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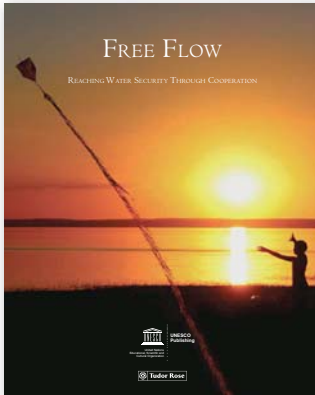


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Cover: Ouadi Qadisha (the Holy Valley) and the Forest of the Cedars of God (Horsh Arz el-Rab) (Lebanon)

At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed that the conservation of biodiversity was one of the cornerstones of sustainable development. They acknowledged that the world was facing an unprecedented wave of species extinction and the rapid destruction of ecosystems and decided that it was urgent to halt the global loss of biodiversity in order to ensure that we leave a healthy and viable world for future generations. To achieve this, the Rio Summit adopted the Convention on Biological Diversity (CBD). This agreement, which has been adhered to by the vast majority of governments, sets out commitments for maintaining the world's ecological foundations as economic development accelerates.

The Convention on Biological Diversity completed the international instruments the global community has developed in the run-up and follow-up to the first United Nations Conference on the Human Environment (Stockholm, 1972). The World Heritage Convention was one of the first of these instruments and since its adoption by the General Conference of UNESCO that same year, has made a very important contribution by ensuring the conservation of the most outstanding places for biodiversity and ecosystems. Today, these sites in total cover over 10 per cent of the surface of the global network of protected areas.

But the battle for conserving world biodiversity is far from won. The 2010 CBD Conference of the Parties adopted a new Strategic Plan for Biodiversity for the next decade, setting out twenty ambitious and specific targets, known as the Aichi Biodiversity Targets. This new plan will be the overarching framework on biodiversity, not only for all the biodiversity-related conventions, including the World Heritage Convention, but for the entire United Nations system.

This issue explores how the World Heritage Convention contributes to achieving these targets, by working in synergy with other site-based instruments. Cultural landscapes and their overlap with protected areas are examined in sites such as Iceland's Þingvellir (Thingvellir) National Park; Global Geoparks and their affiliation with World Heritage sites, including Messel Pit Fossil Site (Germany); joint Biosphere Reserves and World Heritage sites, such as Socotra Archipelago (Yemen); and Wetlands of International Importance (Ramsar List) that are also World Heritage sites, such as Slovenia's Škocjan Caves. These articles demonstrate how these different instruments contribute in synergistic and complementary ways towards achieving sustainable development.

Kishore Rao
Director of the UNESCO World Heritage Centre



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Editorial Director

Kishore Rao
Director, UNESCO World Heritage Centre

Managing Editor

Vesna Vujcic-Lugassy

Editors

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Cover

Photo: Jean-Jacques Gelbart
Design: Recto Verso

Editorial Staff

World Heritage Centre, UNESCO
7, Place de Fontenoy, 75007 Paris
Tel. (33.1) 45 68 16 60 – Fax (33.1) 45 68 55 70
E-mail: g.doubleday@unesco.org
INTERNET: <http://whc.unesco.org>

Advertisements, production

Publishing for Development
145-157 St John Street - London EC1V 4PY - UK
Tel: +44 2032 866610 - Fax: +44 2075 262173
E-mail: info@pdfmedia.com

Subscriptions

Jean De Lannoy, DL Services sprl
Avenue du Roi 202 - B 1190 Brussels - Belgium
Tel: +32 2 538 43 08 - Fax: +32 2 538 0841
E-mail: subscriptions@dl-servi.com

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United Nations
Educational, Scientific and
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World Heritage
Convention



Global to local

How World Heritage sites can bring international conservation goals to ground level

Sonia Peña Moreno
Senior Policy Officer – Biodiversity
Global Policy Unit
IUCN (International Union for Conservation of Nature)

Nazca Booby (*Sula granti*) and Malpelo anole lizard (*Anolis agassizi*) at Malpelo Fauna and Flora Sanctuary (Colombia).

© Diego Grajales



Nature conservation, and its place in sustainable development, is one of the major challenges facing the planet. The myriad of international agreements in place are essential tools in tackling biodiversity loss and preserving our future. But this is also a world full of jargon and acronyms, international meetings, networks and structures. CBD? GEO 4? NBSAPs? MEAs? These are part of the essential international framework ensuring the future of global biodiversity. And while they are inaccessible to most people, they are precisely the tools we need if we are to connect World Heritage principle and ground-level action.

One of the strengths of the UNESCO World Heritage Convention is the way it builds on the local and personal connections to exceptional places, through national and local actions which reinforce a global convention. So let me begin by saying something about my personal experience – and how my home country illustrates some of the challenges facing nature conservation globally. I am from Colombia, born in Cartagena by the Caribbean Sea on the northern coast of the country. In 1984, the Port, Fortresses and Group of Monuments, Cartagena was designated a UNESCO World Heritage site. All Colombians are proud of this, just as they are proud that Colombia is one of the seventeen countries known

as ‘megadiverse’ (along with others such as Brazil, Mexico, Madagascar, Indonesia, the Philippines and Australia). It hosts close to 14 per cent of the planet’s biodiversity, including the Amazon Forest, the Andes and the sub-humid ecosystem of Choco. Colombia is the only country in the South American continent with a coastline on the Pacific Ocean as well as the Caribbean; the second in the world in the variety of bird and flower species, the diversity of its population and the number of its outstanding musicians, writers, artists and singers.

Destruction of forests

Unfortunately, a considerable proportion of Colombia’s ecosystems has been destroyed to make way for agricultural development, mainly in the Andean and Caribbean regions. Almost 95 per cent of the country’s dry forests, including close to 70 per cent of typical Andean forests, have been destroyed in this way. Some of the main threats to the conservation of biological diversity include population migrations resulting from internal armed



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The California condor has been reintroduced in the United States.

There is compelling evidence that conservation works and that the power of collective will leads to desired positive change.

conflict, agriculture, degradation of habitat, and the growing presence of invasive species and pollution.

Unfortunately, this alarming situation is far from unique and now we face an unprecedented biodiversity crisis worldwide. Everywhere we hear that biodiversity loss has breached the so-called ‘safe planetary boundaries’. Scientists warn that biodiversity and the associated ecosystem services are expected to continue their serious decline with major consequences for the life support systems of this planet.

Recently, the Millennium Ecosystem Assessment, the fourth Global Environment Outlook (GEO4), the third Global Biodiversity Outlook (GBO3) and many other authoritative environmental assessments have come to similar conclusions. The status of biological diversity at all levels – ecosystems, species and genetic diversity – continues to deteriorate. GBO3 points out that the main direct drivers of this situation are climate change, habitat degradation, habitat loss, invasive alien species, over-exploitation, unsustainable use and pollution. But this ‘doom and gloom’ picture will not be much help if we want to change the situation for the better. In fact, the declining status of biodiversity calls for concerted strategic responses, policies and actions across the board and at all levels. Easier said than done ...

Fortunately, there is compelling evidence that conservation works and that the power of collective will leads to desired positive change. Take for example the cases of three species that were extinct in the wild and have been reintroduced in their natural environment: the California condor and the black-footed ferret in the United States, and Przewalski’s horse in Mongolia. And whilst a study released in 2010 confirms previous reports of continued losses in biodiversity, it also highlights sixty-four mammal, bird and amphibian species that have improved their status thanks to

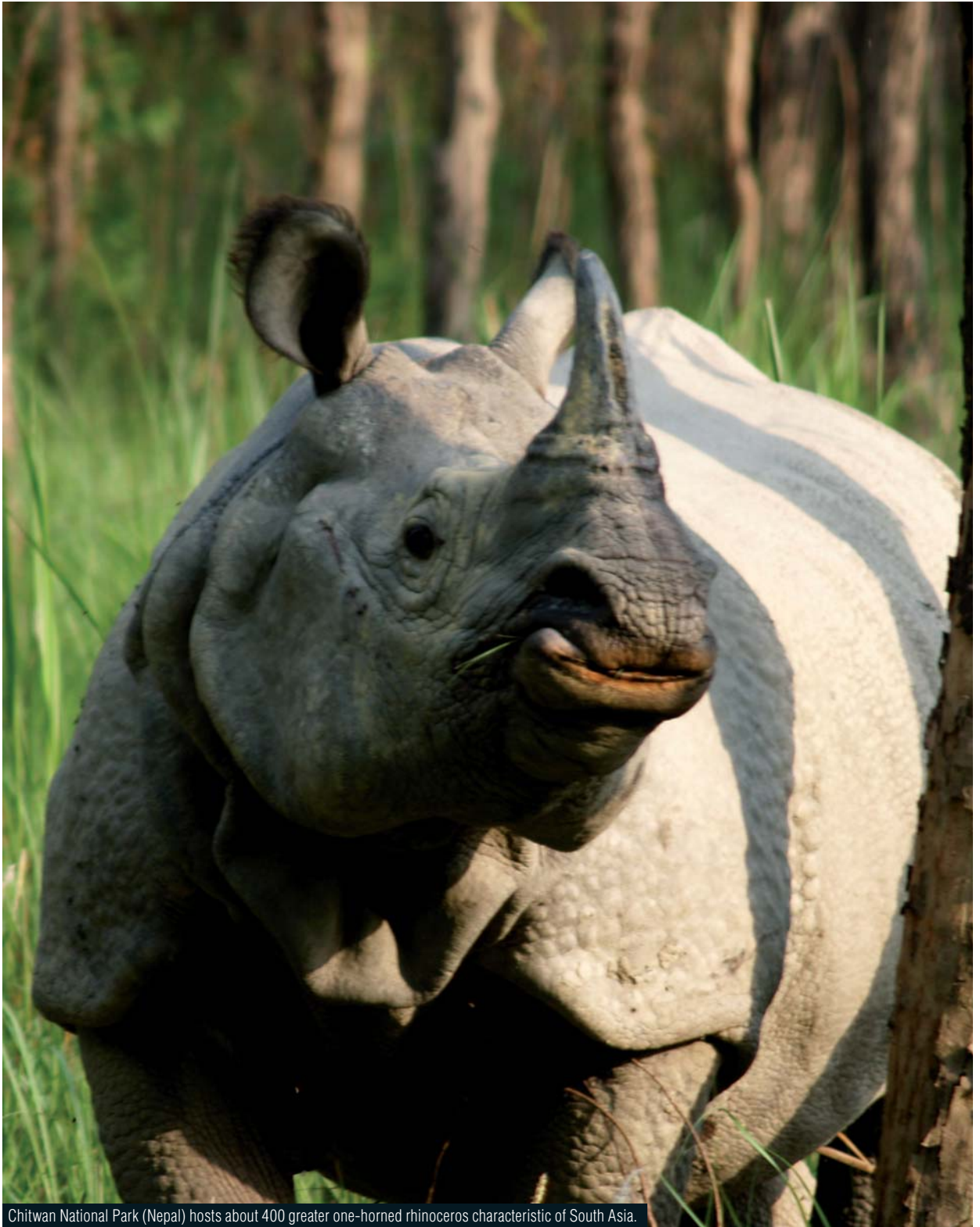
successful conservation action. It is also the first such study to present clear evidence of the positive impact of conservation efforts around the globe. Results show that the status of biodiversity would have declined by nearly 20 per cent if conservation action had not been taken.

Since 1972 a wide range of environmental and sustainable development issues has been addressed at the global level and we have moved from sectoral treaties on endangered species to framework agreements. Multilateral environmental agreements



Malpelo Fauna and Flora Sanctuary (Colombia) provides a crucial habitat for internationally threatened marine species.

© Diego Grajales



Chitwan National Park (Nepal) hosts about 400 greater one-horned rhinoceros characteristic of South Asia.

© Steve Hicks

(MEAs) relating to the environment institute legally binding agreements between several states, and serve as instruments destined to move the environmental agenda forward and keep pace with scientific developments. International agreements have been used as foundations to encourage and establish management frameworks devised to anchor practical international activity touching upon environmental conservation.

Indeed, intensified treaty-making is a sign that governments have recognized that many environmental issues extend beyond national boundaries, that international cooperation is required to address them and that our global environment requires collective protection. It is thus somewhat paradoxical that in spite of the proliferation of international instruments and institutional arrangements designed to protect the environment, the situation is far from rosy for our aching planet. What have the 300 or so MEAs specifically done to reverse these negative trends and environmental decline?

Conventions on conservation

Let us take a closer look at two international agreements. With the alarming rate of biodiversity loss at all levels and the catastrophic impacts on human well-being increasingly better documented, the Convention on Biological Diversity (CBD) was inspired by the international community's commitment to biodiversity conservation, sustainable use and the fair and equitable sharing of benefits. Adopted at the Rio Earth Summit in 1992, entered into force in 1993 with the consent of 193 Parties, the CBD is an almost universal agreement and an all-encompassing legally binding instrument which recognized for the first time that the conservation of biodiversity is a 'common concern of humankind' and an integral

part of development. In short, the CBD is a landmark global agreement that takes a holistic approach to conservation and aims at achieving sustainable development and maintaining life on this planet.

The 1972 Convention concerning the Protection of the World Cultural and Natural

to identify the most exceptional natural places in the world – sites characterized by their outstanding biodiversity, ecosystems, geology or superb natural phenomena. The World Heritage Convention has provided international recognition to well over 10 per cent of the total expanse of protected areas in the world, and while certain gaps in the World Heritage List remain, it currently protects an extremely valuable sample of our natural heritage.

How is a World Heritage site different from a nationally recognized heritage site? The answer is Outstanding Universal Value (OUV). Paragraph 49 of the *Operational Guidelines for the Implementation of the World Heritage Convention* states that OUV 'means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.' Ultimately, these are places that are so extraordinary that the international community has expressly made a commitment through the World Heritage Convention to protect and maintain them.

It seems that the application of OUV to determine natural sites of importance for humanity at the end of the day implies that the preservation of nature is a 'common concern of humankind' –

the common responsibility of us all. Both conventions, the one on Biodiversity and the one on World Heritage, thus provide the international community with a wide framework for specific action designed to protect and preserve natural resources for present and future generations.

Other international agreements have also done their share. In South America, protected



Przewalski's horses grazing in the Hustai National Park in Mongolia.

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The CBD is a landmark global agreement that takes a holistic approach to conservation and aims at achieving sustainable development and maintaining life on this planet.

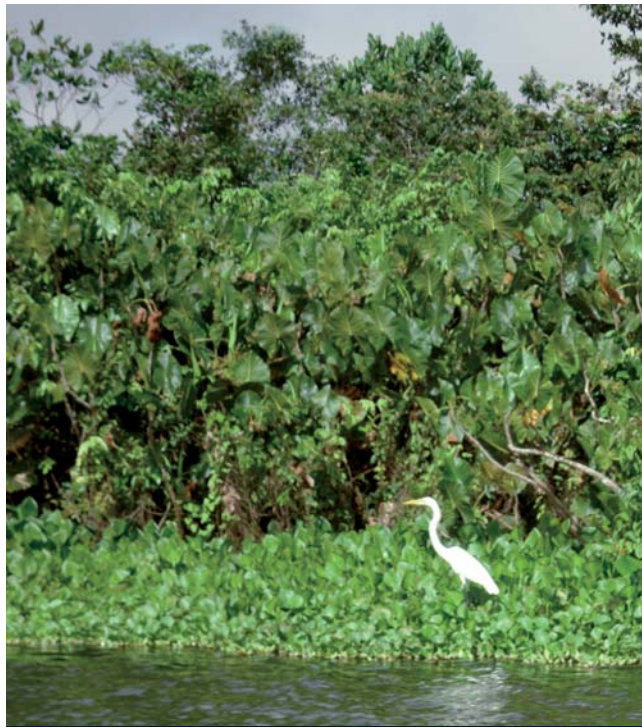
Heritage came into being through the merging of two distinct ideas: one of these aimed at the preservation of cultural sites, and another at fostering the conservation of nature and all its wonders. In the words of Kishore Rao, Director of the UNESCO World Heritage Centre, in its forty years of existence the Convention has become the most successful international instrument

areas, along with the combined efforts of the Convention on International Trade in Endangered Species (CITES) and the Vicuña Convention, helped to spark the recovery of the vicuña. In the recent past and in response to the findings and recommendations of the global assessments mentioned above, Parties to various MEAs, including the CBD, the WHC, CITES, the Convention on the Conservation of Migratory Species (CMS), the Convention on Wetlands (Ramsar) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) have repeatedly called for the implementation of enhanced synergies between MEAs to tackle biodiversity loss. It has become evident that no one policy framework alone is able to change or reverse the situation. As a result, a number of governing bodies have taken decisions to encourage 'synergetic' policy measures. All in all, these decisions have generally reiterated the importance of collaboration and strategic cooperation among the different MEAs (including proposals for joint programmes and meetings of the States Parties concerned), recognized the relevance of enhancing synergies, and stressed the role of specific collaborative activities at the global, regional and national levels.

Institutional arrangements and mechanisms should also be mentioned as they have helped to advance this 'synergy agenda'. Among them are the Biodiversity Liaison Group (BLG), the group of the Chairs of the Scientific Advisory Bodies of the Biodiversity-related Conventions (CSAB), the Issue Management Group on Biodiversity of the United Nations Environment Management Group (IMG-EMG) which includes representatives of all UN agencies and some observers – including IUCN, but also many others.

Strategic Plan for Biodiversity 2011-2020

In October 2010, Parties to the CBD adopted the Strategic Plan for Biodiversity 2011–2020. This is a broad-based plan devised to inspire action by all countries and stakeholders to tackle biodiversity loss. The



Heron in Los Katios National Park (Colombia).

© Claudia Marcela Ayala

The World Heritage Centre has provided international recognition to well over 10 per cent of the total expanse of protected areas in the world and protects an extremely valuable sample of our natural heritage.

Strategic Plan comprises a Vision for 2050, a Mission for 2020, five Strategic Goals and twenty so-called Aichi Biodiversity Targets. It presents an overarching framework with a view to promote coherent and effective implementation of the three objectives of the CBD. The 'Big Plan' provides an ambitious policy framework not only for the CBD and the biodiversity-related conventions but also for the entire international community and the United Nations system.

Through Decision X/2, Parties to the CBD adopted the Strategic Plan and also agreed to translate the plan into national biodiversity strategies and action plans (NBSAPs) taking into consideration the biodiversity trends and particularities of their respective countries. The decision also called

for other biodiversity-related conventions and agreements to take appropriate steps to facilitate coherent and synergistic implementation of the Strategic Plan and the Aichi Targets at all levels, including collaboration in the update and implementation of the NBSAPs. The latter provide a roadmap on how any given country intends to fulfil the objectives of the CBD in light of its specific national circumstances. Because of their nature, NBSAPs are also the appropriate instruments for achieving coordinated and consistent implementation of the biodiversity-related conventions: the broad scope of the CBD encompasses the objectives and provisions of the other conventions and through NBSAPs harmony in national planning can be achieved.

At its last session in Cambodia in June 2013, the World Heritage Committee in close up 37 COMSA "further requests the World Heritage Centre to continue its cooperation with the Biodiversity Liaison Group to create further synergies between the conventions, but also between the joint

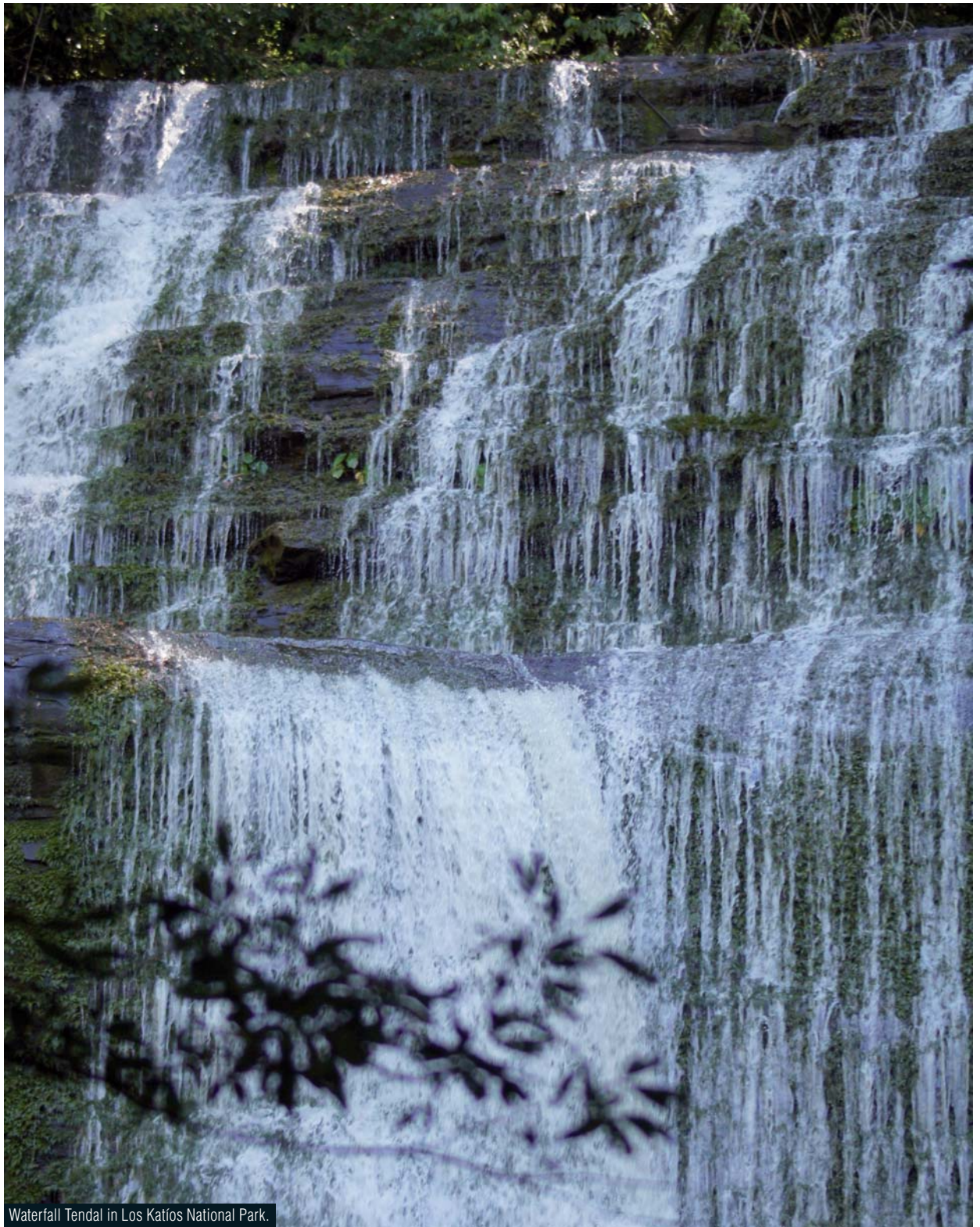
activities initiated with the Secretariats of the CITES, Ramsar Convention and the Council of Europe, and States Parties to ensure that their National Biodiversity Strategy and their Action Plans fully acknowledge the importance of natural World Heritage sites in any attempt to achieve the Aichi Biodiversity Targets'. CMS and CITES have already developed guidelines on the integration of relevant issues, policy measures and practical actions

Both CBD and the World Heritage Convention provide the international community with a wide framework for specific action designed to protect and preserve natural resources for present and future generations.



