



## CHRISTIAN MONASTIC LANDS AS PROTECTED LANDSCAPES AND COMMUNITY CONSERVED AREAS: AN OVERVIEW

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### ABSTRACT

Using a literature review, diverse types of research and empirical evidence, this paper explores whether the essential features of the Indigenous peoples' and community conserved territories and areas (ICCAs) and the criteria of the Protected Landscape Approach are met in Christian monastic territories. Inspired by spiritual principles and applying traditional ecological knowledge, monastic communities developed distinctive natural resource management models, resulting in beautiful, harmonious and diverse landscapes for many centuries. In many countries, modern protected areas have been established on the sites of existing or former monastic lands, thereby creating positive synergies but also new challenges both for conservation and for the monastic communities. This paper shows that monastic communities are one of the oldest self-organized communities with a continuous written record in conservation management. Most Christian monastic conserved lands should be considered community conserved areas usually Category V – Protected Landscapes. The paper also argues that monastic communities' experiences in adapting to and overcoming environmental and economic crises is relevant to both managers and policy-makers involved in protected and high biodiversity areas, especially in regions where the protected landscape approach may be more effective.

**Key words:** Christianity, Community Conserved Area, conservation, landscape, integrated management, monastic community.

### INTRODUCTION AND PURPOSE

The purpose of this paper is to explore whether the essential features of the Indigenous peoples and community conserved territories and areas (ICCAs) governance type and the protected areas management criteria of the Protected Landscape Approach (Dudley, 2008) are met in Christian monastic territories. Thus, it begins by presenting a brief overview of the historical origins of these local communities, and then moves to analyse the essential features of protected monastic landscapes, in order to evaluate the consistency with these approaches, and finally to suggest some conclusions.

Following economic crises, and an increased concern for social justice and conservation effectiveness, a growing interest has arisen in types of protected areas that differ from those created by public administrations via legal mechanisms. The 2008 IUCN *Guidelines for Applying*

*Protected Area Management Categories* consider the entire spectrum of governance types and management approaches and a new definition of protected areas was adopted (Dudley, 2008). The 'other effective means' of the IUCN protected area definition include a wide variety of types of governance, including governance by ICCAs, shared and private governance. In some regions these three broad categories together have an enormous social and ecological potential and cover a greater surface area of protected land and water than the protected areas established by legal means (Borrini-Feyerabend et al., 2013). In 2007, an IUCN conference concerning the revision of the protected areas definition made clear that sacred natural sites, the oldest known type of protected areas, are found in all categories of modern protected areas (Verschuuren et al., 2008). The 2008 protected area guidelines (Dudley, 2008) and the IUCN guidelines on sacred natural sites (Wild & McLeod, 2008) also acknowledge the significance that both religious and

spiritual values continue to have to protected areas and, more broadly, to nature conservation.

This paper argues that all Christian monastic territories should be considered 'sacred natural sites' (Wild & McLeod, 2008). Whilst in the Eastern monastic organizations the adjective 'sacred' is normally used, Catholic monastic organizations usually prefer 'holy'. In any case, both concepts apply to the lands and waters that protect and sustain these monastic communities.

In terms of protected area management objectives and governance types as defined in the IUCN guidelines (Dudley, 2008) Christian monastic territories have clear affiliations. A close association between long lasting local communities and specific landscapes is often the basis of monastic organizations, when combined with effective governance and nature conservation, such areas meet the ICCA governance type. Three characteristics are considered essential to define protected area management Category V, Protected Landscapes, the most significant category for Christian monastic communities. These are: (i) landscape and/or coastal and island seascapes of high and/or distinct scenic quality, with significant associated habitats, flora and fauna, and related cultural features; (ii) a balanced interaction between people and nature whose integrity has endured over time, or where there is a reasonable perspective of restoring any lost integrity; (iii) unique and traditional land-use patterns such as in sustainable agricultural and forestry systems and human settlements that have evolved in equilibrium with their landscapes (Dudley, 2008).

The living dimension of protected landscapes has been thoroughly discussed in the Protected Landscape Approach (Brown et al., 2005) concluding that it depends on the following seven criteria: the landscape in question should (i) be bioregional in scale and represent a mosaic of designations and land uses; (ii) embrace the interrelationship of nature and culture; (iii) recognize the relationship between tangible and intangible values, and the value of both; (iv) be community-based, inclusive and participatory; (v) be based on cross-sectorial partnerships; (vi) be founded on planning and legal frameworks that have created an environment of engagement through equity and governance for a diverse set of stakeholders; and (vii) contribute to a sustainable society.

Finally, let us recall that Target 11 of the CBD Strategic Plan for Biodiversity 2011-2020 states that 'by 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of

particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes' (UNEP, 2010). As we will discuss, Christian monastic conserved areas can also make a contribution to attain this ambitious goal.

This paper will use the criteria defining the management of Category V protected areas, together with the basic features of the ICCA governance type, to illustrate how they are met in areas managed by Christian monastic communities. Before that, however, an overview of the historical origins of these local communities and their fundamental values is presented.

### ORIGIN OF CHRISTIAN MONASTIC LANDSCAPES

The origin of Christian monasticism goes back some seventeen centuries to the deserts of Egypt, Palestine and Syria, when these regions were provinces of the Roman Empire. Founded in the fourth century AD, the oldest thriving Christian Coptic monasteries are still located in the Egyptian deserts, e.g. St Antony the Great and St Macarius. These monasteries provide evidence that monasticism has been able to develop in harsh desert landscapes by managing very scarce resources in an efficient and resilient manner.

