud when the Aznalcollar dam broke –the greatest ecological disaster in the history of Doñana– left large areas of water and soils in Doñana serious con-

taminated by effluent with dangerously high concentrations of heavy metals.

Without citing any particular activity, economic growth in the region and associated population growth in general have also had a serious impact on the protected areas. Direct impacts include toxic waste spills and the overexploitation of aquifers, while more indirect effects include the need to improve transport and energy networks and the demand for better sanitary infrastructures. This in turn leads to an increase in traffic and thus more animals killed on roads (one of the great problems in the conservation of the Pardel Lynx) and a greater fragmentation of habitats.

The industrial growth of the port of Seville and associated projects such as the dredging of the river Guadalquivir to improve navigation may have a serious impact on the hydrological regime of the parks.

The most serious impact of intensive agriculture and tourism on the natural habitats of the parks is the alteration and over-exploitation of the aquifers that supply Doñana with water. This leads to a decrease in water quality and the draining of parts of the marshes using material dredged from the marshes' channels and canals.

The increased urbanisation of the coast as part of a trend towards intensive tourism, as well as all the activities such as the construction of golf courses and other infrastructures that this implies, occurs outside the limits of the parks, but is still, nevertheless, a threat to the protected areas. Increased erosion, the silting up of the marshes, the alteration and fragmentation of habitats, the incomplete treatment of sewage and the over-exploitation of the aquifer all put Doñana at risk.

Intensive agriculture influences the environment most in its use of groundwater for irrigation. This leads to a drop in water levels in the aquifers and a subsequent reduction in the amount of water available to the parks' wetlands. As well, the parks' waters have become increasingly eutrophic and contaminated through overuse. Furthermore, the landscape is losing some of its heterogeneity, the number of habitats and species present is falling and erosion has increased, leading to the silting up of the marshes. In a general sense, the whole of Doñana has become more fragmented and the biological connectivity between ecosystems has suffered.

Effects of current activities on spiritual and cultural aspects

The progressive tendency over recent decades to replace traditional agricultural techniques with intensive farming methods has led to a loss in the cultural values associated with these ancestral methods of subsistence. Structures of great ethnological and cultural interest associated with traditional agricultural methods are being lost as they fall into disuse.

As well, the traditional pilgrimage routes used by pilgrims on foot and on horseback are being obstructed by new roads and a proliferation of industrial estates and the greenhouses used in intensive cultivation. Although physical barriers are probably the most serious impact, the aesthetic and moral effects of such changes should not be underestimated.

Conflicts between the conservation of the natural heritage and the protection of spiritual and cultural values

Any study of the conflicts between the natural and cultural heritage must take into account from the start the fact that a great distance and lack of understanding separates the managers of the protected areas from the local population, in which the brotherhoods are the most vocal presence. For example, the importance of the

conflict over where pilgrims may pass, discussed in more detail below, has been exaggerated, since much of the often very vague and unspecified bad feeling that exists between the different bodies that control activities in the protected areas is concentrated on this one thorny question.

The parks are still seen as an imposition from outside, as 'neocolonial' structures, and often bodies such as the Fundación Doñana 21, the creator of the Second Sustainable Development Plan for the area, that have no direct links to the parks, are lumped with them in one and the same sack.

In any case, a certain amount of bad feeling –above all in the brotherhoods and local authorities- does exist regarding some of the deficiencies in the participative processes that have been established. The park managers are rather less dissatisfied and are generally pleased with the progress achieved, although they feel that there is still a need to find ways to improve relationships between all the parts involved in local conflicts.

The natural spaces are negatively affected by the worship of La Virgen del Rocío, above all by the arrival of tens of thousands of people during the Pentacostal pilgrimage to El Rocío. These impacts (disturbance of fauna, contamination, risk of fires, accumulation

of rubbish, etc.) are worsening due to an increase in the number of participants and their individual behaviour: there is a general lack of civic responsibility and, more specifically, a lack of respect towards the environment (dropping of rubbish, indiscriminate and mass use of often over-sized vehicles) and in many cases practices occur that clearly have very little to do with the objectives of the pilgrimage. To minimise the effects of the pilgrimages, the environmental authorities have established a series of norms that, even when not differing from proposals acceptable to

the brotherhoods, are seen as an imposition. Furthermore, these regulations aside, it is felt that the Almonteños (pilgrims from Almonte) are being prevented from exercising their ancestral rights of passage by 'foreigners', that is, by conservationists, park administrators and scientists.

The pilgrimage routes are affected negatively by the regulations of use established by the administration in their areas of competence. For example, some drovers' roads used by pilgrims are classified as of 'restricted use', that is, the law says specifically that "... motorised transit is

Pilgrims on horseback on their way to the shrine at El Rocío.



only allowed for management and research purposes and must be authorised by the National Park”.

Land-use and management plans. Regulations and norms

The planning tools that are currently in force in the Doñana are threefold: Management Plan for the Doñana National Park⁵, Natural Resource Plan for Doñana Natural Park⁶ and Management Plan for the Doñana Natural Park.

The 11 municipalities within the protected area all have their corresponding urban plans, which only allow for expansion within and around pre-existing settlements and not into any protected area.

In the immediate hinterland of the protected areas, the Territorial Plan for the Doñana Hinterland (December 2003) establishes elements of territorial cohesion within the area of influence of the protected areas, as well as criteria of land-use that will guarantee the preservation of natural resources and the sustainable development of the nearby municipalities.

The Fundación Doñana XXI is promoting a second Sustainable Development Plan for

the region. The first was passed in 1993 and its activities have substantially changed the situation of Doñana’s hinterland.

Two other plans exist –Plan Romero and Plan Aldea– that have been designed essentially as methods of civil protection and organisation for the Pentecostal pilgrimage and are only applicable in the area of El Rocío.

Conservation perspectives and sustainability

Tendencies in the conservation of the natural heritage

The threats to the region’s biodiversity and, in particular, to rarer species and communities in wetland habitats of great ecological importance are generally associated with alterations in hydrological regimes or linked to wetlands affected by a fall in groundwater levels.

The various types of legislation that protect Doñana contemplate a series of mechanisms for the conservation of the area’s natural heritage. Nevertheless, outside the protected area a series of proj-

⁵ Contained in Decree 48/2004, February 10.

⁶ Passed in Decree 2/1997, January 2.

ects that will seriously threaten the wildlife of Doñana are being put into practice and the various competent bodies involved in the planning and management of the Doñana's protected areas are powerless to intervene. This is the case of the development of intensive agriculture, which has drastically reduced the amount of water in the rivers entering Doñana from the north, the tourist development along the coasts bordering the parks, the industrial development in places such as the Polo de Huelva, and the expansion of the Port of Seville.

All this makes it even more necessary for all the municipal and supra-municipal bodies in charge of planning within the socio-economic area of influence and hinterland of the protected areas to establish ways and means of working together. A good example of this coordination is the creation of El Corredor Verde del Guadiamar (Guadiamar Green Corridor) and the projects for building canals in the area to the north of the parks.

In the agricultural sector, there is growing interest amongst farmers and local authorities in promoting more respectful farming methods with a greater degree of social responsibility (i.e., the creation of a Doñana label of quality).

In the tourist sector work is being done within the framework of the Territorial Plan

for the Doñana Hinterland to redirect tourist/leisure activities away from residence-based tourism and towards formulas that are more closely linked to the appreciation of natural, landscape and cultural values.

Tendencies in the conservation of the cultural and spiritual heritage

The replacement of traditional agricultural methods by more intensive techniques is considered to be prejudicial for the conservation of the cultural and spiritual heritage of the area. A number of attempts have been made in planning mechanisms to maintain and promote traditional agricultural and other activities and their associated cultural values. However, their lack of economic viability, the loss of traditional knowledge and the disintegration of former ways of life tied to types of agricultural exploitation, as well as the poor image that these ways of life retain, have inevitably negatively affected the development and continuity of such practices.

Nevertheless, the participation and external projection of the spiritual values that revolve around the Sanctuary of El Rocío are progressively increasing and their continuity seems assured. Even so, voices have been raised that

query the growing massification of the main pilgrimages and their banalisation by the mass media. Some wonder aloud whether this increase in the number of pilgrims may be intrinsically unsustainable, that is, that it may lead to a loss in the symbols of identity and objectives of the spiritual events and religious fervour at the Sanctuary. Some brotherhoods believe that the current situation is affecting their activities negatively and are looking to try to revive more spiritual pilgrimages to El Rocío.

Potential contribution of spiritual values to the conservation of the environment

The main contribution of spiritual values to the conservation of the environment will have to come via an extension of the concept of the Sanctuary to embrace the whole of the marshes and their inherent sanctity. This could generate new conservationist concepts within the brotherhoods based on concepts related to the conservation of the whole environment⁷.

The responsibility and participation of the local brotherhoods, beginning with the Hermandad Matriz, is essential, not only for the organisation of events and pilgrim-

ages, but also for the maintenance and control of measures aimed at minimising the impact of the faithful on the environment and for establishing new ways of controlling the growing number of participants. Thus, appropriate communication channels must be established between the park administrators and managers and the brotherhoods.

In this way, local people will be involved in control mechanisms and will themselves promote and enforce the rules regarding the use of drovers' roads established by environmental legislation. The need to control non-official and individual pilgrimages within the parks must also take place within this framework of cooperation.

The Common Manifesto for El Rocío and Doñana agreed upon in 27 April 2003 is a good starting point (although somewhat limited in its time scale) for an integrated vision shared by all the parties implicated in the age-old nexus of conservation vs. pilgrimage, and one which offers a solid base for new ideas. It also provides a good example of self-regulation by the brotherhoods that could be extended to the whole idea of the pilgrimage and its very conception.

⁷ A good example of this is the poster printed in 2006 entitled "Doñana is your Road. Look after it".

Potential ways of conserving the spiritual values of the site

The aforementioned fact that participation in the spiritual concept of El Sanctuary del Rocío and the processions is on the increase may lead to a situation of massification that could negatively affect the spiritual values emanating from the Virgin.

To safeguard these cultural values, all the implicated parties (beginning with the brotherhoods) must carry out a reflection if the character of the smaller pilgrimages is to be preserved and change some

aspects of the Pentecostal pilgrimage if necessary. The well-known social and economic problems that provoke conflicts between pilgrims and conservation must be tackled and not swept under the carpet.

It is important that in light of the progressive massification of the pilgrimages that all actions that deflect from the principal objective of the pilgrimage be discouraged, and that the manifestations of fervour be encouraged and intensified within the framework of the traditional, well-established group of rituals.

Traditional ornamentation: Sin pecado cart bearing a banner of the Virgin.



Potential synergies between the conservation of the natural heritage and the protection of spiritual and cultural values. Proponents of each position and proponents of a more integrated position.

The single element that binds together the natural, spiritual and cultural values of Doñana is undoubtedly the marshes, the origin of all of these three types of values. La Virgen del Rocío 'appeared' from the very marshes, in the same way that the main natural elements are directly or indirectly linked to the presence of the river and the sea, that is, to the marshes.

Any conservation strategy for the marshes that takes into account both shades of opinion, that is, the natural and 'spiritual' aspects of the marshes, will need a much more integrated vision, strengthened by positive synergy, that avoids a simple model of conservation reflecting only one or other of these two types of values.

The conflicts between these values and their development is not due to any intrinsic incompatibility; on the contrary, both views are compatible and complementary, and conflicts have arisen mainly as a result of the difficulties involved in adapting to the changes occurring in Doñana's natural, cultural and spiritual heritage that have taken place from the second half of the twentieth century onwards. The nec-

essary synergies will arise as the parties concerned begin to understand the importance of the complementary nature of the two visions of Doñana and develop the will to control, limit and suppress the elements that cause distortion to both viewpoints.

Society in general and Andalusian society in particular (including the pilgrims) is aware of the problems concerning environmental sustainability and nature conservation. Likewise, within this same society those people who are most aware of environmental problems understand the need to maintain the values of El Rocío, be they simply cultural or spiritual as well.

Thus, we need to reflect and promote a new vision of the marshes that combine the Sanctuary and its Virgin with the surrounding fragile natural systems of great ecological importance. No pilgrim can be happy seeing the rubbish, fire and erosion left behind after the mass pilgrimages, and no environmentalist should support conservation policies that are not understood or shared by a large part of the local population and the vast majority of the visitors to Doñana. The brotherhoods must try to incorporate and transmit messages of sustainability into their activities, while the managers of the protected areas should try to promote greater respect for

the pilgrimages and their inherent links with the marshes.

Potential contribution of the conservation of the natural and cultural/spiritual values to a balanced socio-economic development of the area

The presence and conservation of the various natural and cultural/spiritual values of the Doñana can act as a singular eco-cultural product with a great economic potential for developing sustainable tourism in the area. The presence of El Rocío, the Virgin, the Sanctuary and other traditional cultural elements integrated harmoniously into the marshes provide an economically viable alternative to other unsustainable economic sectors.

The participation of the local population and, above all, the brotherhoods in the planning, regulation and control of activities within the protected areas would help to reinforce the parks' role in the social fabric of the region.

The spiritual dimension of El Rocío could contribute to a new concept of the marshes as a sacred place, directly linked to the presence of the Virgin del Rocío, and could thus become one of the main pillars in promoting environmental and social sustainability in the area, thereby avoiding the loss of the spiritual nature of the

'Queen of the Marshes'. The sustainability of the natural values of Doñana and the intrinsic sustainability of the area's spiritual values must become the principal way of preserving El Rocío and its surroundings as a place of spiritual importance.

If this new integrated vision is appreciated or, at least, respected by all, then the combination of the concepts of 'natural marshes' and 'spiritual marshes' will help strengthen local attempts at cohesion and favour the integration of outside elements in both natural and spiritual contexts.

Recommendations

The basic reflection to be made here is that to overcome the specific difficulties inherent in the relationship Doñana-El Rocío we must stop thinking of these problems as purely contingent, and understand them as part of a permanent dynamic and deal with them as such.

We must move on from essentially organisational and logistical work based on agreements reached at a lowest common denominator to permanent policies of awareness based on mutual respect and cooperation of all the implicated parties throughout the whole of the year. It is thus essential to promote

channels through which local communities can express their ideas and interests in the most direct fashion possible.

Thus, the following recommendations are fundamentally the description of the workings of a tool –a permanent cooperation body– that will oversee the work of all the implicated parties. This proposal suggests extending the concept of the Sanctuary to the whole of the marshes, as much to the ‘natural marshes’ as the ‘spiritual marshes’. The Sanctuary must be seen by all as the home of the Virgin and as a highly fragile and singular natural ecological system.

1. The creation of a permanent cooperation body whose members will include all the key organisms and bodies that are essential for the correct management of the heritage of Doñana and El Rocío, understood as the combination of all its natural, cultural and spiritual heritages.

a. This body must have the following characteristics:

i. The Almonte Town Council must be the instigator and guiding light behind this body and must ensure that all the many different bodies, organisations and administrations responsible for the many diverse realities of Doñana-El Rocío be part of that body.

ii. Each member must remain independent and retain control of its own particular sphere of responsibility.

iii. Each member must agree to discuss its strategies and activities with the other members involved in decision-making in these same areas (for example, nature conservation, devotion to the Virgin del Rocío and its social implications, study and diffusion of the area’s general heritage, and so forth).

iv. This permanent cooperation body will establish a Board of Arbitration whose role will be to arbitrate in case of disputes between members.

b. Proposals for specific and immediate action by the permanent cooperation body that encompass the field of work of all its members, public and private, and the institutions and services they represent:

i. Drawing up of a strategic plan in order to promote within all the parks’ infrastructures, the local town councils and all public and private bodies working in the area an understanding of the spiritual dimension of the natural world and its relevance to the cult of La Virgin del Rocío.

ii. Promotion of the gradual incorporation of criteria of environmental awareness and sustainability in all institutions and services, public and private, and in all types of activity (reduction of consumption of fossil fuels, promotion of renewable energy sources, reduction in visual and acoustic contamination, encouragement of ethical and environmental practices in purchases and professional contacts, and so forth.)

iii. Establishment of effective means for disseminating the moral and ethical implications of such practices and their implications for the worship of La Virgen del Rocío.

2. The Museum of Religious History in Almonte must aim to act as a central body for promoting documentation, training and awareness, tasks that are currently carried out by various bodies belonging to a number of different institutions and administrations. This museum must become a reference point and use its position to promote coherence and reciprocity in the strategies and activities of the various bodies that study the different aspects of the heritage (natural, cultural and spiritual) of Doñana-El Rocío:

Sanctuary of the Virgen del Rocío, on the shore of the extensive marshlands.



a. The Museum must be linked to the University of Huelva and, more specifically, to its Department of Anthropology as part of a continuum of cultural and spiritual values.

b. The Museum must establish a Resource Centre with the following functions:

i. Coordination of all studies on the natural, cultural and spiritual values of Doñana-El Rocío and attempts to raise public awareness.

ii. Promotion of cooperation between the various public bodies involved in research, education and public access in the area (Centro de Estudios Rocieros, Doñana Biological Station, infrastructures belonging to the protected areas).

c. The Museum must act as documentation centre focussed on the creation of a general and complete catalogue of all the resources to be found in the infrastructures mentioned above.

i. The cooperation of the Centro de Estudios Rocieros is vital and so this centre must be provided with funds to allow it to classify and incorporate into a consultable database all the material it has available.

ii. All the documentation that exists

in other centres that depend on the protected areas or the Biological Station will be incorporated into the catalogue via the appropriate mechanisms.

d. The Museum must act as a provider of teaching resources and information for members of the permanent cooperation body to be able to improve the services they provide.

3. The various brotherhoods and, above all, the Hermandad Matriz must assume as part of their work the conservation of the natural environment. They must integrate into their activities the task of increasing the awareness amongst their affiliates of the need to protect Doñana's natural heritage. It is essential that the worship of the Virgin del Rocío be impregnated with a respect for the natural world. As such, the following activities will be of use:

a. Promotion of the recognition of El Rocío and, above all, the Pentecostal pilgrimage as important acts of religious worship and discourage practices that are contrary to this conception.

b. Assume and promote the concept of the Sanctuary as part of the Doñana marshland, thereby emphasising the sanctity of the area.

c. Include nature conservation amongst its social activities, above all in the case of young members.

4. The protected areas in Doñana, that is, the National and Natural Parks, must recognise the intrinsic value of the cult of La Virgen del Rocío, along with all associated spiritual manifestations and links to and interdependence with recognised inherent values of nature protection. As such, the following activities will be of use:

a. Assume as an aim in its strategic and operative plans the need to take into account both sets of values and the public uses they imply.

b. Assume a new vision of the marshes with the Sanctuary and its devotees as part of a singularly fragile ecological system.

c. Some of the organisational questions include:

i. Establishment of a single management team for both parks that will permit more standardised conservation strategies in the two types of protected area. This greater homogeneity will permit more coherent policies to be applied and facilitate their understanding by the local population.

ii. Establishment within a unified management team of a section specifically dedicated to El Rocío.

5. The Bishopric of Huelva, as the ultimate ecclesiastical authority over Doñana, must also take responsibility for increasing awareness of the need to respect and conserve the natural heritage of the area. It should be encouraged to publish a pastoral letter on the importance of nature conservation, which would reach further and give greater spiritual backing to all efforts to promote the integration of natural and spiritual values.

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This case study used the bibliography detailed below and was also based on 12 interviews carried out in March 2006 with representatives from some of the many bodies working in Doñana and El Rocío.

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Procession of pilgrims entering the sanctuary of El Rocío.





Great Smoky Mountains(Shagonage) and Qualla Boundary

Tennessee and North Carolina, Southern Appalachian Mountains, United States of America

Edwin Bernbaum

Natural values

Great Smoky Mountains National Park covers 210,876 hectares of mountainous terrain divided between the states of Tennessee and North Carolina in the southeast United States of America. The Park lies adjacent to another 23,000 hectares of mountains and valleys forming the Qualla Boundary or sacred ancestral lands of the Eastern Band of Cherokee Nation in North Carolina. The Park itself ranges in altitude from 256 to 2023 meters above sea level, providing a wide range of the climates and habitats to be found from Georgia in the south to the Canadian border with Maine in the north.

As a National Park, Great Smoky Mountains is an IUCN Management Category II site. It was designated an International Biosphere Reserve in 1976 and inscribed as a World Heritage Site in 1983, under criteria N (1), (ii), (iii) and (iv)

for its natural values. Within its relatively small area lies some of the greatest biodiversity to be found anywhere in the world. The US National Park Service under the Department of the Interior is in charge of the Park. Great Smoky Mountains National Park operated with a budget of \$16.9 million and approximately 250 permanent and 100 seasonal staff in 2006. The adjacent Qualla Boundary is owned and governed by the Eastern Band and held in trust for them by the Federal Government.

Great Smoky Mountains National Park lies near the southern end of the Appalachians, one of the oldest mountain ranges in the world. Uplifted 200-300 million years ago by the collision of tectonic plates, this range of metamorphic and sedimentary rocks represents the weathered remnant of mountains that were once as high as the Himalayas. Great Smoky Mountains National Park includes 16 summits that rise above 1828 meters. The highest mountain in the Park, Clingman's Dome, 2023 meters, is sacred to the Cherokee, who call it Kuwahi.

< The top of the Smoky Mountains in the morning mist.

The glaciers of the last ice age stopped just north of the Great Smoky Mountains. The northeast to southwest orientation of the range allowed flora and fauna to migrate along its slopes, providing a wide range of microclimates for many diverse plants and animals. A geologic history of relative freedom from ocean inundation and glaciation for more than a million years has led to an even greater diversification of species in the Park. Some of the peaks and ridges have meadows called 'balds', although for the most part the mountains are forested to their summits.