A mother and her child of the Embera Katio ethnic group in Los Katíos National Park (Colombia).

© Archivo Parques Nacionales / Melissa Valenzuela



Waterfall Tendam in Los Katíos National Park.

© Claudia Ayala

from their respective processes into NBSAPs. Through the Biodiversity Liaison Group, the six biodiversity-related conventions are working to enhance synergies and national implementation with a view to achieving the Aichi Targets, while also harmonizing reporting processes, participating in training workshops, sharing of scientific data and expertise, exchanging experiences, and so on.

All this synergistic diplomacy is surely welcomed and warmly encouraged, but how far can it go to lead to real and urgently needed transformative action on the ground?

Biodiversity in Colombia

I return to Colombia, and more specifically to two natural sites inscribed on the World Heritage List. The first, Los Katíos National Park, extends over 72,000 ha in north-western Colombia, and comprises low hills, forests and humid plains. An exceptional biological diversity is found in the park, which is home to many threatened animal species as well as many endemic plants. Inscribed in 1994, the park was placed on the List of World Heritage in Danger in 2009 by recommendation of IUCN and in accordance with Colombia's request. Illegal logging was the main concern.

The second site, Malpelo Fauna and Flora Sanctuary, inscribed in 2006, is located some 500 km off the coast of Colombia and includes Malpelo island (350 ha) and the surrounding marine environment (857,150 ha). This immense marine park, the biggest no-fishing zone in the Eastern Tropical Pacific, together with Galápagos Islands (Ecuador), represents a key stepping-stone for the conservation of marine biodiversity in the Pacific, and provides a vital habitat for internationally threatened marine species. It

is in particular a 'reservoir' for sharks and one of the few places in the world where sightings of a rare deepwater shark have been confirmed. Broadly recognized as one of the main diving sites in the world, due to the presence of steep walls and caves of outstanding natural beauty, Malpelo's

is called to action in order to address this situation. As a result, success stories and restorations are not rare. Take the case of Chitwan National Park in Nepal, which hosts about 400 greater one-horned rhinoceros characteristic of South Asia. The World Heritage Committee, in the early 1990s, challenged the findings of the environmental impact assessment of the proposed Rapti River Diversion Project. The Asian Development Bank and the Government of Nepal revised the assessment and found that the project would threaten riparian habitats critical to the rhino inside Royal Chitwan. The project was thus rejected and this World Heritage site was preserved for the benefit of future generations.

The conscientious inclusion of Los Katíos and Malpelo in Colombia's revised NBSAP and national protected areas policies would definitely be a step in the right direction and further synergies between the CBD and the WHC. Ideally, this will trigger national action and draw international attention to issues of improved management of these sites. Used in this way, World Heritage sites can become flagships of best practice, grounds for further success stories and pilots for the implementation of the Strategic Plan and Aichi Biodiversity Targets at national level. This confirms that the World Heritage Convention is a remarkably useful mechanism for concrete action in preserving threatened



Red-footed booby (*Sula sula*) at Malpelo Fauna and Flora Sanctuary (Colombia).

© Diego Grajales

World Heritage sites can become flagships of best practice, grounds for further success stories and pilots for the implementation of the Strategic Plan and Aichi Biodiversity Targets at national level.

deep waters support important populations of large predators and pelagic species in a serene environment where they keep their natural behavioural patterns.

By recognizing the OUV of a site, States Parties to the Convention commit to its preservation and endeavour to find solutions for its protection. If a site is inscribed on the Danger List, the international community

sites, ecosystems and endangered species and ultimately a powerful tool to raise awareness and rally action through focused campaigns. Reaching conservation goals results from the recognition of the outstanding values of these sites in terms of human survival. Each and every site is thus essential for the preservation of our common heritage for now and forever. 🌐



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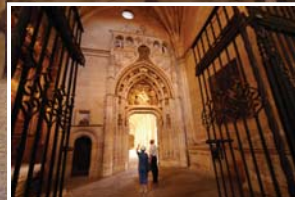
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Old Town of Segovia and its Aqueduct, Spain

Cultural landscapes and protected areas

Unfolding the linkages and synergies

Gunnar Finke

Advisor on Biodiversity at German International Cooperation (GIZ)

Member of the IUCN World Commission on Protected Areas (WCPA)

This article summarises the conclusions of recent research, which has been published by IUCN in G. Finke, (2013), Linking Landscapes: Exploring the relationships between World Heritage cultural landscapes and IUCN protected areas. Gland, Switzerland: IUCN.

Located in a powerful natural setting, the relict cultural landscape of Þingvellir (Iceland) has at its core the Althing, Iceland's historic general assembly site, which lies at the centre of the National Park.

©Karavho



Cultural landscapes are seen as 'cultural heritage' in the framework of the World Heritage Convention, yet they have considerable overlap with one of the heartland issues of nature conservation, the global coverage of protected areas. Recent research reveals the overlaps and synergies between World Heritage cultural landscapes and IUCN's global category system for recognizing protected areas, and some of the possible implications.

Cultural landscapes are at the intersection of culture and nature. They embrace diverse tangible and intangible expressions of human interaction with the natural environment. It was in 1992 that the World Heritage Committee became the first international legal instrument to protect outstanding examples of the 'combined works of nature and of man'. Cultural landscapes may be nominated by States Parties for inclusion in the World Heritage List under the following three categories, of which category (ii) is split into two:

- (i) designed and intentionally created landscape
- (ii) organically evolved landscape
 - relict (or fossil) landscape
 - continuing landscape
- (iii) associative cultural landscape.

While they are inscribed as cultural World Heritage sites, cultural landscapes may possess significant natural values and may furthermore reflect the cultural and spiritual relationships of people with nature and the intangible, socio-cultural dimension inherent to the conservation and sustainable use of biodiversity. Such culture-nature interfaces are also encapsulated in the *Operational Guidelines for the Implementation of the World Heritage Convention*, which recognize that cultural landscapes 'often reflect specific techniques of sustainable land-use, considering the characteristics and limits of the natural environment they are established in, and a specific spiritual relationship to nature. Protection of cultural landscapes can contribute to modern techniques of sustainable land-use and can maintain or enhance natural values in the landscape. The continued existence of traditional forms of land-use supports biological diversity in many regions of the world. The protection of traditional



Fishing has sustained human life at the Saloum Delta (Senegal), an outstanding example of a traditional settlement in a biodiverse coastal environment.

© Ghjiseppu

Cultural landscapes embrace diverse tangible and intangible expressions of human interaction with the natural environment.

cultural landscapes is therefore helpful in maintaining biological diversity'.

It is on this basis that IUCN takes a direct interest in World Heritage cultural landscapes, working with ICOMOS which takes the lead in evaluating cultural heritage nominations for the World Heritage List. IUCN has also identified a number of natural heritage qualities that cultural landscapes may possess in its *Guidelines for Reviewers of Cultural Landscapes – The Assessment of Natural Values in Cultural Landscapes* (2006), including:

- (i) conservation of biodiversity in wild nature (in particular natural and semi-natural systems, wild species of fauna and flora);

- (ii) conservation of biodiversity within farming systems;
- (iii) sustainable land-use;
- (iv) enhancement of scenic beauty;
- (v) *ex situ* collections;
- (vi) outstanding examples of humanity's interrelationship with nature;
- (vii) historically significant discoveries.

Advising on World Heritage is an important part of IUCN's activities, but IUCN is also involved in many other areas of work, within its overall programme on nature conservation. Within the larger programme, IUCN has a global standard-setting role for protected areas, centred on the IUCN protected area management categories framework (see *Guidelines for*



Applying Protected Area Management Categories, edited by N. Dudley, IUCN, 2008). This system outlines the concept of a 'protected area' and provides the definition of such areas as:

'a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.'

The IUCN protected area management categories system is an international standard framework for national or subnational application. The values that IUCN-categorized protected areas protect may be of local, regional, national or international significance. As can be seen from the above definition, the IUCN protected area categories are centrally concerned with cultural values, as well as nature conservation, and the services that ecosystems provide to people. The IUCN

framework organizes protected areas into the following six categories (of which category I is divided into two parts), with each category defined according to its management objectives:

- Ia strict nature reserve;
- Ib wilderness area;
- II national park;
- III natural monument or feature;
- IV habitat/species management area;
- V protected landscape/seascape;
- VI protected area with sustainable use of natural resources.

IUCN further recognizes that protected areas can be classified according to one of four governance types: governance by government; shared governance; private governance; and governance by indigenous peoples and local communities. Accordingly, any management category can exist under any of the four governance types, or vice versa.

Conceptual meeting ground

Among the protected area categories are some that specifically aim at protecting human-influenced landscapes. This is particularly the case with category V protected landscapes/seascapes, which are places where the interaction of people and nature has produced characteristic ecologically, biologically, culturally and scenically important natural values. In addition to this evident connection between World Heritage cultural landscapes and category V protected areas, it is clear however that all the cultural landscape types depict varying but substantial conceptual linkages with all the IUCN protected area categories. The strengths of these conceptual similarities however depend on the natural heritage qualities and the degree of naturalness (that is the extent to which the natural environment has been altered through human impact) present in either of the two. It is on this basis that



Ouadi Qadisha (the Holy Valley) and the Horsh Arz el-Rab (Forest of the Cedars of God) (Lebanon) form a powerful sacred landscape with unique nature-culture links.

© Panoramas

the following conceptual linkages between World Heritage cultural landscapes and the IUCN protected area management categories can be identified:

- Designed and intentionally created landscapes show very little conceptual overlap with any protected area categories, although some very limited theoretical relations with certain category IV or V protected areas may occur. Designed and intentionally created landscapes may solely occur as spatially demarcated features within larger protected areas (notably category V). Yet, in some specific circumstances, the once natural environmental setting that now has been altered into a designed landscape may have contained areas with high nature conservation value. During the subsequent environmental modification of such places into the designed landscape, these areas may have been integrated as more natural constituents in garden, parkland or other designed landscape complexes.

- Relict (or fossil) organically evolved landscapes show a degree of conceptual similarity with categories II to VI protected areas. Relict (or fossil) organically evolved landscapes are a product of the past. As

such, they may form part or the basis of the layered and tightly woven grid of human-nature relationships of landscapes with high nature conservation value. Such landscapes may now be protected areas and would as such reflect earlier human intervention or management.

- Continuing organically evolved landscapes show conceptual similarities with the protected area categories IV to VI, especially with category V, and some very limited linkages with specific category III protected areas. Protected area categories IV, VI, and in particular V, depict areas which, in parts or as an entity, are characterized by an evolutionary process which is still in process and which – though of varying character and intensity – has led to these areas exhibiting unique attributes of a mutually evolving relationship and interaction between humans and their natural surroundings, one which may be very similar to the human-nature interaction as present in continuing organically evolved landscapes. category III protected areas are typically small, focus on specific features, and are predominantly entirely unmodified by humans in character. Yet, they can also be culturally influenced natural features,

natural-cultural sites or cultural sites with associated ecology. As such, they may constitute small, single or contiguous entities that together form a single or part of a continuing organically evolved landscape.

- Associative landscapes overlap conceptually with all the protected area category types. All areas categorized according to the IUCN protected area system may contain within them natural attributes of value for *in situ* conservation measures that may also be of high associative significance.

Spatial linkages

There is a strong spatial connection between World Heritage cultural landscapes and protected areas: fifty-two (60 per cent) of the eighty-six cultural landscapes listed by May 2013 overlap in whole or in part with protected areas.

For those 60 per cent of World Heritage cultural landscapes which coincide spatially with protected areas, around half (54 per cent) of the sites overlap with category V protected landscapes/seascapes (see Chart 1, p. 22). Of the fifty-two cultural landscape properties that are spatially linked



Mapungubwe, a relict cultural landscape (South Africa) with high nature conservation values, demonstrates both the rise and fall of the first indigenous kingdom in southern Africa.

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to protected areas, 42 per cent overlap with category II, and 33 per cent with category IV protected areas. Very few World Heritage cultural landscapes overlap with category Ia (6 per cent), III (10 per cent) and VI protected areas (6 per cent). No cultural landscapes overlap with large, unmodified category Ib wilderness areas, while 13 per cent overlap with protected areas that are not assigned an IUCN protected area management category.

Looking at the overlap of the different categories of World Heritage cultural landscapes with IUCN protected areas (see Chart 2) the strongest linkage exists

between continuously evolving organic cultural landscapes: half (50 per cent) of those 52 World Heritage cultural landscapes which coincide spatially with protected areas are recognized as continuously evolving organic cultural landscapes. 29 per cent of the World Heritage cultural landscapes that overlap with protected areas are relict, 14 per cent are associative, and 7 per cent are designed cultural landscapes.

‘On the ground’ linkages

Due to the significant conceptual and spatial linkages, it is not surprising that World Heritage cultural landscapes which

overlap in whole or in part with protected areas are likely to show strong management and governance linkages. One such case is demonstrated by Þingvellir (Thingvellir) National Park World Heritage cultural landscape in Iceland which overlaps entirely with a category II protected area. The employees that work for the protected area also manage the World Heritage site and contribute to Periodic Reporting for the World Heritage cultural landscape. Most of the funding for the management of the cultural landscape site is allocated through the protected area agency. It is on this basis that significant linkages exist between management plan objectives for the protected area and the management aims for the World Heritage cultural landscape. World Heritage status is entirely consistent with – and indeed benefits from – the site also being a protected area in line with IUCN standards. World Heritage governance takes place through the regime stipulated for the corresponding protected area established under the national nature conservation legislation. The powers and responsibilities for the World Heritage cultural landscape, including the authority and accountability for managing the site, rest with the governmental protected area agency. The same stakeholders are involved through the same participatory processes in management of the World Heritage site and of the overlapping protected area.

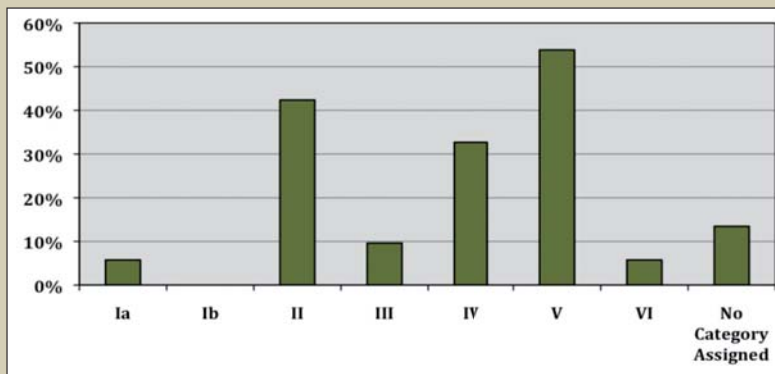
Resulting synergies

World Heritage cultural landscapes and protected areas both play a vital role in the conservation and sustainable use of the world’s cultural and natural heritage. Between these two systems of conservation designations, there are:

- significant conceptual connections;
- clear spatial overlaps, with roughly two-thirds of all World Heritage cultural landscapes coinciding with protected areas in one or more of the IUCN management categories; and
- substantial management and governance relations.

Against this background, it is evident that a complementary relationship between World Heritage natural and cultural landscape sites exists in their shared aim to conserve the world’s Outstanding Universal Value heritage. Although not all may be formally

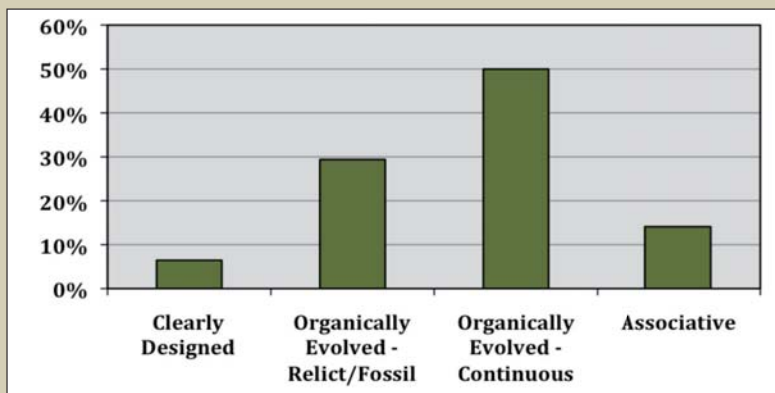
Chart 1



1: Frequency of IUCN protected area categories overlap with World Heritage cultural landscapes

(The numbers do not add up to 100 per cent because a World Heritage cultural landscape site may be composed of more than one protected area, to which different categories are assigned.)

Chart 2



2: Frequency of World Heritage cultural landscape categories overlap with IUCN-categorized protected areas



The mixed site of Rock Islands Southern Lagoon (Palau) bears testimony to a Pacific small island community that once inhabited this unique marine environment.

© Steve L. Martin

classified as such, World Heritage cultural landscapes resemble protected areas in many facets as special places that are identified for special protection measures with the aim of conserving areas that are illustrative examples for the combined works of nature and man.

Many World Heritage cultural landscapes possess significant natural values. The biodiversity and ecosystem services values of some cultural landscapes may also be equivalent to or greater than those of sites listed as natural World Heritage under criterion (viii) on the basis of the outstanding examples of major stages of earth's history that they exhibit. Therefore, in relation to IUCN's mandate and priorities regarding protected areas, natural and mixed World Heritage properties are clearly not a sufficient priority. There is an unambiguous rationale for IUCN to extend the priority it attaches to natural World Heritage towards supporting and advising the conservation, effective management and equitable governance of World Heritage cultural landscapes.

The significant synergies between World Heritage cultural landscapes and protected areas reinforce the avenues for promoting and applying holistic approaches to the conservation and sustainable use of the world's intertwined cultural and natural heritage.

National authorities should seek to link both conservation instruments – World Heritage cultural landscapes and protected areas – as mutually reinforcing tools for the conservation of cultural and biological diversity. The integration of World Heritage cultural landscapes (already listed or tentative sites) with national and/or sub-national systems of protected areas and vice-versa may provide an ideal framework for delivering (enhanced) conservation benefits. At the site level, managers of both World Heritage cultural landscapes and overlapping protected areas should more clearly identify the synergies between the two systems of protection and exploit the potential that each offers to support the

other. There is furthermore considerable scope for applying protected area management effectiveness and governance quality assessment tools to World Heritage cultural landscapes.

The significant synergies between World Heritage cultural landscapes and protected areas reinforce the avenues for promoting and applying holistic approaches to the conservation and sustainable use of the world's intertwined cultural and natural heritage. This may also accelerate efforts towards the recognition and conservation of culture-nature interfaces in world regions where they are uniquely interlinked and are currently underrepresented on the World Heritage List – such as the Pacific. 🌐

Joint Biosphere Reserves and World Heritage sites

Boshra B. Salem, Chair, MAB International Coordinating Council
Samir I. Ghabbour, Chair, Egyptian National MAB Committee

Sian Ka'an (Mexico) was inscribed on the World Heritage List in 1987 and as a Biosphere Reserve in 1986.

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In addition to working together with its Member States to develop and promote education, science and culture, UNESCO's primary objective is to achieve mutual understanding among nations and peoples. To this end two activities have been established with a view to establishing two types of protected area. The first came under the umbrella of UNESCO's Man and the Biosphere Programme (MAB), launched in 1971, which established the so-called Biosphere Reserves, organized into a World Network of Biosphere Reserves. The second was initiated through the Convention concerning the Protection of the World Cultural and Natural Heritage in 1972 (World Heritage Convention), which establishes a list of sites. Updated lists of Biosphere Reserves and World Heritage sites are released annually by UNESCO.

Certain sites reflect specific techniques of land use that ensure and sustain biological diversity. Others, associated in the minds of the communities with powerful beliefs, artistic values and traditional customs, embody an exceptional spiritual relationship of people with nature. The goals of World Heritage sites and the World Network of Biosphere Reserves are to reveal and sustain

the great diversity of the interactions between humans and their environment, but also to protect living traditional cultures and preserve the traces of those that have disappeared. Some Biosphere Reserves are also World Heritage properties. But what is the actual difference between these UNESCO designations?

Biosphere Reserves and World Heritage sites offer two different approaches designed to address the opposable challenges of resource extraction and conservation. They help us to understand the interdependence between our survival as humans within our existing cultures and the survival of the natural environments on which our life depends. As the world's population expands, however, and with it demands for natural resources, and competing pressures on land, there is a need to address a wide range of issues, challenges and management opportunities encountered in World Heritage sites and Biosphere Reserves. Collective action is critical to secure effective solutions to such unprecedented global challenges. Biosphere Reserves and World Heritage sites are frequently sites of such differing practices as mining, tourism, conservation, oil and gas extraction and extensive investments for land reclamation.

A response to criticism

The Biosphere Reserve concept was a response to criticism aimed at the traditional system of nature reserves, whose sole purpose was and still is to ensure the protection of wild animals and plants, without paying much attention to the local population. In Africa in particular, this gave rise to some deplorable tragedies in the days of colonialism. The restriction of the function of protected areas to wildlife conservation sometimes led to the expulsion of local populations, as happened in Kenya and South Africa. Biosphere Reserves are areas of terrestrial and coastal ecosystems, internationally recognized within the framework of the MAB programme.