From the earliest times, the ideal of monastic life was closely linked to the aspiration of a return to a terrestrial Paradise, a desire that was associated with more or less complete solitude in the wilderness. It sought to enable aspirants to progress spiritually, attain holiness, and develop a deep harmony with nature. Numerous accounts talk of religious hermits who befriended wild animals and who in some cases were even fed by them (Macaire, 1991). In the words of contemporary Christian hermits, this cosmic experience of communion with nature is very inspirational and provides the impetus for the duty of caring (Mouizon, 2001).

Two main types of lifestyles developed from the beginning of monasticism, community life in monasteries and isolated life in hermitages or natural shelters. Both types have remained almost unchanged up to the present day and are usually regarded as complementary paths corresponding to different vocations or to different stages in the spiritual life of monks and nuns. The study of the economy and livelihoods of the earliest monasteries in the Middle East has revealed that models related to the adaptations to specific natural and social surroundings never went beyond the limitations of each community's ascetic



**The Santa Creu hermitage at the Holy Mountain of Montserrat, Catalonia, Spain was inhabited by hermits for 14 centuries; today it is a Nature Reserve within the Montserrat Natural Park © J-M Mallarach**

religious principles (Heiska, 2003). However, no systematic research has ever been conducted into the diverse reasons that explain why certain monastic communities failed and vanished, whilst others in similar environments have survived for so many centuries.

The expansion of successful monastic settlements created distinctive landscapes responding to a variety of historical, cultural and geographical patterns. By the end of the twelfth century, several thousand monasteries were thriving in Europe, North and East Africa and the Middle East, including many located in remote and isolated areas. Despite the fact that many monastic communities developed 'best practices' in the face of harsh conditions and have remained stable over many centuries, the resilient landscapes created by them have received little attention from conservationists and managers of natural resources (Mallarach, 2012).

Monastic communities have created numerous resilient monastic landscapes across ecosystems as diverse as the frozen taiga of northern Russia, the African or Middle Eastern deserts, the slopes and valleys of the Alps, Apennines, Carpathians and Pyrenees, the steppes of Eastern Europe and the coastal areas, islands and wetlands of the Mediterranean and the Black Sea.

Subsequently, the spread of Christianity into the Americas, Central and Eastern Asia, Central and Southern Africa and Oceania over the past five centuries has resulted in the development of monastic settlements in additional biomes, such as savannahs and tropical forests.

By following a lifestyle that seeks wholeness, most Christian monastic communities have been able to develop efficient, self-sufficient strategies, respectful to the values of natural surroundings. Most hermitic domains have also made significant contributions to nature conservation. Hermits, in their quest for peace and quiet in pristine areas, have respected and contributed to conserve the integrity of these environments. In terms of landscape ecology, the inclusion of areas devoted to hermits in monastic properties normally engendered a balanced landscape pattern, which in many cases has survived to this day. Thus, monastic landscapes may include monasteries of different sizes, usually surrounded by some agricultural lands and managed forests, with assorted hermitages and monks' cells located in well protected natural areas.

Thanks to the alms and donations as well as the careful management they practised, monastic communities often

**Table 1. Sample of representative thriving Christian monastic settlements in different landscapes found in the main biomes of the world. References for most of them are found in Mallarach, Corcó & Papayannis (2015).**

Biome	Landscape	Region / Country	Monasteries
Alpine	Alpine valley	Bulgaria	Rila
	Alpine valley	Alps, France	Grande Chartreuse
Chaparral	Agro-forest mosaic	Catalonia, Spain	Poblet
	Rolling hills	Crete, Greece	Chrysopigi
	Rocky cliff	Catalonia, Spain	Montserrat
Deciduous forest	Mountain valleys	Romania	Secu, Ramet, Tismana, ...
	Mountain valley	Kosovo	Visoki Dečani
	Rocky Pillars	Meteora, Greece	Aghia Triada, Rousanou,Varlaam,..
	Forested mountain	Lazio, Italy	Santa Scolastica
	Mountain slope	Rioja, Spain	Suso and Yuso
Desert	Rocky cliff	Palestine	Saint George
	Sandy desert	Wadi Natrum, Egypt	Abu Makar
Desert-scrub	Mountain valley	Arizona, USA	Christ in the Desert
	Rocky mountain	Syria	Deir Mar Mousa
Wetland	Islands within lakes	Montenegro	Beška, Kom, Moracnik
	Island in lake Ladoga	Arkhangelsk, Russia	Valaam
Marine	Small coastal islands	Normandy, France	Mont St Michel, Lérins
Rainforest	Forested rolling hills	Colombia	Santa María
	Marine Island	Philippines	Our Lady of the Philippines
Steppe	Plain grassland	Ukraine	Nativity of Mary in Olexandrivka
	Fluvial island	Ukraine	St Michael in Pelaheyivskiyi
Taiga	Lake island	Karelia, Finland	New Valamo
	Lake peninsula	Arkhangelsk, Russia	Kozhezersky
	Plains	Kola peninsula, Russia	Pechenga
Tundra	Arctic archipelago	Russia	Solovestky

ended up managing large tracts of land and waters, covering tens or even hundreds of square kilometres. In several European and Middle Eastern countries, it has been estimated that at their peak Christian monastic communities were responsible for managing up to 35 per cent of all productive landscapes (Mallarach et al., 2015). The maximum expansion of monastic landscapes depended on the region and the period of time. In the Middle East, North Africa and Ireland, they reached their peak in the fifth and sixth century, in Byzantium this was from the tenth to thirteenth century, while the high point in many Western and Central European countries was not attained until the eleventh to fourteenth century and in Russia until the fifteenth-sixteenth centuries. A single Latin monastic order, the Benedictine, is reported to have built over 14,000 monasteries in Europe before the Renaissance (Birt, 1907). Thus, during their long history, Christian monastic communities have created and established a high diversity of landscapes, where both wild biodiversity and agro-biodiversity were actually conserved, either consciously or as a by-product of the supreme goal of a perfect life.