A wet climate with average rainfall of 1400 mm in the valleys and 2160 mm on the higher peaks has further contributed to the biodiversity found in Great Smoky Mountains National Park – more than in any other area of comparable size in a temperate climate. Scientists have documented over 14,000 species of flora and fauna and estimate that an additional 90,000 still remain to be found. Nearly 95% of the Park is forested with 25% still preserved as old-growth forest, including some of the largest blocks of temperate deciduous old-growth trees left in North America.

Five forest types predominate in the Great Smoky Mountains along with nine others, containing more than 130 native tree species – more than in any other national

park in North America. Spruce and fir forests grow in the highest areas, above 1400 m. In the next zone down, northern hardwood forests, distinguished by sugar maple and American beech, occur between 1000 and 1500 m. Pine-oak forests have covered drier ridges in and around the Park. Hemlock forests are found along stream banks. Finally, cove hardwood forests cover valley floors and comprise the most diverse ecosystems. Scientists have identified in these various types of forest more than 1,400 flowering and over 4,000 non-flowering plant species.

The Park's fauna exhibits comparable biodiversity. Researchers have identified at least 66 native species of mammals, of which only two, black bear and white-tailed deer, are large. Medium-size mammal species include red fox, grey fox, raccoon, opossum, woodchuck, and bobcat. There are in addition many smaller mammals such as squirrels, rabbits, and bats. More than 240 species of birds have been observed in the Great Smoky Mountains National Park. At least 60 of these live in the Park all-year around, while an estimated 120 breed there, including 52 neo-tropical species. Many other birds forage or migrate through the area. Bird species commonly found in the Park include, chimney swifts, eastern phoebes, barn swallows, and warblers. The Park

contains at least 43 species of salamanders, frogs, and toads and 39 species of lizards, turtles, and snakes. The abundant streams and rivers also provide habitat for about 50 native fish species, including eastern brook trout.

The main activity related to natural heritage in Great Smoky Mountains is tourism. Of the 58 major National Parks in the NPS, Great Smoky Mountains National Park receives by far the greatest number of visitors, around nine million per year. The second most heavily visited park, Grand Canyon, gets only 4.4 millions visits a year. Great Smoky Mountains lies within a two-day drive for over half the population of the United States. The enormous gateway community on the Tennessee side is filled with resorts, amusement rides, and country music, while a Cherokee gambling casino on the North Carolina side also draws many visitors to the Park. Together with these outside tourist attractions, the Park generates more than a billion dollars per year for local communities.

Although most visitors simply drive the main road crossing the Park, a number make use of the extensive hiking trails and campgrounds. More than 400,000 people each year hike more than 800 miles of trails, including 70 miles of the Appalachian Trail. Backcountry campsites

host about 77,000 overnight campers, while developed campgrounds receive 350,000 visits a year. With two million visitors a year, the main visitor center at Sugarlands provides an opportunity to disseminate messages about natural, cultural, and spiritual values to those who only drive through the Park.

Great Smoky Mountains is a major center of research and education on the natural environment. The All Taxa Biodiversity Inventory has engaged scientists in a project aimed at determining all of the estimated 100,000 species in the Park. The Appalachian Highlands Science and Learning Center works to promote scientific research at Great Smoky Mountains and involve the general public. Teachers and students come to take courses and participate in projects with scientists and Park staff. The Park is also engaged in programs to re-introduce native elk and red wolves.

A large number of people who come for gambling at Cherokee or the attractions of the gateway communities of Gatlinburg and Pigeon Forge in Tennessee have, at best, a peripheral interest in the Park. The smaller number who come for outdoor recreation place a higher value on the environment and have a greater concern for protecting the natural heritage. Among the local population, the original residents,

the Cherokees in the adjoining Qualla Boundary, generally have a deeply vested interest in preserving the natural state mountains they revere as their ancestral homeland and see getting outdoors and walking as a way to combat their number one health threat – diabetes. They feel that they have a right to gather medicinal herbs and wild foods for traditional purposes and this sometimes brings them into conflict with Park regulations. Many non-Cherokee local residents owned or are descended from people who owned land in Great Smoky Mountains and who were forced to sell to the government to create the Park. Many who were upset at the time have come to realize that if they had kept their properties, unrestrained development would have ruined what they now value in the scenic and natural features of the environment.

Spiritual and cultural values

Great Smoky Mountains National Park has particular spiritual and cultural significance for two local groups – the Eastern Band of the Cherokee and the descendents of the Scottish-Irish settlers who created what is known as Appalachian culture. Another more diffuse group from the region in general for whom the Park also has profound values are the outdoor enthusiasts and

environmental conservationists, who are drawn to the remarkable topography and biodiversity of the region. The Cherokees call the Great Smoky Mountains *Shagonage* or “Blue, like Smoke,” referring to the characteristic blue haze that hangs over the range, originally due purely to humidity and trees, but now augmented by air pollution. Their tradition holds that Cherokees have lived here since the creation, when the Great Buzzard formed the mountains and valleys of the region with his wing-tips while fanning the soft, muddy new earth to dry it out and make it habitable. Archaeological evidence indicates that prehistoric hunters and gatherers entered the area of the Great Smoky Mountains perhaps 15,000 years ago. A people speaking an Iroquoian language, the Cherokees, emerged as a distinct group around 1000 years ago and were in control of much of the southern Appalachian Mountains and adjacent territory by the beginning of the eighteenth century.

In response to outside colonization, the Cherokees adapted to the new ways and adopted a syllabary created by a famous Cherokee named Sequoyah. The discovery of gold on their lands in 1828, however, led to their forced removal to Oklahoma in 1836 to 1839 in the infamous Trail of Tears on which many died. A

few Cherokees were able to hide out in the rugged terrain of the Great Smoky Mountains. After the forced removal, they came down and joined a group separate from the main tribe who had been allowed to stay behind and formed the Eastern Band of the Cherokee Nation, now some 12,000 strong and living in their original homeland next to the Park.

Various features of the environment, beginning with the mountains, are sacred to the Cherokees. The summit of the highest mountain in the Park, Clingman's Dome or *Kuwahi*, is said to hide a magic lake that heals all birds and animals that

bathe in its waters. The Cherokees view this and other nearby mountains as sacred sanctuaries since they were able to find refuge here from the forced removal of the 1830s. A smaller mountain close to the town of Cherokee, Rattlesnake Mountain, plays a role as the site where a great shaman killed a poisonous serpent to retrieve a magic crystal of power from its head.

Valleys and rivers have special spiritual and cultural value for the Cherokees. Deep Creek, a valley running down off Clingman's Dome, has special significance as a refuge for Cherokees who

Bilingual wayside panel about explaining the origin of the world, according to the Cherokee worldview.



escaped the Trail of Tears. Cherokees lived traditionally in settlements on valley bottoms, and they revere one of them, the ancient village mound of Kituhwa, as the original center of their homeland. Rivers that flow down from the mountains, such as the Oconaluftee, have particular importance as sources of life and places of spiritual cleansing: an important traditional practice, 'Going to the Waters', involves bathing ritually in the Oconaluftee River to wash away negative feelings and to prepare for special events. Cherokee elders refer to the river as the Long Man, with his head in the mountains and his feet in the sea, unifying the whole environment.

Different species of flora and fauna each have their stories and traditions that reflect the spiritual and cultural values they possess for the Cherokees. The buzzard or, more properly, the turkey vulture, plays a key role in the creation myth, as does the water beetle, which dived into the primordial waters to retrieve a bit of mud from which the earth was created. One story tells how the Creator commanded all the trees to stay awake, but some fell asleep and became the deciduous species that, unlike the evergreens, lose their leaves. Cherokee clan names reflect relationships to particular fauna and flora – Bird, Deer, Wolfe, and Wild Potato.

Custodians of Appalachian culture place more diffuse, Christian values on the natural and man-made features of Great Smoky Mountains National Park. Their views are reflected in the motto of the nearby city of Asheville, taken from the opening lines of the Psalm 121: "I look up to the hills...". Great Smoky Mountains National Park contains the finest collection of log buildings in the United States, dating from the mid-1800s to 1920. In addition, old graveyards lie scattered throughout the Park and still receive flowers today. Appalachian culture is also celebrated in a musical tradition derived from ballads brought from England, Ireland, and Scotland. Since most Cherokees are Christian, either through intermarriage with European settlers or conversion, they share many of these Appalachian values and blend them with Cherokee traditions.

Outdoor enthusiasts and conservationists place particular value on features of the environment, both for their natural and spiritual significance. Many combine interests in both nature and culture in the Appalachian Mountains. A major figure in generating interest for the establishment of the Park in the early twentieth century, Horace Kephart, for example, wrote two influential books reflecting these two interests: *Camping and Woodcraft* and *Our Southern Highlanders*.

The Cherokees have a number of organizations devoted to preserving their cultural and spiritual heritage. The Tribal Council plays a major role through its Office of Cultural Resources. The Eastern Band owns and operates the Museum of the Cherokee Indian. The Cherokee Preservation Foundation, funded by proceeds from the casino, supports many projects devoted to preserving Cherokee culture and heritage. Great Smoky Mountains National Park is in charge of preserving natural and cultural heritage within the Park boundaries. Two cooperating societies –Friends of Great Smoky Mountains and the Great Smoky Mountains Natural History Association– assist the Park in this mission with funding and volunteers.

In addition to scientific research and nature conservation, the Park has a program of interpretive exhibits, signs, and other activities related to spiritual and cultural values. The main visitor center at Sugarlands receives two million visitors a year and projects a film that highlights Cherokee and Appalachian cultures and the inspirational value of the Great Smoky Mountains. A major photographic exhibition includes pictures and inspirational quotes on 22 other mountainous national parks organized around the theme of the sacredness of mountains.

The Oconoluftee Visitor Center hosts a Mountain Farm with buildings and exhibits on Appalachian culture.

The Park joins forces with the Eastern Band and other cultural organizations to host a Mountain Heritage Day with performers and artists representing Appalachian and Cherokee cultures. Within the Qualla Boundary, the Cherokees promote the teaching of their language in their schools and activities highlighting their cultural and spiritual heritage. In addition to the Museum of the Cherokee Indian and the Oconaluftee Indian Village and Living History Museum, a major exhibition entitled 'Unto these Hills' presents Cherokee culture and history to Park and casino visitors. 'Talking Trees' in the town of Cherokee have recordings orally relating Cherokee traditions. Festivals of Appalachian music focus attention on Appalachian culture, as do the activities of academic organizations such as the Appalachian Studies Conference and the nearby University of Western North Carolina.

Local residents descended from European settlers feel deep connections with the land they once owned. The Cherokees view the whole area as part of their ancestral homeland and regard many features in the Park as sacred.

Many local residents in the gateway communities are primarily there for economic reasons and have less regard for the natural and cultural values of the Great Smoky Mountains, and a large percentage of visitors come primarily for gambling and resorts. The Park does, however, draw a substantial number of people interested in the mountains and in Appalachian and Cherokee cultures.

Pressures and impacts

The human activities with the greatest dynamic impact are related to tourism,

both within the Park and in the gateway communities on either side. Outdoor recreation, predominantly hiking, backpacking, and fishing, draws many visitors to the area. Because of the extraordinary biodiversity of the region, scientific research and study programs are very active in the Park. There is also a growing interest in preserving and restoring Cherokee and Appalachian cultures, as evidenced by festivals, school programs, museums and other cultural activities.

Of all economic activities, tourism has the greatest impact on Great Smoky Mountains National Park. Tourists spend around

Dedication ceremony in 2006.



one billion dollars a year in the area, most of it in the gateway communities. The primary attractions are the gambling casino in Cherokee and the amusement parks, resorts, and country music in Gatlinburg and Pigeon Forge. However, many of these tourists also visit and drive through the Park itself. Poaching of natural resources, in particular, ginseng, is another economic activity that has an impact on nature.

Economic activity resulting in increased industrial emissions in the region, combined with automobile traffic from tourism, contributes to air and water pollution in the southern Appalachian Mountains. The higher elevations of Great Smoky Mountains National Park receive some of the highest acid depositions in North America and growing ozone levels are damaging various plant species. This acid deposition from air pollution combines with the naturally acidic bedrock in the range to threaten various aquatic ecosystems. Dogs and horses brought by hikers and campers have also helped to contaminate the streams with the parasite *Giardia*. Tourism along the roads and backcountry lead to litter, waste problems, and, in some cases, poaching, which imperils certain species. Uncontrolled economic development in the gateway communities has led to degradation of scenic

views and has contributed to air and noise pollution.

On the other hand, tourism, particularly outdoor recreation, helps to spread messages regarding the importance of nature and the need to protect it. If even a fraction of the nine million visitors a year carry these ideas back to their home communities, this has the potential for considerable positive impact on conservation in general. The creation of Great Smoky Mountains National Park and the attention it has focused on the value of preserving the environment for its own sake, as well as the tourist income it generates, has reversed a trend that would have led to the destruction of most of the ecosystems in the area. Scientific research has contributed greatly to the preservation and restoration of native flora and fauna.

Economic development in the gateway communities has led to noisy and garish commercialisation that distracts visitors from the appreciation of the inspirational values of the mountains and creates an atmosphere that discourages the quiet contemplation of nature. The income generated by the casino in Cherokee and the growing influences of modernization and the outside world threaten traditional Cherokee practices and beliefs that emphasize spiritual and cultural values. In response to tourist preconceptions, some

Cherokees have adopted Western Plains Indian headdresses, thereby misrepresenting their own traditional dress. The same interest shown by tourists in Indian culture, however, also offers opportunities for the general public to learn more about the actual cultural and spiritual values enshrined in the Cherokee way of life. Exhibits in the Park and at the Museum of the Cherokee Indian, in particular, help to introduce accurate interpretations of Cherokee traditions and their relationship to the land.

Efforts to preserve the natural environment in Great Smoky Mountains have occasionally led to conflicts with spiritual and cultural values. There is a tension between the scientific priority that aims to preserve the natural state of the Park and the traditional Cherokee practices of collecting medicinal herbs and other wild foods. The problem is exacerbated when Cherokees try to collect certain plants and animals not just for their own use, but to sell for income. A few years ago Cherokee demands to exchange a piece of the Qualla Boundary for a pristine portion of the Park where they wanted to build a school for their children created additional tension with Park staff, who did not want to part with land that had important biodiversity value. Issues of land ownership underlie many of the potential conflicts between the conservation of natural heritage and the protection of cultural

and spiritual values: the Cherokees regard Great Smoky Mountains National Park as part of their original homeland and feel they should have a powerful voice in determining its use.

Great Smoky Mountains National Park has a comprehensive management plan based on conservation zones. Most of the Park, 92%, is designated a natural zone. The management plan sets aside an additional 1% as a historic zone and 7% as a development zone. Park police and rangers enforce regulations and there have been issues over the traditional collection of certain species of flora and fauna by Cherokees and others and over regulations on the road that crosses the Park. The Eastern Band of the Cherokee Nation is in charge of managing and using land in the Qualla Boundary. The main land-use and management problems lie in the Gatlinburg and Pigeon Forge area on the Tennessee side, where rampant, tasteless development has led to perhaps the most notorious gateway community for any national park in the United States.

Conservation perspectives and sustainability

Trends in the conservation of natural heritage are mixed. On the positive side, the scientific research and education pro-

grams focused on the extraordinary biodiversity of the site have increased interest in natural values and have led to efforts to protect and restore the environment, including the re-introduction of species of native fauna that have disappeared. On the negative side, air pollution resulting from economic development in the surrounding region is threatening a number of tree and plant species. Tourism is a mixed blessing: it introduces more of the public to the value of protecting the Great Smoky Mountains, but also contributes to economic activities in the gateway communities that distract attention from the natural environment and create eyesores and other forms of environmental desecration just outside the Park.

There is a growing interest in the Cherokee community in protecting spiritual and cultural heritage. The Museum of the Cherokee Indian and other cultural institutions in the Qualla Boundary are promoting exhibits and activities that highlight this heritage. The Cherokees are also putting growing efforts into teaching their language in their public schools in order to recover a mainstay of their heritage that was all but lost as a result of the federal and state governments' policies of discouraging the learning and speaking of Cherokee, which continued up to the middle of the twentieth century. The establishment of

the Cherokee Preservation Foundation in 2000 has led to the funding of projects devoted to strengthening and preserving Cherokee cultural and spiritual heritage.

Among the projects funded by the Cherokee Preservation Foundation, one, in particular, reflects a growing openness and interest by Great Smoky Mountains National Park into working with the Cherokees to incorporate their views and integrate cultural and spiritual perspectives in Park interpretation. Initiated in 1999 as a collaboration between the Park, the Eastern Band of the Cherokee, the Museum of the Cherokee Indian, and The Mountain Institute, the 'Mountains, Spirituality', and the Cherokee project was developed as a series of bilingual wayside exhibits in English and Cherokee linking Cherokee stories and traditions to features of the natural environment –birds, trees, rivers, mountains– along the Oconaluftee River Trail running 2.4 km from the Oconaluftee Visitor Center in the Park to the Qualla Boundary on the edge of the town of Cherokee. The Museum of the Cherokee Indian selected submissions from contemporary Cherokee artists to illustrate the trail's waysides. The designs were finalized in 2005 by the National Park Service and the text translated into Cherokee by the Office of Cultural Resources of the Eastern Band.

A ceremony in 2006 with Cherokee warrior dances and official speeches celebrated the installation of the completed waysides and excited considerable public interest and media attention. Since many Cherokees, both adults and children, walk this trail for exercise, the signs help them to pass on their traditions to the younger generation, promote health and good nutrition among tribal members, and reinforce the revival and teaching of the Cherokee language in their schools. The exhibits also enable them to reach the wider public with the messages they wish to disseminate about their sacred sites and practices. The project provides an innovative model with exciting possibilities for inspiring similar collaborations and waysides elsewhere in the United States and around the world.

The waysides along the Oconaluftee River Trail and other interpretive and educational materials displayed in the Park, the Museum of the Cherokee Indian, and the Qualla Boundary highlight Cherokee ideas, stories, and sayings about the intimate reciprocal relationship between humans and nature and encourage Cherokees to care for the environment. They also have great potential for promoting conservation of natural as well as cultural heritage. A powerful example is the fol-

lowing saying by a contemporary elder, Jerry Wolfe: "We hold these mountains sacred, believing that the Cherokee were chosen to take care of the mountains as the mountains take care of us."

Similar views of stewardship drawn from Biblical quotes and associated with Appalachian culture regarding the need to protect the environment as the divine creation of God entrusted to humans could be combined with Cherokee ideas to promote environmental conservation in general. The idea of the Park as a kind of Noah's Ark of biodiversity could help expand conservation messages and get more of the American public interested in protecting the environment. In any case, the beautiful scenery and striking flora and fauna of the Great Smoky Mountains have the potential to draw attention in a particularly powerful way to the spiritual and natural values of the environment.

An important way to safeguard the spiritual values of the Great Smoky Mountains is to draw on existing programs of interpretation and education in the Park and in the Qualla Boundary. Park interpretation and exhibits that already incorporate these values should be drafted and extended to additional sites in the area. Education programs through the cooperating societies and

the scientific research programs would benefit from having spiritual and cultural perspectives incorporated into their standard ecological curricula as complementary views that enrich people's understanding and appreciation of nature. A key component of such a program at Great Smoky Mountains National Park would be to incorporate more material on Cherokee culture as a living, present-day tradition with important messages about the environment. Too much cultural interpretation in the National Park System focuses on history and archaeology and only refers to American Indians and other indigenous peoples in the past tense.

The successful collaboration between Great Smoky Mountains, the Eastern Band of the Cherokee, the Museum of the Cherokee Indian, and The Mountain Institute to develop the Oconaluftee River Trail waysides demonstrates the potential for synergies between government agencies, local bodies, and non-profit-making organizations to work together to conserve cultural and natural heritage. These entities, along with affiliates and partners, such as the Office of Cultural Resources of the Eastern Band, and local donors, such as the Friends of Great Smoky Mountains National Park, can be powerful champions for continuing this work and promoting a more integrated approach to

Indian guide.



the preservation of spiritual and natural values. Outdoor recreational organizations, such as the local branch of the Appalachian Trail Conservancy, can, in addition, champion the inspirational value of the mountains as sources of renewal and inspiration that can reach out to the wider public and help protect the Park and its surrounding environment.

A well-preserved cultural and natural heritage can contribute to a healthier, more balanced socio-economic development of the area by fostering a more responsible, sensitive tourism that enriches the experience of visitors and motivates support for the Park and its biodiversity. In particular, it can help to mitigate the deleterious effects of unbalanced development in the gateway communities at the two major entrances to the Park and encourage local residents to take a more active role in restraining any growth that might further threaten the environment. Projects such as the Oconaluftee River Trail, which has brought together parties with conflicting cultural and natural interests in a common enterprise that all regard as positive, can help overcome conflicts in other areas and encourage people to work together in more harmonious ways for the preservation of the Park's wealth of natural and spiritual resources.

Recommendations

Study of the natural heritage of Great Smoky Mountains National Park is well-established, and scientists are actively engaged in identifying the 100,000 estimated species in the area. The cultural and spiritual heritage of the mountains, on the other hand, has not been as rigorously investigated and needs more focused research to identify and fill in gaps in current knowledge. We need detailed studies on the importance of spiritual and cultural values for different stakeholder groups and how those values might motivate each group to protect the environment. These stakeholder groups include the Cherokees, Park staff, Park visitors, outdoor enthusiasts, naturalists, conservationists, religious groups, advocates of Appalachian culture, and local residents and businesses.