At the end of colonialism in Africa in the 1960s, some of the newly independent African states considered abolishing the reserves and giving the land back to the local populations for their own traditional uses, or for modern development schemes. Scientists feared that these protected areas and their biota might be lost, and warned UNESCO. This led directly to the idea of multi-purpose uses and to the application of several levels of protection, consisting in three "rings", which are a *core area*, at the heart of the protected area, exclusively set aside for conservation and scientific research; a *buffer zone* in which the local population could engage in their normal traditional activities; and a *transition zone* in which some development projects (such as hotels) could be pursued, under conditions determined by the management of protected areas.

Developing countries were immediately receptive to the idea. A country such as Kenya, which had thought of abolishing its protected areas, found the idea worthwhile.

Biosphere Reserves aim at reconciling people with nature. They promote models of sustainable development based on sound science, forms of economic development which respect the environment and the cultural values of local populations. They often have highly innovative and participative governance systems. Increasingly, Biosphere Reserves are recognized and used as learning places for sustainable development and for the monitoring and mitigation of climate change.

The World Network currently counts 621 Biosphere Reserves in 117 countries around

Mount Nimba Strict Nature Reserve

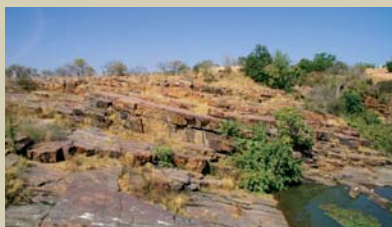
Mount Nimba Strict Nature Reserve is a transboundary World Heritage site on the boundary between Guinea and Côte d'Ivoire. The site is dominated by a chain of mountains that culminates at 1,752 m altitude at Mount Nimba. The slopes, covered with dense forest at the lower levels, with grassy mountain pastures, harbour a rich endemic flora and fauna. The Guinean part of the World Heritage site is also one of the three core zones of Mount Nimba Biosphere Reserve. The buffer zone could provide additional protection to the property as well as opportunities for sustainable development for local communities. However, more work is needed to achieve this goal.



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W National Park of Niger

The Government of Benin has been working on the nomination of Pendjari National Park as a transboundary extension to the W National Park of Niger. The park is the best preserved area of a transboundary ecosystem, located in a transition zone between savannah and woodlands and part of the important ecosystem characteristics of the West African woodlands/savannah biogeographical region. The 'W' Region Biosphere Reserve (Benin, Burkina Faso, Niger) includes all the significant protected areas in this region. Pendjari National Park is surrounded by hunting areas, which are part of the buffer zone of the Biosphere Reserve. These hunting areas are co-managed by local communities, who support their conservation and benefit from the revenue generated by hunting expeditions, thereby providing additional protection for the park.



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Socotra Archipelago (Yemen)

Socotra is globally important for biodiversity conservation because of its exceptionally rich and distinct flora and fauna. 37 per cent of Socotra's plant species, 90 per cent of its reptile species and 95 per cent of its land-snail species do not occur anywhere else in the world. The marine life of Socotra is also very diverse, with 253 species of reef-building corals, 730 species of coastal fish and 300 species of crab, lobster and shrimp. Biodiversity protection is a combined objective of the World Heritage site and the Biosphere Reserve and as management planning needs to deal more effectively with current threats including road construction, overgrazing and overharvesting of terrestrial and marine natural resources, there are good prospects for developing effective linkages between World Heritage and Biosphere Reserve authorities with a view to achieving a more holistic form of management involving the sustainable development aspects of biodiversity conservation.



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the world. These site-specific examples of sustainable development are established by the countries concerned and recognized under the MAB programme. The MAB Secretariat coordinates the World Network of Biosphere Reserves.

How it all started

The founding concept of the World Heritage Convention arose out of the brilliant and unprecedented experience of the greatest international cooperation project ever undertaken, successfully completed in Egypt in the 1960s under the direction of UNESCO. As a result of an international appeal launched by President Nasser of Egypt to save the monuments of Nubia, as a legacy not for Egypt alone but for all of humanity, UNESCO drew up the World Heritage Convention in 1972. The Convention was meant to codify international cooperation ventures to protect sites which, according to its statutes, were

considered to be of Outstanding Universal Value and thus deserving of international cooperation efforts to protect them.

Broadly speaking, the main feature of the World Heritage Convention is that it is more rigid than the Biosphere Reserve concept. It is governed by the World Heritage Committee, which meets once a year to examine the state of conservation of the sites and properties included in the World Heritage List and the List of World Heritage in Danger, as well as adding new sites or properties to either List. This Committee can remove ('delist') a site from the World Heritage List if it is judged to have lost its Outstanding Universal Value.

The chief concerns of the World Heritage Convention are the identification, conservation and management of exceptional natural and cultural sites, as well as raising awareness for heritage preservation. In 2013, the World Heritage List includes 981 properties forming part

of the cultural and natural heritage which the World Heritage Committee considers of Outstanding Universal Value. These include 759 cultural, 193 natural and 29 mixed properties. We can see that there are 621 Biosphere Reserves and only 193 natural World Heritage sites, plus 29 mixed sites – a total of 222 sites. Thus there are about two-thirds more Biosphere Reserves than World Heritage sites ensuring the protection of this type of heritage. The reason for this difference is the great stringency imposed by the World Heritage Convention.

It should also be noted that over eighty sites are both UNESCO-designated Biosphere Reserves and World Heritage sites (see pages 32–33).

Rivals or allies

There has been some discussion as to whether Biosphere Reserves and natural World Heritage sites should be considered rivals advancing incompatible ideas. The

Nanda Devi and Valley of Flowers National Parks (India)

The Nanda Devi Biosphere Reserve (NDBR) was included in the World Network of Biosphere Reserves by UNESCO in 2004 while the Nanda Devi and Valley of Flowers National Parks, forming the core zone of NDBR, were inscribed as natural World Heritage sites in 1988 and 2005 respectively. The NDBR represents a unique combination of mountain ecosystems which include traditional agro-ecosystems, mixed temperate and subalpine forests, alpine meadows and glaciers. The Valley of Flowers is one of the most picturesque hanging alpine valleys in the West Himalayas. Its exquisite floral diversity has been admired by renowned mountaineers and botanists for over a



© Prashant Ram

century. A total of forty-seven villages of indigenous communities fall within the buffer zone of the reserve, which is inhabited mainly by Indo-Mongoloid (Bhotiya tribes) and Indo-Aryan groups. Two famous pilgrimage sites (the Hindu shrine Badrinath and the Sikh shrine Hemkund Saheb) are major settlements with sizeable masses of population moving about the reserve, especially during the summer season. Both the national parks and the forest reserves in the buffer zone of the NDBR are well protected and managed under wildlife management and working plans respectively, while tourist and pilgrim management, and development activities such as hydraulic power projects and infrastructure inside the buffer zone of the reserve, represent both present and potential challenges that must be addressed.

Biosphere Reserves do not restrict any kind of activity, even if it does lead to environmental damage. The workings of the 1972 Convention, on the other hand, are more restrictive and do not allow any activity that could damage the Outstanding Universal Value of a site. Consequently, they may not allow new structures that may affect the site's visual integrity (as in the cases of Vienna and Dresden). In fact, however, there is much complementarity between the two. A World Heritage site can always be part of a Biosphere Reserve devoted to long-term protection and where conservation practices of the management are implemented. Having a natural World Heritage site in the core area of a Biosphere Reserve favours the preservation of its Outstanding Universal Value as long as this is founded on biodiversity. At the policy level, both contribute to the national conservation efforts.

The World Heritage Convention is a binding legal instrument. States Parties to the

Convention, by joining together to protect and cherish the world's natural and cultural heritage, voice a shared commitment to preserving our legacy for future generations. At the same time, having MAB as a programme and not as a binding Convention can be seen as a blessing rather than a curse, because it is implemented and adopted by true believers in its concept independently of any pressure from an international commitment, and thus freely and willingly implemented. And so, in time, the concept will prove its validity and the benefits it affords the surrounding communities.

Both World Heritage sites and Biosphere Reserves have some common objectives, particularly in the fields of ecotourism and education for sustainable development. The Great Volga River Route Project (2004–2007), for example, was conceived to link young people engaged in the preservation and promotion of World Heritage to biodiversity sites and sustainable development issues both in the countries bordering the Volga River and on the shores

of the Baltic, Black and Caspian seas, thanks to information, communication and various technologies. The Volga Project was a follow-up to the final recommendations of the World Heritage Youth Forum in Veliky Novgorod (Russian Federation) in 2002. The project was designed specifically as a contribution to the United Nations Decade of Education for Sustainable Development (2005–2014) and to explore and develop the effective use of the two UNESCO schemes to improve the quality of education.

Some suggestions

In theory, management of protected areas requires strategies, management plans, and programmes for scientific research and local development, in both World Heritage sites and Biosphere Reserves. Such plans are compulsory for both types of site and must be elaborated before nominations, not after.

It may not be easy to formulate an integrated, unified and coherent management plan for implementation in mixed Biosphere Reserves and World

Tropical Rainforest Heritage of Sumatra (Indonesia)

The Tropical Rainforest Heritage of Sumatra (TRHS) was designated a World Heritage site in 2004 and includes the three major national parks in Sumatra: Gunung Leuser (GLNP) a Biosphere Reserve, Kerinci Seblat (KSNP) and Bukit Barisan Selatan (BBSNP). In 2011, TRHS was inscribed on the List of World Heritage in Danger, principally because of agricultural encroachment and a proposed road development inside the property which continue to pose major threats and represent both a potential and present danger to the site's Outstanding Universal Value. Using best management practices and experience in GLNP Biosphere Reserve, UNESCO is helping to formulate an Emergency Action Plan for the Integrated and Coordinated Management of the Tropical Rainforest Heritage of Sumatra. The Biosphere Reserve experience is helping to achieve a cross-sectoral approach with the active participation of all stakeholders to define and implement the corrective measures requested by the World Heritage Committee.



© Ben Bland

Sian Ka'an (Mexico)

Sian Ka'an Biosphere Reserve is also a World Heritage site. Biosphere Reserves enjoy legal status in Mexico, which ensures that these sites are provided with staff and management budgets. Under these circumstances, Sian Ka'an Biosphere Reserve embodies a functional land management unit whose business it is to ensure the conservation of Outstanding Universal Value, and to support sustainable livelihoods for residents within the site and in the surrounding areas. Over the past decade, as a response to growing numbers of tourists, a UNESCO-UNEP-RARE project has linked biodiversity conservation and sustainable tourism development on the Sian Ka'an site. Combining conservation, education, planning, business development and marketing techniques, processes were created to use tourism to ensure the protection of important habitats. This project has provided local communities with direct economic benefits resulting from the growth of tourism.



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Sundarbans National Park (India)

Sundarbans National Park was inscribed on the World Heritage List in 1987 and as Sunderban Biosphere Reserve in UNESCO's World Network of Biosphere Reserves in 2001. Sunderban is the world's largest continuous mangrove patch along with The Sunderbans (Bangladesh), also a World Heritage site. Sundarban constitutes 63 per cent of the total area of Indian mangrove on which the entire Eastern Indian fishery is dependent. It shelters the only mangrove tiger habitat on Earth, along with the largest mangrove diversity with eighty-one species. The reserve also protects the city of Kolkata (formerly Calcutta) and its suburbs from the destructive force of annual gales from the sea and it also provides important ecosystem services, notably by providing a natural water cleaning capacity for the city wastewater, which produces 800 million litres of effluent a day.



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Heritage sites by applying the same methods. A general philosophy of conservation and management must first be designed for each type, and then integrated in one plan to allow for the inclusion of both sets of regulations whose methods they must reflect. But they must at the same time be guided by the general philosophy of both types. On the basis of these attempts, and in view of the growing interest in both, an integrated management plan should be put in place to ensure that the criteria of both types are implemented. Such a management plan should:

- identify and highlight the common values in the site;
- control external and internal activities pursued on the site, e.g. ecotourism, and coordinate action against such illegal activities as fishing or logging;
- enhance research and education and ensure that the site functions as an experimental site;
- abide by international commitments by protecting the site and submitting Periodic Reports on schedule;

- ensure continued support of decision-makers, and follow national plans;
- activate coordination and cooperative activities;
- ensure sustainable funding for monitoring and evaluating progress;
- ensure full transparency in proposing projects that affect sacred sites, or sites for which the local populations show special esteem, and consult the population to gain their approval.

Recommendations could include the following.

- Favour the cooperation of national MAB Committees with focal points for World Heritage.
- Give thought to ways in which MAB might become an international legal instrument on an equal footing with the World Heritage Convention.
- Weigh the suggestion that in protected areas which have both designations there should ideally be one manager trained in both systems, and one integrated management plan that takes both systems into account.

- Organize training courses for managers to harmonize their decisions.
- Unify approaches to boundaries, and preferably apply the Biosphere Reserve zoning including in World Heritage site buffer zones as BR zoning is more versatile and thus more responsive to the needs of local people.
 - Encourage a green economy policy and a unified commercial green label approach for the [organic] products and services provided by the local people.
 - Managers of all types of protected area should avoid conflicts with government authorities. This means that it is their duty to offer a positive image to both the general public and the government.
 - UNESCO should encourage the development of academic programmes leading to higher degrees, notably through World Heritage studies programmes and other courses, such as the e-learning Professional Master's Degree on the Management of African World Heritage at Cairo University (two years). ☺

In Focus Man and the Biosphere Programme

| Country | Biosphere Reserve | World Heritage site |
|------------------------------|--|--|
| Algeria | Tassili n'Ajjer (1986) | Tassili n'Ajjer (1982) |
| Australia | Uluru (Ayer's Rock Mount Olga) (1977) Macquarie Island (1977) Great Sandy (2009) | Uluru-Kata Tjuta National Park (1987 & 1994) Macquarie Island (1997) Fraser Island (1992) |
| Austria | Neusiedler See (1977) | Cultural Landscape of Fertő/Neusiedlersee (2001) (with Hungary) |
| Belarus | Belovezhskaya Pushcha (1993) | Belovezhskaya Pushcha / Białowieża Forest (1979) (with Poland) |
| Benin/Burkina Faso/ Niger | 'W' Region (established 1996 in Niger; extension to Benin and Burkina Faso in 2002) | W National Park of Niger (1996) (Niger only) |
| Brazil | Mata Atlântica (including Sao Paulo City Green Belt) (1993; extension 2002) Cerrado (1993; extension 2000 and 2001) Pantanal (2000) Caatinga (2001) Central Amazon (2001) | Discovery Coast Atlantic Forest Reserves (1999) Atlantic Forest Southeast Reserves (1999) Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks (2001) Pantanal Conservation Complex (2000) Serra da Capivara National Park (1991) Central Amazon Conservation Complex (2003) |
| Bulgaria | Doupki-Djindjiritza (1977) Srébarna (1977) | Pirin National Park (1983) Srebarna Nature Reserve (1983) |
| Cambodia | Tonle Sap (1997) | Angkor (1992) |
| Cameroon | Dja (1981) | Dja Faunal Reserve (1987) |
| Canada | Waterton (1979) | Waterton Glacier International Peace Park (1995) (with USA) |
| China | Wuyishan (1987) Maolan (1996) Jiuzhaigou Valley (1997) Huanglong (2000) | Mount Wuyi (1999) South China Karst (2007) Jiuzhaigou Valley Scenic and Historic Interest Area (1992) Huanglong Scenic and Historic Interest Area (1992) |
| Costa Rica | La Amistad (1982) | Talamanca Range-La Amistad Reserves-La Amistad National Park (1983 & 1990) (with Panama) |
| Côte d'Ivoire | Taï (1977) Comoé (1983) | Taï National Park (1982) Comoé National Park (1983) |
| Cuba | Cuchillas del Toa (1987) | Alejandro de Humboldt National Park (2001) |
| Czech Republic | Lower Morava (2003) | The Lednice-Valtice Cultural Landscape (1996) |
| Ecuador | Archipiélago de Colon (Galápagos) (1984) Macizo de Cajas (2013) | Galapagos Islands (1978) Historic Centre of Santa Ana de los Ríos de Cuenca (1999) |
| Germany | Flusslandschaft Elbe (1979, extension 1997) | Garden Kingdom of Dessau-Wörlitz (2000) |
| Guatemala | Maya (1990) | Tikal National Park (1979) |
| Guinea | Mont Nimba (1980) | Mount Nimba Strict Nature Reserve (1981) (with Côte d'Ivoire) |
| Honduras | Río Platano (1979) | Río Platano Biosphere Reserve (1982) |
| Hungary | Hortobágy (1979) Lake Fertő (1979) Aggtelek (1979) | Hortobágy National Park (1991) Cultural Landscape of Fertő/Neusiedlersee (2001) (with Austria) Caves of Aggtelek Karst and Slovak Karst (1995) (with Slovakia) |
| India | Sundarban (2001) Nanda Devi (2004) | The Sundarbans (1997, Bangladesh) and Sundarbans National Park (1987, India) Nanda Devi and Valley of Flowers National Parks (1988, 2005) |
| Indonesia | Gunung Leuser (1981) | Tropical Rainforest Heritage of Sumatra (2004) |
| Israel | Ramot Menashe (2011) | Biblical Tels - Megiddo, Hazor, Beer Sheba (2005) |
| Italy | Somma-Vesuvio and Miglio d'Oro (1997) Cilento and Vallo di Diano (1997) | Archaeological areas of Pompei, Herculaneum and Torre Annunziata (1997) Cilento and Vallo di Diano National Park with the Archaeological Sites of Paestum and Velia and the Certosa di Padula (1998) |
| Japan | Yakushima Island (1980) | Yakushima (1993) |
| Kenya | Mount Kenya (1978) | Mount Kenya National Park/Natural Forest (1997) |
| Korea, Republic of | Jeju Island (2002) Gwangneung Forest (2010) Gochang (2013) | Jeju Volcanic Island and Lava Tubes (2007) Royal Tombs of the Joseon Dynasty (2009) Gochang, Hwasun and Ganghwa Dolmen Sites (2000) |
| Mexico | Sian Ka'an (1986) Alto Golfo de California (1993. Extended in 1996) El Vizcaino (1993) Sierra Gorda (2001) Mariposa Monarca (2006) | Sian Ka'an (1987) Islands and Protected Areas of the Gulf of California (2005) El Pinacate and Gran Desierto de Altar Biosphere Reserve (2013) Whale Sanctuary of El Vizcaino (1993) Rock Paintings of the Sierra de San Francisco (1993) Franciscan Missions in Sierra Gorda of Querétaro (2003) Monarch Butterfly Biosphere Reserve (2008) |

| Country | Biosphere Reserve | World Heritage site |
|-----------------------------|---|--|
| Mongolia | Uvs Nuur Basin (Mongolia, 1997) | Uvs Nuur Basin (Mongolia/Russia 2003) |
| Montenegro | Tara River Basin (1976) | Durmitor National Park (1980) |
| Morocco | Oasis du sud marocain (2000) | Ksar of Ait-Ben-Haddou (1987) |
| Niger | Aïr et Ténéré (1997) 'W' Region (established 1996 in Niger; extension to Benin and Burkina Faso in 2002) | Aïr and Ténéré Natural Reserves (1991) W National Park of Niger (1996) |
| Panama | Darien (1983) La Amistad (2000) | Darien National Park (1981) Talamanca Range - La Amistad Reserves - La Amistad National Park (1983) (with Costa Rica) |
| Peru | Huascarán (1977) Manu (1977) | Huascarán National Park (1985) Manú National Park (1987) |
| Philippines | Palawan (1990) | Tubbataha Reefs Natural Park (1993) Puerto-Princesa Subterranean River National Park (1999) |
| Poland | Bialowieza (1976) | Belovezhskaya Pushcha / Białowieża Forest (1979) (1979 and 1992) (with Belarus) |
| Poland/Slovakia/Ukraine | East Carpathians (1998) | Primeval Beech Forests of the Carpathians and the Ancient Beech Forests of Germany (2007, extended in 2011) (Germany, Slovakia and Ukraine) |
| Portugal | Santana Madeira (2011) | Laurisilva of Madeira |
| Romania/Ukraine | Danube Delta (1979 and extension 1992 of Romanian part; addition of Ukrainian part (Dunainky) to make a transfrontier BR in 1998) | Danube Delta (1991) (Romania only) |
| Russian Federation | Kavkazskiy (1978) Sikhote Alin (1978) Kronotskiy (1984) Pechoro-Ilychskiy (1984) Baikalskiy (1986) Barguzinskiy (1986) Ubsunorskaya Kotlovina (1997) Katunsky (2000) Altayskiy (2009) | Western Caucasus (1999) Central Sikhote-Alin (2001) Volcanoes of Kamchatka (1996) Virgin Komi Forests (1995) Lake Baikal (1996) Lake Baikal (1996) Uvs Nuur Basin (with Mongolia, 2003) Golden Mountains of Altai (1998) Golden Mountains of Altai (1998) |
| Senegal | Niokolo-Koba (1981) | Niokolo-Koba National Park (1981) |
| Serbia | Golija-Studenica (2001) | Studenica Monastery (1988) |
| Slovakia | Slovenský Kras (1977) | Caves of Aggtelek Karst and Slovak Karst (1995) (with Hungary) |
| Slovenia | The Karst (2004) | Škocjan Caves (1986) |
| South Africa | Cape Winelands (2007) Vhembe (2009) | Cape Floral Region Protected Areas (2004) Mapungubwe Cultural Landscape (2003) |
| Spain | Doñana (1980) Ordesa-Viñamala (1977) Terras do Miño (2002) | Doñana National Park (1994) Pyrénées - Mont Perdu (1997) (with France) Roman Walls of Lugo (2000) |
| Sri Lanka | Sinharaja (1978) | Sinharaja Forest Reserve (1988) |
| Saint Kitts and Nevis | St. Mary's (2012) | Brimstone Hill Fortress National Park (1999) |
| Tanzania, United Rep. of | Serengeti-Ngorongoro (1981) | Ngorongoro Conservation Area (1979) Serengeti National Park (1981) |
| Tunisia | Ichkeul (1977) | Ichkeul National Park (1980) |
| United States of America | Glacier (1976) Yellowstone (1976) Everglades & Dry Tortugas (1976) Olympic (1976) Hawaiian Islands (1980) California Coast Ranges (1983) Glacier-Bay Admiralty Island (1986) Southern Appalachian (1989) Mammoth Cave Area (1990. Extension 1996) | Waterton Glacier International Peace Park (1995) (with Canada) Yellowstone National Park (1978) Everglades National Park (1979) Olympic National Park (1981) Hawaii Volcanoes National Park (1987) Redwood National and State Parks (1980) Kluane / Wrangell-St Elias / Glacier Bay / Tatshenshini-Alsek (1979, 1992 & 1994) (with Canada) Great Smoky Mountains National Park (1983) Mammoth Cave National Park (1981) |
| Viet Nam | Cu Lao Cham – Hoi An (2009) | Hoi An Ancient Town (1999) |
| Yemen | Socotra Archipelago (2003) | Socotra Archipelago (2008) |
| Zimbabwe | Middle Zambezi (2010) | Mana Pools National Park, Sapi and Chewore Safari Areas (1984) |

Global Geoparks and geological World Heritage

A case study from Germany

Patrick J. McKeever
pj.mckeever@unesco.org
Division of Ecological and Earth Sciences, UNESCO

Marie-Luise Frey
Frey@welterbe-grube-messel.de
Welterbe Grube Messel gGmbH, www.grube-messel.de

Jutta Weber
j.weber@geo-naturpark.de
Global Geopark Bergstrasse-Odenwald, www.geo-naturpark.de

The 'Sea of Rocks' – one of the most popular sites in the Global Geopark Bergstrasse-Odenwald.