## ESSENTIAL FEATURES OF PROTECTED MONASTIC LANDSCAPES

Most monastic facilities are carefully integrated into the natural environment that surrounds them. This is probably due to a combination of factors such as the special relationship between Christian monasticism and nature viewed as an essential part of divine Creation, the contemplative attitude regarding natural creatures, i.e. viewing Creation in general and all its creatures as divine manifestations, and the search for harmony and perfection. Asceticism, frugality and moderation have also played a major role in the harmonious incorporation of monastic facilities into natural landscapes. This topic is analyzed more fully below following the criteria of IUCN's management category V – protected landscapes.

### • High scenic quality and significant associated habitats, flora and fauna, and cultural features

Numerous monastic communities and hermits have settled in and adapted to some of the world's most beautiful and astonishing landscapes (Table 1). The reasons for selecting these amazing sites may be diverse,

**Table 2. Sample of Christian monastic lands with more than six centuries of records on nature conservation included in legally established protected areas (Mallarach, Corcó & Papayannis, 2015).**

Monastic community	Centuries of monastic management	Protected Area name	IUCN category	Country
St Catherine Greek Orthodox (male)	16	Saint Catherine Natural Protectorate	V	Egypt
Qashida Ouadi Maronite and Orthodox (male and female)	15	Ouadi Qashida - Cedars of God World Heritage Site	IV	Lebanon
Lérins, Cistercians since 1859 (male)	15	Marine Protected Area and Nature Reserve Lérins Islands	IV + III	France
Caldey – Currently Trappist (male)	14	Pembrokeshire National Park	V	Wales, UK
Mount Athos Pan-Orthodox hundreds of monastic settlements (male)	11	Mount Athos Natural and Cultural World Heritage Site and Natura 2000	V + IV	Athos, Greece
Montserrat, Benedictine (male and female)	10	Natural Park Muntanya de Montserrat	II + V	Spain
Serbian Orthodox monasteries (male and female)	9	Skadar Lake National Park and Ramsar site	V	Montenegro
Grande Chartreuse Carthusians (male)	9	Chartreuse Natural Regional Park	V	France
Rila Bulgaria Orthodox (male)	9	National and Natural Parks of Rila	II + V	Bulgaria
Maria Laach Benedictine (male)	9	Eifel National Park	II	Germany
Sacro Eremo Camaldoli Camaldolese (male)	8	National Park Casentino Forests	II	Italy
Mileseva Serbian Orthodox (male in the past and female since 2002)	7	Special Nature Reserve Milesevka	IV	Serbia
Desert of San José de las Batuecas – Carmelite (male)	6	Natural Park las Batuecas-Sierra de Francia	V	Spain
Neamt, Secu, Agapia, and other Romanian Orthodox (male and female)	6	Vanatori Neamt Natural Park	V	Romania
Solovetsky Russian Orthodox (male)	6	Solovetsky Islands World heritage Site	IV	Russia

including beauty, remoteness or security, etc. However, according to traditional sources, the main reasons are often related to spiritual inspiration (Kinder, 2002).

After eleven centuries of uninterrupted governance by a coalition of Christian monasteries organized in self-sufficient communities, the peninsula of Mt. Athos, the only self-ruled monastic territory in the world, has managed to conserve a rich biodiversity, including 22 plant species endemic to Greece, 14 of which are local endemics, and 41 species of mammals, six of which are carnivores (Philippou & Kontos, 2009). In 1988 the entire Athonite peninsula was listed as a mixed natural and cultural World Heritage Site (Papayannis, 2008).

A number of old-growth forests hosting a very rich biodiversity have been preserved by monastic communities. An example is the Sainte Baume (Holy Cave) of Saint Marie Madeleine in Provence (France), a hermitic site dating from the fifth century, considered to be one of the highest quality forest sites in the Western Mediterranean (Rossi et al., 2013). Another example is the Sacro Eremo delle Carceri (Italy), the forested

mountain area to which St Francis of Assisi retreated in the twelfth century, which conserves some of the finest forestlands in the whole of Italy (Pungetti et al., 2012).

The cultural heritage of monastic communities is both tangible and intangible and often very rich and diverse. Their tangible heritage includes monastic buildings or facilities, and numerous objects such as old books and manuscripts, while their intangible heritage relates to liturgy, music, icon painting, wood carving, philosophy, science, traditional ecological knowledge and so forth, along with all other forms of religious art. Unlike the natural heritage, the cultural heritage of these communities has been the object of extensive research, as described, for example, in the synthesis by Krüger and Tomas (2007).

#### • **An enduring and balanced interaction between people and nature**

Numerous examples of balanced and resilient interaction between monastic communities' settlements and natural areas can be found throughout the world – Table 2



**Panorthodox Aghia Anna Skete. Monastic settlements and garden terraces on steep slopes within the off-road area of the Athonite Peninsula, Greece. All transportation, including solar panels, is done with mules © J-M Mallarach**

provides a representative sample and a few outstanding examples are discussed below.

St Catherine's, one of the first Christian monasteries, was founded in 337 AD in the desert near the site of the Biblical burning bush at the foot of Mount Sinai, and has been active uninterruptedly ever since, with the help of Muslim Bedouins. In 2002 monastic lands were included in the St Catherine Protectorate, one of the largest protected natural areas in Egypt, part of which is a cultural World Heritage Site (Grainger & Gilbert, 2008). The monastery of St Anthony the Great, founded in 356 AD, on the mountain of Al-Qalzam (Egypt), has been occupied continuously since then, managing the territory around it, and today consists of a self-contained monastic village with gardens, a mill, a bakery and five churches, hosting a large monastic community.