Most research on Cherokee cultural and spiritual heritage has focused on traditions of the past and stories collected from a small group of living elders and storytellers: studies of the prevalence and importance of this heritage across a broader cross-section of contemporary Cherokee society would help assess opportunities to engage the Eastern Band more fully in environmental conservation and sustainable development. A compilation of inspirational ideas, stories,

and quotes from naturalists and from custodians of Appalachian culture could provide useful material for reaching the broader public with evocative messages about the need to conserve the cultural and natural heritage of the Great Smoky Mountains. Research carried out in collaboration with religious leaders from different denominations could provide ideas as to how to inspire congregations to take up conservation measures. Christian denominations play an important role in Southern life and could galvanize considerable support for protecting the biodiversity of the Park if approached the right way through the right messengers.

Focusing on spiritual and cultural values can generate opportunities for creating and improving synergies among authorities for protecting the natural, spiritual, and cultural heritage of the Great Smoky Mountains. The Park and the Eastern Band of the Cherokee were able to find a shared interest in working together on the Oconaluftee River Trail waysides that helped them deal with conflicts in other areas of their relationship. In a similar way, other organizations, such as chambers of commerce, could work together with the Park on inspirational projects that do not threaten their interests but allow them to do something meaningful for the cultural, spiritual, and natural environment of the area. In addition to mak-

ing money, many people in business seek some kind of meaning in their work and want to leave something of value behind. Inspirational, non-threatening projects could encourage the first steps towards working together on more contentious issues such as regulating egregious tourist development just outside the Park.

Involving people and organizations with spiritual and cultural interests could also improve synergies among authorities. A committee of Native Hawaiian elders called the Kupuna Committee meets regularly with the superintendent at Hawai'i Volcanoes National Park to provide input: the creation of a similar committee of Cherokee elders could help Great Smoky Mountains National Park work better with the Eastern Band of the Cherokee to integrate their perspectives into Park plans and projects. It is important that Cherokees and others with cultural and spiritual interests in the region be involved from the beginning in new undertakings so that they can have a real influence on decision-making.

Education is one of the most effective tools for developing an integrated approach to the conservation of natural, spiritual, and cultural heritage. The superintendent of Mount Rainier National Park in the northwest United States holds that

educating visitors influences everything else the Park does, from law enforcement to maintenance. If people are informed, they are much more willing to follow rules and respect others' beliefs and practices. Other important tools for developing an integrated approach include incorporating spiritual and cultural perspectives into environmental impact studies and management plans. Workshops for legislative and other bodies could provide additional tools for integrating these perspectives into conservation programs to ground them in deeply held values and make them truly sustainable.

Efforts to protect the environment and encourage more sustainable development need to show that conserving the cultural, spiritual, and natural heritage of the site can enrich people's lives. One way to do this is to promote quieter, more contemplative forms of recreation and tourism that focus on the role of nature as a source of inner peace and renewal and, as a consequence, have less impact on the environment. Authorities would do well to draw on spiritual and cultural values to inspire people in local communities to come up with their own ways of promoting environmental conservation and

Some key Cherokee terms

"Going to the water" – a key Cherokee ritual of bathing in a river for spiritual purification performed daily and before important events.

Atagahi – a magic lake hidden in the Smoky Mountains that heals birds and animals.

Gunahita Yvwi – "long man," the term for the river as the Long Man, with its head in the mountains, its feet in the sea, and its body growing as it goes along.

Duyukta – the path of being in balance, the moral code central to the Cherokee world view.

Qualla Boundary – the ancestral lands of the Eastern Band of the Cherokee Indian Nation.

Shaconage – "blue, like smoke," a Cherokee description of the Great Smoky Mountains.

sustainable development, rather than imposing regulations from above. Finally, inclusive approaches that encourage a diversity of views so that no one feels left out will have the greatest chance of preserving the rich natural, cultural, and spiritual heritage of the Great Smoky Mountains. People are more inclined to appreciate and support other's efforts if they feel their own views are being acknowledged and respected.

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Holy Island, Isle of Arran

Scotland, United Kingdom

Isabel Soria

Introduction

Holy Island is situated just off the east coast of the Isle of Arran, a short ferry ride from the settlement of Lamlash. Arran itself is the largest island in the Firth of Clyde and lies 26 kilometres off the Ayrshire coast, North Ayrshire Unitary Council Area, south-west Scotland.

Holy Island covers an area of 340 hectares and its central peak, Mullach Mor, rises 314 m a.s.l. Since there are no roads on the island, the only way to travel around is on foot. The island has been a private estate for centuries and was acquired in 1992 by the Rokpa Trust, a non-profit Buddhist organisation founded in 1980 by the Tibetan doctor and teacher Dr. Akong Tulku Rinpoche. In May 2003, the trust opened the Holy Island Centre for World Peace and Health in the north of the island, along with a monastery retreat, the Kagyu Samyé Ling Tibetan Centre, in another part of the island. This 'Holy Island Project' is part of the Rokpa Trust's wider 1000-year plan to promote world

peace, interfaith spirituality and ecological sustainability in harmony with nature, all under the guidance of the project's Executive Director and Abbot of Kagyu Samyé, the venerable Lama Yeshe Rinpoche. The Centre and retreat provide accommodation for over 60 people and offer opportunities for short stays or longer retreats, as well as courses in meditation, yoga and T'ai Chi. The island's permanent resident community is made up of around 15 volunteers, who help run the Centre for World Peace and Health, and 12 Buddhist nuns who live in the Long Term Retreat Centre, which is closed to the public.

Natural values

Holy Island is an example of management through ownership and it aims to restore the natural biodiversity that is one of the main natural values of the site. However, there are currently no officially designated sites of interest for wildlife on the island. The Holy Island Project states that the objective of its environmental management is to protect "a pristine and unspoiled ecosystem, where all forms of natural life and the land itself are respect-

< Dorje Phurba Drubchen ceremony, with Dulmo Choje and other lamas from India and Nepal, Holy Island of Arran.

ed, using an approach that is in harmony with the island's unique ecology".

The owners of the island have created an internal designation for environmental management. The east coast of the island has been designated as the "East Coast Nature Reserve" to protect breeding birds. Although access to the area is not prohibited, visitors are recommended not to enter the area to avoid disturbing the birds.

As an undesignated site, the management of the island is left in the hands of the owners. The management of the whole island is the responsibility of the Executive Director of the Holy Island Project, Lama Yeshe Rinpoche. He defines the activities needed for environmental improvement on the Island. However, since the island receives funding from the Forestry Commission's Millennium Forest Scheme for developing semi-natural habitats and planting coastal woodland, the conservation management is committed to observing the statutory conditions of the Woodland Grant Scheme. The community also seeks advice from environmental professionals (on a voluntary basis), conservation agencies, forest rangers from the mainland, governmental environmental organisations (Scottish Natural Heritage and Forestry Commission) and informally from

visitors who have some expertise in the field.

Holy Island features a mosaic of different semi-natural habitat types. The most dominant habitats are dry heath (heather moorland), woodland (recent plantations) and coastal habitats (rocky shores and saltmarsh). Although the island forms a dramatic landscape, biodiversity is not particularly high. Like most of the land in Scotland, it has been used for agriculture and hill grazing for many centuries (Holy Island Management Plan, 1996). Nevertheless, the island is still representative of the natural heritage of the south of Scotland as described below.

The two most interesting natural habitats on Holy Island are the cliffs and coastal heaths, and the marine habitats that include maerl beds in the open water and the sea-bed environment benthic zone of the Firth of Clyde. The cliff and coastal heath habitat supports a wide range of different natural communities and the biodiversity here includes refuge areas for rare plants and fragments of semi-natural woodland, as well sites for nesting birds. The maerl beds –a collective term for several species of calcified red seaweed- in the benthic zone are located in the channel between Arran and Holy Island and have been identified as a key site in the coastal and marine Habitats Biodiversity

Action Plan. The maerl beds are much under appreciated and fragile habitats that have never been considered to be of sufficient quality to merit designation. However, the promotion of both the maerl beds and the coastal habitats is supported by the UK Habitat Action Plan and the UK government has a legal commitment under the Habitats and Species Directive –albeit only in a general sense under this vague piece of legislation— to protect these habitats.

In terms of the island's flora, the dominant communities are heath, stands of bracken (*Pteridium aquilinum*) and grassland, with trees a rarity. For many centuries the island has been extensively used for grazing domestic animals, although some remnants of ancient natural woodland remain along the western slopes of the island up to about 30 m a.s.l. There is also some natural regeneration of birch (*Betula pubescens*); the reforestation carried out in 1996 consisted mainly of the planting of pedunculate oak (*Quercus robur*), European ash (*Fraxinus excelsior*) and *Sorbus* spp. The two plant species of most interest on Holy Island are the healthy population of the nationally scarce rock whitebeam (*Sorbus rupicola*), a very rare plant on Arran and supposedly one of the original parents of the endemic *Sorbus arranensis* (a hybrid), and bearberry (*Arctostaphylos uva-ursi*), a prostrate

evergreen shrub of the Ericaceae family, rare in southwest Scotland.

The Island has an important diversity and richness of sea birds: Cormorant (*Phalacrocorax carbo*), Shag (*Phalacrocorax aristotelis*), Oystercatcher (*Haematopus ostralegus*) and Fulmar (*Fulmarus glacialis*) all nest in the sandstone cliffs on the eastern side of island (Holy Island Project News, 1997). Large mixed colonies of Herring Gull (*Larus argentatus*), Greater Black-backed Gull (*Larus marinus*) and Lesser Black-backed Gull (*Larus fuscus*) exist mainly on the northeast side of the island; Gannets (*Sula bassana*) come from the nearby colony on Aisla Craig (a bird sanctuary) to fish in Lamlash Bay. Other birds found on the island include Stonechat (*Saxicola torquata*) breeding on the shore, and Common Buzzards that visit from Arran.

The marine life in the waters surrounding Holy Island is of interest and Common Seals (*Phoca vitulina*) and Basking Sharks (*Cetorhinus maximus*) are regular visitors. The agro-biodiversity of the island is increased by the Soay sheep (*Ovis aries*), one of the United Kingdom's oldest surviving livestock breeds, feral goats (*Capra hircus*) and a few of the original native ponies of the Western Isles of Scotland, Eriskay ponies (*Equus caballus*).

The main activities relating to the island's natural heritage are focused on environmental restoration and include the solving of the problems caused by overgrazing and the replanting with native tree species. Two conservation management plans were written by volunteer consultants in 1992 and 1996.

The activities proposed in these plans include the following:

- Planting 30,000 native trees in a fenced-off area to prevent grazing damage.
- Bracken clearance to restore pasture land.
- Rhododendron (*Rhododendron ponticum*) clearance: this shrub is a pest in Scottish forests and has spread throughout the island since it was planted originally at the farmhouse.
- Monitoring wildlife.

At the moment trees have been planted as was planned and now the greatest efforts are being put into clearing the rhododendron. In terms of animal management, the management plan for 1996 states that advice will be sought on appropriate stock densities for conservation grazing. At the moment the number of grazing animals is thought to be acceptable and animals are left to graze on their own and are not subject to herding.

Visitors and local people are responding very positively to the new management strategy focused towards nature conservation that is being promoted by the island's owners. People from Arran have the feeling that the Buddhists are taking good care of the island.

Since acquiring the island, the Buddhists have been disseminating environmental information and have set up an information centre on Holy Island where volunteers provide information about the island's natural and spiritual values. They have also produced informative brochures for visitors and have established a regularly maintained footpath that crosses the island via its most interesting sites.

Spiritual and cultural values

The main significance of Holy Island is its spiritual value. It has been considered a sacred place since the sixth century, when St. Molaise —a Celtic Christian— retreated there to live as a hermit. Even then it was already recognised as a holy site by the indigenous Celtic peoples, who referred to it as the 'Island of the Water Spirit'. Since the days of St. Molaise the island has been regarded as sacred by Catholics and other Christians. Nowadays, however, the spiritual interest of the island has

been extended by its recent acquisition by the Tibetan Buddhists as a place of retreat.

Most of the sites of spiritual and cultural value on the island date from the days of St Molaise. St. Molaise's Cave, where the saint lived, lies on the western shore of the island and nearby there is a circular sandstone block known as either St Molaise's Table or the Judgment Stone. The monastery that once stood on Holy Island is purported to be on the north-western corner of the island and between this site and St. Molaise's Cave there is another cave, known as the

Smugglers' Cave. This cave was used for ecclesiastical purposes and there are a number of crosses carved upon the walls. Also near St. Molaise's Cave there is the Holy Well, which is associated with the history of St. Molaise. It was thought "to bring a blessing to those who drink from it" and to heal the sick. The Holy Well has long been known to Catholics as a place for healing. The Saint was believed to have miraculous powers and so became a figure of popular devotion, and it became customary to celebrate St. Molaise's day on April 18. The cave and the well are still sacred for Christians and are treated as such by the Buddhists.

Holy Island near the eastern coast of the Isle of Arran.



It is important to appreciate how St. Molaise came to settle on Holy Island as this understanding provides clues to the origins of the sanctity of the island. In those days many holy men in the Celtic church went on pilgrimages with no apparent destination in mind believing that they would be guided to an appropriate place. It seems that St. Molaise followed this tradition and, influenced by Celtic myths, considered Arran to be the 'Land of the Blessed'. This power of attraction also brought the Tibetans to the island and Lama Yeshe has commented that during his three-year retreat he had a vision of an island in Scotland and Holy Isle's footprint-like outline attracted his attention as being auspicious to their faith. Additionally, it is said that a strong lay-line (earth energy line) crosses the island from north to south and gives the island a special spiritual status. Many people feel that it is the island's inherent spiritual qualities that make it such a sacred place. Whether it be due to these inherent qualities or the values conferred on the island by the people that have visited and lived there over the centuries, Holy Island undoubtedly plays an important role in the spiritual history of different faiths, from both West and East, and it thus can be considered as a sacred site.

Since 1992, the Tibetan Buddhist owners have brought their own spiritual values to

the specific context of Holy Island. However, for the Tibetan Buddhists, nature itself has a sacred value and, in turn, all nature is sacred. On the island they can live as a part of nature and this gives them the necessary environment they seek to develop their full spirituality. Following Tibetan tradition they believe that the island is full of natural spirits such as Naga, the Water Spirit, who helps you reach enlightenment. All of your actions have an effect on these natural spirits and you can be helped by them or hindered by them, depending on your attitude towards nature. There are rocks all over the island that are decorated with Tibetan Buddhist designs (Green and White Tara, the Karmapa) and other symbols that encourage you in your spiritual practices. As well, there are written mantras and a number of prayer signs.

Today it is the island's owners, the Tibetan Buddhists, who are in charge of the cultural and spiritual heritage of the island. However, all decisions relating to Christian values have to be agreed upon by the Catholic Church because of the sacred connections of the site with St. Molaise. The sacred values of the island are both recognised and enhanced by a variety of different activities including a regular pilgrimage to St. Molaise's Cave for miracles and healing. However, the custom of walking to the well has stopped since

Arran became Presbyterian. The spiritual value of the island was also enshrined by the custom practiced until the end of the eighteenth century of using it as a burial ground for the community of Lamlash.

The Holy Island Project promotes spiritual activities and aims to promote harmony between nature and living beings and thus achieve spiritual progress in people of all faiths. The primary objectives developed by the project aimed at enhancing spiritual practices include:

- Establishing the Centre for World Peace and Health. This is a place for people of all faiths and health to come to and focuses on global spirituality and living in harmony with the environment. It aims to be a central point for interfaith connection and retreat.

- Creating the Long-term Retreat Centre for Tibetan Buddhist Nuns, focused on keeping alive the Tibetan Buddhist tradition. The central tenets of this retreat are the teachings of Karma Kagyu.

These actions that aim to enhance the spiritual value of the island are complemented with other activities such as:

- The designation of Holy Island as a United Kingdom Sacred Site by the Alliance of Religions and Conservation.

- Preservation of the Christian Celtic heritage of the site by means of the maintenance and interpretation of sacred sites.

- Different spiritual ceremonies. Interfaith services with different representatives from all of the world's mainstream faiths that associate religion with natural harmony.

- Specific Buddhist ceremonies such as the Drupchen, held on Holy Island to contribute towards ending the obstacles we face in the world today: natural disasters, floods, earthquakes, war and violence. A Drupchen is an intensive period of spiritual practice involving a large group of Lamas and other Buddhist and non-Buddhist practitioners from west and east. Its role is to transform negative energy into positive energy. During this ceremony, the visiting Lamas consecrated the site of the proposed Stupa (a traditional Buddhism building that symbolises and transmits the energy of perfect wisdom and compassion) for World Peace. The function of both the Drupchen and the Stupa is to balance the elements and climate, and bring peace of mind and harmony to all living beings.

The attitude of the local population and visitors toward the spiritual value of the site has fluctuated over the years. Ownership of the island changed repeat-

edly over the last century and this has generated uncertainty regarding the conservation of the island. When the Buddhists acquired the island conflicts arose with the local population mainly because the Buddhists chose to reveal their plans to deny access to some of the western part of the island in a public meeting. However, today the attitudes of both parties have been clarified and access for visitors to Holy Island has been improved rather than restricted. A ferry runs regularly and an open day has been established to enable people to visit the Centre for World Peace and Health. In addition the paths to the spiritual sites on the island have been improved and this has helped the new owners and their new spiritual values to gain acceptance from their neighbours in the local population.

Furthermore, the spiritual values of the island are attracting new visitors from all over the world, some of whom are becoming part of the local community. The new visitors attend the courses held on the island and people visit or volunteer to work as part of a personal search for a special place in which to develop their spirituality. Amongst the visitors to the island there are always people who are curious to see what is happening there or to discover for themselves what is special about a place known as 'Holy Island'. A Christian tradition of visiting sites connect-

ed with St. Molaise still exists, even if nowadays it is most relevant to the people of Lamlash.

The Buddhists' idea of improving the sacred value of the site has been endorsed by both the Catholic Church, the church most affected by the new Buddhist tradition on the island, and the Church of Scotland (the Presbyterian church that reformed the Catholic doctrines in the sixteenth century according to the principles of John Calvin), the majority church on Arran.

The current feelings of the Buddhist community can be summed up in the following statement: "Today, with the acquisition of Holy Island by the Buddhist Community, two different traditions meet, bonded together by their respect for these peaceful places. From now on the Samye Ling community will be cultivating an island for the nourishment of the human spirit'.

Pressures and impacts

As an island, Holy Island has a privileged status regarding pressures and impacts from the outside. It is also important to highlight again the fact that the island is in private hands and that it is managed with conservation in mind. However, there are still some human

activities that are having a negative impact on the site.

At the moment the main activity that could be considered to be a threat to the island is tourism. Tourism is increasing on the Isle of Arran and Holy Island represents one of the tourist attractions for visitors to Arran, although it is not one of the top 10 visitor attractions in the area. Since the Buddhists' purchase of the island, the local tourist office has begun to distribute leaflets to promote visits. Tourist activity mostly consists of visitors coming to Holy Island for the day. The information centre estimates that around 5,000 people visit-

ed the island for the day last year. Although visitor numbers are not high, the impact of these day-visits is real. Most visitors walk around the island and climb Mullach Mor, activities that lead to erosion and path damage. People also occasionally wander into the protected area in the east of the island, thereby breaking the owners' rules. As tourism increases, visitors may become a potential danger to the conservation of both the natural and spiritual values of the island.

When the Tibetan Buddhists first bought the island they considered the idea of not allowing people to access the western

Tibetan Buddhist stupas near the Interfaith Centre, Holy Island.



side of the island for part of the year in order to maintain the peacefulness of that area for spiritual practices. However, this idea was never implemented, maybe because of the Scottish land reform that gives statutory rights of access in Scotland. These rights are for outdoor recreation, for crossing land and water and for some educational and commercial purposes. Even so, the current owners want to welcome everyone to the island and do not think of visitors as a threat to the values of the island.

Furthermore, aside from tourists, human impacts derived from the increasing needs of the community living in the Centre of World Peace and Health could also potentially threaten the environmental sustainability of the island. This community consists of volunteers living on the island for long periods, as well as teachers and participants on courses and short-term visitors. The Centre provides accommodation for 60 people and has to meet all the needs of the different people that are staying there. Therefore, it has become a comfortable and 'high-class' building for people staying on the island, although the increasing demands of these people seems to have outstripped the natural resources of the island: for example, the increased need for water leads to restrictions during the summer, when water has to be collected from natural sources on the island.

The good management of the Centre of World Peace and Health comes into conflict with the management of the island's natural resources. Although the enhancement of the environmental values of the island is an important part of the Holy Island Project, these activities are still secondary to the development of the project's spiritual components. An environmental workgroup exists, but it has no representation on the management committee of the Holy Island Centre. The environmental workgroup consists of two volunteers working full-time on environmental issues, although their lack of knowledge and instability may be a handicap to the fulfilment of the management plan. In addition, this plan seems to be of little use as it does not provide any guidelines for specific actions; rather, it provides only general aims that need to be achieved, thereby making the task of improving the island's natural resources even more difficult.

The Holy Island of Arran is included in the Isle of Arran Local Plan adopted on 15 February 2005. This plan provides for the enforcement of issues concerning land-use in order to promote and control development. All planning applications are assessed within the guidelines of this plan and under local designations Holy Island is regarded as a Site of Importance for Nature Conservation (SINC). Within these sites, all proposals for development require an envi-

ronmental impact study. Furthermore, where development is permitted, the local council may apply specific conditions to secure the protection of wildlife. Given its volcanic features, Holy Island is also considered to be part of the Arran coastal landscape and any development within this zone has to be referred to the Ayrshire Landscape Character Assessment.

Conservation perspectives and sustainability

In recent times several initiatives have unsuccessfully tried to have Holy Island declared as a protected site. Currently, other projects are alive, such as the one championed by the local organisation COAST, the Community of Arran Seabed Trust, who have proposed that the seabed within Lamlash Bay be declared a Marine Protected Area.