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Eisenfelds Quelle

Informational sign



Crocodile Fossil crane.

© Welterbe Grube Messel gGmbH

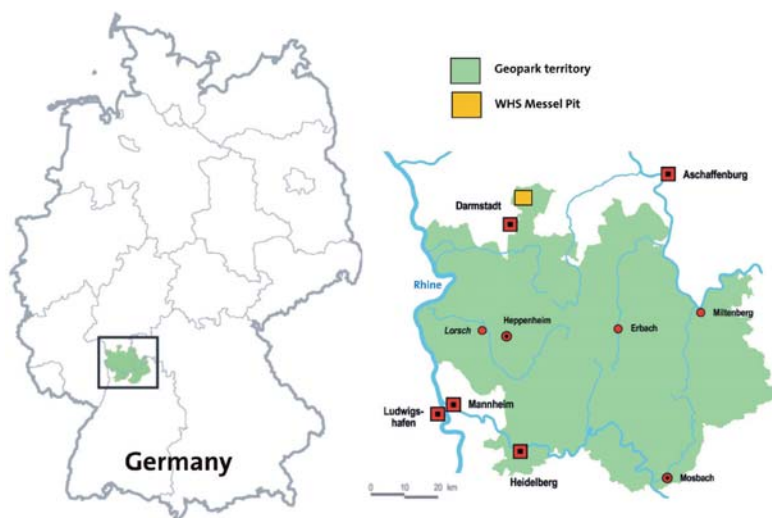
The World Heritage Convention, adopted by UNESCO in 1972, offers the opportunity for sites whose Outstanding Universal Value is so exceptional that their natural or cultural significance extends beyond national boundaries and justifies their recognition as a World Heritage site. Not only must a site meet conditions of integrity and authenticity, it must also fulfil at least one of ten criteria in order to establish its value. Six of these criteria are for sites of cultural value and four are for sites of natural value. Criterion (viii) specifically refers to sites of Outstanding Universal Value in terms of their geological and/or geomorphic significance. It recognizes that sites inscribed under criterion (viii) should be 'outstanding examples representing major stages of Earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features'. As of October 2013, while 86 sites on the World Heritage List are inscribed partially under criterion

(viii), only 17 sites out of a total of 981 are inscribed solely for their geological or geomorphic value under criterion (viii). Until recently there was no alternative mechanism to the World Heritage Convention for recognizing sites or areas of international geological or geomorphic significance. This was not at all the case of sites of biological value, which can also gain international recognition under UNESCO's Man and the Biosphere (MAB) programme or the Ramsar Convention on Wetlands. A 2005 report for the Protected Area Programme of the International Union for Conservation of Nature (IUCN) noted that, due to the necessarily selective nature of World Heritage, listing cannot be reasonably expected to recognize the full range of globally significant geological sites. The report went on to state that the then newly founded Global Geoparks initiative 'now offers a significant complementary programme to World Heritage listing. This alternative should be recognized and promoted'.

But what exactly are Global Geoparks and how do they complement World Heritage listing?

Scientific value

Global Geoparks are UNESCO-affiliated sites that include geological and/or geomorphic heritage of international significance where that heritage is being conserved and promoted for the sustainable economic benefit and social well-being of the communities that live there. Geological/geomorphic heritage of international significance does not refer to demonstrating Outstanding Universal Value as defined under the World Heritage Convention, but refers to the scientific value of a site as determined independently by international peer-review undertaken by the International Union of Geological Sciences. A bottom-up, participatory approach with local communities is at the core of the Global Geopark approach and without this sort of active involvement an area will not gain or keep its recognition as a Global Geopark. Global Geoparks also celebrate and exploit the links between a region's geological/geomorphic heritage and all other aspects of that area's natural, cultural and intangible heritage. The community involvement and economic impact aspects of Global Geoparks further



Location of the Global Geopark Bergstrasse-Odenwald and Messel Pit (Germany) World Heritage site.

© Global Geopark Bergstrasse-Odenwald

The Messel Pit World Heritage site is located about 30 km south of Frankfurt am Main and geographically forms a site within the Global Geopark Bergstrasse-Odenwald.

differentiate them from World Heritage sites but also mean that, typically, a Global Geopark is a significantly larger area than a World Heritage site. Global Geoparks are also linked together in a network, the Global Geoparks Network (GGN) which provides a mechanism for Global Geoparks to work together, share experience, develop partnerships and help and assist each other. Playing a dynamic role in the GGN is a compulsory aspect of membership, which is reviewed every four years.

As of October 2013 there were 100 Global Geoparks and some of these areas encompass both natural and cultural World Heritage sites. However only a very small number also include a geological/geomorphic World Heritage site inscribed under criterion (viii). Nevertheless, the question may reasonably be raised of why there should be such a dual designation for particular areas and how these two labels can work together in the same area in a way that promotes synergies and avoids duplication of effort. Perhaps the best way to illustrate this is by examining a case study, in this instance from Germany.

Messel Pit Fossil Site

The Messel Pit World Heritage site is located about 30 km south of Frankfurt am Main (Germany) and geographically forms a site within the Global Geopark Bergstrasse-Odenwald. The locality was inscribed on the World Heritage List in 1995 and the Outstanding Universal Value of the site is defined by superbly preserved fossil remains found in shale that was previously exploited for oil shale mining. The quality of the fossils (which include, for example, feather structures, skin and stomach contents) is such that it has given a completely new insight into the evolution of life, climate and environment during the Eocene Epoch of geological time some 47.8 million years ago. The uniqueness of the Messel Pit is communicated to the public in a new visitor centre, opened in 2010 on the edge of the former quarry on the theme: A Celebration of Time and the Messel Worlds. The centre has seven thematic exhibition rooms, a gift shop and bistro. It is not viewed as a museum, but as a discovery site for the visitor and also as a place for all citizens of the world to discover the special memory of planet Earth that is preserved here.

Global Geopark Bergstrasse-Odenwald

The Global Geopark Bergstrasse-Odenwald, about 50 km south of Frankfurt am Main, covers an area of 3,500 km² between the rivers Rhine, Main and Neckar. It was first recognized as a European Geopark in 2002 and in 2004 it became a founding member of the Global Geoparks Network. The region is characterized by over 500 million years of Earth history, a multifaceted natural landscape, and a cultural heritage stretching back thousands of years. There are three World Heritage sites within the boundaries of the Global Geopark: the Messel Pit Fossil Site (inscribed under geological criterion viii), the Abbey and Altenmünster of Lorsch (inscribed under cultural criteria iii and iv) and the Global Geopark also includes sites within the serial, transnational Frontiers of the Roman Empire World Heritage site ('The Roman Limes' inscribed under criteria ii, iii and iv). The Global Geopark offers a wide range of activities for inhabitants as well as visitors and promotes the World Heritage sites as individual sites within the larger park. A team of professionally trained Geopark rangers delivers landscape tours and environmental programmes. The entrance gates to the Global Geopark, information centres and environmental educational centres provide visitors with helpful advice for discovering the region. More than thirty Global Geopark trails offer individual landscape discoveries. The Global Geopark cooperates with many partners to create a regional identity, including those from the sectors of tourism, agriculture and gastronomy.

Geoparks and World Heritage working together

From 1992 to 2003, the Messel Pit was managed by the German Federal State of Hesse with a focus on conservation and research. However in 2003 the Ministry of Science and Arts founded the Welterbe Grube Messel gGmbH, a not-for-profit company to promote the Messel Pit and make it known to the public. This has included close collaboration with the Global Geopark Bergstrasse-Odenwald and the development of guided tours as tourism products, with the visitor centre adopting the holistic Geopark concept of connecting geological, natural and cultural heritage. In



Tourists at Messel Pit visitor centre discovering the volcanic history of the area.

© Jutta Weber

this context, both partners have developed a range of projects and skills for their mutual benefit, which present the further advantage of avoiding duplication of effort:

- Training of Geopark rangers;
- Offering new jobs for geoscientists;
- Development of geoscientific public relations and geo-education tools;
- Use of information panels and trails to explain the area's geological heritage to visitors and tourists;
- Exchange and collaboration with other partners of the Global Geoparks Network and other World Heritage sites;
- Joint development of geotourism products and media for the public;
- Conception and implementation of a visitor centre at the Messel Pit with state, scientific and regional partners;
- Use of the Messel Pit as an entrance gate to the wider Global Geopark.

The Global Geopark contributes each year to European Geoparks Week. This activity is a huge platform from which to communicate the regional geological, natural and cultural heritage to the public, while also promoting other Global Geopark partners in Europe. The Messel Pit has hosted the central event of the European Geoparks Week for several years and contributes guided tours and activity day programmes. Additionally, every

The Global Geopark Bergstrasse-Odenwald acts as a regional promotional platform with a wide range of local and regional partners.

year the Geopark offers a comprehensive programme including several activities with local partners. It also includes them in promotional brochures and media activities. The Messel Pit is one of these partners.

The entrance gates to the Global Geopark, as well as the various information and geo-education centres, offer a wide range of activities and events and a full range of brochures, maps and publications covering the whole Global Geopark region. Since 2007, the Messel Pit has been promoted as the northern entrance to the Global Geopark and the centre there includes information about the territory as well as the wider European and Global Geoparks Network. In this context, the two partners integrate one another in their annual magazines and publications. Relating to the Day of the Geotopes, a Germany-wide event to promote sites of geological importance, the Global Geopark Bergstrasse-Odenwald annually celebrates one special geological site within the Global Geopark which is then promoted as Geotope of the Year. The official celebration is attended by state

ministers, scientists, representatives of the universities, politicians, cooperation partners and local stakeholders and it enjoys high public media visibility. In 2010, the Messel Pit received the Geotope of the Year award and was promoted accordingly by the Geopark.

The Geopark rangers offer environmental education programmes for target groups of all ages. As part of their cooperation, the Global Geopark and the Messel Pit have jointly developed Geo-workshops with the Geopark rangers, which follow the main geoscientific themes of the Messel Pit: 'rain forest', 'fossils', 'volcanoes' and 'below the surface'. The participants consider the workshops as a well-balanced combination of information, education and fun. The Messel Pit has developed promotional collaboration with the regional tourism organization Odenwald-Tourismus, conceived to develop the World Heritage site as a beacon for the regional tourism product. Funded by the German Federal Government and the state of Hesse, this collaboration also promotes awareness of the Global Geopark, its infrastructure and facilities.



Visitor platform at Messel Pit World Heritage site.

© Welterbe Grube Messel gGmbH

Cooperation with the Global Geoparks Network

Cooperation among Global Geoparks is a continuous and ongoing task and for Bergstrasse-Odenwald and the Messel Pit includes projects with the Global Geoparks of Hong Kong (China, intercultural ranger training), Lesvos Island (Greece, ranger exchange, contributing to an annual International Intensive Course on Geoparks), Lushan (China, scientific exchange) as well as common presentations at Global Geopark fairs (Langkawi, Malaysia) and at World Tourism Trade and Promotion Fairs such as the International Tourism Fair in Berlin.

How do they differ?

The Messel Pit World Heritage site and the surrounding Global Geopark Bergstrasse-Odenwald share the same promotional approach: the conservation and communication of our geological and

natural, as well as cultural, heritage to the public. Regarding the territory and outreach, the Messel Pit is a single locality, based on UNESCO's definition, and is focused on Outstanding Universal Value. As in the case of all other World Heritage sites, protection, conservation and the safeguarding of the geological heritage for future generations, as well as public outreach activities, are core remits. On the other hand, the Global Geopark Bergstrasse-Odenwald acts as a regional promotional platform with a wide range of local and regional partners. In this context, communication and cooperation as well as geo-educational activities are fundamental tasks, as they are indeed in any other Global Geopark. These tasks are also the basis of the cooperation with the Messel Pit and the resulting benefits are obvious – since 2003 there has been a continuously increasing number of visitors, regional and internationally, benefiting

both the World Heritage site and the Global Geopark and thus the local communities throughout the region.

Win-win situations

This collaboration between partners constantly creates win-win situations. They have main topics and aims in common. Together, they help to shape and promote a regional identity, reach a wider audience, support one another by means of events, publications and products, develop common activities and cooperate in media and public relations. Over the last decade, the Global Geopark Bergstrasse-Odenwald and the Messel Pit World Heritage site have developed a network of cooperation that integrates local, regional and international partners. The visitors benefit from the variety of heritage, tourism and activity products available at both places. The collaboration between Bergstrasse-Odenwald and the Messel Pit is an example of good practice also found in other Global Geoparks, World Heritage sites and Biosphere Reserves around the world. It is seen as part of a global approach that can serve the needs of future generations. It can also serve as a motor for fruitful sustainable development in the region and favour the understanding between countries, institutions and people that is crucial for the future of the planet. ♻️

The following Global Geoparks include or partially overlap with a World Heritage site inscribed either solely or including criterion (viii):

| Country | World Heritage site | Global Geopark |
|-------------------|-------------------------------------|---------------------------|
| China | China Danxia | Danxiashan |
| | South China Karst | Shilin Stone Forest |
| | Lushan Natural Park | Mt. Lushan Global Geopark |
| Germany | Messel Pit Fossil Site | Bergstrasse-Odenwald |
| Italy | The Dolomites | Adamello Brenta |
| Republic of Korea | Jeju Volcanic Island and Lava Tubes | Jeju Island |



Shale landscape at Messel Pit World Heritage site.

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The Ramsar and World Heritage conventions and Slovenia's Škocjan Caves

Christopher Briggs
Secretary General
Ramsar Convention on Wetlands

Škocjan Caves (Slovenia) have been a World Heritage site since 1986, a Ramsar site since 1999, and a MAB Biosphere Reserve since 2004.

© Paul Asman and Jill Lenoble





Several joint missions of Ramsar and World Heritage experts have been carried out over the years, at Srebarna Nature Reserve (Bulgaria) for example.

© Esther Westerveld

The Ramsar Convention on Wetlands, signed in 1971, is the world's first global multilateral environmental treaty, and its central principle of 'wise use', or sustainable use of natural resources, was pioneering in its time and has since become a key foundation for the modern environmental and sustainable development movements.

As I start in my new post as the fifth Secretary General of the Convention, I am struck by the many ways in which Ramsar's Contracting Parties have led the way in trying out new institutional and conceptual arrangements that have been taken up productively by the other multilateral environmental agreements (MEAs). One of the most notable of these has been the construction of synergistic and collaborative arrangements with other MEAs and their secretariats, and also between Ramsar and the leading non-governmental organizations (NGOs) working in the same fields.

It was back in January 1996 that the Secretaries General of the Ramsar Convention

There are currently sixty Wetlands of International Importance (Ramsar sites) that are also inscribed within forty-seven World Heritage sites.

and the Convention on Biological Diversity signed the first memorandum of cooperation between two global MEAs. Shortly thereafter, a first Joint Work Plan between the two conventions was agreed and we are now collaborating under a fifth plan. Over the years, the secretariats have built a broad record of partnership on many fronts. Since those days, ground-breaking relationships of this sort have been widely emulated throughout the world of environmental and development institutions, and Ramsar itself has constructed a formidable edifice of agreements with many other MEAs and NGOs with overlapping missions and expertise.

The Ramsar Parties have been reaffirming the benefits of such synergies at every one of their triennial Conference of Parties (COPs) since 1999 – but one thing is

particularly worth noting here: increasingly over the years, the Parties have expressed their concerns about the fact that these institutional synergies between secretariats and subsidiary scientific Advisory Bodies are not easily translated to the on-the-ground work carried out in the name of the MEAs in the regions and countries, and site-based work.

Ramsar and World Heritage

Another example of cooperation can be found in the Memorandum of Understanding (MOU) signed between the Ramsar Secretariat and the World Heritage Centre in May 1999. This was a very natural linkage since the World Heritage Convention, which is almost as old as the Convention on Wetlands, is one of the very few MEAs that, like Ramsar and the



Djoudj National Bird Sanctuary (Senegal) was inscribed as a Ramsar site in 1977 and as a World Heritage site in 1981.

© Jbdodane

UNESCO Man and the Biosphere (MAB) programme, are based upon a list of sites that qualify as protected areas. That first MOU, which still remains in force, was established with a view to promoting the nominations of wetland sites under the two conventions and sharing expertise about them, coordinating the reporting about sites listed under both conventions, and in some cases collaborating on advisory missions to those sites to help them solve management problems.

There are currently sixty Wetlands of International Importance (Ramsar sites) that are also inscribed within forty-seven World Heritage sites. Over the years, the two conventions have sent joint advisory missions of Ramsar and World Heritage experts to investigate and make recommendations on a number of joint sites, such as Ichkeul in Tunisia, Djoudj and Diawling in Senegal and Mauritania respectively, and Lake Srebarna in Bulgaria, and these have proved very productive in finding not only solutions but also the financial resources needed to implement those recommendations.

Perhaps the most exciting new initiative to benefit from this close relationship has been the recent and rapid development of the Ramsar Culture Network (RCN), which is presently elaborating an extensive programme of activities increasing cooperation with World Heritage as well as other parts of UNESCO. As the programme develops it will be led to focus as much as possible on the site level, by means of case studies for example, and the exchange of lessons learnt and knowledge among site managers. At a planning meeting at UNESCO Headquarters in Paris in May 2013, it was agreed that activities undertaken within the proposed RCN programme of work for 2013–2016 should be very pragmatic and results-oriented, with a bottom-up approach and good engagement with local communities.

The five-person Ramsar Culture Network Steering Group is co-led by Dave Pritchard and Thymio Papayannis and includes a representative from the World Heritage Centre and another from the Ramsar Secretariat. Ramsar and World Heritage

have made joint presentations on the potential cultural importance of wetlands at a number of important meetings over the past eighteen months, and Dave Pritchard believes that a number of attributes of World Heritage cultural as well as natural properties offer exciting opportunities for further development, such as the traditional uses of wetland products, the evolution and functioning of rice terraces, *qanat* and *fouggara* irrigation systems, traditional water supply systems, networks of inland waterways for navigation, salinas (salt lakes), cities developed in deltas and around arterial rivers, and so on.

Clearly, even within the framework of such high-level collaborative ventures, there are obvious benefits that can be filtered down to site level, such as lessons learnt, case studies, guidelines and awareness-raising material. But we need to ask ourselves how widely such synergies can be experienced and shared directly by site managers themselves. We would like to know what benefits the sites themselves can derive from being inscribed under

either of the two conventions and also what synergies can result from having been inscribed under both of them.

Independent experts have conducted surveys of Ramsar site managers in the United States, Canada and Africa, and they have agreed on the benefits that site managers perceive as the results of having acquired the Ramsar status of 'international importance'. Generally, the most important benefits the managers cited drew upon the increased prestige that resulted from this designation; they confirmed that Ramsar recognition has helped to maintain the conservation status of those wetlands, largely by increased public awareness; increased participation by local stakeholders; greater support for the protection of the site; increased access to conservation funding opportunities; and enhanced opportunities for research and, most importantly, for tourism and ecotourism. Let us look at that concept in a specific case in Slovenia.

Škocjanske Jame

Slovenia's Škocjanske Jame (Škocjan Caves) have been a World Heritage natural property since 1986, a Ramsar site since

1999, and a MAB Biosphere Reserve since 2004. The site includes one of the largest known underground cave systems in the world, as part of the broader system which extends from the ponor of the Reka River to the Gulf of Trieste in Italy within the karst plateau. The caves and surrounding landscape are examples of extraordinary natural beauty, and they now form the protected area of the Škocjan Caves Regional Park, covering more than 400 ha.

The natural attributes of the park are remarkable. After heavy rains, the Reka River floods and may rise more than 100 m within the cave system, with all attendant risks and impacts. The site supports numerous endemic (crustaceans, cave beetles) and endangered animal species (such as *Miniopterus schreibersi*, one of the rarer bat species), and it was the first underground wetland in the world to have received Ramsar status. In addition, archaeological excavations have shown that the site has been occupied for more than 10,000 years, with continuous settlement from the middle Stone Age to the Iron Age.

Dr Gordana Beltram is Director of the Regional Park. She is also Slovenia's national

focal point for the Ramsar Convention and Chairperson of the Ramsar Standing Committee for the triennium 2003–2005. She and her colleague Rosana Cerkvenik indicate that the benefits of World Heritage status are very similar to those revealed by the surveys of Ramsar site managers. Tourism is the most important economic activity in the area, they say, and Škocjanske Jame park plays a key role in the local economy. In cooperation with local stakeholders and the local tourist association, the area has been actively publicized, and the park works closely in cooperation with other protected areas in Slovenia and internationally, including other World Heritage and Ramsar sites, in promoting the conservation of nature and cultural heritage as well as sustainable development. The site now receives some 100,000 visitors annually, three-quarters of whom are international tourists, and the numbers continue to increase.