The Ouadi Qashida (the Holy Valley) in Lebanon, despite the wars and conflicts the region has suffered, still conserves some of the best remnants of the native cedar forests at Horsh Arz el-Rab (Cedars of the Lord). Three Maronite monastic communities share the custodianship of this holy natural site, offering natural caves for retreats. The site was declared a cultural World Heritage Site in 1998 and an interpretation centre has been built

to stress the importance of preserving the cedar forest remnants (Higgins-Zogib, 2005). The Carthusian Order often choose wild rugged countryside, surrounded by large forests that were left untouched to create a buffer of solitude and silence. Perhaps the best example is the first mother-monastery of Grand Chartreuse, built nine centuries ago in a secluded forested valley in the Savoy Alps (France), still managed by the Carthusian community, and nowadays included in the Regional Natural Park of la Grande Chartreuse.

Christian monastic gardens gave birth to botanical and pharmaceutical gardens in numerous post-medieval towns of Europe and the Middle East (MacDougall, 1986). In fact, some monasteries continue to keep pharmaceutical gardens, such as Pannonhalma (Hungary) and Vatopedi in Mt. Athos (Greece).

- **Unique and traditional land-use patterns in harmony with the landscape**

Many Christian monastic territories have developed over time a balanced landscape mosaic that includes farm land – with vegetable and medicinal gardens, olive groves and orchards – and partially managed forests, although some also boast pastures and wetlands (rivers, lakes, etc.) and areas that are left without extractive uses.

Organic farming is commonly practised in monastic territories. In some monasteries traditional practices have never ceased, as in the Romanian monasteries of Neamt, Secu, Agapia or Varatec, where local plant varieties and local breeds are preserved using traditional methods and provide foodstuffs for self-consumption (Catanoiu, pers. com., 2012). Some monasteries such as Duprava (Serbia) have a mission to conserve local domestic varieties and breeds (Pesic, pers. com., 2014). In recent years, a number of monastic communities have moved from agrochemical to organic farming. Examples include the communities of Pierre-qui-Vire, Saint-Benoît-sur-Loire and Boulaur (France), Hosios Lukas, Chrysopigi and Agia Triada (Greece), Santa Croce in Gerusalemme and Casamari (Italy), Plankstetten (Germany) and Miura (Japan). In some cases, organic agriculture represents a significant part of the monastic community's identity, e.g. the monastery of Solan (France) (Delahaye, 2011). It is significant that some of the finest agricultural products of this part of the world are produced organically by monastic communities, from wines, beers (e.g. Belgian Trappists) and liquors (e.g. Chartreuse), to cheese, cakes, jellies and many other delicacies.

Best practices in animal husbandry have been developed in a number of monasteries such as those of Frauenthal



**The Orthodox Monastery of Pechenga Russian Federation is thriving in the extreme conditions of the Kola peninsula**

Source: [https://upload.wikimedia.org/wikipedia/commons/3/34/Pechenga\\_Monastery\\_Petsamon\\_luostari\\_01.jpg](https://upload.wikimedia.org/wikipedia/commons/3/34/Pechenga_Monastery_Petsamon_luostari_01.jpg)

and Hauterive (Switzerland), Cystersów (Poland) and many more in Romania. A number of monastic communities such as Randol, Chambarand and Lérins (France) that raise cattle or sheep, produce organic cheese for self-consumption and/or for sale.

#### • Forest management

Wise and prudent management has been the guiding rule in most forests managed by monastic communities. On the Italian Peninsula, the Camaldulensian monks condensed about eight centuries of continuous experience of forest management of their forests into the Forestry Code of Camaldoli. This formed the basis for the first Forestry Code of Italy (Frigerio, 1991). On the Athonite peninsula (Greece), development of sustainable forestry practices such as restoring coppiced oak and chestnut trees in tall forests and the combining of sustained yields with biodiversity and aesthetic concerns have been developed in the forests of Simonopetra Monastery and have influenced other forested lands within the monastic autonomous territory as well as in Greece (Kakouros, 2009). In Spain there are well documented cases where monastic communities like that of Poblet and St Jeroni de la Murtra went through many

efforts to stop or minimize external threats to their forests (Estruch, 2001). Sound management practices have been developed involving native or mixed tree species, such as in the monastery of Stift Heiligenkreuz (Austria), known as the ‘mystical heart of the Vienna Woods’.

Although monastic forest practices have acquired a justifiable reputation for sustainability, not all such practices are identical. In Italy, for instance, experts can identify the forest structure of forests managed by Benedictine, Cistercian and Camaldolesian communities. Wise forest practices developed by the Camaldolesian monks in the Apennines allowed the establishment of the Casentino Forests National Park in Italy (Pungetti et al., 2012). The careful management of smaller forests around monasteries occurs in numerous monastic areas such as Notre-Dame de Randol (France), Chrysopigi on Crete (Greece) and Wavreumont (Belgium).

In many arid regions of the Middle East and Africa, Christian monastic lands host the only surviving but generally severely over-exploited and ecologically deteriorated forest patches and extremely valuable

biodiversity. This is the case of numerous monastic forests and forests used by hermits in Ethiopia. These are normally grouped together into ca. 35,000 'church' forests that are conserved in the country (Dudley, et al., 2005; Bekele et al., 2001). Finally, in other arid regions, certain monasteries such as those of Koubri (Burkina Faso) and Dzobegan (Togo) have planted well-adapted tree species and have succeeded in creating the only forests for many kilometres around also creating a milder climate in the monastic buildings themselves (Yawo, 2003).