As part of the resource management plan the owners of the island have designated part of the island as the 'East Coast Nature Reserve', although this declaration has no legal backing and is mainly founded on the design of the network of footpaths that make it difficult to access the area.

In order to safeguard the island's cultural and spiritual values from the potential negative impact of human activities, a list

of behavioural rules for the island has been drawn up. Even though the rules have no statutory regulations, the managers of the island believe that they are sufficient for preserving the island's inherent values. These five golden rules are as follows:

- Protect all life and refrain from killing.
- Respect other people's property and refrain from stealing.
- Speak truthfully and refrain from lying.
- Encourage health and refrain from intoxicants.
- Respect others and refrain from sexual misconduct.

The main goal of the current management of the island is for the spiritual values to contribute to the sustainable management of the natural values. The Holy Island Project is defined as an initiative aimed at promoting a commitment from religions on nature conservation. This commitment between different religions and the environment has also received backing from different patrons, including the H.H. the 17th Gyalwa Karmapa, the Most Revd. Richard F. Holloway, and the Bishop of Edinburgh. The Rt. Hon. Martin Palmer, director of the International Consultancy on Religions Education and Culture (ICOREC) has stated that "the project is a successful example of Buddhist awareness and concern for our natural world

and those who share it". Therefore, the Holy Island Project is thought to be a potential interfaith vehicle for a commitment to nature conservation.

On Holy Island the Buddhists believe that their contribution to nature conservation comes from their spiritual teachings that aim for a personal commitment of each human being with nature. They have absolute conviction that it is people who have to change first and understand their own nature and that only then will a feel for the conservation of nature follow. To help this personal search they have specific courses such as 'Buddhism and nature' and 'Meditation in nature'. These courses have a positive effect on the participants and attempt to awake an awareness of being in contact with nature; as such Holy Island works as a promoter of deep experiences in nature. In addition, there are other activities concerning the daily management of the island that are evidence of the Tibetan way of living in harmony with nature. Visitors to the island observing this different lifestyle should come away with a more considerate view of nature. Information about the Tibetan way of life is also given in the information centre. This allows day visitors that do not have the chance to experience the full way of life on the island to receive information about the spiritual and cultural values of the island. People that come for a walk usually seem very

interested in the Buddhist traditions and it is hoped that perhaps some change of attitude will occur as a result of receiving information on the subject.

The promotion of the spiritual values on Holy Island is attracting people from around world. It is surprising to see how people searching for spiritual improvement come from far away to visit this Scottish island. This benefits tourism in the area, since the people who come to Holy Island also get to know Arran and spend some days there as well.

On Holy Island it is understood that any successful conservation has to be based on deep philosophical conviction. Therefore, the spiritual development of all human beings is enough for conserving nature. However, spirituality by itself is not a valid tool for conserving nature. In order for formal protection to come from people and from their experiences with nature, we still need management tools, science and action from outside to achieve the sustainable management of resources and to be able to base conservation on deeply held human convictions. Although the environmental management of the island is satisfactory, more can be done to integrate these concepts into the way of life of the site. Despite its lack of any outstanding specific scientific value, the owners' aims to promote the natural

restoration of the island should be better supported. The expert advice that the owners of the island have been given is not clear and seems to be lacking in content. The synergy that exists on the island between spirituality and nature conservation has to be backed up by better environmental expertise.

Support for Holy Island, a site that is not formally designated as a protected area, should come from governmental environmental institutions because this sacred place is achieving important advances in conservation.

Recommendations

One of the problems with the project on Holy Island is a lack of a clear vision regarding current policies. The Holy Island Project provides a good framework for the management of the island. A management plan for the natural resources of the island also exists, although it is not a feasible tool for the everyday running of conservation activities on the island. For the volunteers living on the island, who are the people who have to put into practice the environmental policies, the aims of the project are not particularly clear. It seems

Tibetan Buddhist monks and nuns meditating in nature.



that management consists essentially of solving problems as they appear through the common sense of the volunteers. As is consistent with the patriarchal and hierarchical traditional structures of Tibetan Buddhism, trends are decided by Lama Yeshe, who is advised by different experts. This sometimes makes it a little difficult to understand management policies and to fully appreciate their aims.

The recommendations for improving the management of the Holy Island Sacred Natural Site are as follows:

Everyone who plays a role in the resource management of the island should be aware of the importance and dynamics of the spiritual value of conserving nature. The role of the Holy Island Project for promoting this spiritual attitude towards nature and environmental protection should be fully recognised. It is part of the 'value' that the island can 'export' to the wider world. As an executive tool for improving the management of the Sacred Site, it is suggested that an overall management plan that will explain to all the exact nature of the Holy Island Project should, with Lama Yeshe's endorsement, guidance and insights, be drawn up. This should consist of an appropriate integrated land-management plan, in which spiritual values and scientific ecology mutually enhance each other.

The Management plan should consider the following issues:

- i. Completion of an accurate biodiversity survey in order to fully appreciate the ecological worth of the island.
- ii. Actions promoted in the plan should be developed in conjunction the stakeholders in the island's community, especially with those most often resident there. This action plan should be continuously monitored and developed by stakeholders, who should also receive expert advice.
- iii. Experts should provide the management tools for developing the best possible practices that can be derived from the spiritual values of the stakeholders' ethos. They should also provide long-term technical support for managers.
- iv. Technical advice and some financial assistance should be forthcoming from government institutions and other external sources.
- v. A regular monitoring programme should be set up with targets and indicators to control the achievements of the plan. The monitoring process will provide interesting data on how spiritually based management may

improve nature conservation and as such may be able to strengthen scientific knowledge.

vi. The right type of people needed for developing the plan should be found. The members of the island's community change very quickly owing to the turn-over of volunteers and so knowledge of the management plan often has to be passed on from one group of volunteers to the next. A core group of informed and committed people who can develop the plan in the long term should be identified. The management plan's activities should be clearly detailed and specified.

vii. The spiritual awareness of people towards nature should be enhanced on the island through wider contact with the world. Visitors should be informed about the experiences other people have had at the site. In addition, self-awareness activities contributing to a greater awareness of nature could be promoted and advertised via leaflets, signs, audio, video and personal contacts. This could be perhaps carried out via information panels complementing those panels with prayers that already exist, as well as through newsletters, writings and daily life experiences. In order to improve the promotion of the interfaith

characteristic of the Holy Island Project, prayers about nature from different religions could be displayed on these information boards. Scottish Natural Heritage produces free advisory publications and holds training events to assist in this process.

The positive interfaith connection to be experienced on the island should be promoted to a greater extent. A real commitment from groups of different faiths should be put into action in order to give more power to the ideas in the Assisi declaration; and Holy Island could be established as a very important place for religions to work towards nature conservation.

The conservation status of the island should be promoted in order to back up the current rules of behaviour established by the Tibetan Buddhists. This conservation status should take into account the improvement of both spiritual and ecological values, without ignoring the fact that spiritual values are the main driving-force behind island management. A Sacred Natural Sites legal designation that encouraged the spiritual-based management of nature could be promoted.

In a wider context, the recovery of the spiritual values of a site in the technologically developed world by a culture coming from

the non-technological world should be seen as a good way of reinvigorating natural spiritual values in a site that was almost spiritually dead. This fact may stimulate other cultures to take care of spiritual natural sites that have been abandoned and to show just how important nature is even if there is no real outstanding biodiversity value in the site in question.

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Buddhist divinity, rock painting on Holy Island.





Kolovesi National Park Rock Paintings

Southern Savo, Finland

*Matti Määttä, Minna Oksanen, Tero Sipilä
& Arto Vilén*

Natural values

Kolovesi National Park, one of the most spectacular sites within the Lake Saimaa complex of lakes, was established to protect its unique natural and cultural values. Lake Saimaa, the largest and most famous lake complex in Finland, is regarded as a site of outstanding universal importance due to its geological features and natural beauty. It is included in Finland's preliminary list of World Heritage sites as a single site under the denomination 'The Saimaa-Pielinen Lake System'.

The landscapes of the Saimaa-Pielinen Lake System combine ancient Precambrian rocks formed over two billion years ago with features dating from around the end of the last ice age, less than 12,000 years ago. Major processes include:

- Tectonic processes related to the movement of ancient continental

plates. Large-scale fracturing, faulting, erosion and weathering resulting in mosaic-like bedrock relief, now largely submerged under a labyrinthine system of channels and lakes.

- Erosion and deposition during the ice age and as the ice sheet finally melted.

- Land uplift since the ice age and the consequent tilting and isolation of the Lake Saimaa basin from the Baltic Sea, and subsequent fluctuating water levels.

Today, Saimaa-Pielinen consists of natural and semi-natural landscapes characterised by a stunning scenic combination of lakes, shorelines, islands and low hills. The total length of shoreline in Lake-Saimaa is about 25,000 km, including more than 14,000 islands of over one hectare. The lakes are covered by snow and ice for 5-6 months of the year.

Kolovesi (literally 'lake of holes') is part of the Lake Saimaa complex. It is exceptionally rugged and topographical variation is high: steep cliffs raise straight from deep waters to high summits and have inspired and provided a suitable rock surface for

painters at times of differing water levels. The curving shorelines of the islands and mainland combine in a beautiful and seemingly endless mosaic landscape.

Kolovesi is one of the key habitats for the endemic subspecies of the Saimaa Ringed Seal (*Phoca hispida saimensis*), which has lived in a population isolated from the Baltic Sea for around 8000 years. This seal was legally protected in 1955; before this date dozens of seals were shot annually. The Saimaa Ringed Seal population is under threat and was the first sub-species to be included in the IUCN Red Data Book in 1966 at its current status of 'Endangered'. According to the European Union (Council Directive 92/43/EEC, Annex IV), the species needs strict protection.

The Saimaa Ringed Seal breeds on snow piles along the shorelines of the islets and islands, the only places in Lake Saimaa where snow accumulates. Pups are born in lairs under the snow in mid-winter (late February-early March). Annual pup production is at present ca. 50-55 newborns and, based on the annual counts of seal lairs and pup production, the present population size is thought to be around 270-280 seals. About 30 seals live in Kolovesi, where there are at least five fertile adult females. Kolovesi has the highest seal density in Lake Saimaa at about one seal per km², which illustrates the pristine

nature of the area. The number of seals in Kolovesi has slowly increased as a result of conservation measures, although the population should not yet be regarded as stable or viable and still relies on connections to adjacent sub-populations. The main threats to seal populations are accidental entrapment in fishing tackle and disturbance at breeding sites, which can lead to abnormally high lair mortality amongst the lanugo-covered pups.

Lake Saimaa salmon are relicts like the seals, but are not regarded as sub-species. They can be found in Kolovesi, although, unfortunately, their natural spawning rivers are now used for hydro-electric production. Kolovesi is also important in the protection of the Lake Saimaa Char and in attempts at increasing its natural regeneration. Both fish are dependent on stocks of fingerlings from fish farms.

Kolovesi also provides protection for old-growth forests. Almost all the forests of the region have been logged over the years as a result of a favourable situation that allows cut trees to be floated down to processing plants. However, in over half of the total forest cover natural succession has been at work for over a hundred years. These forests are usually located on cliffs next to the shoreline.

The heterogenic structure of these forests provides a high quality environment for several threatened species, some of which are all but unique to the boreal vegetation zone. Lately, younger forests have been ecologically improved by creating small openings and deliberately damaging trees to promote structural diversity and increase the amount of dead and decaying wood in these once managed forests. As well, small areas of forest-covered mires have been restored by blocking drainage ditches to restore the water balance.

Bears, wolves and lynxes are frequent in the Park and surrounding areas. Recent monitoring has demonstrated that wolverines also live in the Park, but there is sufficient habitat to prevent them from entering farms and gardens. Every year wolves kill a number of hunting dogs and even farm animals and are regarded with some reticence by local people.

Of the threatened bird species, Black-throated (*Gavia arctica*) and Red-throated Divers (*Gavia stellata*), Osprey (*Pandion haliaetus*), Lesser Black-backed Gull (*Larus fuscus*), Hobby (*Falco subbuteo*) and Red-breasted Flycatcher (*Ficedula parva*) have all nested in the Park.

The use of motor boats in the Park is forbidden and is the only such area in Lake Saimaa. This has created a silent environment that is good for wildlife and highly appreciated by visitors.

Kolovesi was included in the Finnish Shoreline Protection Programme 1990, although it was subsequently agreed that it deserved a higher conservation status and was thus declared a National Park in 1990 with a surface area of 2,300 ha. Subsequently, more land and water has been acquired by the Finnish State and added onto the Park; these areas are no longer used for forestry activities. A new act of parliament aimed at enlarging the National Park and updating its regulatory basis is currently under debate in the Finnish Parliament, and will increase its total surface area to 5,500 ha (around 4,500 ha of land and 1,000 ha of water). Kolovesi is also the core area of the European Union Natura 2000 site of Kolovesi-Vaaluvirta-Pyttyselkä, which has around 4,800 hectares of land and 3,000 hectares of water.

The legal regulations governing the Park are quite strict, being classified as a Category II park under the IUCN classification of protected areas. The rock paintings of Ukonvuori, Havukkavuori and Vierunvuori are protected by the Antiquities Act.

Kolovesi National Park is fully owned by the Finnish State and is managed as part of the Finnish protected areas network by Metsähallitus Natural Heritage Services. Metsähallitus is a state-run enterprise that manages state lands and waters and its Natural Heritage Services are a public unit whose main responsibility is to manage state-owned protected areas. Management is mainly financed by the budget of the Ministry of the Environment. Metsähallitus is also responsible for the conservation and monitoring of the Saimaa Ringed Seal. Management resources are adequate.

The Park has had an operative management plan since 1993, although it is currently under revision and a new plan is expected to be ready by 2007. This plan is being prepared in a participatory manner with input from local people and entrepreneurs.

An inventory of the natural heritage of the site has recently been carried out and the known distribution of key species is recorded. All the data is incorporated into the Metsähallitus Geographic Information System.

Map of Kolovesi National Park, and situation within Finland. (Author: Metsähallitus)



The use of motor engines in boats has been forbidden since 1994 and has reduced the disturbance to the seals. As such, Kolovesi is the only place with no motor boats in the whole of Lake Saimaa. This has significantly increased the importance of the Park to visitors, who seek silence within this extraordinary landscape and also hope to see a seal. Access is restricted in the lake system, although the number of visitors has been constantly increasing in recent years. Currently, about 6,500 visitors visit Kolovesi annually, almost all of them in summer. Over 60 % of all visitors stay overnight and spend on average 3.4 days in the Park, an exceptionally high figure for a national park in southern Finland. Recent visitor surveys and other studies lay an emphasis on the importance of the sensation of silence in Kolovesi.

A network of entry points and camp sites has been built. Their use is being monitored and, if the site's carrying capacity permits, the network may be enlarged if and when the need arises. Local entrepreneurs rent out canoes, provide accommodation and other services for visitors. An average of about three people-years are used to manage the site annually; major work is carried out by contractors.

No people live within the Park boundaries. There is one house that is inhabited all year around and a few summer cottages within the Park's external boundaries in small private enclaves. During the setting up of the Park, a group of local residents were allowed to continue hunting elk within the Park during the autumn. The number of elks killed per year is regulated on the basis of population numbers. Inside the Park there are areas with restricted access aimed at protecting the seals. Elsewhere, Finnish right-to-roam applies and local people pick berries and mushrooms and catch fish. No licences to use fishing nets are sold. Hunting has been an issue during the drafting of the new act and the current situation, in which a couple of elks per year are shot, is expected to continue. There was some opposition to the setting up of the Park, although currently the Park is regarded favourably by local people, who expect to retain their traditional rights and look forward to a greater positive impact of the Park on the local economy.

Metsähallitus discourages any activity on the ice whilst seals are in their lairs. This provision, however, is not currently included in regulations and snowmobiles, for example, are allowed to some degree on the ice during winter. Restrictions may be imposed if seen fit.

Spiritual and cultural values

Kolovesi is seen by visitors today as a remote, almost wilderness area. Scientists and archaeologists have been able to prove that the area has been occupied fairly constantly for thousands of years and has been an important waterway, a rich place for hunting and fishing, and a site of shifting cultivation.

The Park features some of the most rugged rocky areas within the Saimaa Lake complex. Its massive rocks were holy places for a long time for the people who painted the rocks and these Stone Age paintings are today the main spiritual and cultural values of the area.

Finland has the largest accumulation of prehistoric rock paintings in Northern Europe. They consist of red ochre paintings on the steep vertical surfaces of granite rocks: there are none of the rock carvings here that are also found in other parts of Scandinavia or north-west Russia.

The choice of the locations of the paintings in Kolovesi appears to have been influenced by the jagged coastal landscape and the winding passages between the islands. Rock paintings

were probably situated deliberately where waterways crossed, on an arm of a lake, along the edges of the short isthmi or on the upper parts of waterfalls.

Estimating the age of rock paintings is mostly done on a basis of a comparative analysis of the prehistoric coastlines, settlements and the height of the paintings. Such analyses enable us to determine the date at which water levels reached a suitable height below the paintings. It is assumed that the paintings were made from a boat or from on top of the frozen ice. They are located much higher than today's water level would permit and it is suggested that they were painted during the periods of the Typical Comb Ware (4,100-3,600 cal BC) and the Early Metal Age (3,600-600 cal BC).

Many modern observers have been struck by the human likenesses of the natural features at certain rock painting sites. Some credibility is given to this idea by ethnographic information on cults associated with distinctively shaped stones in other parts of northern Eurasia. The Saami cult of the *sieidi* -rock formations worshipped as the expression of a supernatural power- is of particular relevance here. Rock paintings are found in three mountain sites (*vuori* means mountain):

Vierunvuori cliff

Paintings are situated on a cliff near the junction of the waterway connecting Lake Kolovesi and Lake Ruokovesi. The paintings are situated about 13 meters above water level and consist of two elks (one with a marked heart) and several anthropomorphic figures in different positions.

Ukonvuori cliff

The name Ukko could refer to old Lapp tradition and heritage since it was a name ancient Finnish people gave to high sacred places. In a cave-like recess in the wall of the mountain of Ukonvuori a human figure with raised hands and bent legs is depicted. The figure is situated at the far end of the cave so that it will catch the sun. There are also circles and a blurred area of red paint. Metsähallitus Natural Heritage Services has built a small dock, stairs and a path leading to Ukonvuori.

Havukkavuori cliff

There are paintings in two different places on the mountain of Havukkalahdenvuori, both on massive rock cliffs. In the first, the lowest paintings are situated about 9.5 m above the surface of the lake and consist

of two right-hand hand-prints, elks and three human figures in different positions, as well as some anthropomorphic features (for example, a human face on the profile of a rock). In the second group, the lowest figures are situated 6.9 m above the surface of the lake and consist of three animals, probably elks, some lines (some of them snakes) and a human figure with raised hands.

All these rock paintings have strong connections to the Stone Age and ancient Finnish pre-Christian religious traditions. Since many aspects of rock art seem to find such close parallels in Saami ethnography, the possibility of using a direct historical analogy in interpreting northern European hunter-gatherer rock art should be taken seriously.

Shamanism is a central element in both Finnish and Saami pre-Christian religions. The most convincing archaeological evidence for prehistoric shamanism is found in northern Eurasia. In Siberia, for example, rock art and the use of holy places (rocks, trees and springs) extends from prehistory right up into historical times.

It has been suggested that shamanistic cosmology is reflected not only in the iconography of their rock paintings, but also in their locations within the landscape, which in many respects resembles

those of Saami sacred sites (*sieidi*). The most common type of rock painting site, an imposing rocky precipice rising from the lakeshore, can be interpreted as reflecting the aspirations of accessing both the upper world and the lower world, along a symbolic axis. The middle world is inhabited by human beings, while the upper and lower worlds are the abode of the gods and spirits. These three levels of cosmos build a 'World Mountain', a type of belief that is common among Finno-Ugric and Altaic peoples. Rock paintings are situated at the point where the three elements—earth, water and sky—meet.

The most important paintings depict humans, elks (antlers), boats and handprints. Familiar signs and styles are repeated in numerous paintings and encourage us to believe that these figures may have been meaningful for more than one group of people and were powerful signs connected with legends and beliefs.

Finnish rock paintings are part of the northern hunting and fishing culture. They may have been done in special places that were thought to bestow good luck on hunters and fishermen – if ignored or offended, they could deprive the hunter of his catch. They may have been part of some sacrificial cult and the painter –or

shaman– would have been the most influential person of the community.

The iconography of rock paintings appears to reflect experiences such as the falling into trances, summoning spirit helpers, changing one's physical form and journeying to the Otherworld. The elk, we suggest, is pictured not as prey, but as a spirit helper or a 'soul animal' of special importance. The elk is associated with the middle world, the bird with the upper world and the snake with the lower world.

Other explanations for rock art can be found in the Finnish national epic poem 'Kalevala'. Ukko is the god of the weather, crops and thunderstorms, according to old Finnish pre-Christian traditions. He provided protection during wars and helped hunters and fishermen, and was probably the most powerful of the gods, being both feared and revered. Ukko lived in the sky from where he looked down upon the world. He used a big axe or mace and flashed lightning down on the world. The snake-like figures in the rock paintings could in fact be lightning (= powerful god of the thunderstorm, Ukko). We find the same kind of thunderstorm gods in mythologies from all over Europe and the Middle-East. Nevertheless, the name Ukko may also refer to a place where people collected shiny quartz stones

and Ukonvuori does have an old quartz stone quarry.

Although the ancient Finnish pre-Christian religious tradition is not alive in Finland anymore, many similarities can be found between the old religious traditions of Finno-Ugric and Altaic peoples. While the concept of shamanism seems to explain the function of many different aspects of Finnish rock paintings, there are other explanations for these painted images and some sites may have served different purposes from others. More research is needed into these issues.