Dr Beltram believes that the fact that the caves have been recognized internationally as a World Heritage and a Ramsar site helps to increase interest in the caves and their importance in the sight of visitors, while



The result of a collapsed roof of one of the Škocjan Caves (Slovenia), Mala Dolina.

© Paul Asman and Jill Lenoble

the impression formed when visiting the area also helps people to understand the meaning of World Heritage and the value of internationally important wetlands. The park has become better known in Slovenia and abroad and new opportunities have been identified for expanding and enriching sustainable tourist activities, and increasing local employment as well – all of which help to fulfil the park's goals in supporting the economic, social and cultural development of the local communities – by working with local tourist associations to improve tourism products, for example, and by encouraging traditional agriculture and ecologically oriented food production for tourists.

The income generated from entrance fees and the sale of souvenirs accounts for nearly two-thirds of the park's annual budget. Since it was established, the park has also increasingly been able to provide financial resources for the improvement of infrastructure in the three villages

within the protected area. In addition to improving tourist facilities and services on site, part of the income is distributed to local inhabitants for the maintenance of typical karst architecture and of the cultural landscape. Thus, in addition to its own developments, between 1999 and 2011 the park has invested over €430,000 of its own resources into the buildings, appearance and infrastructure of the three villages.

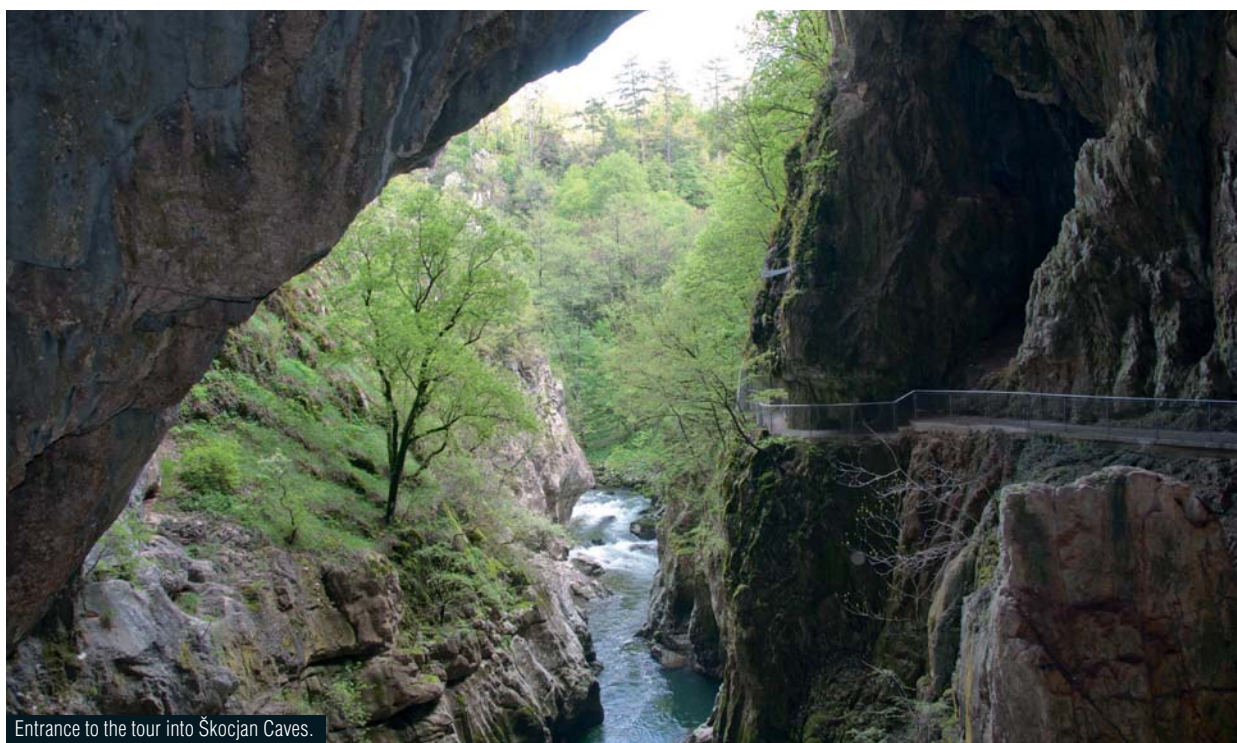
As Dr Beltram sums up, 'Škocjanske Jame is among the few areas with the three international nominations. Over the years the World Heritage Convention, the Ramsar Convention, and the MAB programme have been working hand in hand in this area assisting the park in enhancing recognition of the area and its importance locally, nationally and internationally. With local people, schoolchildren and professionals, the park has managed to effectively conserve and protect the karst area and its larger hinterland.'

The income generated from entrance fees and the sale of souvenirs accounts for nearly two-thirds of the park's annual budget.

Future collaboration

We have seen how the MEAs can fruitfully collaborate at the global and secretariat levels to achieve synergies in the pursuit of their missions, in supporting one another's objectives, in supplementing one another's knowledge and experience, in avoiding the duplication of efforts, and sometimes in combining their resources to address the problems of their listed sites. And we have seen how participation in these conventions can increase the prestige of sites that enjoy national protected area status and multiply the benefits they receive as their international status becomes better known, especially through designation under more than one such MEA.

But I wonder if we cannot go further and suggest that, drawing upon the experience of the Škocjan Caves and the new Ramsar Culture Network, we can expand prospects for more synergies between the MEAs at the site level itself. Perhaps we can find further ways to encourage a greater exchange of scientific knowledge and expertise, management experience and responses to funding opportunities, between jointly listed sites in one or several countries. ☉



Entrance to the tour into Škocjan Caves.

© Paul Asman and Jill Lenoble



Fraser Island (Australia).

© Talisen

| Country | Ramsar site | World Heritage site |
|----------------------------------|---|--|
| Albania | Butrint, 2003 | Butrint, 1992, 1999 |
| Algeria | La Vallée d'Iherir, 2001 | Tassili n'Ajjer, 1982 |
| Andorra | Vall de Madriu-Perafita-Claror, 2013 | Madriu-Perafita-Claror Valley, 2004 |
| Argentina | Humedales de Península Valdés, 2012 | Península Valdés, 1999 |
| Australia | Great Sandy Strait, 1999 | Fraser Island, 1992 |
| | Kakadu National Park, 1980, 1989 | Kakadu National Park, 1981, 1987, 1992 |
| Bangladesh | Sundarbans Reserved Forest, 1992 | The Sundarbans, 1997 |
| Brazil | Mamirauá, 1993 | Central Amazon Conservation Complex, 2000 |
| Bulgaria | Srébarna, 1975 (MR) | Srebarna Nature Reserve, 1983 |
| Cameroon | Partie Camerounaise du fleuve Sangha, 2008 | Sangha Trinational (with CAR & Congo), 2012 |
| Canada | Peace-Athabasca Delta, 1982 | Wood Buffalo National Park, 1983 |
| | Whooping Crane Summer Range, 1982 | |
| Central African Republic | Rivière Sangha située en République Centrafricaine, 2009 | Sangha Trinational (with Cameroon & Congo), 2012 |
| Congo | Sangha-Nouabalé-Ndoki, 2009 | Sangha Trinational (with Cameroon & CAR), 2012 |
| Costa Rica | Isla del Coco, 1998 | Cocos Island National Park, 1997, 2002 |
| Democratic Republic of the Congo | Parc national des Virunga, 1996 | Virunga National Park, 1979 |
| Egypt | Wadi El Rayan Protected Area, 2012 | Wadi Al-Hitan (Whale Valley), 2005 |
| France | Baie du Mont Saint-Michel, 1994 | Mont-Saint-Michel and its Bay, 1979 |
| Germany | Wattenmeer, Elbe-Weser-Dreieck, 1976 | The Wadden Sea (with Netherlands), 2009 |
| | Wattenmeer, Jadebusen & westliche Wesermündung, 1976 | |
| | Wattenmeer, Ostfriesisches Wattenmeer & Dollart (MR), 1976 | |
| Hungary / Slovak Republic | Baradla Cave System and related wetlands, 2001 / Domica, 2001 | Caves of Aggtelek Karst and Slovak Karst, 1995, 2000 |
| Hungary | Hortobágy, 1979 | Hortobágy National Park - the Puszta, 1999 |
| India | Keoladeo National Park, 1981 (MR) | Keoladeo National Park, 1985 |
| Japan | Yakushima Nagata-hama, 2005 | Yakushima, 1993 |
| | Miyajima, 2012 | Itsukushima Shinto Shrine, 1996 |
| Kazakhstan | Naurzum Lake System, 2009 | Saryarka - Steppe and Lakes of Northern Kazakhstan, 2008 |
| | Tengiz-Korgalzhyn Lake System, (1976) 2007 | |
| Kenya | Lake Bogoria, 2001 | Kenya Lake System in the Great Rift Valley, 2011 |
| | Lake Elmenteita, 2005 | |
| | Lake Nakuru, 1990 | |



Kenya Lake System in the Great Rift Valley (Kenya).

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|---------------------------|--|--|
| Lebanon | Tyre Beach, 1999 | Tyre, 1984 |
| Mauritania | Banc d'Arguin, 1982 | Banc d'Arguin National Park, 1989 |
| Mexico | Humedales del Delta del Río Colorado, 1996 | Islands and Protected Areas of the Gulf of California, 2005 |
| | Laguna Ojo de Liebre, 2004 | |
| | Parque Nacional Bahía de Loreto, 2004 | |
| | Parque Nacional Cabo Pulmo, 2008 | |
| | Laguna San Ignacio, 2004 | Whale Sanctuary of El Vizcaíno, 1993 |
| | Sian Ka'an, 2003 | Sian Ka'an, 1987 |
| | Sistema Lacustre Ejidos de Xochimilco y San Gregorio Atlapulco, 2004 | Historic Centre of Mexico City and Xochimilco, 1987 |
| Mongolia | Lake Uvs and its surrounding wetlands, 2004 | Uvs Nuur Basin, 2003 (transboundary) |
| Nepal | Beeshazar and associated lakes, 2003 | Royal Chitwan National Park, 1984 |
| | Gokyo and associated lakes, 2007 | Sagarmatha National Park, 1979 |
| Netherlands | Waddensee (Wadden Sea), 1984 | The Wadden Sea (with Germany), 2009 |
| Niger | Parc national du 'W', 1987 | W National Park of Niger, 1996 |
| Philippines | Puerto Princesa Subterranean River National Park, 2012 | Puerto-Princesa Subterranean River National Park, 1999 |
| | Tubbataha Reef Marine Park, 1999 | Tubbataha Reef Marine Park, 1993 |
| Romania | Danube Delta, 1991 | Danube Delta, 1991 |
| Russian Federation | Selenga Delta, 1994 | Lake Baikal, 1996 |
| Senegal | Delta du Saloum, 1984 | Saloum Delta, 2011 |
| | Djoudj, 1977 | Djoudj National Bird Sanctuary, 1981 |
| Seychelles | Aldabra Atoll, 2009 | Aldabra Atoll, 1982 |
| Slovak Republic / Hungary | Domica, 2001 / Baradla Cave System and related wetlands, 2001 | Caves of Aggtelek Karst and Slovak Karst, 1995, 2000 (transboundary) |
| Slovenia | Škocjanske jame (Škocjan Caves), 1999 | Škocjan Caves, 1986 |
| Spain | Parque Nacional de Doñana, 1982 | Doñana National Park, 1994 |
| Sweden | Sjaunja, 1974 | Laponian Area, 1996 |
| | Laidaure, 1974 | |
| Tunisia | Ichkeul, 1980 | Ichkeul National Park, 1980 |
| United Kingdom | Gough Island, 2008 | Gough and Inaccessible Islands, 1995, 2004 |
| | Inaccessible Island, 2008 | |
| USA | Everglades National Park, 1987 | Everglades National Park, 1979 |
| Yemen | Detwah Lagoon, 2007 | Socotra Archipelago, 2008 |

Satoyama

Harmony between people and nature

Robert Blasiak
United Nations University, Institute of Advanced Studies
Secretariat of the International Partnership for the *Satoyama* Initiative

Rice paddies in Nepal.

© Sharada Prasad



The simplicity of the Japanese term ‘*satoyama*’ contains a great depth of meaning about the interactions between people and the landscapes and seascapes they inhabit. *Satoyama* is made up of two characters meaning *sato* (village) and *yama* (mountain), while its sister term, *satoumi*, refers to villages and *umi* (oceans). Collectively, *satoyama* and *satoumi* describe the traditional landscapes and seascapes of Japan, where villages dotted the mountain valleys and seacoasts, and where close and harmonious interactions between humans and the natural environment played an important role in securing vital ecosystem services benefiting human well-being and the conservation of biodiversity.

Significantly, *satoyama* and *satoumi* do not refer to pristine untouched pieces of nature, but rather mosaics of different types of land use that have been shaped through the long-term interactions of communities with their surroundings. One of the most characteristic landscapes of Japan and many Asian countries, for example, is the terraced rice paddy, a system that will rapidly collapse without extensive human intervention and maintenance. Rice paddies, however, have been found to foster tremendous levels of biodiversity, and constitute one important piece of the complex mosaic of land uses that make up *satoyama* and *satoumi*.

Sustainably managed mosaic landscapes and seascapes have been identified in many locations around the world. Looking more closely, a number of shared aspects emerge. In many such areas, cultural traditions and practices are inextricably linked with the ecological systems that the people inhabit. These coupled socio-ecological systems, however, are amazingly diverse. On the Iberian Peninsula, for example, landscapes known as *dehesas* in Spain and *montados* in Portugal have developed over hundreds of years into multifunctional systems. These vast savannah-like landscapes are shaped both by human intervention and cattle grazing, leading to complex agrosilvopastoral systems. Indeed, this same formula of harmonious human-nature interactions has led to diverse mosaic landscapes all over the world. Malawi has *chitemene*, Cambodia is home to *srair-chamkar*, Cuba has *campos monte*, and in the Philippines one finds *muyong*. In recognition of both the commonalities and diversity among these areas, a new term was coined, ‘socio-ecological production landscapes and seascapes’ (SEPLS). The benefits derived from SEPLS extend well beyond just the conservation of biodiversity; sustainably managed SEPLS are at the very root of the social, economic and environmental well-being of communities. Close consideration of SEPLS around the world provides substantial evidence not only of the ingenuity of past generations, but also insight into how to achieve higher quality of life and solutions to some of the pressing problems of today.

Focusing specifically on such SEPLS, the Satoyama Initiative was started through a joint collaboration between the Ministry of the Environment of Japan and the United Nations University Institute of Advanced Studies. With a stated vision of realizing societies in harmony with nature, the objectives of the initiative found resonance in the international community, and in October 2010, the International Partnership for the Satoyama Initiative (IPSI) was launched during the Tenth Conference of the Parties to the Convention on Biological Diversity (CBD COP10) in Nagoya, Japan.



© François Philipp

Fostering an inclusive spirit, IPSI has since expanded to 147 member organizations (as of August 2013), spanning indigenous and local community groups, UN organizations, academic organizations, NGOs, and more.

Damaged landscapes and the loss of a monument

The Oriental White Stork is an impressive bird – 1.5 m tall, and with a wingspan of over 2 m, it is easy to see why Japan has designated the bird as a special national monument. Subsisting on fish, frogs and other small animals, the stork towers over most wading birds, and could once be seen as a large white and black form moving through Japan’s rice paddies.

But despite its size, national recognition, and place at the top of the food chain, the Oriental White Stork began to disappear from the Japanese landscape. Once widespread across Japan, populations rapidly fell, leading in 1955 to the formation of a stork protection group, and in 1965 to the initiation of a captive breeding programme in Toyooka, a city of 85,000 in Hyogo prefecture.

But in 1971, the last Oriental White Stork was observed in the wild, and it was subsequently declared extinct in Japan. What had gone wrong? And how can such a thing be fixed?

The first question was answered more easily than the second. In addition to overhunting, a key cause of the disappearance of Oriental



White Storks in the wild was loss of habitat. In 1940, Toyooka's pine trees, which had provided a nesting site for the storks, were cut down to provide lumber for the war effort. Subsequently, small-scale rice production was consolidated into large, well-drained paddies that would stand dry for parts of the year, removing a considerable portion of the habitat for the frogs and fish that had previously fed the storks. In addition, farmers began widespread application of fertilizers, herbicides and pesticides. As bioaccumulators at the top of the food chain, the storks were heavily affected by the chemical inputs.

Satoyama comes alive again

Toyooka City's captive breeding programme, started in 1965, was a struggle that spanned generations, and it was not until 2002 that the captive population exceeded 100. In 2005, five storks were released into the wild for the first time in thirty-four years.

But a successful breeding programme was only half of the solution – what sort of environment were these five birds being released into? After all, storks had once been widespread across the nation; what would stop these five birds from disappearing along with their ancestors?

Luckily, this chapter of the storks' history is a hopeful one. Toyooka City embarked on a remarkable effort to address the causes leading to the disappearance of the storks.

One key piece of the puzzle has been the 'white stork friendly farming method' that has been jointly promoted by Toyooka City and the Japan Agricultural Cooperative since 2003. Among other things, participating farmers must slash pesticide use by 75 per cent, and leave their paddies flooded at a deeper level for longer periods in order to enable tadpoles and other aquatic organisms to spawn. By 2009, over 200 ha (about 7 per cent of Toyooka's rice fields) were being cultivated by this method.

The resonance of these efforts came from an innovative branding mechanism, whereby rice grown using the 'white stork friendly farming method' received corresponding certification and was marketed at a higher price. Starting from a handful of stores in the beginning, sales of this stork-friendly rice have now expanded to 505 shops across Japan.

Two years after the first storks were released in the wild in 2005, a chick hatched naturally in the wild. It marked a welcome success to decades of efforts by Toyooka City. Since then, local education, sustainable farming methods and environmental measures have helped the wild population of the Oriental white stork to grow to eighty-three birds, which have now been sighted across thirty-three of Japan's forty-seven prefectures, providing a hopeful sign for the potential of humans to achieve, or rediscover, a more harmonious balance with the nature that surrounds them.

Such activities and lessons are at the core of the vision and mission of IPSI as it works to consolidate knowledge and best practices from efforts around the world and make these available to stakeholders working towards realizing societies in harmony with nature.

Members of the same family

In some ways, the 20th anniversary of the World Heritage Convention in 1992 marked the beginning of a future shared kinship with the Satoyama Initiative. For at this point, UNESCO officially began recognizing significant interactions between people and the natural environment as cultural landscapes. By acknowledging the strength of such linkages and their importance in highlighting the inextricable link between humans and the natural world, UNESCO has made it possible to inscribe sites such as the Rice Terraces of the Philippine Cordilleras (1995) and Mongolia's Orkhon Valley Cultural Landscape (2004) on the World Heritage List.

But it was on the occasion of the 40th anniversary of the Convention in 2012 that much stronger linkages began to form between the Satoyama Initiative and UNESCO. In March 2012, UNESCO became a member of IPSI, and later in the same year, both organizations participated in an International Meeting on the International Protection of Landscapes held in Florence (Italy), and an Expert Workshop on Heritage and Sustainability – from Principles to Practice held in Toyama (Japan). At the Florence meeting, a more appropriate topic of shared interest and common purpose would be difficult to find, and the resulting Florence Declaration on Landscape, 2012, strongly called for greater efforts to 'safeguard and improve landscapes as an integral element of sustainable development processes'. Taking into account the outcome document from the Toyama meeting (Toyama Proposal on Heritage and Sustainable Development), synergistic partnership between UNESCO and the Satoyama Initiative is poised to contribute to the post-2015 International Development Agenda. ☺




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Forum

On Wednesday, 25 September, UNESCO Director-General Irina Bokova joined the President of the International Council of Museums (ICOM), Dr Hans-Martin Hinz, and United States Assistant Secretary of State for Population, Refugees, and Migration, Anne Richard, to launch an Emergency Red List of Syrian Cultural Objects at Risk.

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Ancient City of Damascus (Syrian Arab Republic).

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Interview with Bráulio Ferreira de Souza Dias, Executive Secretary of the Convention on Biological Diversity

Dr Dias has over three decades of experience in policy-making and coordinating the implementation of biodiversity programmes at national and international levels. Formerly National Secretary for Biodiversity and Forests at the Brazilian Ministry of the Environment, Dr Dias has been deeply involved with the negotiations and implementation of the Convention on Biological Diversity (CBD) since its origin.

World Heritage:

As Executive Secretary of the Convention on Biological Diversity since the beginning of the United Nations Decade on Biodiversity and the first years of implementation of the Strategic Plan for Biodiversity 2011–2020, what are your views on the benefits of close collaboration among, for example, the Convention on Biological Diversity and the World Heritage Convention – including through the Biodiversity Liaison Group?

Bráulio Ferreira de Souza Dias: To some extent the liaison work of this group has been subsumed within the work being conducted under the Biodiversity Issue Management Group (IMG) of the UN Environment Management Group (EMG) where all members of the Biodiversity Liaison Group, including the World Heritage Centre, have mapped their respective mandates to the global Aichi Biodiversity Targets. (For further details see <http://ieg.informea.org/> and click on each target 'feather').

Depending on their actual protected area status, World Heritage sites are in a position to contribute to all three objectives of the Convention on Biological Diversity (CBD), through direct conservation of biodiversity, provision of ecosystem services (sustainable use), and the generation of benefits through use of biological resources, payments for ecosystem services and fair and equitable sharing of benefits resulting from the use of genetic resources.

Ever since the United Nations Environment Programme (UNEP) publication *Cultural and Spiritual Values of Biodiversity* in 1995 and the subsequent work of Terralingua and other academic studies, it has become clear that cultural diversity and major components of biological diversity are closely correlated, although the extent to which this actually results from a causal relationship remains unclear.

WH: National authorities have specific obligations and must apply specific reporting mechanisms in preserving heritage. Are there any prospects of further streamlining between existing conventions and legal instruments?