## CRITERIA OF THE PROTECTED LANDSCAPE

### APPROACH

This section evaluates how six out of seven criteria of the Protected Landscape Approach, as defined by Brown et al. (2005), are met by Christian monastic protected landscapes. Given that these communities place a strong emphasis on self-sufficiency, the only criterion that is rarely fulfilled is the existence of cross-sectorial partnerships.

- **Representing a mosaic of designations and land uses at bioregional scale**

Hundreds of present-day natural protected areas with diverse designations (national parks, natural parks, natural monuments, nature reserves, etc.) have been established in ancient or present monastic lands that retain their beauty, harmony and biodiversity. Most of these natural areas are managed as Category V protected areas, which account for over half of the protected areas of Europe (Gambino et al., 2008). For instance, the island of Caldey (Wales), inhabited by Christian monks since the sixth century, is now part of the Pembrokeshire National Park; the lands of the Abbey of Maria Laach (Germany) are within the Eifel National Park, and the Abbey of Lérins (France), founded in the fourth century, stands on the small archipelago of the same name, where both the land and sea are natural protected areas (see Table 1).

In other cases, certain contemporary natural protected areas have been promoted by monastic communities, either as protection against urban encroachment – for example, Montserrat Natural Park and its Nature Reserve and the Poblet Site of National Interest, both in Catalonia (Spain) – or as a means of conservation, the case of Rila Natural Park (Bulgaria) created by the Orthodox Church, surrounded by a National Park. In these few cases, monastic authorities are represented on the boards of the protected areas, which is not generally the case when the protected area is promoted and managed by public agencies.

This overlap with different types of protected areas may create challenges and opportunities depending on each particular case. A quite sensible challenge is tranquillity. Many protected areas foster public use, whilst for monastic communities silence and quiet is very important. On the other hand, many monastic communities do not have the ability or the means to resist external pressures, and they are grateful of the support they can get from protected area managers.

As the examples discussed above demonstrate, the ideal self-sufficient monastic settlement implies the development – inasmuch as it is feasible – of diverse land uses, including forests, grasslands and croplands, the encouragement of practices such as fishing in ponds, lakes, rivers or in coastal waters, and the promotion of renewable energy sources, such as hydropower, photovoltaic, wind etc. Given the bioregional scope that monastic territories have had over time, the type and extension of all these land uses are closely related to the specific ecosystems and biomes in which monastic settlements have taken root. For instance, monasteries in rugged forested mountains slopes have agricultural lands reduced to well-managed terraces, like those of Aghia Anna Skete, on the eastern shore of Mount Athos, Greece. Conversely, monasteries located on fertile plains, like Boulaur, France, retain a mosaic of land uses, devoting a higher proportion to agriculture and pasturelands.

- **Embracing the interrelationship between nature and culture and tangible and intangible values**

The relationship between natural, cultural and spiritual dimensions lies at the very heart of the lands and waters managed by Christian monastic communities: their mission is spiritual, their means are cultural and their physical support is natural. Monastic communities are not oriented towards the creation of material profit but rather towards spiritual benefit, striving for perfection and excellence in both spiritual and material domains. The monks of the Coptic monastery of Abu Makar in Wadi Natrum (Egypt) say, *'We never divide the material and spiritual. Our whole life, even in its most material details, must contribute towards the spiritual progress of each monk and the whole community towards the worship of God, (...) It is our deep conviction that we attain our heavenly vocation through the carrying out of these commonplace tasks on Earth'* (Monastery web site, 2015).

Monastic communities consider the relationship between natural Creation and Nature to be a manifestation of God that deserves deep respect, whence the common use of



**New Skete of Sihla, Moldavia, Romania, is a good example of the new orthodox monastic settlements in the Carpathians, within the Natural Park of Vanatori Neamt © J-M Mallarach**

the terms 'holy' or 'sacred' to refer to their territories. As these communities normally intend 'to endure for ever' in the same place, natural resources are carefully safeguarded not just for the present generation, but to be bestowed on future generations of monks or nuns. Among the most cherished values stemming from this philosophy are silence, solitude, harmony and beauty, which they consider as prerequisites for experiencing a sacred atmosphere (Mallarach & Papayannis, 2007). Here one finds all the criteria suggested by E. F. Schumacher to ensure the conservation of the intrinsic value of the land, namely health, beauty and permanence (Schumacher, 1997).

- **Community-based, inclusive and participatory governance**

Monastic communities are among the oldest self-organized communities to have kept continuous written records on natural resource management and governance, often over many centuries, showing that conservation of ecological integrity and diversity of their lands was the norm, not the exception. One can find

records on all the activities the monasteries have been engaged in (such as agriculture, forestry, livestock, fishing, mills, etc.), although very few of them have been analyzed from an environmental point of view, and due to wars, fires, looting, sackings, etc. in a number of cases these extremely interesting records have been lost. This significant but often overlooked historical circumstance is in part due to the fact that monastic communities are based on principles that coincide closely with those of environmental sustainability: stability, discipline, asceticism or sobriety, vegetarianism, communal property, and acknowledging that they are custodians or stewards, never owners. Private property is usually not allowed, with rare exceptions, whilst communal property is always the norm.

Although the governance of monastic communities varies greatly according to the tradition or lineage they belong to, all tend to stress the family bonds of the community, with the abbot or abbess seen as the father or mother figure of the monastic family. Although the authority of the head of the monastery and his or her close associates

is undisputed, most monastic communities do follow certain democratic procedures when, for instance, electing the abbot or abbess or accepting new candidates.