All ancient monuments and sites in Finland are protected under the provisions of the Antiquities Act and all the rock paintings in the area are protected by the Finnish National Board of Antiquities, which takes care of all ancient sites in the area. Within this Board, the Department of Archaeology and the Department of Monuments and Sites are responsible for maintaining and caring for the country's archaeological and cultural heritage, as well as certain provincial museums.

The lake areas of Saimaa and Päijänne have the oldest place-names in Finland. We cannot trace any etymological origin

Kolovesi prehistoric rock paintings.



back to our language as the original language of the area has disappeared, although the genetic heritage of the people is still alive in eastern Finland. We could call the people who lived in the Saimaa lake area 'Laplanders', although we must understand the difference between Lapp and Saami. The Lapps are people with a hunting culture who subsist by fishing and hunting. Saami people are an ethnic group (*sabmelas* in their own language). The name 'Lapland' comes from words *lape* or *lappe*, which mean a remote area, although the Samean words *lapp* and *lappo*, which mean 'dismissed', might also be a possible origin of the name. Lapps were often feared and despised as shamanic nomads.

Metsähallitus Natural Heritage Services takes care of nature conservation and the natural heritage of the area and participates in the conservation of the cultural and spiritual heritage of the region.

Most visitors to Kolovesi National Park are canoeists, mostly from southern Finland and abroad. Päivi Tommola has examined the natural experience of the visitors in her thesis and the following are her main findings:

- For most visitors Kolovesi National Park is an uninhabited, wilderness-like region. It is quiet and peaceful and a place where

people can feel in touch with nature and relax.

- People feel a connection with nature and this awakes a respect. Finnish visitors above all feel they are going back to their roots when they visit. They experience a religious-like sensation when they see the tall cliffs rising around them. The only noise is that which the visitors themselves make, which they hear repeated back as an echo. They can feel a connection with the past through the rock paintings of the area.

- Visitors are worried about losing this peaceful and silent area.

Development pressures

Kolovesi is located in the relatively remote area of southern Savo in south-eastern Finland. Population density is quite low and there are only a small and continuously diminishing number of people living on the outskirts of the Park. The main economic activity is forestry, which, however, no longer provides much employment due to the advance of mechanisation. Metsähallitus owns the majority of commercial forests: large industrial forestry companies own significant areas of land, although there are quite a few private forest owners, a minority of them still

active. Up to the early 1970s, logging and silviculture provided a significant number of people living nearby with at least temporary work. Cultural landscapes are gradually disappearing.

There is significant demand for summer cottages due to the natural beauty and location of Lake Saimaa. Shoreline construction is subject to planning that defines potential plots; many land owners are selling their plots as their value is quite high. Traditionally cottages are built right on the lake shore and so there are fewer free stretches of shoreline for people from outside the Park. Cottage plots are located in areas with fewer seals. Building and servicing cottages is an important part of the local economy.

Nature tourism is gradually increasing. Most Finnish visitors need no more than a canoe to rent, although the growing number of foreign visitors has increased the demand for services.

Building cottages on the shoreline reduces access and negatively affects the feeling of silence. Otherwise, one would say that there is a lack of life in the Park in general and in European terms the area could be regarded as a 'wilderness'.

Visitor disturbance to the seals is monitored and information on how to avoid distur-

bance is distributed. If the need arises, further restrictions may be required that might have a negative impact on nature tourism. Only part of the waters within the Park boundaries are owned by the state. No licences for net fishing are sold for state waters. In private waters regulations on fishing in areas that are part of the Natura 2000 network where there are seals and voluntary agreements with water owners are satisfactory. The major issue is the unregulated use of snow mobiles when the lakes are frozen over.

The disturbance caused by visitors to the rock paintings needs more research. Some erosion and vandalism (new paintings) occurs. The Ukonvuori quartz quarry has caused harm to the paintings and some have been partly destroyed.

Conservation perspectives and sustainability

The conservation situation of both natural and spiritual values will be satisfactory once the Finnish Parliament has passed the Act for enlarging Kolovesi National Park. This, together with the legislation on ancient sites, will ensure the protection of both the natural and cultural values of the site. The Act will be complemented by a revised management plan that will specify objec-

tives and permitted activities and detail lower-level regulations.

Metsähallitus has recently drafted a cultural strategy that will place more emphasis on identifying, managing and interpreting the cultural heritage present within its protected areas. It is also hoped that this will increase the level of funding.

A deeper understanding of the roots and spiritual heritage behind the rock paintings, together with its potential inclusion in the Delos initiative, will increase the overall value of Kolovesi. It will give a deeper context to the feeling of silence and mysticism that is already highly valued by visitors and will encourage the possibilities of nature tourism. Such an understanding of the region's roots and cultural heritage will also increase local acceptance of the Park. Linking the post-glacial changes in water levels with the works and beliefs of the rock painters is also expected to contribute positively to the universally outstanding values required for World Heritage nomination. The number of visitors could be increased during the main summer season without putting natural values, including the Saimaa seals, at risk or threatening the feeling of solitude and silence that reigns in the Park.

Recommendations

The increased emphasis, interpretation and marketing of the cultural and spiritual heritage of Kolovesi remains well in line with the strategy undertaken by Metsähallitus to improve its cultural approach to protection. In the future, Kolovesi will be one of the key areas for this approach thanks to its connection with the Delos Initiative. Special emphasis will be placed on local people as a means of increasing the local value of the Park. The Delos Initiative approach will be incorporated into the management plan. The status and condition of the rock paintings will be continuously monitored and action taken whenever necessary. The features of the paintings themselves will be more accurately documented using the latest technology.

Knowledge of the spiritual significance of the rock paintings is, however, not yet adequate enough to provide a sound scientific base for interpretation. The archaeological inventory and compilation of Kolovesi modern history is complete. The rock paintings and their surroundings could be studied in more detail, although it is more important to study who the painters actually were and whether they moved away from the area voluntarily or not. Likewise, it will be important to find links between the paintings and the belief

systems of the Fenno-Ugrian indigenous people in Russia.

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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 develop¹. 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

¹ 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 Greece². 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

² 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.

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Mount Athos¹

Greece

Thymio Papayannis

The site

Mt. Athos in the Greek Prefecture of Halkidiki in south-east Thessaloniki is an elongated rocky peninsula, approximately 50-km long and 10-km wide, that links the continental part of Greek Macedonia to the Aegean Sea². The almost perfectly conical Mt. Athos, the Holy Mountain, rises to a height of 2,033 m and is located on the tip of the peninsula, which, although physically connected to the mainland, is in fact only accessible by sea. A sense of isolation is thus maintained and there is strict control over access³.

Restricted access is a requirement of the monastic community that has existed on Mt. Athos for more than 1000 years and as a result a religious centre of great spiritual and cultural importance has evolved.

Limited access and the philosophy and practices of the 20 monasteries built on the peninsula have contributed to the maintenance of a rich natural environment, both terrestrial and marine, which has achieved international recognition.

Although part of Greece, Mt. Athos enjoys special autonomous status and self-government, as enshrined in a charter signed in 1926⁴; nevertheless, spiritual guidance is the responsibility of the Ecumenical Patriarch of Constantinople and the Greek Ministry of Foreign Affairs is in charge of the peninsula's political affairs⁵.

Natural values

The area has been managed actively by the monasteries for the past ten centuries and many highly important natural values have been preserved, a fact that demonstrates the possibility of harmonious co-existence between

1 Based on the results of a UNESCO mission to Mt. Athos in February 2006, in which Thymio Papayannis represented IUCN.

2 Historically, Mt. Athos maintained trading and spiritual links with many of the islands of the northern Aegean Sea, especially Lemnos, and traded timber for cheese, grapes and wines and other agricultural products.

3 Today there is only a dirt road, closed to all vehicles except fire engines in case of emergency.

4 Also recognised in the treaty of accession of Greece to the European Union in 1977.

5 Via a civil governor, resident in the village of Karyes, the capital of the peninsula.

humans and nature. The main natural values of the Mt. Athos peninsula can be summarised as follows:

- An unusual diversity of ecosystems in a very limited area, ranging from alpine (on the summit of the Holy Mountain) to Mediterranean (the coast).
- Coastal and marine areas rich in biodiversity, as shown by the presence of Mediterranean Monk Seals.
- Remnants of Mediterranean-type forests in certain areas, along with other types of forests.
- Great floral and faunal variety, including endemic and endangered species.

More detailed documentation of the biodiversity of the area is included in the data sheet⁶ for the designation of Mt. Athos as a World Heritage Site in 1988, both for its natural and cultural significance⁷.

In addition, most of the Mt. Athos peninsula (except for a small part in the north-west) has been inscribed in the

provisional Greek list of Natura 2000 sites⁸ and, as such, is protected under the European Union Habitats Directive (92/43/ EEC). This provisional list is still being finalised for Greece, although it is expected that Mt. Athos will be included. As a Natura 2000 site, Mt. Athos should in theory be the responsibility of the Ministry of Environment, Physical Planning and Public Works. However, due to its heavy work load and lack of staff, the Ministry's Nature Management Service has not yet become actively involved in the area. Two years ago, however, a local initiative commissioned two consultant firms from Thessaloniki to prepare a Special Environmental Study⁹, with a remit approved by the Service on Nature Management. It should be noted here that the EC/DG Environment considers the Special Environmental Studies carried out in Greece as being equivalent to management plans for the Natura 2000 sites.

To date, the actual management of the area has always been the result of a delicate balance between the needs of the monastic communities on Mt.

⁶ See http://whc.unesco.org/archive/advisory_body_evaluation/454.pdf.

⁷ The only other Greek site with mixed designation (nature plus culture) is Meteora in Thessaly.

⁸ With a site code of GR1270003 and an area of 22,000 ha.

⁹ In accordance with Law 1650 of 1986 on the 'Protection of the environment'.

Athos and the corresponding services of the Greek state. Traditionally, the 20 monastic brotherhoods own the entire area of the peninsula and have almost complete administrative autonomy, although certain matters of common interest are handled by the Holy Community (Iera Kinotis) of official representatives from the 20 monasteries. The Holy Supervision (Iera Epistasia) consists of four members elected by the five oldest monasteries and is the executive body of the community.

The Forestry Ephorate¹⁰ plays a major role in environmental matters. It should be noted here that the monks have a considerable respect for the natural world that derives from the teachings of the Orthodox Church on the sanctity of the Creation, as well as the example set by Ecumenical Patriarch Bartholomew I. The same cannot be said of the numerous visitors, who are mainly interested in the religious aspects of the area, nor of the building and forestry contractors and workers, who are usually totally indifferent to the natural world. Herein lies the crux of the question of the environmental degradation that is clearly visible in certain parts of the Athos peninsula.

Spiritual and cultural values

Although Mt. Athos was inhabited by Christian Orthodox hermits from a much earlier date, the first organised monastery, Great (*Meghisti*) Lavra, was established by St. Athanassius the Athonite in 963 AD. A contract (*typicon*) was signed between the Byzantine Emperor Ioannis Tsimiskis and the monks of the area in 972 that defined the framework and rules of the monastic community. Since then, 19 other monasteries and many other smaller facilities such as hermitages, *sketes*, churches and cells have been built.

It is worth remarking that during the first part of the second millennium Mt. Athos was an official Byzantine institution, but that its monasteries have never been solely Greek and also include even today a Bulgarian, a Russian and a Serbian monastery.

From its very beginning, Mt. Athos was dedicated to the Mother of Christ and so was known as *The Garden of the Virgin Mary*. This is the explanation given for the avaton, the rule prohibiting women and children from entering the site that has been strictly enforced throughout the ages. In the Byzantine times, Mt. Athos

¹⁰ Forestry Committee, consisting currently of Fathers Nicodimos (Megisti Lavra), Theodossius (Stavronikita) and Efthymios (Zographou).

was an important religious centre and played a key role in the Empire, with monks becoming patriarchs and emperors retreating here for refuge and solace.

After a period of decline in modern times, Mt. Athos has once again started to attract a large number of young and educated monks —many of them of non-Greek origin— and has seen a revival of its spiritual role within the Orthodox world. Most of the recently arrived monks have an urban background and thus are not as knowledgeable of the austere rural traditions on which monastic life is based. On the

other hand, they are much more aware of the need to protect the unique cultural heritage of the area and have been able to apply new technologies available for this purpose.

Today, the spiritual and cultural values of Mt. Athos can be summarised as follows:

- Global recognition as major monastic centres.
- Pre-eminent teaching and inspirational role throughout the whole Christian Orthodox world.

Map of Athos.



- Maintenance of a living Orthodox and Byzantine tradition for over a millennium.

- A responsibility for the protection and management of a unique cultural heritage (consisting of architecture, manuscripts and rare books, icons, religious objects, tools and other artefacts) under the supervision of and in collaboration with the appropriate services of the Ministry of Culture.

- Establishment of a school of religious painting that has been influential in many places, including Russia.

- A particular system of government based on democratic principles of self-governance and on obedience to spiritual rules.

In recent years, the cultural and spiritual treasures of Mt. Athos have been made available to the world through special exhibitions, such as the one recently organised in Helsinki by the Finnish presidency of the European Union. This has been a positive development, but it has also created a much broader interest in the Holy Mountain and has increased demand for visits, which the monastic community attempts to control via the implementation of various measures.

Pressures and impacts

Conditions

On Mt. Athos, the natural environment and human occupation are inextricably linked and the conservation of the former is closely related to the latter. The environment of Mt. Athos can be divided in distinct zones, whose main characteristics (and threats deriving from human actions) are briefly described below.

Marine zone: The waters around the peninsula of Mt. Athos are well preserved and are said to be still home to an unknown number of Mediterranean Monk Seals *Monachus monachus*. There are no significant sources of pollution and fishing is not allowed within 500 m of the coast, other than by the monks themselves for their own use. Illegal commercial fishing is very rare due to efficient policing by local coastguards. Recently, there has been some debate in the Holy Community as to whether humanitarian reasons are grounds for allowing local fishermen to enter the no-fishing zone. However, no final decision has yet been taken.

Coastal zone: Most of the coastline is steep and rocky with just a few pebble and sandy beaches. There are no natural harbours and only a little trade enters the

Peninsula via the sea. The eastern coast is often lashed by northerly winds, while the western side is more sheltered and has a warmer climate. Most of the monasteries have traditionally always maintained installations on the coastline (*arsanas*¹¹) for mooring and storing small boats. In order to allow ferries transporting wood and building materials to dock, larger and more practical port facilities have been constructed recently along several stretches of the coastline; their integration into the landscape has not always been satisfactory.

Forests: Mt. Athos is mostly covered by forest: the particular type of forest varies according to the microclimatic zones, which range from Mediterranean-type evergreen forests¹² and maquis at lower levels, through dense chestnut, oak and black pine forests, and up to alpine and sub-alpine vegetation on the mountain summit. The forests are still largely intact, although there are certain threats, above all the opening up of new roads, generally for fire protection but also to facilitate the transportation of timber. In certain areas, unsustainable forest practices have led to overexploitation and a loss of biodiversity. In

addition, the monoculture of chestnut trees for the production of timber has created vulnerability to attacks by parasites (for example, *Endothia parasitica*). It is worth noting that, due to the high costs of manpower and transport, sustainable forestry in Athos is a financially marginal activity, both for the loggers and the monasteries, and thus unsustainable forestry practices occur.

Cultivated areas: In the past, a large part of the Athos peninsula was cultivated, mainly with vineyards and olive groves. Today, most cultivated areas have been abandoned and have reverted to forest. There is only one major commercial exploitation of vines for wine-production¹³, the remaining cultivated areas consist of small patches of vines, olive trees and vegetable gardens in the vicinity of the monasteries, mainly tended by the monks for their own use.

Inhabited areas: These areas consist of the purely monastic facilities (monasteries and their dependencies, *sketes* and cells, *arsanas*), as well as two small towns (the main port of Daphne and the capital Caryes). All are well integrated into their natural environment and there

¹¹ A word that may originate from the Italian *arsenale*.

¹² Consisting mainly of *Arbutus*, cypress, heather, holm oak, laurel, lentisc, Phillyrea, pine and wild olive.

¹³ Tsantalís Winemaking lies within the Panteleimon Monastery; there is also a smaller vineyard in Mylopotamos.

is a harmonious transition from built-up areas into cultivated and forested areas.

Threats

There are various environmental threats and problems that have to be faced up to. The main such threats are summarised below:

Forest degradation: In certain areas of forest, over-exploitation could lead to degradation, even allowing for natural regeneration.

Road network: Mt. Athos already has an extensive network of roads. The density of roads should be 15-20 m/ha, although in certain monastery properties it approaches 40 m/ha, which is considered to be excessive¹⁴. Most are dirt tracks¹⁵ and often become impassable in winter (due to mud and snow), and can easily revert to forest once abandoned. In recent years, new roads have been opened and older ones improved: nevertheless, at times these roads are much wider than would seem to be necessary and are rarely integrated into the landscape. Road cuttings create steep slopes that are only re-vegetated very slowly, while excavated earth and rocks are often dumped on the

lower edge of the road, thereby creating serious environmental degradation.

Unregulated constructions: In various places, functional installations such as storehouses (mainly for timber and building materials) and cement silos have been erected seemingly without any consideration for the landscape.

Waste management: Each monastery deals with its own solid and liquid waste and as a result various unregulated rubbish dumps exist on Mt. Athos. These contribute to environmental degradation and also constitute a potential fire hazard. Recently, an agreement was made to transport solid waste from Caryes to the municipal dump at Thessaloniki. Nevertheless, this is only intended as a temporary measure until a suitable site can be found on Mt. Athos. Another problem is the dumping of abandoned vehicles (a small number of which were noted during a recent mission).

Hunting: Although in theory prohibited on Mt. Athos, some workers (especially in forestry) own and use guns. This activity is not appropriate for such a sensitive area and should be controlled more effectively.

¹⁴ According to a 1999 study by EKBY (Greek Biotope Wetland Centre).

¹⁵ Except for a large part of the road between Daphne and Caryes.

Conservation perspectives

Planning efforts

All of the problems mentioned above originate to a large extent from a lack of any overall 'management plan' for Mt. Athos. Such a plan has been proposed by many different bodies and one was almost passed in 1999 as a result of an initiative originating from the Forest Ephorate; it is, however, still pending. In its stead, a Special Environmental Study was commissioned a year ago and is still to be finalised. Once completed, the study will be submitted for approval to both the Holy Commu-

nity of Mt. Athos and the Ministry of Environment, Physical Planning and Public Works. It is worth noting that any plan designed for Mt. Athos area as a whole contradicts the traditional idea of each monastery acting as an autonomous institution. This attitude, however, is gradually being replaced by an understanding of the need for a more collective approach.

On a more positive note, there have been a number of significant developments in recent years in the exploitation of the forests, mainly as a result of the actions of the Mt. Athos Forestry Ephorate. These include:

Monastery of Stranonikita, with its vegetable gardens.



- The continued enforcement of the ban on grazing¹⁶, which helps the rapid natural regeneration of the forests, above all after fires;
- The development of management plans drawn up by forestry consultants for most of the monasteries to decide which tree species are to be exploited;
- Various studies on the improvement of forests;
- Remedial action regarding road construction.

More efficient fire protection has been achieved¹⁷ through better organisation, appropriate equipment (such as fire engines) and personnel, although the maintenance of the existing material –especially the fire engines– and the training of personnel need to be placed on a more systematic basis.

Recently, the Holy Community has agreed to the development of a risk assessment strategy (including both fire and seismic events) by the Aristotle University of Thessaloniki.

Cultural and spiritual perspectives

In terms of culture, building restoration work is being carried out in an appropriate fashion thanks to careful studies by competent architects and engineers, although exceptions have occurred, usually as a result of ignorance and the need to use quickly available European Community funds. The main threat is from fire, as buildings are often wooden and possess outdated heating systems¹⁸. Great progress, however, has been made in the protection and safeguarding of removable objects of great cultural value using state-of-the-art techniques; likewise, the repair of damage caused by past neglect and exposure to harsh conditions is being remedied.

Regarding spiritual issues, the monastic community has attempted to balance its desire to welcome and provide spiritual teaching to visiting pilgrims and the need to mitigate the social and environmental pressures caused by large numbers of visitors¹⁹.

It is evident from the above that the future of Mt. Athos as a sacred area, in which there is an evident harmony between nature and human activities, depends to a

16 With the exception of a limited number of mules, used mainly for timber transport.

17 After the very destructive and extensive forest fire of August 1990.

18 A large part (60%) of the Serbian Monastery of Hilandary was burned down in 2004 by a fire caused by an electric heater being left on.

19 Who are traditionally welcomed by the monasteries free of charge.

critical extent on the beliefs and attitudes of the monastic brotherhoods. Outside interventions may be positive, although probably not determinant. In this context, certain positive measures promoted by the Holy Community and the Greek state should be implemented rapidly and effectively.

Recommendations

The highest priority for Mt. Athos in terms of both its cultural and natural values is the preparation, approval and systematic implementation of an integrated and multi-disciplinary management plan for the entire area, which should tackle the following issues:

- Evaluation of the current situation, taking into account the historical co-existence of nature and spirituality/culture in Mt. Athos and the legitimate needs of the monastic brotherhoods.
- Improved planning of the transportation network throughout the peninsula.
- Integrated management of the natural and human environment.
- Sustainable management of forests.
- Identification and protection of the cultural landscapes.

- Resolution of the problem of solid and liquid waste.
- Management of risks, especially from fires, earthquakes and the possible impact of climate change.

Due to the administrative autonomy of the monasteries, such a plan should first take into account all of these recommendations for the entire peninsula and then concentrate in greater detail on proposals for the specific area of each monastery.