BF: A number of decisions taken by the ninth meeting of the Conference of the Parties (COP 9), asked the CBD Executive Secretary to ensure greater cooperation between relevant processes and conventions, and in particular with Decision IX/27 on cooperation among multilateral environmental agreements (MEAs) and other organizations.



Bráulio Ferreira de Souza Dias.

© CBD Secretariat

Certainly the MEAs and UNEP are exploring complementary ways to harmonize reporting obligations and many governments are interested, because of the economic considerations but especially because governments are increasingly recognizing linkages between issues such as biological and cultural diversity. The Secretariat has a Memorandum of Understanding and works closely with many parts of UNESCO but at this time an attempt at streamlining reporting obligations would obviously need to commence with MEAs. This remains a prerogative of the Parties, of course, to the extent that they choose to move in this direction, as we have many of the same Parties in common. The Secretariat also works closely with the United Nations Food and Agriculture Organization (FAO) in the Globally Important Agricultural Heritage Systems (GIAHS) programme, which is particularly important for *in situ* conservation and cultural heritage as well as for biological and genetic diversity.

WH: World Heritage sites protect the biodiversity of some of the world's most valuable places. Nevertheless we see that even these places are increasingly under threat. What role could the World Heritage Convention play in turning CBD policy decisions into real conservation action on the ground

using this important network of sites? How can the iconic network of World Heritage sites contribute to this effort?

BF Whether a site is a natural World Heritage site, a Ramsar site or a Biosphere Reserve, it is invariably a protected area. The establishment of comprehensive, ecologically representative, effectively managed and financially secured protected area networks is a critical strategy not only for biodiversity conservation, but also for securing ecosystem goods and services, enabling climate change adaptation and mitigation, and helping countries to achieve their Development Goals. And finally it is a key investment in environmental sustainability.

Recognizing these critical roles played by protected areas, the Parties to the Convention on Biological Diversity in February 2004 committed to a comprehensive and specific set of actions known as the Programme of Work on Protected Areas (PoWPA).

By laying emphasis on the equitable sharing of costs and benefits, but also by recognizing various governance types, and by giving prominence to ecological representation, management effectiveness and multiple benefits, PoWPA is the most comprehensive global plan of action for effective implementation of agendas touching upon protected areas and is acknowledged as a defining framework or 'blueprint' for protected areas planning for the coming decades.

Over the past twenty years the CBD's financial mechanism, the Global Environment Facility, has invested US\$1.5 billion in developing countries and countries with economies in transition. These funds were devoted to the creation or management of 2,302 protected areas covering 634 million hectares and to the expansion and consolidation of these protected areas.

COP 10, held in Nagoya (Japan) in 2010, adopted the Strategic Plan for Biodiversity 2011–2020 with the twenty Aichi Targets, including Target 11 on the conservation of terrestrial and marine areas. [NB: in which at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, are to be conserved through protected areas by 2020.]

Since the elements of Target 11 incorporate the PoWPA tenets, further effective implementation of this programme holds the key for achieving this target.

The Conference of Parties has recognized the World Heritage Convention as an important partner in facilitating the implementation of the CBD, PoWPA and World Heritage in a mutually supportive way.

At the national level, ministries of environment and forests are focal points for both the World Heritage Convention and the CBD and in some countries the PoWPA focal points are also the World Heritage natural site focal points, thus facilitating synergistic implementation.

At secretariat level we have collaboration in the coordination of capacity, in building activities and in disseminating the tools, guidelines and best practices for an effective implementation of agendas touching upon protected areas.

At COP 11 in Hyderabad (India), the CBD Secretariat organized, in partnership with the International Union for Conservation of Nature (IUCN) and the Indigenous Peoples' and Community Conserved Territories and Areas (ICCAs), a well-attended colloquium on community conservation areas. I believe we should give more attention to such areas in order to enhance their recognition and to support their management. In many parts of the world community conservation areas could significantly help countries to achieve Aichi Target 11.

Countries also use the Global Environment Facility and other bilateral funding in order to improve the management effectiveness of protected areas with a view to achieving biodiversity conservation and other goals.

WH: The working group on biocultural diversity came into existence after the International Conference on Biological and Cultural Diversity: Diversity for Development – Development for Diversity (ICBCD), held in Montreal in 2010. Do you also see new avenues for collaboration on cultural heritage?

BF: The UNESCO-CBD Programme on the Links between Biological and Cultural Diversity was a recommendation that arose from the ICBCD, which was a joint initiative by the CBD Secretariat, UNESCO, the UNESCO National Commission of Canada and the University of Montreal, supported by the Economic Forum of the Americas.

The UNESCO-CBD programme was endorsed by the constituencies of UNESCO and welcomed by COP 10 in October 2010 in Nagoya.

The decision recognized the joint programme as a 'useful coordination mechanism to advance the implementation of the Convention and deepen global awareness of the interlinkages between cultural and biological diversity'. States Parties and other relevant stakeholders were invited to contribute to and support the implementation of this programme, which is still in its early stages. Governments have requested that we focus on understanding the links between biological and cultural diversity and their implications for policy development. As such, cultural heritage is considered in the programme but no specific work has commenced or is planned in the immediate future with the World Heritage Convention.

WH: The World Heritage Committee has requested that all 'States Parties ensure their National Biodiversity Strategy and Action Plans (NBSAPs) fully consider the importance of natural World Heritage sites to achieve the Aichi Biodiversity Targets'. What do you think are the priorities when it comes to ensuring that World Heritage sites play a full role in the NBSAPs, and what should happen to ensure this?

BF: Even as countries revise their NBSAPs to reflect the Strategic Plan for Biodiversity 2011–2020 and the global Aichi Targets, we expect countries to set national targets that will contribute to the global targets. By incorporating World Heritage sites into their NBSAPs, countries can ensure that they contribute to a number of different targets. For example, around 25 per cent of the global total of almost 1,000 World Heritage sites are classified as 'natural' and can clearly play a role in contributing to the area-based targets (5, 11, 14 and 15) of biodiversity conservation, restoration and climate change mitigation. For example, in my own country, Brazil, the World Heritage sites in the Atlantic Forest South-East Reserves, the Pantanal Conservation Area, the Cerrado Protected Areas and 6 million hectares of the Central Amazon Conservation Complex play an essential role in conserving Brazil's biodiversity. However, other World Heritage sites play a much more integral role in providing ecosystem services to local populations and maintain the close relationship between society and cultural landscapes. ☉

World Heritage: beacons of inspiration



Célia Zwahlen
World Heritage Communications Officer,
International Union for Conservation of Nature, www.iucn.org

Do you remember the last time you visited a national park, nature reserve or other protected area? How did it make you feel?

The chances are you were not completely unmoved. You may even have found a moment of respite. But to be bold: I am ready to bet you felt inspired.

‘In all things of nature there is something of the marvellous,’ Aristotle wrote. If this is true for all things of nature, then we can certainly see that natural World Heritage sites are quite exceptional – as beacons of inspiration.

Natural and mixed World Heritage sites, and World Heritage cultural landscapes, together cover over 10 per cent of the land and aquatic surface included in all the planet’s protected areas. When it comes to implementing the World Heritage Convention, we need to reconsider what this implies for the conservation of the world’s most emblematic places.

Inspiring solutions

Inspiration does not stop at a time and place, but spreads beyond boundaries. Likewise, the potential benefits of World Heritage extend far beyond the listed sites. The valuable contribution that World Heritage sites make to the conservation of protected areas must be put back into focus.

These places and the people responsible for them need to be supported and challenged to play a leadership role in developing, establishing and demonstrating global standards for management of protected areas. World Heritage sites should act as ‘flagships’ in terms of raising public awareness, building capacity and finding solutions to conservation issues.

This will be the central point of discussion at the IUCN World Parks Congress in November 2014 in Sydney (Australia). A landmark global event happening only once every ten years and setting the agenda for work on protected areas, it will build on the

theme of Parks, People, Planet: Inspiring Solutions. One of the objectives we believe it should set is to establish World Heritage properties as key leaders in meeting and resolving the challenges faced by protected areas worldwide.

Over the next decade and beyond, World Heritage sites will need to meet the challenge to deliver conservation of the world’s most inspiring places, and demonstrate best practice. They are the litmus test for measuring success of the global protected area movement: if we cannot manage to deliver in this segment of globally recognized protected areas, we clearly have failed.

At the same time, these sites have the potential to be the learning laboratories and a source of inspiration for protected area practitioners.

Inspiring success

While recognizing the positive in order to achieve this vision, IUCN is developing strategies and actions to underpin World Heritage performance over the next decade. A key product that will be launched in March 2014 is the new IUCN World Heritage Outlook website, followed by a parallel report in the run-up to the World Parks Congress.

This new knowledge tool sets out to improve the conservation future of the Earth’s iconic places by making accessible existing information to track the state of conservation for all natural and mixed World Heritage sites. It will show evidence of best practice and identify the standards that sites need to achieve to remain excellent. It builds on three years of work, pilot exercises and consultation, including the annual World Heritage Committee meetings.

It will enable IUCN to do a better job as an Advisory Body to the World Heritage Committee through proactive monitoring. Today, site monitoring is mostly carried out as a reactive response to problems as they arise. As a consequence, out of the current 222 natural World Heritage sites, we know

that 8 per cent are Danger listed and 25 per cent are affected by serious conservation issues. But the status of many of the remaining sites is little known.

World Heritage Outlook will fill this knowledge gap by collecting best-available data and presenting Conservation Outlook Assessments for all natural and mixed sites on the World Heritage List. These desk-based assessments will offer a projection of a site’s potential to conserve its values over time based on the state and trend of its Outstanding Universal Value, threats, and the effectiveness of protection and management.

Conservation Outlook Assessments will also compile additional information on conservation issues, benefits and possible projects relating to a site. All information is referenced so that future assessments can review the previous information base, and this will also build on information gathered through the six-yearly Periodic Reports prepared by States Parties to the Convention.

This approach allows us to harness the widely untapped potential of the World Heritage Convention as one of the world’s most important, and most underrated, conservation instruments. Through it, we can raise awareness of World Heritage sites as flagships for innovations in management, responding to major threats and pioneering best practices.

World Heritage consistently receives high-profile recognition. So if we move from reactive monitoring that focuses on problems, to proactive monitoring that demonstrates success, there is better scope for communicating inspiring messages about the importance of conserving our biodiversity and natural heritage.

Experiences, successes and challenges encountered in real-world practice of the World Heritage Convention are illustrations of the realities faced across protected areas. Exposing successful performance opens up the possibility for the transfer of good



Australia, host of the 2014 World Parks Congress, is the state with the largest number of natural World Heritage sites. Pictured here, Macquarie Island, Tasmania.

© IUCN Photo Library - Jim Thorsell

The 40th anniversary of the Convention in 2012 created the momentum to envision a future where World Heritage can unleash its full potential as a conservation flagship.

management practices among sites, and for sharing lessons in the wider protected area community.

Stronger and more credible

The 40th anniversary of the Convention in 2012 created the momentum to envision a future where World Heritage can unleash its full potential as a conservation flagship. To seize this unique opportunity, the Convention, if it is to perform better, will need to address major challenges that are eroding the Outstanding Universal Value of an increasing number of sites.

But this should be part of a positive vision focused on setting standards and achieving success. Being at the forefront of protected areas, the Convention cannot afford to lower the bar, but must evolve if it is to maintain its credibility and effectiveness in the face of the conservation challenges of the 21st century.

During the 2012 IUCN World Conservation Congress, governments, NGOs, the

private sector and civil society agreed that strengthening the World Heritage Convention was a global conservation priority, and called on IUCN and UNESCO to strengthen their efforts to support states, sites and stakeholders.

Our recommendations to the World Heritage Committee are fundamentally based on the principle that the highest standards must be upheld through rigorous compliance with the *Operational Guidelines for the Implementation of the World Heritage Convention*. IUCN's contribution to World Heritage over the next decade also needs to be focused on constructive support and solutions.

Therefore, World Heritage Outlook is not about monitoring as a passive exercise. We aim to provide the essential support tool for capacity-building, creating partnerships, attracting investment and building awareness. In this way, we will be able to use the Convention's unique leverage in tackling major protected area issues, such

as wildlife trade, industrial development or climate change adaptation.

We have to find solutions by ensuring a stronger and more credible World Heritage Convention. The outlook report on natural World Heritage is an essential step in that direction. It will help to create the conditions in which all natural World Heritage sites will apply best practice.

This initiative also coincides with the development of the IUCN Green List of Well-Managed Protected Areas to be launched at the 2014 World Parks Congress. The Green List will be a new global quality standard for protected areas, encouraging progress towards effective and equitable management. We hope that World Heritage sites demonstrating a positive outlook and good standards of protection and management will be strongly represented among the sites designated to receive this global recognition for the quality of their management.

There is plenty of room in which to develop a strong future for World Heritage sites and to secure their position as beacons of inspiration. So let us be bold once again and aim for a future where the beacon sites of the World Heritage Convention will inspire others to set new standards for the conservation of the planet's natural wonders, to the benefit of the people who rely upon them.

UNESCO celebrates 10th anniversary of the 2003 Convention for the Safeguarding of Intangible Cultural Heritage

The Safeguarding of Intangible Cultural Heritage and the World Today was the topic of a panel discussion hosted by Phoenix Satellite TV on 15 October 2013 at UNESCO Headquarters in Paris. The Phoenix TV debate was followed by the opening of a photo exhibition of traditional arts and a performance by fifty peasant artists from Weinan city in China's Shaanxi province.

The panellists were UNESCO Director-General Irina Bokova, Nigerian Nobel Prize for Literature Laureate Wole Soyinka, Homi Bhabha of Harvard University, former French Minister of Culture and Communication Renaud Donnedieu de Vabre, Chairman of the Nishan Forum on World Civilizations Xu Jialu, and Chairman of Phoenix Satellite TV Liu Changle. The session was moderated by Phoenix TV Senior Anchor Jiang Shangyang.

The Director-General opened the debate by describing how the 2003 Convention, ratified by 155 countries, has extended the definition of cultural heritage. Intangible cultural

heritage is about identity and community with a strong link to cultural diversity, and hence to sustainable development. 'It is our response to globalization,' she said.

'China's development is closely related to its history and culture', said Xu Jialu, who also underlined the importance of research and the need to create a framework that goes beyond the Convention, helping Member States to protect their intangible heritage. 'We have to work towards an understanding of new humanism, which is based on values inherent in the intangible cultural heritage and which should form part of the curricula of educational institutions across the world. Intangible cultural heritage symbols bring new values into the humanities of today. Due to migration, intangible cultural heritage is no more a local issue,' said Homi Bhabha. Renaud Donnedieu de Vabre stressed that, when travelling, 'I want to discover what people are proud of, we need to preserve and envisage creation. By protecting intangible heritage, we protect positive

values of our culture, this helps to create new values.'

Wole Soyinka said that intolerance is 'the biggest challenge and threat to the values that the Convention defends. To protect diversity, we must broaden the world's understanding that cultural diversity is our common heritage. Its protection is an ethical imperative, inseparable from respect for human dignity.' In addressing the power of contemporary media, Liu Changle emphasized their significant contribution to the promotion of cultural diversity in the world and explained the necessity of preserving this diversity for future generations.

The Director-General concluded the lively debate by referring to the many partners and stakeholders who are now collaborating with UNESCO towards a new humanism, based especially on human dignity. It should always be remembered that 'no culture is superior to another', said Ms Bokova, adding that the ongoing efforts open up a whole new space of human identity.



Making fine-woven mats, a traditional skill in Samoa.

© Steven Percival

Preparing nominations for the Safeguarding of the Intangible Cultural Heritage: Caribbean countries strengthen their capacities

Twenty representatives of institutions involved in safeguarding cultural heritage in Cuba, Dominican Republic and Haiti met in Havana (Cuba), from 7 to 11 October 2013 to strengthen their skills in preparing nominations for the Lists of the Convention for the Safeguarding of the Intangible Cultural Heritage.

This complements the training they received in their respective countries on the implementation of the Convention at the national level. Both activities were made possible thanks to a generous contribution

from Norway to the Intangible Cultural Heritage Fund in support of a regional project for strengthening national capacities for the safeguarding of intangible cultural heritage.

Two members of UNESCO's network of facilitators, Adriana Molano Arenas from Colombia and Fabián Bedón Samaniego from Ecuador, conducted the sessions, emphasizing that nominations mobilize a wide range of stakeholders involved in safeguarding intangible cultural heritage – first and foremost communities – as well as designing safeguarding plans tailored to the specific contexts and conditions

for practising a given intangible cultural heritage element.

Besides theoretical training on nomination procedures, the participants put into practice their acquired knowledge both through evaluation exercises on mock nominations and a field visit to Regla, where they had the opportunity to exchange with traditional musicians of this municipality at the foot of Havana Bay, and to better understand methods to convey their practice to younger generations.

More information:
www.unesco.lacult.org

Emergency Red List of Syrian Cultural Objects at Risk is launched in New York

On 25 September 2013, UNESCO Director-General Irina Bokova joined the President of the International Council of Museums (ICOM), Hans-Martin Hinz, and United States Assistant Secretary of State for Population, Refugees, and Migration, Anne Richard, to launch an Emergency Red List of Syrian Cultural Objects at Risk.

The event was held at the Metropolitan Museum of Art in New York City and featured remarks from the Museum's Director, Thomas Campbell, as well as the President of the World Monuments Fund, Bonnie Burnham.

Since 2000, in close partnership with UNESCO, ICOM has published twelve Red Lists for cultural objects at risk across the globe.

The ICOM Red Lists facilitate the work of police, customs officials and all other professionals concerned with the protection of cultural property worldwide by helping them to identify categories of objects that are particularly vulnerable to illegal purchase, transaction and export. The Syrian Red List includes objects covering the most important periods of Syrian history: prehistory and ancient history, the Islamic era and the Middle Ages, as well as the Ottoman period.



© yeowatzup

Voicing her profound shock and distress at the loss of so many lives in the Syrian Arab Republic since the beginning of the conflict, Irina Bokova recalled the tragic and irreversible destruction of Syria's unique heritage, from the World Heritage sites of the Ancient City of Aleppo to Crac des Chevaliers.

'At UNESCO, we believe there is no choice to make between saving lives and saving cultural heritage. Protecting heritage is inseparable from protecting populations, because heritage enshrines people's identities. Heritage gives people strength and confidence to look to the future – it

is a force for social cohesion and recovery. This is why protection of heritage must be an integral part of all humanitarian efforts,' she stated.

Ms Bokova expressed special thanks to the United States Department of State for its financial support, which enabled the development of this Emergency Red List. She also paid tribute to its steadfast commitment in the fight against illicit trafficking of cultural property, particularly in the framework of UNESCO's 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, and she expressed her hope that the United States will continue to stay fully engaged with UNESCO.

'Syria's irreplaceable heritage can only be protected through a coordinated international response,' the Director-General emphasized. Highlighting UNESCO's actions in this regard – including the organized technical meetings and trainings as well as the endorsed action plan aimed at preventing further losses and repairing damage to Syrian cultural heritage – she called for active cooperation from Syria's neighbours, as well as from its police and customs partners, to reinforce efforts to fight against illicit trafficking.

UNESCO World Heritage in Korea National Parks

Gayasan national park (Haeinsa Temple Janggyeong Panjeon, the Depositories for the Tripitaka Koreana Woodblocks)

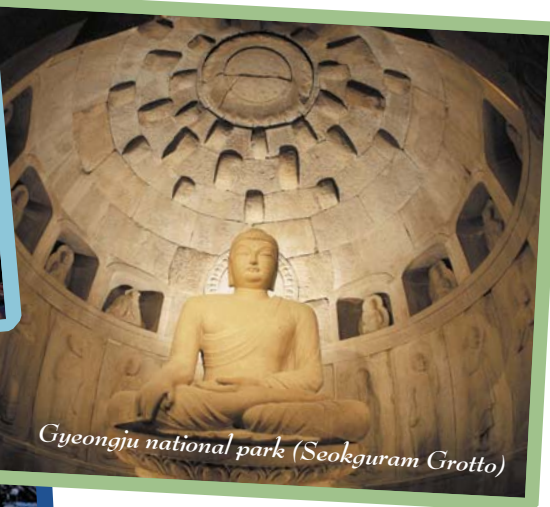


The Temple of Haeinsa, on Gayasan national park, the most complete collection of Buddhist texts, engraved on 80,000 woodblocks in the 13th century. The buildings of Janggyeong Panjeon were constructed to house the woodblocks, which are also revered as exceptional works of art.

Gyeongju national park (Gyeongju Historic Areas)



The Gyeongju Historic Areas contain a remarkable concentration of outstanding examples of Korean Buddhist art, in the form of sculptures, reliefs, pagodas, and the remains of temples and palaces from the flowering.



Gyeongju national park (Seokguram Grotto)

The Temple of Bulguksa and the Seokguram Grotto form a religious architectural complex of exceptional significance.

Gyeongju national park (Bulguksa Temple)



KNPS

KOREA NATIONAL PARK SERVICE

Jong-Kwan Choi, Director
Partnership Dept.
Korea National Park Service
Taeyoung Bldg. 4th FL, 144 Mapo-ro
(Gongdeok-dong), Mapo-gu,
Seoul, Republic of Korea
Tel: +82-2-3279-2800
Fax: +82-2-3279-2833
Website: www.knps.or.kr

News

All partners to the Škocjan Caves project, aimed at establishing a monitoring programme for World Heritage sites in south-eastern Europe, held their first project workshop in September 2013. Sites in Bosnia and Herzegovina, Bulgaria, Hungary, Romania, Serbia and Slovenia are participating in this project.

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Gamzigrad-Romuliana, Palace of Galerius (Serbia).

© 2009 Anne Chen / Ancient World Image Bank (AWIB)

Partners in monitoring

All partners to the Škocjan Caves project, aimed at establishing a monitoring programme for World Heritage sites in south-eastern Europe, held their first project workshop in Park Škocjanske jame – Škocjan Caves (Slovenia) from 9 to 13 September 2013.

The monitoring project has been designed to elaborate on monitoring as an efficient tool for the management of protected areas by addressing all aspects of the attributes which refer to Outstanding Universal Value and sustainable development. The goal is to develop and test methods and tools that would eventually be applicable to sites in other subregions.