Most Christian monastic orders allow each monastic settlement a large degree of autonomy. Autarchy is usually regarded as an ideal way of life since it maximizes freedom from worldly pressures, being recommended by the monastic rules that have been in place for over fifteen centuries. For instance, the Rule of St Benedict (480-550) recommends placing the monastery in an area that can provide for all the monks' material needs (Rule of Benedict 66, 6) and states that monks should take care of all the possessions of the monastery 'as if they were sacred vessels of the altar' (Rule of Benedict 31, 10). 'All the possessions of the monastery' include the fields, the vegetable gardens, the forests, springs, and wells, as well as all the other elements that ease the life of the monastic community. The ideal is summed up by the famous motto '*ora et labora*', along with the principle that 'they will be truly monks if they work with their hands' (Rule of Benedict 28, 8). Similarly, the rule St Basil drew up for the community he founded around 356 AD in Cappadocia stressed the virtues of poverty, obedience, renunciation and self-abnegation. Celtic monastic rules were similar as well (O Maidín, 1996). The logical consequences of the guiding principles of these rules are the rooting of monastic communities in the land, a growth in creative efforts aimed at developing wise and prudent management systems striving for perfection, the avoidance of any kind of commercial mentality, and care for those such as the poor, old, sick, weak and pilgrims who are most in need (Neyt, 2003).

- **Founded on planning and legal frameworks with a diverse set of stakeholders**

Christian monastic landscapes exist under diverse legal frameworks, ownerships and governance systems and styles. In many cases they are not included in legally established protected areas and are therefore community conserved areas. The inclusion of monastic landscapes as part of formal protected areas implies in most countries the existence of governing boards, planning and management regulations, public-use requirements and so forth. In fact, in most countries monastic communities are not allowed to participate in the governing boards of protected areas, a prohibition that has created difficulties when attempting to make the objectives of protected areas compatible (especially in the sphere of public use) with the requirements of monastic life. The case of Mt. Athos is a global exception, as it is one of the world's largest mixed natural and cultural World Heritage sites whose heritage is managed by a Holy Community representing 20 sovereign monasteries.

The UNESCO Initiative of World Heritage Sites of Religious Interest<sup>1</sup>, launched in 2010, is seeking to address these challenges in the context of the World Heritage Convention, in particular the management of World Heritage sites by religious communities.

- **Contributing to a sustainable society**

Over their long histories, Christian monastic communities have often made significant contributions to peace and stability in the regions in which they are established. In addition to their often successful economic stability, they also ensure social security by providing food and basic supplies to the local population in times of need and famine, as has occurred, for example, in several monasteries in Catalonia (Gort, 2008; Altisent, 1974). A well-documented example of ecological sustainability is that of the Cistercians. In addition to the common domestic and liturgical uses of water, this community was known for developing creative and efficient systems for using water for productive purposes such as flour, oil- and paper-milling, efficient irrigation techniques, fish aquaculture methods and purification and depuration systems. These monastic communities, numbering several thousands, had a significant positive impact – to date only partially researched – in Western Europe before the Industrial Revolution (Kinder, 2002). The sophisticated agricultural systems and devices for harnessing renewable water energy that were developed by Cistercians were a source of inspiration for farming techniques in large regions of Europe for several centuries (Leroux-Dhuys, 1999).

However, the history of Christian monasticism is not one of steady evolution. Aside from the occasional disruptions caused by wars or pillage, the worst setbacks suffered by monastic communities in Europe came with the Reformation, which suppressed monasticism in northern Europe and parts of central Europe and the British Isles. Later on, the French Revolution and its aftermath in the nineteenth and twentieth centuries prompted several European governments – liberal and communist alike – to ban religious houses and monastic organizations, or to enforce severe limitations on their activities, which usually involved the confiscation of monastic properties and lands for political, ideological or economic reasons (Besse, 1911).

As a result, many monasteries were abandoned, sacked or destroyed, which had severe repercussions not only for monasticism and its associated cultural and spiritual heritage – as has been well studied – but also for landscape conservation and sustainability in general, a consequence that has not yet been thoroughly analyzed.



**Santa Maria de Poblet, a Cistercian monastery, Catalonia, Spain. Within the walls, vegetable gardens and orchards for the community. Around, vineyards, olive and almond groves. At the background, forested slopes managed by the monks for seven centuries © Arxiu PNIN Poblet**

In just a few decades, many monastic forests that had been carefully managed for centuries were cut down or seriously damaged (Urteaga, 1989). Numerous traditional varieties of fruit and vegetables were lost and a great deal of traditional ecological knowledge, including many of the best practices that had been gradually developed over centuries by monastic orders in Europe, was rapidly forgotten. Later, when political situations changed and a certain level of tolerance re-emerged, a monastic resurgence occurred in many European countries, which led to the partial recovery of what had been lost, including natural resources and quality landscape management.

For a number of reasons, both spiritual and material, and including the conscious goal of permanence and asceticism that monasteries uphold, Christian monasticism has usually gone hand-in-hand with ecological sustainability. Monastic management practices were – and still are – usually sustainable, sophisticated and well-adapted to the conditions of each particular site. As in other protected areas of the same category, however, in some monastic conserved lands conflicts may develop, either within, or in relation with surrounding lands or waters, especially in areas including fragile or declining habitats or species. In those cases, as it has been suggested, active management interventions are needed, and careful monitoring is

essential to check if contemporary management practices support or damage biodiversity (Dudley & Stolton, 2015).

#### • **Community Conserved Areas**

Monastic communities are a particular type of local community sharing a territory and involved in different but related aspects of livelihoods – such as managing natural resources held as ‘commons’, developing productive technologies and practices, and producing knowledge and culture. They share a common daily life and are permanently settled. Moreover, they have a strong sense of identity, share a rich cultural and spiritual legacy and are well self-identified. Therefore, monastic communities completely fit into the definition of ‘local community’ in relation to Community Conserved Areas (Borrini-Feyerabend & Hill, 2015).