An examination of the content of the Special Environmental Study –currently in its final phase– indicates that it might be sufficient to cover most of the points mentioned above with the possible exception of the question of risk management. An evaluation of the study might also be required to determine whether it satisfies the requirements of the World Heritage Convention for management planning²⁰. In this context, it is important to make clear that management planning should be seen as a continuous and dynamic process, of which the drawing up of the management plan is but a first step. In addition, the Ministry of Environment, Physical Planning and Public Works should be

²⁰ In accordance with the latest decision of the World Heritage Commission.

encouraged to assign a high priority to its work on Mt. Athos (in accordance with Law 1650/1986 and Community Directive 92/43/WWC). This Ministry should play a key role in the assessment, approval and implementation of the Mt. Athos management plan.

On a broader level, any integrated approach to the cultural and natural heritage of Mt. Athos will require close collaboration between the Ministries of Culture and Environment, which today is minimal. Regarding spiritual questions, Mt. Athos could regain its prominent position as an intellectual centre of Orthodox thought by adopting the approach of HAH the Ecumenical Patriarch on the sanctity of the Creation, which he has promoted through His ecological symposia²¹. The Ecumenical Patriarchate might consider organising in the near future a conference on the 'Integrated approach to the spiritual, cultural and natural heritage of sacred sites' with the support of the Delos Initiative.

Positive measures

Positive measures, either already implemented or being considered, include the following:

The decision to entrust the Holy Community with the power to approve the opening up of new roads and the admittance of vehicles to Mt. Athos. Once a management plan for the entire area exists, this process will be much easier.

A programme for the ecological management of the chestnut forests funded by the European Union and implemented by the Simonopetra Monastery during the 1990s has provided useful lessons.

Recently the EKBY (the Greek Biotope Wetland Centre²²) has been working on a project for the 'Rehabilitation of coppice *Quercus ilex* and *Quercus trainetto* woods²³ in Mt. Athos', in co-operation with the Holy Community and monasteries and funded by LIFE-Nature²⁴. This project, which aims at increasing biodiversity by restoring tall forests, focuses on selective-inversion thinning applied exper-

²¹ The latest of which was held on the Amazon River in July 2006.

²² Established in Thessaloniki, it operates within the framework of the Goulandris Museum of Natural History.

²³ Holm oak and Hungarian oak forests, respectively.

²⁴ Project LIFE03 NAT/GR0093, October 2003 to March 2005 (extended to 2006), with a budget of approximately two million euros. Its scientific director is Professor Spyros Dafis.

imentally to a pilot area of 500 ha and aims to develop a series of guidelines. In addition, it recommends measures such as:

- Preparatory actions for the mapping of these forests.
- Training of forest workers and monks to improve the management of forests.
- Establishment of a management system for the forest areas that have been thinned.
- Public awareness and information activities (web site, publication and meetings).
- EKBY prepared in 1999 for the Ministry of Environment, Physical Planning and Public Works a study on the 'Rehabilitation of slopes along the forest road network in Mt. Athos', which includes very interesting and well thought-out recommendations.
- The preparation of a Special Environmental Study (to be completed).
- The regional authorities are planning to

carry out a study on the management of solid and liquid wastes.

- The possibility of proceeding with the preparation of a management study for the whole Athos peninsula is being discussed by the Forest Ephorate and KEDAK²⁵.
- The Ministry of Environment, Physical Planning and Public Works is also considering the need for measures to protect the Mt. Athos Natura 2000 site.

Specific recommendations

A number of specific recommendations have also been included that have already been presented to the Holy Community and to the Greek State:

Forests

- Implementation of the measures for the ecological management of the Mt. Athos forests, as contemplated in the Simonopetra/EC project²⁶.
- Application of the results of the above-

²⁵ KEDAK is the Centre for the Preservation of the Athonite Heritage and comes under the auspices of the Ministry of Macedonia and Thrace.

²⁶ These include soil-care, the encouragement of mixed forests with the planting of *Prunus avium*, *Tilia platyphyllos*, *Acer pseudoplatanus* and *Quercus dalechampii*, the selective cutting of chestnut trees every 40 years, the protection of ancient trees and other similar measures.

mentioned Holy Community/EKBY/ European Community project to all of the oak forests on the peninsula.

- Assessment of the viability of commercial forestry on Mt. Athos in order to determine whether the income from this activity could be obtained from other sources (such as EC subsidies). If so, traditional forestry would be practiced only for the needs of the monasteries, thereby relaxing the considerable human and transport pressure that commercial forestry exerts on Mt. Athos.

- Until such time, the possibility of managing the Mt. Athos forests sustainably in accordance with an international forestry certification system (such as FSC or PEFC) should be contemplated; this would also provide commercial advantages.

Road construction and maintenance

- Rapid assessment of the needs and prioritisation regarding roads within the framework of the overall management study (or independently of the study, if need be).

Saint Panteleimonos or the Russian Monastery, view from the sea.



- Forbidding the dumping of excavated matter on the lower slopes of roads.

- Adoption of the recommendations of the EKBV study on road construction and the treatment of slopes.

- Avoidance of 'hard' constructions in concrete, except where absolutely necessary.

- Planting of indigenous tree species along newly opened roads to alleviate their impact on the landscape.

Waste management

Until the general study is finished, certain immediate measures should be carried out. The following actions are especially significant:

- Removal from Mt. Athos of all abandoned vehicles.

- Assessment of the feasibility of extending the Caryes-Thessaloniki agreement in order to cover the transport of solid waste from the entire peninsula.

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Sacred Sites and Pilgrimage Routes in the Kii Mountain Range. Mie, Nara and Wakayama Prefectures, Japan

Makoto Motonaka

Description of the site

Historical and Spiritual Values of the site

Since ancient times, the Kii Mountain Range has harboured a tradition of nature worship, in which mountains, rocks, forests, trees, rivers and waterfalls are deified and revered as objects of worship. Located to the south of the Nara Basin, the site of one of Japan's ancient capitals, this region is beloved by people from the capital and recognised as a sacred site where the gods descend and reside.

After Buddhism was introduced into Japan in the sixth century, the Kii Mountain Range became the central site for ascetic Buddhist practices; the Shingon school of esoteric Buddhism, which arrived in the ninth century, also chose this area as a place in which to perform its ascetic rituals.

Between the mid-tenth and eleventh centuries, the Shugen school of ascetic

Buddhism established itself as the indigenous religion of Japan. It combined elements of pre-Buddhist mountain worship, an esoteric form of Buddhism called Mikkyô and the Taoist belief in the immortal Hsien, which was introduced from China. The followers of the Shugen sect chose the Kii Mountain Range as a base for their religious worship.

On the basis of the diversity of religious beliefs and activities that have been fostered by the region's unique geology, climate and vegetation, the three outstanding sacred sites of Yoshino and Ômine, Kumano Sanzan and Kôyasan, as well as the pilgrimage routes that connect them, have all become important heritage areas in the Kii Mountain Range.

World Heritage Values

The Sacred Sites and Pilgrimage Routes in the Kii Mountain Range were inscribed in the World Heritage List on the basis of Cultural Criteria (ii), (iii), (iv) and (vi), and the concept of Associative Cultural Landscapes.

< Kii Mountains temple.

Criterion (ii) The outstanding monuments and the sites that form the cultural landscapes found at this site are a unique fusion between Shinto, rooted in the ancient Japanese tradition of nature worship, and Buddhism introduced into Japan from China and the Korean Peninsula. These monuments are unmatched elsewhere in the region and illustrate the exchange process that has occurred between religious cultures in East Asia.

Criterion (iii) Each compound of the shrines and temples included in the nominated site contains the remains of lost wooden or stone structures that exist nowhere else and other archaeological material pertaining to religious rituals.

Criterion (iv) Many of the temples and shrines in the site are excellent examples of wooden religious architecture of great historic and artistic value.

Criterion (vi) The combination of highly sacred natural objects and sites, the surrounding forest landscapes and the religious rituals and festivals that are still observed in these sacred mountains ensures that this site possesses a highly diverse mix of both tangible and intangible elements of heritage.

Natural heritage

Most of the Kii Mountain Range is covered by dense verdant forests. Three endemic plants and plant communities thrive in the forests of the site: Oyamarenge, a deciduous shrub belong to the Magnoliaceae family, *Bukkyougatake Genshirin*, a sub-alpine evergreen coniferous forest consisting mainly of Veitch's fir (*Abies veitchii*), and the Nachi primeval forest, a laurel forest dominated by isunoki (the isu tree - *Distylium racemosum*). They are all widespread over the mountain ridge and have been designated as natural monuments under the Law for the Protection of Cultural Properties.

All elements in the core area of this World Heritage site are designated as national historic sites, places of scenic beauty and/or natural monuments under the Law for the Protection of Cultural Properties. Some of the elements of the site and its buffer zone are protected as national and/or quasi-national parks under the Natural Park Law. Parts of the site's buffer zone are protected by the Forest Law and the Municipal Ordinances for the Conservation of Cultural Landscapes.

Given that the Kii Mountain Range was included in 2004 in the World Heritage Site list as a Cultural Heritage Site, the

Japanese Agency for Cultural Affairs is now responsible for the conservation of the whole site from the standpoint of national and international cultural values. The Ministry for the Environment is in charge of the conservation of national and quasi-national parks, while the Japanese Forestry Agency is in charge of the conservation of national forests included in the site and the promotion of forestry activities.

The departments for the Protection of Cultural Properties, the Conservation of the Natural Environment and Forestry Promotion belonging to the three separate prefectural governments that cover the area of this World Heritage site are in charge of its overall conservation. Appropriate guidance and assistance is also provided by the corresponding agencies and the ministries of the Japanese government.

Each local municipality is also in charge of on-site management from a cultural and natural point of view. Guidance and assistance is provided not only by the corresponding national governmental agencies and ministries, but also by the three prefectures.

The main elements of the site's natural heritage are the coniferous and broad-leaved forests that cover much of the Kii

Mountains. Some of the most significant forests (in terms of their size and/or characteristics) and some of the particularly old and/or tall trees growing in temple and shrine compounds are highly revered and are protected as natural monuments.

Most of the people living in and around this site are aware of its natural value. Most of the pilgrims and hikers who visit the mountain range also appreciate its importance and sometimes express their concern at the increasingly negative impact of tourism. On the other hand, some of the visitors who visit as part of large-scale group tourism pay little attention to the natural heritage of the site.

Spiritual and Cultural values

The Sacred Sites and Pilgrimage Routes in the Kii Mountain Range consist of a group of sacred sites connected by pilgrimage routes lying in the Mie, Nara and Wakayama Prefectures. The site is associated with the Shugen sect of ascetic Buddhism that sprung up from a blend of religious elements that include the worship of nature inherent in the Shinto of ancient Japan, the Buddhism introduced from the continent that developed in its own particular fashion in Japan, and Taoist beliefs.

The spiritual value of the site is closely tied to local natural and anthropogenic factors. Natural elements consist essentially of the geographical features of the mountains themselves, characterised by verdant coniferous and broadleaved forests, old trees growing tall in sacred spots and waterfalls used uninterruptedly over the years as sites for ascetic rituals by Shugen-do trainees, as well as the coast (Shichi-rimihama) and the Kumanogawa River, both of which are also significant elements on the pilgrimage trails that connect the three sacred sites. Other important sites include various anthropogenic elements such as historic temples and shrines, pilgrimage routes connecting the three sacred sites and the still-unexcavated archaeological remains relating to religious rituals and practices.

The organisation of *Shugen* ascetic practices is closely linked to the management of the sacred spots located along the pilgrimage routes. The religious organisations that run the Buddhist temples and Shinto shrines, all generally recognised and understood by the general public, are also in charge of the management of the compounds.

The departments in charge of the protection of cultural sites in the three prefectural governments and the local municipalities are responsible for the con-

servation and enhancement of the cultural and spiritual values of these sites. An Agency for Cultural Affairs provides technical and financial assistance and support, while in the case of the temple and shrine compounds, their owners are responsible for the conservation and enhancement of the sites in consultation with local municipalities.

The main activities related to the spiritual and cultural heritage of the site are the *Shugen* religious ceremonies, rituals, festivals, pilgrimages and ascetic practices that are held in the temple/shrine compounds all along the pilgrimage routes; some of these events are designated as folk-cultural events by the prefectural governments.

Most of the local people and visitors are fully aware of the importance of the *Shugen* religious ceremonies, rituals, festivals and ascetic practices that are held in the compounds of the temples and shrines and along the pilgrimage routes. Local people's work is often closely related to the religious activities performed by Buddhist priests and ascetic trainees.

Pressures and impacts

The most dynamic human activities in the region are:

- Pilgrimages: on-going religious activity as a historical and living tradition.
- Tourism: closely linked to the traditional pilgrimages.
- Mass tourism: an increasing number of visitors (including hikers).
- Management or operation of inns, restaurants and other facilities for visitors by local people.
- Infrastructures for lessening the inconveniences to local people caused by visitors.

Employment in the area essentially revolves around the management or operation of inns, restaurants and other facilities for visitors (including pilgrims).

Some of these local economic activities may occasionally have a negative impact on the site, although overall there is no major problem in this sense. Agriculture, forestry, fishery and other local economic activities in the buffer zone have no negative repercussions on the site.

Currently, there is no real serious negative impact upon the natural environment of the site. However, some of the projects described below that are planned for the site's buffer zone may have a negative impact on certain places of natural and spiritual/cultural significance.

Pilgrimage, Kii Mountains.



- Construction and improvement of roads, including the construction of large bridges.
- Artificial canalisation of rivers to prevent floods.
- Construction of wind farms on mountain tops.

Buddhist ceremonies, rituals, festivals and *Shugen* ascetic practices are conducted in harmony with the natural environment and aim to bring people closer to nature. Therefore, potential conflicts between the conservation of the natural heritage and the protection of spiritual/cultural values are unlikely in the foreseeable future.

The livelihoods of the local people who have historically cared for pilgrims along the pilgrimage routes depend on activities such as coppicing for charcoal, planting of Japanese cedar and rice production in terraced paddies scattered around villages. Local people have always made use of the pilgrimage routes for the transportation of the essential materials they need for their daily lives. The Sacred Sites and Pilgrimage Routes in the Kii Mountain Range are a heritage site with close ties to Shintoism, Buddhism and *Shugen-do*, in which the surrounding cultural landscapes relating to local people's lives and livelihoods are also a part of the site and its buffer zone.

Land-use in the site and its buffer zone is determined by laws concerning forestry, agricultural promotion and rivers, as well as landscape conservation ordinances enacted by the municipalities in the area. Consensus concerning activities altering the existing state of the site are reached through three mechanisms: preservation and management plans for each individual designated historic site, place of scenic beauty or natural monument established between municipalities and land owners; mid-term preservation and management plans developed individually by each prefecture; and an overall preservation and management plan drawn up jointly by the three prefectural governments for all the relevant elements in the World Heritage Site.

Conservation perspectives and sustainability

A distinctive characteristic of the natural environment of the site is that all of its natural elements possess great spiritual and cultural significance and have been well protected over the centuries by the religious activities that are performed there. Implicitly, thus, the public realise that the conservation of the site's natural heritage should be incorporated into any plan for protecting the site's cultural and spiritual heritage.

Due attention has been paid to the fact that the cultural and spiritual value of the site is closely associated by both local people and visitors with the natural environment. The public are aware of the importance of incorporating the protection of the site's cultural and spiritual heritage into the overall conservation of the site's natural environment.

Due to their great spiritual value, some parts of the densely vegetated temple and shrine compounds are closed to the public, a prohibition that may have contributed to the conservation of these natural elements and their surroundings. Both the forests that cover the compound of the Koyasan Buddhist Temple and the Nachi Primeval Forest, located behind the Nachi-Taisha Shinto Shrine, have been well preserved thanks to a strict prohibition based on religious doctrine that prevents entry to these sites.

Owing to their participation in religious ceremonies, rituals and festivals, local people and visitors are aware that the sacredness of the site is closely associated with its rich natural setting. More and more Buddhist priests and practitioners of the Shugen ascetic school engage in religious activities and increasingly greater numbers of people visit these religious sites on pilgrimage, all of which shows that this cultural manifesta-

tion is alive and well here in the spiritual heartland of the Japanese people.

People's lives and livelihoods in the region depend on the natural environment surrounding their homes. Land-use can be classified by type (sacred forests, forest plantations, terraced rice paddies, rivers and seacoasts) and natural quality (strictly protected natural areas with a high degree of sacredness or transitional areas that lie in between protected areas and settlements). The protection of sacred natural sites contributes to the overall assessment for zoning the natural areas in the region.

Thus, the possibility of good positive synergy between the conservation of the site's natural heritage and the protection of its spiritual/cultural values must be taken into account.

As mentioned earlier, if the socio-economic development of a region is not to be negatively affected, it is essential to aim for a harmonious balance between the protection of sacred natural sites and the conservation of the various types of natural zones that surround them. Highly sacred zones cannot exist in isolation, since they are closely connected to people's spiritual lives. The integration of natural and

spiritual values must contribute to the sustainable development of the region.

Recommendations

Each municipality should set up a coordinating committee to facilitate the sharing of appropriate information and the reaching of agreements regarding the conservation and management of the heritage site between the religious organisations who own the temples and shrines, local people, local authorities, stakeholders and other pertinent organisations. Consensus should be based upon an in-depth evaluation of not only the natural values of the site, but also the spiritual/cultural values that are associated with the site's natural elements. The natural value of the land-use that sustains local lives and livelihoods should also be assessed in an appropriate manner.

Moreover, on the basis of the site assessment agreed to by the coordinating committee, a plan including general principles and comprehensive measures for the correct preservation and utilisation of the site and policy for appropriate and effective management must also be established. This management plan will be highly beneficial for local people if based on a proper assessment of the value of the site and will contribute greatly to the sustainable socio-economic development of the region.

It is essential that mechanisms for establishing consensus, cooperation and coordination between local people, owners of the temples and shrines, administrative organisations, NGOs and other stakeholders are set up. In particular, the relevant agencies and departments of local municipalities and prefectural and central governments should cooperate in the exchange of information and enforce measures to manage the site in an appropriate way.

In order to maximise the effectiveness of the coordinating committee established by the local municipalities, special attention should be paid to the following:

- Promotion of national and international cultural interchanges between local people and visitors in aspects of spiritual, cultural and natural heritage.
- Encouragement of education for young people aimed at highlighting the purity, beauty and sanctity of the site.
- Sharing of information with local people, including owners of the temples and shrines.
- Encouragement of discussions regarding the effects on people's daily lives of the fulfilment of management policies within the heritage site.
- Provision of appropriate means for explaining to visitors the need to protect the site.

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Fire ritual.





Vanatori Neamt Natural Park, a Romanian Jerusalem

Neamt region, Moldavia, Romania

Sebastian Catanoiu

A piece of history

To predict the future, sometimes it is enough merely to understand the past.

Romania is not the only Latin country in Eastern Europe, but it is the only Orthodox Latin country. It is a well known fact that Romania has the greatest number of places of worship per head of population of any country in Europe. After the Great Schism, the influence of the Byzantium Empire ensured that Romania would be dominated by Orthodox Christianity. The spread and survival of Orthodoxy in Romania was possible because the vacuum left by the waning power of Byzantium was replaced in the Middle Ages by the influence of the Russian Empire. This religious influence was palpable in neighbouring countries (all of them populated by Orthodox Slavs, except for Hungary).

For the 1000 years after the Roman Empire went into retreat (270 BC), we have very little historical information about Moldavia, the eastern-most province of

Romania. From 1000 AD onwards the land was ruled by the Cumans, a nomadic people, and legends recall that in order to fight the Cumans and the Tartars, the Hungarian kings would send Teutonic Knights to fight on their kingdom's borders. The fortress at Neamt was built by these knights between 1210 and 1220 and the difficulties arising during its construction led the Teutonic Knights to take control of most of the region of Neamt. Although this Germanic period lasted for less than 100 years, its legacy is still present today. In popular Romanian *neamt* means 'German'; thus, not only is the fortress called *Cetatea Neamtului*, but the town is named 'Tirgu Neamt' and the region is known as 'Judetul Neamt'. Because of the security it provided, this military building ushered in a period of progress for the region.

From 1350 onwards, Orthodox monks from the Romanian feudal state of Valahia (near the Byzantium Empire) began to establish small hermitages in Moldavia. Some grew and became famous - Neamt (1000 monks under the abbot Paisie), Secu (400 monks) or convents such as Agapia and Varatec (each today with 300-400 monks or nuns). Originally, when the region was poorly populated, the first

< *Sihastria Monastery Vanatori-Neamt.*

small hermitages were established near rivers or in places with good access to rivers. From the period in which the Neamt fortress and the first monasteries were built, we have no historical information about the villages in the area. It is known that some villages grew up near the fortress or near the monasteries. According to local custom, at the beginning of their reigns every new Moldavian prince had to donate villages, lands or forests to the monasteries. Thus, many of the villages in the region were ruled by monasteries and the peasants were obliged to work there as servants. The monasteries expanded and became very wealthy and influential and by 1864 their lands represented almost 10% of the whole of Moldavia. In this year, prince Alexandru Ioan Cuza confiscated for the Moldavian state a large part of the monastic lands (farmlands and forest), an act that marked the beginning of the debate on the so-called 'monastery question'.

The arrival of a communist society provided a minimum of economic security for most of the citizens. However, the changes that occurred with the fall of communism in Eastern Europe affected many people and because no efficient economic solutions were found, many chose the spiritual dimension offered by the church. The right to private property,

protected by post-communist legislation, enabled the monasteries to reclaim their former assets and today the monasteries have regained some of the properties they lost in the past.