Sites in six countries are participating in this project, including the Millenary Benedictine Abbey of Pannonhalma and its Natural Environment (Hungary); Gamzigrad-Romuliana, Palace of Galerius (Serbia); Historic Centre of Sighișoara, Villages with Fortified Churches in Transylvania (Romania); Old Bridge Area of the Old City of Mostar, Mehmed Paša Sokolović Bridge in Višegrad (Bosnia and Herzegovina); Pirin National Park, Srebarna Nature Reserve (Bulgaria); as well as Ljubljansko barje Pile dwellings (Slovenian part of the serial transnational property) and Škocjan Caves (Slovenia).

The September training workshop emphasized the links of natural and cultural



Historic Centre of Sighișoara (Romania).

© Jason Rogers

sites. Lectures on communication were held in order to help participants better understand the process of engaging local communities in the monitoring of World Heritage sites.

Participants learned about the management and monitoring of sites and discussed monitoring indicators based on each property's Statement of Outstanding Universal Value. They also learned about effective management and the importance of establishing partnerships with local communities and other representatives of the public. During a field visit to Škocjan Caves, management issues relating to conservation of the site, visitor safety and development projects were presented.

The importance of knowledge and capacity-building in World Heritage management was highlighted, as well as the necessity of preparing and implementing monitoring as part of the Periodic Reporting exercise. Finally, several case studies for cultural and natural sites were presented.

Due to the variety of challenges in managing natural and cultural values, as well as technical requirements, the workshop concluded that it would be difficult to agree upon a limited set of indicators that would cover all sites, their surveillance and their interpretation. Participants therefore decided to prepare an individual questionnaire for each site. Key themes were selected for the questionnaire, such as credibility of the site, clear presentation of its Outstanding Universal Value, benefits and added value, and the participation of local communities. The questionnaire will be tested in December 2013 and the results compared and published on the project's website: <http://mwh.park-skocjanske-jame.si>. As a next step, each World Heritage site is to prepare a monitoring scheme that will be shared with the project group and experts.

The project's web page, undertaken with the support of the Slovenian National Commission for UNESCO, is a platform for further communication among the participating properties and reinforces the network of World Heritage sites at subregional level.



Old Bridge Area of the Old City of Mostar (Bosnia and Herzegovina).

© Bryan Pocius

Local communities in New Caledonia

For the first time ever, all the local communities actively involved in the management of the exceptional World Heritage marine site of Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems (France), met together from 5 to 6 July 2013 to discuss conservation and preservation.

The World Heritage designation of the property has triggered a new way of promoting conservation. As a result of the site's inscription of the World Heritage List in 2008, local management committees, which now number thirteen, were set up across New Caledonia to provide day-to-day advice to the provinces responsible for decision-making. This unique endeavour

involves the Caledonian population in the management of the lagoons in a very comprehensive organizational structure and provides invaluable knowledge, not only at the provincial level but to the World Heritage Centre as well. Since 2011 the organization Conservatory of Natural Areas has coordinated these independent committees and served as a focal point for all matters relating to World Heritage.

The serious and dedicated involvement of local people, along with a large number of volunteers from the communities, have been essential to the management of this complex serial site and have provided a best practice example of a participatory management system.

The serial site comprises six marine clusters representing the main diversity of coral reefs and associated ecosystems in the French Pacific Ocean archipelago of New Caledonia and one of the three most extensive reef systems in the world.

Attack on Pang Sida rangers

An attack by some thirty to forty rosewood poachers on eight Pang Sida rangers in the Dong Phrayayen-Khao Yai Forest Complex World Heritage site in Thailand on 11 July 2013 resulted in the wounding of one ranger and the arrest of two poachers.

The attack occurred just one week after the conclusion of the Ranger Training Course on monitoring and enforcement, financed by the UNESCO World Heritage Rapid Response Facility (RRF) and held from 30 June to 7 July 2013. Attended by twenty-two enforcement rangers from Pang Sida National Park as well as twenty-one Department of National Parks rangers from neighbouring Thap Lan National Park, the training proved very useful during the attack.

After being ordered by the rangers to stop and lay down their arms, the poachers opened fire on the patrol team with automatic weapons, wounding one ranger in the shoulder and hand. The rangers, whose ageing guns were no match for automatic weapon fire, managed to detain two poachers, while the others fled into the forest. The two loggers were granted bail soon after their arrest and are reported to have taken advantage of their release and left Thailand. The poor state of their weapons is considered to be a significant safety issue for enforcement rangers, placing them in potentially dangerous situations.

The 'tactics-only' Ranger Training Course utilized ranger team leaders from the World Heritage site as well as guest instructors from the Royal Thai Navy. Rangers were introduced to park protection, first aid, navigation, weapons training and patrol tactics. Equipment and training provided during the course, particularly the administration of first aid, were used by the rangers following the attack.

This training course was followed by a three-day field operation in which participants were evaluated during a real patrol. Patrols conducted in the field practice section documented frequent signs of rosewood poaching.



Lagoons of New Caledonia (France).

© Bryan Pocius

Dinaric Karst: the Upstream Process in practice

The 4th Dinaric Karst Meeting of the Pilot Upstream Process Project 'Dinaric Karst Serial Nomination', involving Bosnia and Herzegovina, Croatia, Italy, Montenegro, Serbia and Slovenia, was held in Ljubljana (Slovenia) on 1 October 2013 in view of submission of this important subregional transboundary serial nomination project to the Tentative List before 1 February 2014.

Dinaric Karst is one of the original ten pilot projects chosen to test the Upstream Process concerning nominations and it is now considered to be one of the best-performing projects and an example of best practice in this experimental approach to nominations.

The idea of the Upstream Process goes back to the 32nd session of the World Heritage Committee in 2008, when it was decided to initiate a reflection on the future of the World Heritage Convention. In 2011 the Committee took note of the selection of ten pilot projects chosen to explore creative approaches and new forms of guidance that might be provided to States Parties in considering nominations before their presentation. One of these projects has already been instrumental in the inscription of the Namib Sand Sea (Namibia) on the World Heritage List at the 37th session of the Committee in June 2013.

Although it is not yet inserted in the *Operational Guidelines for the Implementation of the World Heritage*

Convention, the idea of the Upstream Process has taken off, with more States Parties requesting upstream support whether their projects were part of the original ten or not.

An inclusion of a project in this experimental approach does not necessarily imply inscription on the World Heritage List, but the main aim is to reduce the number of properties that experience significant problems during the nomination process. Upstream support is wholly financed by the States Parties seeking such assistance. Because of its experimental and still voluntary nature, the Upstream Process is not funded by the World Heritage Centre or the Advisory Bodies, but they do respond to requests by States Parties for advice and guidance. The eventual step after this experimentation phase is to include the Upstream Process in the *Operational Guidelines*.

The Dinaric Karst is a large region in south-eastern Europe extending over 60,000 km², and is the major geomorphic type of landscape of the Dinaric Mountains. Its name denotes a natural feature and derives from the Kras plateau above the Gulf of Trieste and the Dinara mountains, an impressive and spectacular limestone mountain range on the border between Bosnia and Herzegovina and Croatia.

The 4th Dinaric Karst Meeting was extremely fruitful in moving towards the goal of submission of the Dinaric Karst to the Tentative Lists of the six countries involved. As an example of best practice, the project could be used as a model in formalizing the Upstream Process, in view of its insertion in the *Operational Guidelines*.

Modernities in the Arab World



Rabat, Modern Capital and Historic City: a Shared Heritage (Morocco).

© Keith Laverack

A second expert meeting on a thematic programme aimed at safeguarding the heritage of urban and architectural modernities in the Arab World was held in Rabat (Morocco) from 27 to 29 May 2013.

The second cycle of the Periodic Reporting exercise in the Arab States (2008–2010), showed that it was necessary to take into consideration ignored or marginalized categories of heritage, including the cultural heritage produced in the Arab World from the mid-19th century to the end of the 1970s. A first expert meeting was held at UNESCO Headquarters in December 2012.

At this second meeting, experts continued their reflection on a definition of the mandate of the programme, as well as deciding on priority actions to be taken in the short term. Discussions centred around four major issues: knowledge about the heritage of modernities, recognition, protection, and conservation.

It was agreed that the title of the new programme would be Heritage of Urban and Architectural Modernities in the Arab World.

The meeting confirmed the expectations raised by the thematic programme among those involved on a daily basis in the safeguard of the urban and architectural heritage of modernities in the Arab world.



Dinara mountains (Bosnia and Herzegovina).

© Brian Eager

Celebrating cities and development

The city of Lyon (France) and the Organization of World Heritage Cities (OWHC) hosted a meeting on World Heritage cities and historic sites from 22 to 24 May 2013. The meeting was organized in partnership with the World Heritage Centre within the framework of the France UNESCO cooperation agreement, the Council of Europe, the Directorate of Democratic Governance, Culture and Diversity, the French Ministry of Culture and Communication, the ICOMOS French Committee, the International Committee on Historic Towns and Villages (CIVVIH), the Getty Conservation Institute, the Association of French World Heritage, the French National Association of Towns and Regions of Art and History and Towns with Protected Areas.

The gathering took place during the celebration of the 15th anniversary of the inscription of the Historic Site of Lyons on the World Heritage List, as well as the development of a management plan for the site.

The meeting built on the Historical Cities in Development: Keys for Understanding and Acting case studies initiative, a project which collects case studies on conservation and management of historic cities and documents city expertise in urban development by highlighting heritage-focused urban projects.



Historic Site of Lyons (France).
© Keith Laverack

It aimed to continue the dynamics, methodology and analyses implemented through the compilation of case studies. Some of these case studies, dealing with the reconversion of monuments and sites involving new uses, aid in the preservation and enhancement of heritage. Other case studies on the role of local inhabitants in the sharing of heritage values, social appropriation or governance address issues of good citizenship, while still others provide examples of the strategy of local authorities that are implementing a global development scheme.

The meeting was addressed primarily to mayors and elected officials, as well as managing bodies of World Heritage cities and historic towns, with a focus on the European region. It aimed to contribute to the debate on operating methods promoting an interaction between values and heritage, urban projects and the expectations of local residents, while identifying specific initiatives. The concept notes and programme are available online (<http://whc.unesco.org/en/events/1009/>) and the proceedings will also be available soon.

The outcome of the Lyon meeting was to encourage further city-to-city partnerships and continue to develop case studies as tools for cities. The outcome of the meeting and the case studies were presented at the World Congress of the Organization of World Heritage Cities in Oaxaca (Mexico) from 18 to 22 November 2013.

Bermuda taxes petrol for heritage



Historic Town of St George and Related Fortifications, Bermuda (United Kingdom).

© dJLicious

In order to preserve the Historic Town of St George and Related Fortifications, Bermuda (United Kingdom), inscribed on the World Heritage List in 2000, the Parliament of Bermuda passed legislation on 6 October 2013 to tax all petroleum products going through the St George Oil Docks at one quarter of a cent per litre of tax levy. The funding, an example of sustainable financing, will be used to protect the town's World Heritage status and to maintain the site to the standards set out in the criteria of its designation.

The town of St George, founded in 1612, is an outstanding example of the earliest English urban settlement in the New World. Its associated fortifications graphically illustrate the development of English military engineering from the 17th to the 20th centuries, being adapted to take account of the development of artillery over this period.

Bermuda's Public Safety Minister, Michael Dunkley, quoted in *The Royal Gazette*, says the damage inflicted on the town's wharf by Hurricane Fabian in 2003 has still not been repaired. The funding, he said, will be used 'to revitalize St George into a centre that Bermuda can be proud of'.

Safeguarding Mali's cultural heritage

In order to raise awareness of the importance of safeguarding Mali's culture heritage, endangered by the destruction of fourteen mosques in Timbuktu by armed rebels earlier this year, UNESCO participated in a side event of the Humanitarian Affairs Segment of the United Nations Economic and Social Council (ECOSOC-HAS) in Geneva (Switzerland) from 15 to 17 July 2013.

At its exhibition booth UNESCO showcased activities carried out on the ground, notably through an information kit on UNESCO's Actions in Mali. A fact sheet provided a chronological overview of the main actions. The Action Plan for the Rehabilitation of Cultural Heritage and the Safeguarding of Ancient Manuscripts in Mali, elaborated with a group of technical partner organizations and adopted by the Malian Government, was also made available.

The 'Heritage Passport' for Mali was displayed, as well as an illustrated map with brief descriptions and geographical coordinates of the cultural properties, libraries and museums in the northern region. This map, developed by UNESCO in collaboration with the National Directorate

of Cultural Heritage in Mali (NDCH) and the International Centre for Earthen Architecture (CRAterre), was prepared to inform the armed forces and NGOs working in Mali, as well as local and international communities, about the importance of safeguarding Mali's cultural heritage.

The UNESCO stand also highlighted the World Heritage Resource Manual, *Managing Disaster Risks for World Heritage*, and a new publication, *Heritage and Resilience*.

The exhibit shared with a steady stream of visitors the importance of culture in the development and prosperity of Mali, and provided a convincing argument for including the consideration of culture in humanitarian assistance activities.

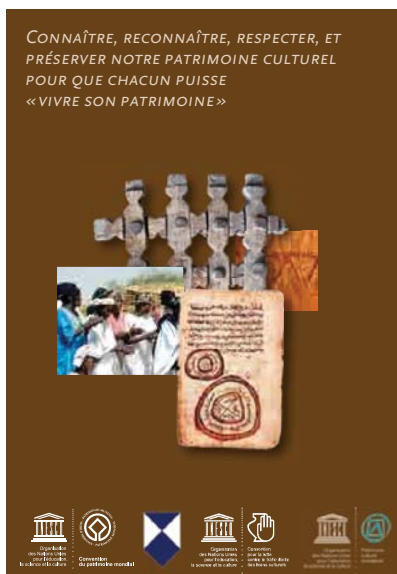
In August 2013, work began on repairing and rebuilding Timbuktu's cultural heritage, and in order to ensure the active implementation of the Action Plan a staff member from the World Heritage Centre was sent to Mali to ensure the interim of UNESCO's Bamako Office starting in September 2013. On 28 September, a bomb attack in a nearby military camp in Timbuktu damaged the Djingareyber Mosque, which was already severely damaged during the armed conflict in northern Mali. UNESCO is continuing to undertake emergency rehabilitation action for the Djingareyber Mosque and other heritage sites at Timbuktu in close collaboration with the national authorities.

Towards the preservation of the Everglades

On 28 August 2013, Everglades National Park World Heritage site (United States) moved one step closer to the restoration of the natural flow of freshwater to the property, with the announcement by the state of Florida of a commitment of US\$90 million to help replace a 2.6 mile (4 km) stretch of existing highway berm (barrier) with a bridge along the northern boundary of the park.

Everglades National Park is the largest designated subtropical wilderness reserve on the North American continent. At the southern tip of Florida, the site has been called 'a river of grass flowing imperceptibly from the hinterland into the sea'. The exceptional variety of its water habitats has made it a sanctuary for a large number of birds and reptiles, as well as for threatened species such as the manatee.

At the request of the State Party, the property was reinscribed on the List of World Heritage in Danger in 2010, after having been on it from 1993 to 2007, due



Everglades National Park (United States).

© Alan Sandercock

to concerns that the property's aquatic ecosystem had continued to deteriorate, in particular as a result of alterations to the hydrological regime, adjacent urban and agricultural growth, increased nutrient pollution from upstream agricultural activities, and protection and management of Florida Bay resulting in significant reduction of both marine and estuarine biodiversity.

The financial commitment by the state of Florida over a three-year period is to be matched by the US\$90 million of federal funding for construction of the bridge.

As a partial solution to the problem of freshwater flow to the Everglades, the new bridge will replace dam-like roadfill on what is known as the Tamiami Trail. This highway, built in 1928, interrupted the natural flow of freshwater southward through what is now the park.

The 37th session of the World Heritage Committee, held in Cambodia in June 2013, noted progress in implementing corrective measures at the site, but pointed out continual postponements in the finalization of the General Management Plan and requested that the State Party submit a detailed report on the state of conservation of the property by 1 February 2014.



International Observatory of Syrian Cultural Heritage established

Since the beginning of the conflict in March 2011, the immensely rich cultural heritage of the Syrian Arab Republic has suffered alarming destruction. In June 2013, the 37th session of the World Heritage Committee decided to inscribe Syria's six World Heritage sites on the List of World Heritage in Danger. On 29 August, UNESCO organized a high-level technical meeting including the United Nations and Arab League Special Envoy to Syria, Lakhdar Brahimi, together with representatives from ICCROM, ICOM, ICOMOS, INTERPOL, the World Customs Organization and the European Commission. At the meeting, an emergency plan was developed to help the Syrian people to preserve their exceptional heritage and prevent further losses.

Several activities are planned within this framework, including a multimedia campaign to raise awareness among the population, training of police and customs staff in the risks of the illicit trafficking of cultural goods, training of heritage professionals in emergency measures for monuments and historic sites, and

the establishment of an International Observatory of Syrian Cultural Heritage.

Work on the observatory has already begun and will be a tool for the preservation of Syrian heritage in the form of an internet platform, housed on the UNESCO website, serving as a reference point for the situation concerning Syrian heritage and scheduled to be accessible to the public in early 2014. With the help of networks of stakeholders and heritage experts, it will gather information to follow and evaluate the evolution of the state of conservation of sites, and the safeguarding of objects and cultural expressions, as well as preparing measures to take on the ground once the conflict is over.

Compiling precise documentation on the heritage is indispensable to prevent further risk and to efficiently plan emergency measures and future action. Available information on cultural properties must be gathered and analysed – including maps, images and descriptions – before and during the conflict, on damage or looting incurred at the sites, as well as the disruption of the expression and transmission of intangible cultural values.

The observatory will also be used to disseminate the work of UNESCO's institutional partners, such as ICOM's Red List of Syrian cultural heritage in danger, and to inform the wider public of illicit trafficking, stolen objects, while alerting the parties engaged in the conflict of the threats to Syrian heritage – a pillar of Syrian identity and vector for reconciliation and peace.



Citadel at Ancient City of Aleppo (Syrian Arab Republic).

© yeowatzup

World Heritage youth action camps and Young Guardian Clubs

Youth action camps in Indonesia and Malaysia, held in summer 2013 as part of the World Heritage Education Programme, have helped young people to better understand the importance of conservation and preservation of World Heritage.

In Indonesia, from 27 August to 9 September 2013, ten young people from five countries participated in the first international action camp in Taman Jaya, Ujung Kulon National Park. The activity was organized by the Indonesia International Work Camp to support the park's mission to strengthen conservation and introduce the value of volunteering to the local community of Banten.

The event saw the establishment of a Young Guardian Club in Ujung Kulon (YGC-UK), bringing together selected 15-

17-year-old students from the community. They participated in two days of training and worked in collaboration with National Park rangers and the UNESCO Jakarta Office. They then helped to construct a fence in the eastern part of the park to keep domestic cattle, which carry disease detrimental to the health of rhinos, away from the Javan Rhino Study and Conservation Area. They also planted vegetation for rhino fodder in the area. Indoor sessions were devoted to knowledge-sharing and concluded with question and answer periods in which students showed their interest in the idea of the YGC and the part they could play in conserving the park.

The purpose of the YGC-UK is for local youth communities to help in preserving the national park and to cooperate with the National Park Office in implementing sustainable future actions. The club also serves to raise awareness about the preservation of the park. IIWC formed the first YGC in Indonesia, the YGC-Borobudur, in 2009 in support of the World Heritage Volunteers initiative.

In Malaysia, the Melaka and George Town, Historic Cities of the Straits of

Malacca World Heritage site hosted the first World Heritage Volunteers work camp from 16 to 29 August 2013. Eighty-seven youths from Malaysia, China and Indonesia worked together for two weeks, holding cultural learning and exchange sessions in the core zone of the heritage site, attending lectures and meeting with local people. The students were particularly interested in interaction with the local community. They also carried out surveying and repairing of historic buildings and visited local schools to talk about heritage.

The project, dubbed MA-CHN-DO because of its tri-country nature, was organized by the Melaka World Heritage Office, the Chinese Society of Education Training Center and the Indonesia International Work Camp. The collaboration aimed to support and follow up on the recommendations of the First Asia-Pacific World Heritage Regional Forum of Site Managers and Youth NGOs: Linking Networks, held in Seoul (Republic of Korea) in August 2012.

MA-CHN-DO is now a continuing project and the next activities will be in China in 2014 and Indonesia in 2015.



Volunteers paint a house at the Malacca World Heritage site (Malaysia).

© Irene Liu/UNESCO/CSET

Heritage for Kids in tablet form

In July 2013 the Japanese mobile phone operator NTT DoCoMo launched a new initiative for elementary schoolchildren enabling them to use tablet devices as part of the natural World Heritage project UNESCO Kids.

The project, conceived in 2006 by Evergreen Digital Contents and Dentsu in partnership with the UNESCO World Heritage Centre, is now providing forty-five units in classrooms to teach children about World Heritage at Ushikawa elementary school in Toyohashi, Aichi prefecture.

Children find the location of Shiretoko World Heritage site on the interactive map, watch videos of bears hunting, hear Japanese deer calls and search for information online about eco-friendly tourism, all through a small handheld tablet device.

World Heritage learning using tablet devices, with visual and audio support, is different from traditional means of learning using pictures and letters.

The unique combination of World Heritage and tablet devices profoundly attracts children's attention and stimulates their eagerness to learn more.

By learning the importance of World Heritage conservation, children at Ushikawa elementary school are now discussing how they can contribute to preserve the beautiful nature in their local town.

NTT DoCoMo is also responsible for the promotion of natural World Heritage learning programmes, including an i-mode site, which provides information regarding World Heritage properties via a mobile phone service.



Children using tablets to learn about World Heritage.

State of conservation at a glance

The World Heritage Centre, with the support of the Flemish Government, has developed an online information system that allows for the visualization on one single page of the evolution of the state of conservation of a World Heritage property over the years.