The main defining characteristics of ICCAs have been summarized as follows: i) a people or community is closely identified with a well-defined territory, area or species; ii) the community is the major player in decision-making (governance) and implementation of the management of the territory, area or species, and so a community institution has the capacity to develop and enforce regulations; and iii) the community management decisions and efforts lead to the conservation of the territory, area or species and associated cultural values (Borrini-Feyerabend et al., 2004).



Solovetsky fortified monastery located on the Solovetsky Islands in the White Sea in northern Russia © Fr Maxim Massalitin Source<sup>2</sup>

Our research has shown that these three features fully apply to most territories managed by Christian monastic communities. As in most ICCAs, the objectives of management of Christian monastic communities are related to a series of factors such as (i) a bond of livelihood, health, identity, autonomy, culture and freedom; (ii) a tie between generations of monks and nuns that guarantees the preservation of their memories and their projection in the future; (iii) the ground where these communities live, learn, work and connect with the soul as well as the material and spiritual realms; and (iv) a bond with sacredness in the form of a) saintly ancestors who may have founded or inspired the settlement, b) with sites sanctified by the lives and deeds of holy people, or c) with the responsibility to care for a holy legacy. The latter includes natural areas and natural resources as part of the monastery, since it is traditionally understood as a living organism.

## CONCLUSIONS

We believe that the long and generally successful ability of many Christian monastic communities to adapt to the most diverse ecosystems for many hundreds of years deserves more attention from the viewpoint of nature conservation in general and of protected landscapes in particular. Managers of protected areas, especially those that are equivalent to Category V Protected Landscape,

would benefit greatly from the best practices developed by monastic communities as managers of forests, pastures and croplands, as well as their use of renewable energy sources, in many different ecosystems, from the Arctic tundra and taiga to the arid plains of the Middle East and deserts of North Africa. There are solid evidences that landscapes managed by these monastic communities have been more carefully conserved than those managed by lay organizations thriving around them, in the same regions over the centuries.

Although conserved areas managed by Christian communities are usually equivalent to IUCN Category V, quite frequently these territories include areas of stricter protection. The domains of hermits are usually equivalent to nature reserves or strict nature reserves (Categories I or III).

Following the conclusions of the Santa Fe Accord on historical ecology (Crumley, 1994), we contend that the analysis of the criteria applied for the creation and maintenance of conserved areas by Christian monastic communities in diverse ecosystems throughout history is of interest for nature conservation and landscape management. Such an analysis has the potential to provide an array of well-documented examples of effectively managed community conserved areas that

have created and maintained for centuries a diversity of aesthetically pleasing, harmonious and biodiverse landscapes, spread over a large variety of ecosystems.

We suggest that most Christian monastic territories should be considered as part of the global network of ICCAs as well as protected landscapes. Since they can provide inspiring solutions for many other types of protected landscapes they deserve respect and careful attention, whether or not they are included in legally established protected areas. Moreover, their values, management principles and governance systems can inspire criteria for community well-being in healthy conserved landscapes. Since most focal areas for prioritizing biodiversity conservation have been identified and are situated in countries dominated by Christianity (Mikusinski et al., 2013), the conservation experience of Christian monastic communities can inspire both conservationists and policy makers. What is needed is to better analyse and distil the best practices developed by Christian monastic communities, giving priority to those located in hotspots of biodiversity.

Most of the threats and challenges that Christian monastic communities are currently facing in their attempts to maintain or restore the integrity of their territories are similar to other sacred natural sites, community conserved areas and protected landscapes. Therefore, the majority of the recommendations included in the Protected Landscape Approach (Brown et al., 2005), the best practice guidelines for sacred natural sites (Wild & McLeod, 2008) and the governance of protected areas (Borrini-Feyerabend et al., 2013) would be useful for Christian monastic conserved areas.

The renewed interest in environmental coherence found in Christian monasteries around the world is a promising trend. Their message, grounded in spiritual principles and traditional ecological knowledge, provides a living example of resilient sustainability that other local communities are attempting to follow.

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#### ENDNOTES

<sup>1</sup> [whc.unesco.org/en/religious-sacred-heritage](http://whc.unesco.org/en/religious-sacred-heritage)

<sup>2</sup> <https://www.flickr.com/photos/massalim/2150517110/in/photolist-4h2XPd-dMa4GS-f8SbjJ-5peaKY-5p9U3Z-f8SaCj-9k1aef-f8BPtR-gNnAwk-f8BEmz-f8BMSx-dM4KSX-f8BMcZ-gNnCAa-f8BDQP-dMajSJ-f8BQ8V-dM4Lfk-dM4LaX-dMa4JJ-4hPv5t-4hP19M-dM4vFa-dM4Lm4-dMajmf-dMa4Vq-dMajqU-dMa5Fm-dMajTY-dMajC-dMajAs-f8TgbQ-dMa4LJ-dMajS-dMa5fo-dM4vj8-dM4vt6-dM4v46-dMa5zY-dM4L8z-dM4vLP-dMa5sJ-dM4KUF-dM4vBe-dM4vzM-4gXUmc-dM4v8t-4h35mS-dMa59b-dMaj6b>

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Partial view of the Rila monastery, Bulgaria, surrounded by magnificent forests. The community has kept the 'holy unity' with nature that the founder, St Ivan Rilski, wished eight centuries ago. © J-M Mallarach

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## APPENDIX 1

Web sites on some monastic orders and monasteries cited in the article (last accessed 3.02. 2016)