Natural values

Vanatori-Neamt Natural Park was founded in 1999 and its first administration was set up within the framework of the Biodiversity Conservation Management Project with as partners the Global Environmental Facility of the World Bank, the Romanian Government and the Romanian National Forest Administration. The Natural Park corresponds to the fifth category of the IUCN, that is, a "Protected landscape: protected area, managed mainly for landscape conservation and recreation". Since 1999 the Natural Park has been managed via the Vanatori-Neamt Natural Park Administration by the National Forest Administration, a state-owned company with a long and distinguished history in forestry. This is a common situation in Romania: 22 of our national and natural parks (including the oldest and most famous) are administrated by the National Forest Administration, on the basis of an official contract between the Ministry of the Environment and Water Management and the National Forest Administration.

The Ministry of Agriculture, Forestry and Rural Development has overall responsibility for forestry in Romania. The Secretary of State for Forestry oversees the Directorate of Forests, which, in turn, comprises four main directorates (Strategy, Policy and Forest Regime; Hunting and Fishing; Private Forest Management; and the Forest Inspectorate). This structure is under review and may be reorganised. The Ministry of the Environment and Water Management is responsible for environmental policy and strategy; the administration of protected areas in Romania is under the supervision of the same minister. It was announced in 2006 that the National Agency for Protected Areas, which still exists only on paper, will be handed direct control of protected areas. The Commission for the Protection of Natural Monuments of the Romanian Academy has scientific responsibility for all categories of protected areas (strictly protected areas, national parks, natural monuments, natural reserves, protected landscapes). In areas of forest, the National Forest Administration has had, via the protected areas administration, management responsibility up to now. Local authorities are responsible for land-use planning, but have limited capacity for dealing with issues affecting biodiversity.

In total the Natural Park covers 30,818 ha, of which 26,322 ha are forest, 2,300 ha pastureland, 900 ha hayfields and 700 ha urban areas. In 1990 the process of restoring forests to their former owners started and today about 5,300 ha of forest inside the park belong to the Orthodox Churches, 20,900 ha to the National Forest Administration and about 140 ha to small-scale owners. Besides this, there are still about 4,000 ha that are claimed by both the National Forest Administration and the Orthodox Church.

One of the initial main objectives of the Vanatori Neamt Natural Park administration was to control forest management in the forests belonging to the park. This goal was achieved in 2002, when for the first time in Romania the responsibility for forest management inside the park met the standards of the Forest Stewardship Council.

Before the restitution of the forests, 5,300 ha of forest belonging to the Orthodox Church were awarded a Forest Stewardship Council certificate. However, with the changes in the control of the forests these 5,300 ha lost their certificate and the new administrators, due to lack of funds, were not able to undergo a new certification process. Thus, the chance of achieving international recognition for the Natural Park's responsible forest manage-

ment, which takes into consideration environmental, social and economic aspects, was lost.

The largest part of the Vanatori-Neamt Natural Park lies in the Eastern Carpathian and the Moldavian Sub-Carpathian mountain systems at heights of between 365 and 1231 m (average altitude of almost 800 m). The superficial hydrographical network is part of the Neamtu (Ozana) and Cracau river basins, tributaries that flow into the right bank of the Moldova and Bistrita rivers.

An important characteristic of the area is the underground mineral water, rich in bicarbonates and magnesium salts. The springs of the Baltatesti and Oglinzi spas have low flow rates, but a high mineral content. The water of these salty springs has been used by local people for centuries to cure different ailments and for extracting salt by evaporation to use as a food preservative. The underground water is situated in highly permeable sandstone and gritstone deposits. Initially, the water contains little salt, but after entering into direct contact with salty clays they become very saline and then take up bicarbonates and magnesium from the sandstone and friable gritstones. Chemical analyses show that these kinds of mineral waters are very similar to the water

emanating from other famous European spas such as those at Karlsbad, Marienbad and Vichy.

The vegetation of the park displays a pronounced zonation: the foothills are mostly covered by mixed deciduous forests, dominated by pedunculate oak (*Quercus robur*), small-leaved lime (*Tilia cordata*) and hornbeam (*Carpinus betulus*). The montane zone, between 600 and 1100 m, is dominated by two species, European beech (*Fagus sylvatica*) and European silver fir (*Abies alba*). Almost pure beech forests dominate in some areas, although generally the beech is mixed with silver fir, Norway spruce (*Picea abies*), and sycamore (*Acer pseudoplatanus*). In some places, the montane zone is dominated by conifers, usually a mixture of silver fir and Norway spruce. Natural stands of yew (*Taxus baccata*), which are protected under Romanian legislation, can also be found.

Inside the Park there are other protected areas:

Dumbrava oak forest (I IUCN): a pedunculate oak forest at 450 m with trees aged between 200 and 300 years and between 25 and 30 m tall lying on an alluvial deposit in the Ozana River Valley at the upper altitudinal limit for the species. This reserve is important for the genetic value of its trees and as

such is protected by the Romanian Academy.

Brass Woods (IV IUCN): this reserve lies on Filiu Hill at 550-650 m and is home to excellent oak forests of, for example, sessile oak (*Quercus petraea*), that are over 150 years old.

Silver Forest (IV IUCN): this silver birch forest is over 100 years old (very old for this species) and lies at 510 m. Like Brass Woods, the Silver Forest is also important culturally as the site that inspired the famous Romanian poet Mihai Eminescu. The flora of the park reflects the typical

characteristics of the low mountains of the Sub-Carpathian zone and is very diverse and well preserved. Recent baseline-surveys have calculated that the park holds 1053 vascular plants (approx. 53% of the flora of the Neamt region and over 25% of all known Romanian plant species), 67 species of lichens, 157 species of moss and over 500 species of mushrooms.

The area has been well known as a hunting reserve since 1475 (indeed, *Vanatori* means 'hunters'), when hunting here was the preserve of the Moldavian prince and his court. In all, 35 mammal species (including 10 bat species, Red and Roe

A log hermitage, Sihla Monastery.



Deer, Wild Boar, Hare, Wolf, Fox, Wild Cat, Brown Bear, Badger and Pine Marten) live here, along with 101 species of breeding birds. The numerous birds of prey reflect the stability of the region's ecosystems. As well, 13 amphibian species and seven fish species are found here. However, one of the main attractions of the park is the European Bison, present in a Bison reserve set up in 1968. Thanks to the reintroduction programme carried out by the Vanatori-Nearmt Natural Park administration, European Bison can now be found in semi-liberty in a large acclimatisation area (180 ha). Over the next few years the bison will be allowed to roam freely.

According to our studies there are at least four pastureland and three forest habitats, four mammals, 13 birds, four amphibians, six invertebrates, three kinds of fish and three plant species that are included in European Union Habitat and Species Directives (92/43/EEC) and/or Bird Directive Annexes (79/409/EEC). For this reason, the whole of the park has been proposed as a Natura 2000 site in the provisional list for Romania, which is in the process of being finalised.

People in the area are aware of the main protected species and sites in the Natural Park, although their environmental concern goes no further. Very few, generally the most educated people, fully appreci-

ate the importance of conserving biodiversity on the scale of the park as a whole. The younger generations, above all, have a very important role to play in the conservation and protection of biodiversity by promoting a proper attitude regarding the understanding of nature. Local inhabitants are aware of the need for sustainable development in the area and that the natural values of the area must be preserved, since this will mean an improvement in their living conditions as the area grows as a tourist attraction.

The tourists that visit the area are aware of the famous reserves inside the Park (Dumbrava, Silver Forest and Brass Wood) and are very interested in the European Bison: the Bison reserve is one of the main points of attraction in the area.

Spiritual values

The spiritual value of the area is closely related to Orthodox Christianity. One hermitage and two churches in the area use the Russian Orthodox calendar. The differences between Russian Orthodoxy and Romanian Orthodoxy are insignificant, the most important difference being the two-week difference in the calendar. In all, 80% of the Romanian population is Orthodox (in our area the percentage is higher) and so local people and Romanian

tourists generally share religious values. According to statistics, just 15% of tourists come from foreign countries and visitors have no problems in understanding the religious significance of the area.

The area of Vanatori-Neamt is very famous for its collection of Orthodox monasteries. There are almost 40 churches, small hermitages and monasteries, of which 16 are nationally famous. Owing to the succession of invasions by the Turks and Tartars, amongst others, during the Middle Ages, some of the older religious buildings are heavily fortified.

Neamt Monastery was built between 1375 and 1391 on the site of an older wooden hermitage. Under abbot Paisie the number of monks grew to over 1,000 and the monastery came to be known as 'Big Lavra' or sometimes as the 'Romanian Jerusalem'. Specialists consider it to be the most eloquent expression of the Moldavian architectural style. Nearby are the Old Icon, New Icon, Vovidenia (1751), Procov (1714) and Carbuna hermitages, all lying in beautiful forest settings.

Secu Monastery is a stone building dating from 1602 belonging to Nestor Ureche, the father of the chronicler Grigore Ureche. Nifon Hermitage stands near this monastery and was also built deep in the surrounding forest.

Sihastria Monastery was built in the middle of the eighteenth century as a hermitage attached to Secu monastery. Nowadays it consists of a complex of monasteries, of which the new one is the biggest in the area. The Poiana lui Ion hermitage is also new and is administrated by the prior of Sihastria.

Sihla Monastery lies at 1,000 m near rocky cliffs and spectacular gorges, the site of Teodora's cave. This monastery was built in 1763 and this is also the site of the famous 'One-log Hermitage'. In the vicinity, stands Daniil Sihalstrul (1936), the most isolated hermitage in the area.

The first reference to the convent at Varatec dates from 1785, when the first wooden church was built; the present building was built in 1808.

Agapia convent was built in 1644 and painted by Nicolae Grigorescu (the famous Romanian painter) between 1858 and 1860 and today contains a memorial house for Alexandru Vlahuta (a famous Romanian novelist). Old Agapia was established in the mid-sixteenth century in a very traditional orthodox style. The two convents at Agapia and Varatec are the biggest convents in the whole of the Orthodox world (300-400 nuns each) and are famous for their icon painting, embroi-

dery and weaving that respect old methods of production.

Dobru convent is the oldest convent or monastery in the region still using the Russian orthodox calendar. Indeed, the village of Vanatori was the first place in Romania with a church built for people wanting to follow the old Russian Orthodox calendar. Today, its first priest is regarded as a martyr by the local community since he was killed at the altar of his church for not wanting to change the rules of the old traditions.

Sfanta Cruce Hermitage was the site of a terrible battle during the Second World War during which thousands of Romanian, German and Russian soldiers were killed. After the war, this hermitage was built in honour of these unknown soldiers.

Aside from the monasteries, which house a lot of holy relics and tombs of religious and historical figures, there are also numerous other places of religious significance for Orthodox worshippers such as the cave of Saint Teodora the Pious and the cell of the priest Cleopa.

The monasteries are important from both a spiritual and a cultural point of view. Neamt monastery is also very famous for its library (which contains

more than 10,000 medieval books written in Slav, Greek and Romanian) and museum. In these periods monasteries were cultural centres and every monastery was involved in spreading the word of the Bible and the Romanian language. Today, there are theology seminaries (high school level) for boys at Neamt and girls at Agapia.

Cultural values

In terms of cultural significance, it suffices to say that, in modern times, a lot of important artists (including Romania's most famous poet, novelist and painter) lived and created in this splendid region. Some were born and bred in the area and chose to stay, and the area boasts attractions such as the Ion Creanga Memorial House (the most important Romanian storyteller), the Mihai Sado-veanu Memorial Museum (the most important Romanian novelist), the Veronica Micle Memorial House (former home of the most important Romanian poetess), the Alexandru Vlahuta Memorial House (one of the most important Romanian novelists), the History and Ethnography Museum and the Nicolae Popa Collection of History, Ethnography and Popular Art.

Neamt Fortress is a national symbol and, despite having been besieged on numer-

ous occasions, it was seldom conquered by force. It is the eternal subject of Romanian poetry, prose and painting and during holiday periods many school children (above all from Moldova province) come to learn about our national history. In 1650 the fortress was transformed into a monastery in order to avoid its demolition by the Turks, who wanted to destroy this national symbol. In 1685 it became the property of the Secu Monastery and during an uprising in 1716 was for the first time burned down. During the eighteenth century it was blown up by the Turks.

All monasteries have almost complete administrative autonomy, although they are directly subordinate to the Moldavian Archbishop. The main authority on religious affairs is the Romanian Patriarchy.

The management of the forests in the Park owned by the Orthodox Church is carried out by a private forestry district that is legally under the legal control of the Ministry of Agriculture, Forestry and Rural Development and the Moldavian Archbishop, who receives advice from a Forestry Council on policy for all the forests in Moldavia that are property of the Orthodox Church. The capacity for deal-

Agapia Veche Monastery, Vanatori-Neamt.



ing with issues of biodiversity in these private forest districts is limited.

The Ministry of Culture and Religious Affairs is in charge of the protection and conservation of cultural, religious and historic sites of national importance. The funds provided by this ministry go towards the restoration and maintenance of monuments, but often these funds are not sufficient. Local councils take care of the locally important sites, although, likewise, funds are limited and monasteries and churches often have to use their own funds.

For other projects being developed in the area (roads, agriculture etc.), the Ministries of Public Works and Agriculture, Forest and Rural Development are involved.

In conclusion, management of the lands owned by the Orthodox Church (agricultural lands, forests, etc.) is theoretically under state supervision (via differing ministries); nevertheless, in practice the abbots, the Moldavian Archbishop and the Romanian Patriarchy play the most important role. We should note, however, that most of the funds invested in religious sites come from the Orthodox Churches.

Every road in the forest seems to pass by a monastery or end at a hermitage. All year round and, above all, in the summer and

during Orthodox festivals, large numbers of pilgrims travel to and from these religious sites, attracted by masses, the *hram* (religious festivities of the patron saints of the monasteries, churches, hermitages, etc.), and the religious festivities that are celebrated at Christmas and Easter. Some of the so-called 'weekend visitors' try to see as many monasteries as they can in a short period of time and are interested in every attraction that can be visited on the roads between the monasteries. Some pilgrims take advantage of the accommodation offered by the monasteries to stay for a few days to pray and to obey the monastic rules for a short period of time. In order to enter the monasteries, visitors must respect certain rules: respectful clothing must be worn, women are forbidden to wear trousers or make-up, and the use of a shawl is compulsory. It is totally forbidden to drink alcohol or to smoke and a humble, penitent attitude is required. External cleanliness does not suffice and internal purity is also required. All hate, pride and a lack of respect must be left outside these monasteries. All visitors, pilgrims, tourists and locals alike know and respect these rules.

Pressures and impacts

In terms of the economies of the towns and villages inside the Natural Park the

most important activities are timber extraction and the manufacture of finished and partially finished wood-based products such as panels and furniture. Lower down the economic scale come tourism, industry, agriculture, stock-raising and cottage industries. These economic activities mainly bring benefits to local companies and people. However, due to the high unemployment rate, the population is oriented excessively towards the exploitation of local resources.

Life in the Vanatori-Neamt Natural Park has been lived for hundreds of years in close harmony with the surrounding forests. Local inhabitants have created a habit of using the forests as a source of income and use its timber and other resources. Other traditional occupations include farming, horticulture, stock-raising, the selling of animal or vegetal products in local fairs and manufacturing and handicrafts. Many of the traditional ways of life still exist. Horses are still used in a rudimentary way for transportation and as labour in the forest and fields; local stock-raising techniques are not very efficient and thus generate little income. Houses, tools and many of the objects used in day-to-day life are made using local materials and traditional techniques. Traditional local architecture is characterised by wooden buildings with wooden tiles and ornaments, sur-

rounded by wooden sculptured poles and decorated gates.

Traditional activities do not have a significant negative impact on the environment and so no major conflict exists between the park's objectives and the conservation of holy sites. The main attractions in the Park area are the medieval monasteries, visited by 65% of visitors, while other cultural and historical sites are the main focus for 20% of people. To a lesser extent, however, visitors are attracted also by the overall natural values of the region with its inherent historical and cultural connotations: areas such as the Silver Forest, the Brass Woods or the European Bison Reserve are the main target for about 15% of visitors and around 5% of people come for treatment at the Oglinzi and Baltatesti spas. The tourists that visit the area not only head for the monasteries, but also take in the fortress, the Bison Reserve and the natural reserves, all of which lie in the same areas as the monasteries.

Access to the Park is easy by car and so a lot of the visitors (60% in all) do not actually stay overnight in the area. This is also partly due to the fact that accommodation is limited (there are fewer than 50 pensions, hotels or motels, of which half are quite new). In fact, the monas-

teries provide about 50% of the accommodation in the area.

Pilgrimages take place around the main points of interest, although in the case of weekend or holidays, the park's picturesque valleys (Agapia, Secu and Neamtisor) are the main destinations for visitors. There is no charge for visiting any of the sites other than the Bison reserve. Annually, it is estimated that about 400,000 people visit the park.

The most dynamic and widespread of all human activities in the Vanatori-Neamt

Natural Park in the future will be tourism and forest-related activities (logging, sawmills, furniture, etc.). This prognosis is based on the fact that from 1 January 2007 onwards Romania will be a member of the European Union and on the basis of the experience of other European Union members it is easy to predict what will happen.

The demand for high quality wood from certified European producers will increase. Prices will rise and so the pressure on forests will increase. Other economic activities such as extensive

Neamt Monastery.



agriculture and stock-raising, which, because of low productivity, cannot compete with modern agricultural production in western European countries, will undergo dramatic changes. Forest-related activities will remain one of the main economic activities for the inhabitants of the area.

It is also expected that the traditional sources of income for the Orthodox Church (donations, heritages, private financial support, etc.) will diminish as the cost of living rises. Likewise, the forests belonging to the Orthodox Church will also be put under increasing pressure.

On the other hand, tourism will increase. As mentioned above, half of the accommodation facilities are new and more still are under construction. The Orthodox Church owns more than half of the total accommodation in the area and is currently building and restoring facilities to create more places. Smart modern accommodation is seen to be important in order to attract greater numbers of tourists.

At a local level, the park is seen as being beneficial: it promotes the area as a whole via its positive image, it encourages eco-tourism and offers local people the possibility of earning a living from recreational tourism, entertainment and local attrac-

tions (the Bison). A single attraction (the monasteries) will not be sufficient for future visitors and the possibility of seeing the Bison in captivity, semi-free or in total freedom will provide tourists with a reason to remain in the area for longer. The new environmental educational trails that are designed to provide a better idea of the park's biodiversity will be another point of attraction.

At the moment the region's mineralised waters are not sufficiently exploited, despite representing a good opportunity for economic and social growth, and only two spas operate, neither of which is promoted well enough to attract more health tourists.

In an area of such great interest for national and international tourism, the development of sustainable tourism is a complex business, mainly due to the joint presence in the same area of monasteries, a natural, montane landscape of rare beauty and ethno-folkloric traditions, to which we can add the historical and cultural significance of the spas.

Impacts on the natural environment

Traditional activities have less impact on the environment. However, in the near

future tourism and other forest-related activities will begin to have a far greater impact on the area.

The main activities that have negative impacts on the area are wood extraction and industrialisation. The excessive mechanisation of timber extraction (traditionally, horse- and oxen-drawn carts were used to extract logs of much smaller size) since new tractors and high capacity and velocity trucks began to be used for logging means greater impact on forests (specifically on trunks, roots, saplings and soils). New forest tracks are required, along with roads for these kinds of tractors and modern roads for the new trucks. Logging takes place on slopes and the collecting and transportation of cut timber occurs along riversides, which leads to a progressive degradation of aquatic ecosystems as vegetation is cut back. In order to obtain short-term profit with low investment, the initial industrialisation of our area only aimed to extract timber that could be processed cheaply (dried, steamed or made into furniture parts). This means a large volume of wood is extracted for a final product with a low price per unit. A large percentage of this timber is exported and only a small part goes to Romanian furniture factories. As a result a lot of sawdust is deposited in water courses and only the largest companies use sawdust as fuel for their own

heating systems, the small companies store it up (in our area there are no facilities for making bricks from sawdust as fuel). In areas where wood is extracted, illegal cutting occurs and logging is unpleasant for tourists who want to admire the beautiful forests of the park. The process of returning the forests to their former owners is as yet not complete. Logging activities continue to represent a danger for biodiversity in these forests due to a lack of law enforcement.

Visitors are especially interested in the monasteries, but also visit the main natural attractions and pass through the region's forests on its roads. Many visit the monasteries in the morning and then have barbecues or picnics in the forest or on the rivers banks, not far away from the main road. Most are willing to respect the rules and regulations of a protected area in the vicinity of monasteries. Biodiversity is affected in this case by the environmental pollution caused in particular by rubbish, fires and car washing, but also in general by the easy access by car to the park (especially to the beautiful landscape between the monasteries in the Secu, Agapia and Nemtisor valleys). Conflicts occur between tourists who pollute and those who come to enjoy the park's natural landscapes and peacefulness. Illegal camping is another problem that negatively affects the environment for longer

periods of time and implies ditches dug, branches cut, fires lit and rubbish left in areas of natural quiet (hayfields, forest edges, etc.). Noise pollution disturbs game. There is also a problem with chaotic domestic and tourist waste disposal caused by lack of both education and an integrated waste system (collection, transportation, storage and recycling).

Some threats to the preservation of the local way of life are caused by the appearance of so-called modernity and investors with financial possibilities but no desire to observe the traditions of the area and the type of development carried out to date.