This online management tool on the state of conservation of World Heritage sites and the factors affecting their Outstanding Universal Value since 1979 makes available information from the significant number of reports prepared by the UNESCO Secretariat and the Advisory Bodies to the World Heritage Committee. It is one of the most comprehensive, exceptional and extensive monitoring systems of any international convention, based on a global network of nearly 1,000 sites. This unique tool is integrated with all the other World Heritage Centre databases on nominations, international assistance, missions, the World Heritage Committee's decisions, statutory documents, etc.

Similarly, the International Union for Conservation of Nature (IUCN), one of the Advisory Bodies to the World Heritage Committee, is developing a knowledge tool on natural World Heritage properties to help track their state of conservation through online conservation outlook assessments. Synergies are currently being established between the two systems for improved complementarity.

The World Heritage Centre information system is publicly available for all stakeholders of the World Heritage Convention (States Parties, site managers, UNESCO, Advisory Bodies, NGOs) as well as researchers, students and interested members of the public at <http://whc.unesco.org/en/soc>.



Walter Santagata (1945–2013)



Walter Santagata.

© International Research Centre on the Economics of Culture and World Heritage Studies, Turin

The World Heritage community mourns the loss of Walter Santagata, distinguished Italian academic, who passed away on 14 August 2013.

Santagata will be remembered as an intellectual and visionary figure, whose contribution to innovation and culture had a strong impact in advancing UNESCO's fundamental mission in the field of culture. For many years he was the main force driving the creation of the International Training Programme on World Heritage Management, which led to the establishment of the Master Programme on World Heritage at Work, a unique training and capacity-building initiative that is now based at Venaria Reale (Residences of the Royal House of Savoy World Heritage site) in Turin (Italy).

Walter Santagata was equally the driving force behind the creation of the UNESCO Category 2 International Training and Research Centre on the Economics of Culture and World Heritage, also based in Turin, which was approved by UNESCO's General Conference in 2011. He also played an important role in the International Congress on Culture, Key to Sustainable Development held in Hangzhou (China) in May 2013.

Professor of Public Finance and Economics of Culture at the University of Turin, and Director of the Centro Studi Silvia Santagata-EBLA, he had been a member of the Ministerial Council of Studies of the French Ministry of Culture since 2009, after having served in several capacities within the Italian Ministry of Culture, including chair of the Scientific and Technical Committee for the Economics of Culture and member of the Higher Council for Cultural Heritage and Landscapes.

Walter Santagata will be sorely missed.

Jaeger-LeCoultre auction benefits Brazilian Atlantic Islands

The Swiss luxury watch manufacturer Jaeger-LeCoultre, partner of the World Heritage Centre since 2008, organized its fourth annual online auction for the benefit of World Heritage marine sites from 23 to 26 April 2013. This year, Jaeger-LeCoultre auctioned a watch inspired by the Memovox Deep Sea of 1959: Prototype No. 1 of the Jaeger-LeCoultre Deep Sea Chronograph Cermet.

The online auction provides part of Jaeger-LeCoultre's donation of US\$20,000 to the Brazilian Atlantic Islands: Fernando de Noronha and Atol das Rocas Reserves. The islands are part of a large submarine mountain system of volcanic origin. The waters are extremely important for the breeding and feeding of tuna, shark, turtle and marine mammals. They are home to the largest concentration of tropical seabirds in the Western Atlantic. Baia de Golfinhos has an exceptional population of resident dolphin and at low tide the Rocas Atoll

provides a spectacular seascape of lagoons and tidal pools teeming with fish.

The donation will be dedicated to the conservation of this exceptional marine site. The purchase of a fully equipped rubber dinghy will enable the improvement of the site's monitoring programme aimed at evaluating the state of conservation of its exceptionally rich marine life and at countering illegal fishing activities by facilitating swift interception of non-authorized boats.

Together with the *International Herald Tribune*, Jaeger-LeCoultre continues the innovative Tides of Time partnership with UNESCO's World Heritage Centre. The partnership delivers both financial support to the World Heritage Centre's Marine Programme and a multi-year international media campaign through which specific conservation needs of World Heritage marine sites are highlighted in the printed pages of the newspaper and the online global pages of the New York Times.

The overall goal of the Tides of Time partnership is to help to defend and protect World Heritage marine sites of Outstanding Universal Value that require intervention to ensure future generations can continue to enjoy them.



Brazilian Atlantic Islands: Fernando de Noronha and Atol das Rocas Reserves (Brazil).

© Ricardo Polisel Alves

1,000 new species

World Oceans Day 2013 Celebrating Marine World Heritage



On the occasion of World Oceans Day, 8 June 2013, the World Heritage Marine Programme published an online newsletter drawing public attention to over 1,000 new species discovered at marine sites since they were inscribed on the World Heritage List.

The theme of this year's World Oceans Day was: Together we have the power to protect the ocean. This message reflects the spirit of the World Heritage Convention to protect the exceptional marine sites listed. The theme inspired the World Heritage Centre to join up with UNESCO's global marine biodiversity data portal, Ocean Biogeographic Information System, in close cooperation with the Intergovernmental Oceanographic Commission, to unveil some of the world's hidden wonders.

The newsletter reached over 5,000 ocean conservationists worldwide.



2013–2014 World Heritage map available

The latest version of the World Heritage map, produced by UNESCO World Heritage Centre and National Geographic Maps with support from Qatar, host of the 38th session of the World Heritage Committee in 2014, can now be ordered for a modest shipping fee (<http://whc.unesco.org/en/map/>) or downloaded free of charge (<http://whc.unesco.org/en/wallmap/>) from the World Heritage Centre website. All proceeds will go towards the preservation and promotion of World Heritage sites.

The map is an extremely valuable learning and awareness-raising tool that gives a rich initial contact with World Heritage, allowing UNESCO to communicate its work in this field on a large scale. The original versions of the map are English, French and Spanish, but through the partnership with *National Geographic's* local language editions it has so far been published in over ten other language versions. An Arabic version will also be produced ahead of the Qatar Committee session.

This large format (78 cm by 50 cm / 31 in. by 20 in.) full-colour map features the 981 World Heritage sites and brief explanations of the World Heritage Convention and conservation programmes, as well as superb photographs of sites with explanatory captions.



Download the new World Heritage magazine app



Available for iPad, Android and Kindle Fire tablets, this new app allows you to download *World Heritage* magazine.

Lavishly illustrated, and published quarterly since 1996 in English, French and Spanish, *World Heritage* is UNESCO's official publication devoted to sites inscribed on the World Heritage List and their conservation. With the app, not only can you read exclusive articles written by experts on the ground, but see video footage of the world's most spectacular sites taken by NHK and TBS.

The app is launched with the three latest issues of the magazine: N°67 Sharing Best Practices in World Heritage, N°68 World Heritage in Cambodia and N°69 World Heritage and Agricultural Landscapes, and updates will soon follow. It will be available for iPhone and Android phones in early 2014.

World Heritage is published by UNESCO World Heritage Centre, PFD Publications and UNESCO Publishing.

Download the *World Heritage* magazine app from iTunes, Amazon and Google Play.

<https://itunes.apple.com/us/app/world-heritage-review/id718120903?mt=8>

<http://www.amazon.com/MAZ-Digital-Inc-Heritage-Review/dp/B00FLQ175U>

<https://play.google.com/store/apps/details?id=com.maz.worldheritage>

Atlas app includes all World Heritage sites

The World Heritage globe of the Collins Atlas application for iPhone and iPad was launched on 29 October 2013. The app comes with one globe pre-installed and includes ten other globes that can be downloaded, providing information on the UNESCO Memory of the World programme, and themes such as development, the economy, physical maps, the environment, communications and more. Each globe allows the user to see themed information presented in beautiful mapping and graphics.

With the World Heritage globe, the user can:

- discover the locations of all 981 World Heritage sites;
- learn about the criteria for inscription on the World Heritage List;
- read a detailed description of each site;
- view over 650 stunning photographs;
- find out more with web links to further information and photographs.

This link directs users to the local iTunes store in the countries where it is available:

smarturl.it/atlasbycollins

Please note that the app is available in these countries:

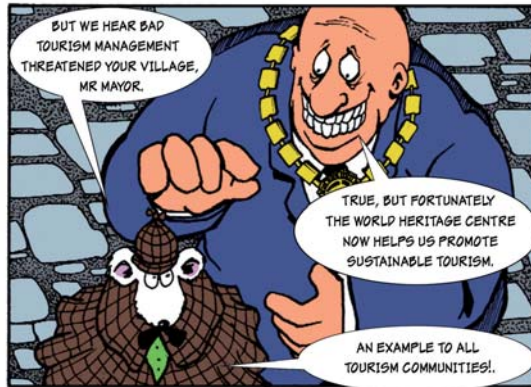
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The Case of the Lost World Heritage, 10th episode

A series of World Heritage comic strips featuring Rattus Holmes and Dr Felis Watson, the famous pet detectives of Sherlock Holmes and Dr Watson, will soon be published. The sleuths save the World Heritage sites from evil Moriarty, who plans to steal them for an interplanetary theme park. They are part of a series co-published by UNESCO and Edge Group, UK, which includes other adventures of Holmes and Watson in *Rattus Holmes in the Case of the Spoilsports* (about doping in sports) and *Rattus Holmes and the Case of the World Water Crisis*. It will also be available on the World Heritage Centre website <http://whc.unesco.org>. For more information about Edge Group and their work, write to edgesword@yahoo.com.

The story continues in the next issue of *World Heritage*...



CLIMATE CHANGE IS AFFECTING NATURAL HERITAGE SITES.

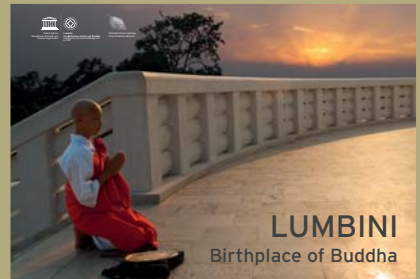
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Keeping the Outstanding Exceptional: the Future of World Heritage in Australia
 Australian Committee of the International Union for the Conservation of Nature (ACIUCN)
 English only
<http://aciucn.org.au/index.php/publications-world-heritage/>

This publication presents the results of a symposium held in August 2012 by ACIUCN, in partnership with the Wet Tropics Management Authority and supported by the Australian Conservation Foundation, to assess current management of Australian World Heritage sites and how to improve in the future. Over 100 experts from government, academia and Indigenous sectors attended the conference. The book includes the 'Cairns Communique', a statement by the symposium outlining key steps to improve management of these iconic parts of Australia for all time. Publication of the book was supported by a grant from the Australian Department of Sustainability, Environment, Water, Population and Communities. It can be downloaded in its entirety or by chapter at the link above.

Celebrating 40 years of the World Heritage Convention: Proceedings of the closing event of the celebration of the 40th anniversary, November 2012 in Kyoto, Japan
 UNESCO World Heritage Centre
 English and French
 Online only

This document provides a vivid record of the three-day landmark event, organized jointly by the Government of Japan and the UNESCO World Heritage Centre in Kyoto, Japan, 6-8 November 2012. During the Closing Event, challenges the Convention faced in its early years as well as today's key issues in the World Heritage community were deliberated. Themes discussed in panel discussions were: how World Heritage community dealt with challenges in its early years; sustainable development and World Heritage; disaster prevention and recovery from disaster with communities; capacity-building and communication, and engaging the civil society and public and private partnerships. The publication was financed by Japan Funds-in-Trust.

World Heritage Papers Series 36 World Heritage Earthen Architecture Programme: Proceedings of the International Colloquium on the Conservation of World Heritage Earthen Architecture, 17-18 December 2012
 UNESCO World Heritage Centre
 English and French in one volume

Since ancient times, people all over the world have used earth as their main building material. Earthen architecture expresses the human capacity to create a built environment with locally available resources. The results are as diverse as monuments, historic towns, family homes and archaeological sites. These places are economic, ecological and cultural assets to their communities and their construction and conservation contribute positively to the local economy. This publication reports on a colloquium organized by UNESCO that brought together earthen architecture experts from around the world, including World Heritage site managers, and gives an overview of the state of conservation of earthen architecture sites with detailed case studies and specific management and conservation examples.

EPA Newsletter École du Patrimoine Africain
 In English or French, depending on the issue
 To subscribe: <http://www.epa-prema.net/en/the-epa-newsletter.html>

L'École du Patrimoine Africain (School of African Heritage) is a postgraduate university specializing in the preservation and promotion of both tangible and intangible cultural heritage. It trains heritage professionals from twenty-six sub-Saharan African countries and is located in Porto-Novo (Benin). The EPA Newsletter is a quarterly electronic bulletin that provides information on EPA and its network through articles, news and interviews.

Lumbini, Birthplace of Buddha
 UNESCO Publications/Oriental Cultural Heritage Sites Protection Alliance
 English only
<http://publishing.unesco.org>

Lumbini, set in the fertile plains of Nepal's Terai region and universally regarded as the place where the Lord Buddha was born, was inscribed on the World Heritage List in 1997. As one of the most sacred sites significant to Buddha's life and path to Enlightenment, the Sacred Garden of Lumbini has been a centre of pilgrimage for devout followers from as early as the 3rd century BC. A joint publication of UNESCO and the Paris-based NGO Oriental Cultural Heritage Sites Protection Alliance, Lumbini, Birthplace of Buddha is a novel approach at encapsulating this site's timeless essence. Eight photographers from around the world – three of them Nepalese – have used their unique vision to capture the Sacred Garden experience and, in the tradition of pilgrims past, share its message of harmony with all peoples, regardless of religion. The result is a collection of over 200 photographs depicting seven distinct themes with texts by national and international personalities in Nepali, Chinese, English and French.

Understanding Heritage: Perspectives in Heritage Studies Heritage Studies Series Volume 1
 Edited by Marie-Theres Albert, Roland Bernecker, Britta Rudloff
 English only
 De Gruyter
<http://www.degruyter.com/view/product/204345>

This publication develops heritage This publication develops heritage studies with a perspective towards and as a contribution to human development. The academic mainsprings and research interests of this repositioning of heritage studies as an academic discipline are discussed by internationally renowned thinkers and heritage practitioners. Central questions concern the sustainable protection and use of heritage, focusing on the world's cultural heritage and intangible cultural heritage, but equally questions on the relations between heritage and memory and how these could mutually enrich our understanding of heritage.

World Heritage: Benefits Beyond Borders
 Edited by Amarendra Galla
 Original English co-published by UNESCO Publishing / Cambridge University Press
 French version published by UNESCO Publishing and French
<http://www.publishing.unesco.org>

The French version of this publication, launched in English on the 40th anniversary of the World Heritage Convention in 2012, has just been published. This thematic collection of case studies provides a thorough understanding of World Heritage sites and their Outstanding Universal Value in the context of sustainable development. The case studies describe twenty-six thematically, typologically and regionally diverse World Heritage sites illustrating their benefits to local communities and ecosystems and sharing the lessons learned with the diverse range of stakeholders involved. Publication was made possible thanks to a financial contribution by the Government of Japan through the Japan Funds-in-Trust.

Reflections on Preventive Conservation, Maintenance and Monitoring by the PRECOM³OS UNESCO Chair
 English only
 Koernraad Van Balen and Aziliz Vandesande
 KU Leuven Publishers
http://precom3os.org/index.php/news/precom3os_book_publication/

The UNESCO Chair on Preventive Conservation, Maintenance and Monitoring of Monuments and Sites (PRECOM³OS) was inaugurated in March 2009 at the Raymond Lemaire International Centre for Conservation at KU Leuven (Belgium). On this occasion, the state of affairs on preventive conservation and heritage management practices within an international context was presented. In 2012, a thematic seminar was organized by the International Centre where the international World Heritage perspective was given in relation to the wider development potential of heritage preservation strategies based on preventive conservation. This publication collects the key contributions of both events and analyses them to identify the awakening trends observed within the activities of the PRECOM³OS UNESCO Chair. It aims to promote further international collaboration and the development of research activities in the field of preventive conservation of monuments and sites.

Calendar

20 to 24 January

Meeting of UNESCO World Heritage Centre and the Advisory Bodies of the World Heritage Convention.

UNESCO Headquarters, Paris, France.

Information: r.veillon@unesco.org

31 January to 8 November

Call for papers for 18th ICOMOS General Assembly and Scientific Symposium: "Heritage and Landscape as Human Values".

Florence, Italy.

Information: secretariat@icomos.org

28 to 31 January

Africa Nature Workshop.

Limbe, Cameroon.

Information: b.diawara@unesco.org

4 to 6 February

Official signature twinning arrangement Banc d'Arguin/Wadden Sea.

Wadden Sea, Germany.

Information: f.douvere@unesco.org

24 to 26 March

Using Natural and Cultural Heritage in Sustainable Development – Synergy for Development.

Bergen, Norway.

Information: bente.krossoy@adm.uib.no

14 and 15 May

2nd meeting of the UNESCO UNITWIN Network on Underwater Archaeology.

Kemer, Turkey.

Information: u.guerin@unesco.org

First week of June

5th Meeting of the Scientific and Technical Advisory Body to the 2001 Convention on the Protection of the Underwater Cultural Heritage.

UNESCO Headquarters, Paris, France.

Information: u.guerin@unesco.org

2 to 5 June

5th session of the General Assembly of the States Parties to the Convention for the Safeguarding of the Intangible Cultural Heritage.

UNESCO Headquarters, Paris, France.

Information: r.samadov@unesco.org

9 to 15 June

World Heritage Youth Forum in conjunction with the 38th session of the World Heritage Committee.

Doha, Qatar.

Information: c.quin@unesco.org

15 to 25 June

38th session of the World Heritage Committee.

Doha, Qatar.

Information: r.veillon@unesco.org

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World Heritage magazine is published jointly by UNESCO and Publishing for Development and printed four times a year in English, French and Spanish. The publication presents and promotes the preservation of our World Heritage, with detailed feature articles and news items about the most outstanding cultural and natural sites around the world. This magazine is particularly designed to reflect and enhance UNESCO's dedication to World Heritage sites; our legacy from the past, our responsibility for the present and our duty to future generations.

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Process Protection in Austria's National Parks

In Austria's national parks, high priority is given to process protection, the protection of natural processes occurring in the environment. By abstaining from interventions, particularly sensitive parts of the biological diversity are safeguarded in the core zones of national parks. Apart from the nature conservation aspect, this provides also valuable scientific evidence and allows for new ways of experiencing nature.

There are presently six national parks in Austria (IUCN category II). Based on the "Austrian National Park Strategy" common positions on key issues of natural area management were worked out.

Bark beetle management (*Ips typographus* and *Pityogenes chalcographus*)

With the "Position Paper of the Expert Committee for Bark Beetle Management" www.nationalparksaustria.at a uniform basis for a harmonised way of proceeding in the event of bark-beetle occurrence is now available for all Austrian national parks. Both the requirement to leave natural processes unaltered in national parks and the need to protect neighbouring areas were taken into account in the document.

In general, it is recommended that process protection areas be clearly divided into as large coherent core areas as possible, which are entirely free of interventions, and peripheral intervention zones. If intervention zones are needed, they serve above all to ensure the protection of neighbouring areas and, thus, to increase people's acceptance. The recommended width of bark beetle intervention zones is 500 m. Upward and downward deviations must be technically substantiated and determined for the relevant site.

For cases where, for specific listed reasons, the level of forest protection cannot be achieved in forests adjacent to national parks, it is recommended to adopt agreements with the adjoining owners.

Management of hoofed game

With the "Guiding Principles for the Management of Hoofed Game in Austria's National Parks" www.nationalparksaustria.at the common objectives, principles and standards for the management of hoofed game in Austria's national parks are now available.

In general, national parks have large and coherent game reserves which ideally should comprise the entire core zone with 75 per cent of the area of the



© National Park Donau-Auen – Kracher

national park. The measures required in hoofed-game management are taken outside the game reserves, respectively outside the national parks. In game reserves no measures of hoofed-game management are taken, which means no shooting, no hunting infrastructure, no feeding, no salt-licks, etc.

Under certain conditions exceptions can be granted for a limited time and region. Interventions in game reserves are permitted only in exceptional situations, which naturally will not occur every year.

It is above all for interventions in the past that a state completely unaffected by man is difficult to imagine in Austria's national parks. However, what is possible is to take the present state as a basis and to stop interventions into natural processes in core areas from now on. This means not to do anything in these areas but observe the development, record them in scientific documents, and make use of the knowledge gained.

The goal is to advance and promote the implementation of the "Position Paper of the Expert Committee for Bark Beetle Management" and of the "Guiding Principles for the Management of Hoofed Game in Austria's National Parks". Efforts to ensure a national park management which is accepted in the regions and complies with the international criteria will have to continue.



lebensministerium.at

Federal Ministry of Agriculture, Forestry,
Environment and Water Management



© National Park Gesäuse – Pötscher



Fujiisan, Sacred Place and Source of Artistic Inspiration (Japan).

© Guilhem Vellut

In Focus: World Heritage and sustainable tourism

The World Heritage Sustainable Tourism Programme helps sites to manage tourism in a way that protects their Outstanding Universal Value and benefits local communities, to the long-term advantage of all.

Among other World Heritage sites this issue will take a close look at the Seventeenth-Century Canal Ring Area of Amsterdam inside the Singelgracht (Netherlands), the Agave Landscape and Ancient Industrial Facilities of Tequila (Mexico) and Fujiisan, Sacred Place and Source of Artistic Inspiration (Japan), to see how partnerships, stakeholder engagement and other aspects of tourism management can best contribute to preserving these sites for the enjoyment of future generations. ♻️



Seventeenth-Century Canal Ring Area of Amsterdam inside the Singelgracht (Netherlands).

© Jorge Lascar



Agave Landscape and Ancient Industrial Facilities of Tequila (Mexico).

© Mickael Thomassin

The essence of Spain

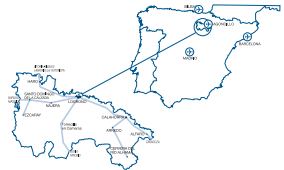


Welcome to La Rioja, the smallest of all the Spanish regions yet a cultural and geographical compendium of Spain. La Rioja combines all the wonders of this huge country: stunning light, unforgettable landscapes, openhearted people, ancient traditions and buildings and incomparable gastronomy. La Rioja is a melting pot of every culture that has touched Spain; a perfect resume of the country. Find out everything here.

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