- *Abbey of Santa Maria de Poblet*: [www.poblet.cat](http://www.poblet.cat)
- *Stanbrook Abbey*: [www.stanbrookabbeyfriends.org/Sustainability](http://www.stanbrookabbeyfriends.org/Sustainability); [www.guardian.co.uk/environment/2009/oct/30/stanbrook-abbey-eco-friendly-nuns](http://www.guardian.co.uk/environment/2009/oct/30/stanbrook-abbey-eco-friendly-nuns)
- *Abbey of Christ in the Desert*: [christdesert.org/About\\_Us/Strawbilt/History/](http://christdesert.org/About_Us/Strawbilt/History/)
- *Bulletin Alliance of International Monasticism, Num: 78/79*: [www.aimintl.org/index.php?option=com\\_content&view=article&id=304&Itemid=326&lang=en](http://www.aimintl.org/index.php?option=com_content&view=article&id=304&Itemid=326&lang=en)
- *Carthusians*: [www.chartreux.org](http://www.chartreux.org)
- *Franciscan Custody of the Holy Land*: <http://198.62.75.4/opt/xampp/custodia/01cust.php>
- *Monastery of Camaldoli*: [www.camaldoli.it](http://www.camaldoli.it)
- *Monastery of Miura*: [www.pcusa.org/news/2012/8/16/japanese-catholic-monastery-practices-ecological-w/](http://www.pcusa.org/news/2012/8/16/japanese-catholic-monastery-practices-ecological-w/)
- *Monastery of Saint Macarius the Great, Egypt*: [www.stmacariusmonastery.org/eabout.htm](http://www.stmacariusmonastery.org/eabout.htm)
- *Monastery of Cantauque*: [www.monastere-cantauque.com/english/index.html](http://www.monastere-cantauque.com/english/index.html)
- *Monastery of Saint Anthony, Egypt*: [stanthonymonastery.org/NewHome.htm](http://stanthonymonastery.org/NewHome.htm)
- *Monastery of Mar Musa, Syria*: [www.deirmarmusa.org/index1.html](http://www.deirmarmusa.org/index1.html)
- *Monastic Inter-religious Dialogue on the Environment, 2008*: [monasticdialog.com/conference.php?id=117](http://monasticdialog.com/conference.php?id=117)
- *Monastic Orders and Monasteries*: [www.religiousworlds.com/mystic/orders.html](http://www.religiousworlds.com/mystic/orders.html)
- *Muensterschwarzach*: [www.abtei-muensterschwarzach.de/ams/kloster/konvent/index.html](http://www.abtei-muensterschwarzach.de/ams/kloster/konvent/index.html)
- *Orthodox Monasteries Directory*: [www.orthodox-monasteries.com](http://www.orthodox-monasteries.com)

**RESUMEN**

A partir de una revisión bibliográfica, diversos tipos de investigaciones y evidencias empíricas, este trabajo examina si los territorios monásticos cristianos cumplen las características esenciales de los Territorios Indígenas de Conservación y otras Áreas Conservadas por Pueblos Indígenas y Comunidades y los criterios del enfoque basado en el paisaje protegido. Inspiradas en principios espirituales y aplicando conocimientos ecológicos tradicionales, las comunidades monásticas han desarrollado modelos propios de gestión de los recursos naturales, creando y manteniendo paisajes hermosos, armoniosos y diversos durante siglos. En muchos países, las áreas protegidas modernas se han establecido en territorios monásticos existentes o antiguos, creando así sinergias positivas pero también nuevos retos tanto para la conservación como para las comunidades monásticas. Este artículo plantea que las comunidades monásticas auto organizadas están entre las comunidades más antiguas que disponen de registro escrito continuo en la gestión conservacionista y que la mayoría de los territorios de comunidades cristianas monásticas deberían ser considerados áreas de conservación comunitarias, correspondiendo por lo general a la Categoría V – Paisajes Protegidos. Plantea asimismo que las experiencias de dichas comunidades para adaptarse y superar crisis ambientales y económicas son relevantes para los responsables políticos y los administradores de las áreas naturales protegidas, especialmente en las regiones con una gran biodiversidad, donde el enfoque basado en paisajes protegidos puede ser más eficaz.

**RÉSUMÉ**

A partir d'une revue littéraire, empirique et académique, le présent rapport cherche à démontrer si les territoires monastiques chrétiens respectent les lignes directrices établies pour les Aires du patrimoine autochtone et communautaire (APAC) et les critères de l'Approche des paysages protégés. Inspirés par des principes spirituels et par l'application des connaissances écologiques traditionnelles, les communautés monastiques ont développé des modèles distinctifs de gestion des ressources naturelles, préservant des paysages admirables, harmonieux et variés pendant de nombreux siècles. Dans plusieurs pays, les aires protégées modernes ont été établies sur des terrains monastiques anciens ou existants, créant ainsi des synergies positives, mais aussi de nouveaux défis à la fois pour la conservation et pour les communautés monastiques elles-mêmes. Cet article montre que les communautés monastiques sont l'une des plus anciennes communautés auto-organisées qui ont laissé une trace écrite et continue de gestion de la conservation. La plupart des territoires des communautés monastiques chrétiennes devrait être considérées Aires de patrimoine autochtone et communautaire, correspondant, en général, à la Catégorie V – Paysages protégés'. Le document met également en avant que l'expérience des communautés monastiques, qui ont su s'adapter et surmonter les crises environnementales et économiques, est valable pour les décideurs et les gestionnaires des aires protégées à biodiversité élevée, en particulier dans les régions où l'application des critères de l'approche des paysages protégés pourrait se révéler particulièrement efficace.