Impacts on the spiritual and cultural aspects of the site

The main economic activity in forests belonging to the Orthodox Church and an important source of income for the Moldavian Archbishop is logging. Some of the logs are sawn in the monasteries' own sawmills for their own purpose (new constructions, repairs, etc.), while others are sold to the forestry companies. Monasteries are organised in small communities and every large monastery owns forest tractors, log-lifters, chainsaws, in some cases small sawmills and even a whole timber factory in the case of the Neamt monastery. The need for timber and wood

for construction is great because every monastery is aiming to build their own new facilities (a new shelter in the case of Agapia, a new abbot's house in Neamt, and a new hermitage in Sihastria). Despite its claims to respect the environment, the Orthodox Church's day-to-day needs and development requirements mean that its forests are seen above all as sources of income.

Tourism is another source of income for monasteries. Every monastery has its own accommodation facilities, some of which are being modernised respectfully with great attention being paid to old Orthodox traditions, architecture, austerity and position. Elsewhere, most of the new facilities being built are modern and able to receive a great number of tourists, and also respect traditional styles. The number of tourists that use the monasteries' facilities is increasing, although the 'quality' of these tourists is lower. Sometimes the loss of tradition because of pressure of tourists is the first step towards the loss of sacred values of the site.

The increasing number of tourists magnifies the problem of waste disposal and every monastery seems to have its own way of solving this problem. In the case of the monasteries near the roads, rubbish is left in appropriate waste disposal points. However, at those monasteries and her-

mitages where access by car is difficult, solid and liquid waste both represent a real threat to the environment.

The Orthodox Church encourages nature conservation. The monasteries themselves, all places of worship, and their surroundings are models of cleanliness and good management. They are seen to play an important role in environmental education, sometimes even more so than schools because of the force of the example they set. However, the protection of cultural values is sometimes carried out with a disregard for natural values. The forest is taken into consideration in daily life above all as a source of income, and not as a reservoir of biodiversity. Other habitats such as pastures and hayfields, equally important for biodiversity, receive the same treatment. In some cases, buildings that alter the landscape and that are linked to the monasteries have been built without full legal approval.

Conservation perspectives and sustainability

Trends in the conservation of the site's natural heritage

The main actor promoting nature conservation in the area is the Vanatori-Neamt Natural Park, which is dependent on the

National Forest Authority and the Ministry of the Environment and Water Management. As of 2003, the Natural Park has a management plan whose main objectives are:

- Maintain biodiversity;
- Develop and implement strategy for free-living Bison;
- Encourage certification of forest management;
- Attract tourists and promote local values;
- Help communities to keep local traditions and values;
- Promote and support park-friendly activities;
- Involve public and local communities through education and public awareness activities;
- Increase the capacity of the park's administration and promote close cooperation with all stakeholders.

The whole of the park has been proposed as a Natura 2000 site as a result of a biodiversity monitoring and inventory programme. In order to increase the number of Bison and to improve their genetic quality, three importations of stock have been carried out so far and all the facilities for the Bison reintroduction have been built (quarantine farm, acclimatisation area, veterinary laboratory, etc.). The forestry certificate has been obtained and every year the certification body carries

out a monitoring visit. Public interest revolves around only the most spectacular and well-known elements of the region's natural heritage: the European Bison, bears, wolves, lynx, yews and the Brass Wood and Silver Forest reserves. In order to inculcate a greater sense of unity in all the stakeholders in the area and to obtain further support for its natural heritage, the park administration has developed a small grants programme and a number of its own projects. The success of the small grants programmes can be measured by the fulfilment of all of the objectives proposed and also by a greater cohesion in the park's activities as a whole.

An example of one of the park's own projects is the 'Bison Land' initiative. The main idea of this educational and support campaign was to use the European Bison as a flagship species for the area and to integrate local communities –be they inside or just outside the park– into a common micro-region called 'Bison Land'. After the first year, five local councils in the area around the Vanatori-Neamt Natural Park agreed to promote a common policy regarding the reintroduction of the Bison and nature protection. Likewise, local environmental NGOs also agreed to join together in a 'Bison Land Coalition' in order to provoke local interest in the project

Sihla Monastery, traditional shelters for hermits; Vanatori-Neamt.



and promote ecological education and public awareness regarding the importance of the presence of the European Bison in the region. A cultural revival of local pride has manifested itself in the form of a rekindled interest in ancient myths and legends involving the Bison and further research into traditional handicrafts using the Bison as a local symbol. This experience and the collaboration of local communities will be useful in future work.

In 2006 the park's new Visitor/Information Centre was opened. The importance of this centre is twofold: it aims not only to promote the natural heritage of the area, but also to support local communities in the move towards long-term sustainable development. It also serves as a community centre for the area and the importance of its role in the promotion of the various different programmes being carried out in the park cannot be overemphasised.

The surface area of the special conservation zones within the park has increased from 56 ha to 653 ha. After the Bison are released and monitoring begins, further areas will be proposed as special conservation zones (above all, the areas preferred by Bison). In these areas, no human activity will be allowed (only scientific research and strictly controlled tourism). Another 250 ha of special conservation area have been designated as a 'secular

forest of outstanding value' to protect the yew forests.

Trends in the protection of the cultural and spiritual heritage

All the monasteries have been restored: in some cases, just certain details have been improved (Agapia), in other cases modern heating systems are being installed and/or cells and other adjacent constructions are being improved. In monastic areas, only church buildings are allowed. Some of the projects for the monasteries have been initiated with European Union funds (road improvements, water and waste management, etc.). Owing to both its traditional status and current social conditions, the Orthodox Church is seen as a very credible institution and is currently expanding. New churches, monasteries, hermitages and shrines are being built in cities, towns, communes and isolated places, as well as in protected areas. This expansion and its characteristics are part of the Church's strategy, which is of private and not public concern.

Recommendations

It is obvious that the conservation of the natural heritage and the protection of the cultural and spiritual heritage have a lot in

common. It is much easier to protect sacred sites if the surrounding natural heritage is also being conserved. As well, the existence of a sacred site implies that environmental protection will also have a spiritual component. The strategies of protecting a natural environment and maintaining faith are not antagonistic in the long term. Problems appear in the short term when debate centres on how strategies aiming to protect both of these tendencies are to be implemented. It is easy to fall into the trap of regarding the great numbers of tourists that are attracted to the region's sacred places as a blight on the protected areas. A lot of work has still to be done to transform this flux of visitors into a true blessing for the park – this means 'converting' these tourists into protectors of the region's natural heritage by means of environmental education. The only possible way of doing this is for all interested parties to work together on as many common initiatives as possible.

Sacred Natural Sites must be well defined and finally officially recognised by national legislation (according to Romanian law there are a number of different ways of defining the Sacred Natural Sites that are not particularly specific: "... areas that protect historical monuments with significant national interest" (Law 345/2006), or "... forested areas in the areas around archae-

ological, architectural, historical and cultural sites" (Technical Normative n°. 3 for Forestry).

Sacred natural sites must be included in the legal limits of protected areas (according to Romanian law, a protected area can contain special conservation zones, zones of exceptional biodiversity, sustainable development zones, tourist development zones, etc.).

Obtaining a high level of protection for sacred natural sites will imply some economic restraints being put on owners (Natural Forest Administration, monasteries, private owners). In this case, some kind of compensation is required.

An integrated management plan drawn up on the basis of public consultation and the existing management plan is required for the sacred natural sites already included in protected areas. This new plan, based on criteria of spiritual and nature conservation for the Sacred Natural Sites, must take the following into account:

The main goal of the plan must be the protection of the region's spiritual and cultural heritage.

Internal zoning: the Sacred Natural Sites must have a high level of protection within an area of sufficient size. In

the case of the most spiritually important sites within a single protected area, a network of Sacred Natural Sites must be established.

Other than religious activities the other activities that are permissible in these areas must be defined. According to Romanian law, Sacred Natural Sites in forest areas can be included, for example, in category TII, which allows only for timber extraction for conservation purposes. According to the High Conservation Value Forest Guide (WWF, IKEA), the Sacred Natural Sites can be included in HCVF 6: "Forested areas needed for the protection of the traditional cultural identity of local communities". In important ecological, economic, cultural and religious zones closely linked to local communities, conservation and cutting aimed at natural regeneration are allowed.

Sustainable development for the area: certification is necessary, not only for the forest and for the wood-processing industry (chain of custody), but also for agriculture (organic farming), tourism, etc.. The use of local products must be encouraged and local brands and trade marks for products and services specific to the area must also be officially recognised and promoted.

Joint environmental and religious public awareness and education programmes must be implemented in order to emphasize the wonderful mixture of natural and spiritual features in the region.

The strict visiting rules for monasteries and other sacred places must be extended to the whole of the sacred natural site.

Waste management (collecting, transportation, storage and recycling) must be improved. This problem can be tackled by involving the waste disposal services of the nearby towns and the provision of disposal facilities at sacred sites. This task is highly necessary for the religious communities and local tourist industry. It is important to solve the waste disposal problem because it has a great environmental impact on the area and also because it sets a good example for all visitors to the area.

The interview questionnaire for the Vanatori-Neamt Natural Park has an extra chapter entitled 'Property/Administration'. The question "What kind of property do you think assures the best protection for the natural heritage?" was answered as follows: 60% said state property, 35% both state and private property and 5% private property. The same question for spiritual and cultural heritage received the following answers: 65% said state proper-

ty, 20% both state and private property and 5% private property. In the case of the Sacred Natural Sites inside a protected area, 82% of people said that the running of the Sacred Natural Sites is best carried out by the administration of the protected areas, whereas in the case of Sacred Natural Sites not in a protected area, 35% of people said that administration is best carried out by land-owners, while 42% suggested other organisations.

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7. The Montserrat Declaration

On sacred natural sites in technologically developed countries

TAKING INTO ACCOUNT the papers and case studies from three continents presented during the Montserrat Workshop on Nature and Spirituality, held on 23-26 November 2006 in the Monastery of Montserrat in Catalonia, Spain, within the framework of the IUCN/WCPA Delos Initiative, part of the Task Force on Cultural and Spiritual Values of Protected Areas, as well as the discussions that followed;

BENEFITING from the knowledge and experience of the 40 participants from 8 countries, including representatives of Christian and Buddhist monasteries, international, national and local environmental authorities and conservation organisations, academics and individual experts;

APPRECIATING the work carried out by the Delos Initiative during the past two years on sacred natural sites in technologically developed countries;

REALISING that sacred natural sites are under threat even in developed countries from ignorance and neglect, and

specifically from cultural or spiritual breakdown, unsustainable development projects and resource exploitation, urbanization, mass tourism and lack of appropriate land-use planning and control;

The participants of the workshop

MAINTAIN that the sacred has been one of the most powerful drivers or realities for conservation, inspiring feelings of awe, veneration and respect. Sacred natural sites, landscapes, species and individual elements have been one of the most effective forms of nature conservation over the ages, some are of local significance, whereas others have significance for wider groups, cultures, traditions, and regions;

RECOGNISE that nature has intrinsic values and meanings, including cultural and spiritual, and is understood by followers of various faiths and spiritual traditions as a divine manifestation of some deeper, sacred reality, however that may be conceived;

< Degotalls trail, Montserrat; start of the Catalan pilgrim's trail to Santiago de Compostela.

FURTHER RECOGNISE that to ensure long-term sustainability, conservation goals, programs and messages need to be grounded in deeply held values, beliefs, ideas, and practices. The conservation community needs to recognize these aspects and give these deeply held values, beliefs, ideas, and practices the place that they deserve in the conservation of protected areas. This constitutes both a challenge and a great opportunity to build support for the conservation movement, involving partners and stakeholders that up to the present have not been supportive, because they felt excluded by the materialistic outlook that nature conservation has often adopted;

RECOGNISE AND CONFIRM the actual existence of sacred natural sites in all of the IUCN categories of protected areas found in technologically developed countries;

FURTHER CONFIRM that the spiritual aspects of sacred sites in protected areas can contribute significantly to the conservation of natural heritage in various ways, mainly by raising awareness in the faithful, inspiring people and involving them in conservation initiatives;

INSIST that the diachronic rights of the custodians of sacred sites must be

safeguarded both from insensitive public and private development and from political ignorance and that their participation in determining the future of protected areas must be ensured;

ACKNOWLEDGE that the appropriate management of protected areas can enhance the maintenance of the spiritual values of sacred natural sites, thus creating positive synergy among natural, cultural and spiritual values not only for protected sites, but for nature in general;

FURTHER ACKNOWLEDGE that positive synergies between natural, cultural and spiritual values extend to sacred sites beyond the boundaries of designated Protected Areas and therefore function as a vehicle for supporting and communicating nature conservation;

MAINTAIN that such synergy can be established only through close and equitable collaboration between the traditional custodians of sacred sites and those in charge of the management of protected areas, with mutual respect the prerogatives and responsibilities on both sides;

SUGGEST that dialogue between these two sides should be encouraged and

strengthened, so that objectives and requirements can be fully understood and a common language and —eventually— a common approach, which integrates both views, can be developed;

FURTHER SUGGEST that a future goal should be the development and implementation of integrated management plans for sacred natural sites, which would take into account both spiritual and nature conservation goals; such plans, however, must be prepared with the full participation of all those concerned;

POINT OUT that any management measures concerning cultural, spiritual and natural values in sacred natural sites must respect the universal rights of people and be based on a broad participatory approach;

PLEAD FOR CAUTION that particular care should be devoted to sites in protected areas that are sacred for indigenous and traditional peoples and for minorities; in addition, the role and contribution of new immigrants must be taken into account;

SUGGEST that in places where multiple faiths coexist, a diversity of perspectives must be recognised, and the collaboration between these faiths in work on nature conservation, emphasizing shared values, must be promoted;

INDICATE that education and art can play a key role in creating a climate of co-operation and understanding in regard to sacred natural sites;

ENCOURAGE the Delos Initiative to continue its work in facilitating integration processes between the spiritual-faith groups and the nature conservation organizations and consequently develop and disseminate guidance on the integrated management of sacred natural sites;

FINALLY EXPRESS THEIR GRATITUDE to the Monastery of Montserrat, the Board of the Mountain of Montserrat, the Ministry of Environment and Housing of the Government of Catalonia, the Fundació Territori i Paisatge (Caixa Catalunya savings bank), and the Delos Co-ordination for the excellent organisation of the Montserrat Workshop.



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The photographs in this volume are by:

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- Santos Casado de Otaola (pp. 46, 58, and 67)
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- Héctor Garrido, CSIC-EBD (pp. 174, 182 and 190)
- Jesús García-Varela (pp. 70 and 194)
- Pere Grima (pp. 146 and 163)
- Liza Higgins-Zogib (pp. 119, 120 and 144).
- Petros Kakouros / EKBV (p. 262)
- Ramon Lamarca i Morell (p. 199)
- Josep-Maria Mallarach i Carrera (pp. 12, 17, 28, 34, 62, 75, 76, 86, 95, 142, 150, 154, 159, 270, 305 and 310)
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Appendix 1

Montserrat: Nature and Spirituality 1st Workshop of the Delos Initiative

Programme

Monastery of Montserrat
23-26 November 2006
Catalonia, Spain

Thursday, 23 November

Arrival around 16:00

17:00

- Welcome and introductions of the participants.
- Presentation of the workshop's goals and schedule
- Short introduction about facilities and logistics.

18:45

Vespers

19:30

Welcome from the Prior of the Monastery.

20:15

Dinner

Friday, 24 November

09:00

Coffee

09:30

Opening of the workshop

- Ramon Ribera-Mariné, Prior of the Monastery
- Jordi López, President, Steering Committee Natural Park Mountain of Montserrat
- Miquel Rafa, Head of projects, Fundació Territori i Paisatge - Caixa Catalunya saving bank
- Ramon Luque, Director, Directorate-General for the Natural Environment, Ministry of the Environment and Housing, Autonomous Government of Catalonia
- Puri Canals, IUCN vice-president

10:00

Speeches

- Jesús García-Varela: *Nature and Spirituality.*
- Gonzalo Oviedo: *Protected Areas and Sacred Natural Sites of Indigenous and Traditional People*

- Edwin Bernbaum: *The experience of the Sacred Mountains Program*
- Santos Casado: *Spiritual values in the history of protected areas of Spain*
- Discussion.
- Session title: The case study of Montserrat.

11:30

Introduction to the case study of Montserrat, followed by a guided visit to the Sant Joan area of old hermitages, led by the Prior of the Monastery and the Director of the Natural Park.

13:30

Picnic at the Holy Grotto hermitage

15:30

The holy mountain of Montserrat
Presentations by:

- Ramon Ribera-Mariné, Prior of the Monastery
- Jordi Lopez, President, Executive Committee Board of the Montserrat Mountain
- Josep Altayó, manager of L'ARSA, public services at the Monastery of Montserrat
- Xavier Ariño, Catalan Federation of Hiking and Climbing Clubs
- Francesc Diego, Department of the Environment and Housing of Catalonia

17:00

Questions and answers

17:30

Coffee-break

17:45

Conclusions and recommendations, by Josep-Maria Mallarach

18:30

End of the session

Saturday, 25 November

Session title: Presentation of the Delos Initiative case studies

9:15

First session

- *Mount Athos*, Thymio Papayannis
- *Vanatori – Neamt Natural Park*, Sebastian Cataniou
- *Kii Mountain Range*, Bas Verschuuren
- Questions and answers

10:15

Coffee-Break

10:45

Second session

- *Kolovesi rock paintings*, Matti Määttä

- *Ajji / Ukonsaari*, Yryo Norokörpi
- Smoky Mountains National Park, Edwin Bernbaum
- Questions and answers

12:00

Third session

- *El Rocío -Doñana protected areas*, Jordi Falgarona
- *Meteora*, Thymio Papayannis
- Questions and answers

13:30

Lunch

Session title: Case studies and lessons learned

- *Holy Island of Arran*, Isabel Soria
- Contribution of sacred natural sites to nature conservation, Liza Higgins-Zogib

16:00

Open discussion about the diagnoses, chaired by Thymio Papayannis

17:00

Coffee-break

17:10

Open discussion about the recommendations, chaired by Edwin Bernbaum

18:30

End of the session.

Sunday, 26 November

Session title: Conclusions and proposals for the Delos Initiative

9:15

- Last open session: Thymio Papayannis and Josep-Maria Mallarach
- Contributions to the UNESCO-IUCN Guidelines on sacred natural sites
- Proposals to further develop the Delos Initiative
- Conclusions and outputs of the workshop

11:30

Coffee-break and free time.

12:00

Salve Regina and *Virolai* (hymn of the Black Madonna) by the Escolania of Montserrat (one of the oldest boy's choirs in Europe).

13:30

- Farewell lunch.
- Visit to the Les Agulles and Coll de la Massana areas, northern section of the Park, guided by Miquel Rafa, Fundació Territori i Paisatge (Caixa Catalunya savings bank).
- Return to Barcelona.

Secretariat:

Josep-Maria Mallarach,
e-mail: mallarach@silene.es

Web sites:

- The Delos Initiative:

www.med-ina.org/delos

- Monastery of Montserrat:

www.abadiamontserrat.net

- Natura Park of the Mountain of Montserrat

www.muntanyamontserrat.net/parc_natural_index.php

Minimizing the environmental impact of the workshop: Compensating CO₂ emissions

Strategies and actions for nature conservation cannot be understood in isolation from social and poverty issues and the impacts of global climate change. To be really effective and sustainable, we argue that actions should not only be based on technical decisions, but should also be rooted in the deepest beliefs, in the cultural and spiritual values of the society.

Following the Guidelines for event greening¹, we acknowledge that the Delos Workshop in Montserrat, as any other similar event, necessarily creates some negative environmental impacts. In our case, we concluded that the main environmental impacts were caused by the carbon emissions during participant's outings, including trips to and from the airport and the field trip on the last day, plus the emissions inherent in operating venues and event activities.

Offsetting the carbon footprint can be done in several ways. The first step is to

calculate the amount of carbon emissions and the second is to calculate its economic value. Following the methodology of "ZEROCO₂" proposed by Fundació Natura², a local NGO working in nature conservation, we calculated the total amount of emissions.

Once the calculation was done, the next step was to invest money to mitigate and compensate the impacts of the emissions. A common way is funding tree plantations to offset estimated carbon emissions. An alternative option, which we decided to follow after consultation with leading members of the IUCN Strategic Direction on Governance, Communities, Equity, and Livelihood Rights in Relation to Protected Areas (TILCEPA), was to give money to a reliable local organization created to help poor people affected by climate change catastrophes.

The Silene Association, as organizer of the first workshop of The Delos Initiative, made a donation to compensate the impact of the CO₂ emissions produced by the participants of the workshop to Pahamune House, Paha-mune

¹ Baillie, A. (2004) Leaving a Greening Legacy: Guidelines for event greening. Published by the Gauteng Department of Agriculture, Conservation and Lands Affairs in collaboration with GEF, UNDP and IUCN. Available from www.iucn.org/publications/greening. For information about the zero emissions project, see: <http://www.ceroco2.org/Default.aspx>.

² For information about the zero emissions project, see: <http://www.ceroco2.org/Default.aspx>.

Narammala, in the Kurune-gala District (NWP), Sri Lanka, a centre that rehabilitates Tsunami-affected children and other children in distress. Paha-mune House is a project run by A.M.M. Shahabdeen Trust Foundation, from Sri Lanka³.

In coherence with the guiding principles of The Delos Initiative, the modest contribution made to Pahamune House is the beginning of a relationship between Silene and the A.M.M Sahabdeen Trust

Foundation, which aims to develop and organise environmental educational activities for the children at Pahamune House. We hope that such awareness will help the children conserve nature and understand the spiritual aspect and links between all religious traditions existing in Sri Lanka. This in turn, should highlight the related ethical and moral attitudes, and emphasise the spiritual responsibility of every individual to protect the earth they live in.

3 For information about the A.M.M. Shahabdeen Trust Foundation see: <http://www.ammstrustfoundation.org/pahamuna2.htm>

Appendix 2

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NOTE: These details were updated at the time of the Workshop in November 2006. Some may have changed since then.





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