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- ensuring that protected areas are placed at the forefront of contemporary environmental issues such as biodiversity conservation and ecologically sustainable development

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Cover photo: Ruaba National Park and World Heritage Site, Tanzania. Photo: Jim Thorsell/IUCN.

Editorial - 25 years of World Heritage action

P.H.C. (BING) LUCAS

THE YEAR of 1997 marks the 25th anniversary of the World Heritage Convention, one of the oldest and most successful international conservation conventions and the only one which deals with both natural and cultural values.

A well-attended workshop held during the First World Conservation Congress of IUCN at Montreal, Canada, in October 1996 provided a timely opportunity to review what has been achieved through the Convention and to consider future directions, adapting to changing circumstances and promoting a new vision for the future of the world's natural heritage.

This issue of *PARKS* brings together papers presented at the Montreal workshop which examined both the history and future of the Convention, examining ways in which World Heritage can best adapt to the next century.

Some well known people in the history of the Convention participated in the workshop including three former chairs of the World Heritage Committee – David Hales and Robert Milne (USA) and Christina Cameron (Canada) – along with Bernd von Droste, Director of the World Heritage Centre.

Opening the workshop, David Hales said that the Convention was about tomorrow and not about the past – the convention is a bridge between grandparents and grandchildren. He said that the critical issue is to ensure that the artefacts of the past are passed to future generations so that an understanding and appreciation of heritage will be protected because of their intrinsic values. He emphasised that protection must remain the focus of the Convention.

The workshop reached a number of conclusions, important both for the successful implementation of the Convention and for conservation in the 21st century. These are summarised on pages 51–52 by workshop convener Harold K. Eidsvik.

World Heritage is a bridge to the future

World Heritage sites are a source of pride, wonder and inspiration and are a “gift to the world” held in trust by this generation for future generations. World Heritage provides a unique opportunity to foster environmental awareness at all levels, particularly for the young. Innovative education programmes focused on World Heritage, such as the UNESCO World Heritage Youth Forum, need to be encouraged and expanded.

Partnerships are needed

Achieving the goals of the World Heritage Convention requires partnership. Established partnerships, such as those between the UNESCO World Heritage Centre and IUCN, are crucial and these need to be consolidated and expanded. New partnerships are also required, at all levels. At the international level, this could involve enhanced cooperation with other Conventions, particularly the Convention on Biological Diversity. Opportunities for transboundary World Heritage sites



between two or more countries need to be explored and expanded. Exchange schemes between countries which aim to improve World Heritage site management, such as that between Indonesia and New Zealand in relation to the Ujong Kulon World Heritage Site, need to be developed. At national levels, better partnerships are required between agencies managing World Heritage sites and other relevant organisations and agencies including NGOs. At local levels more effective working relationships with local people need to be established. Planning for World Heritage sites needs to be considered in the context of regional land use and innovative planning schemes, such as the Bow Valley Study in Banff National Park in Canada, need to be implemented.

Resources need to be mobilised and site management needs to be strengthened

A number of World Heritage sites are under pressure and targeted financial assistance is required. Listing of sites as World Heritage in Danger should be seen as a positive measure which triggers efforts, at all levels, to address the pressures faced. Opportunities, such as those provided by the Global Environmental Facility, need to be explored.

Management of World Heritage sites needs to be strengthened. Focused training programmes need to be developed to enhance the skills of world heritage managers. The prestige of "World Heritage" must be instrumental in raising the stature and esteem of protected area managers in society. Stronger and more effective institutions need to be developed. Every use needs to be made of modern technology to strengthen communication and dialogue between World Heritage site managers, including use of the internet and information management networks such as the WCMC World Heritage Information Network (WHIN). Guidelines to assist management and presentation of World Heritage sites need to be developed but these need to be focused on practical issues.

The workshop identified a number of cross-cutting issues:

- **Gender.** Management of World Heritage sites must involve key groups from local communities. The role of women in this process is critical, particularly in relation to communication of the values of World Heritage in a way which makes sense to local people.
- **Communication.** More effective communication is particularly important in relation to World Heritage. This is applicable at many levels. At the international level there is a particular need for better communication with other Conventions; at the national level, better links are needed with key policy and decision makers to ensure that World Heritage is clearly understood; at the local level there needs to be communication of how World Heritage is relevant to local communities, with particular emphasis on the many positive benefits.
- **Law.** The World Heritage Convention provides an international framework for action to protect the world's special places. Specific legislation is also valuable at a national level, such as is the case in Australia, to ensure that the Convention is translated in a way that is relevant to the unique needs and circumstances of each country. Such legislation needs to be responsive to changing circumstances.

P.H.C. (Bing) Lucas is Vice-chair, World Heritage, of IUCN's World Commission on Protected Areas.

Nature's hall of fame: IUCN and the World Heritage Convention

JIM THORSELL

This paper provides an overview of the work of the World Heritage Convention and particularly its natural component. The text is based on that prepared for a slide set which is available as a training tool to increase awareness of the Convention. The accompanying photographs are taken from the slide set and illustrate the range of sites that are included in the World Heritage list.

THE WORLD Heritage Convention is one of the big three international habitat conventions, the others being the Ramsar and the Convention on Biological Diversity. Sometimes referred to as the Nobel Prize for Nature, the World Heritage Convention is a unique international legal instrument that sets out to define the 'geography of the superlative' – the most outstanding natural places and cultural sites on earth.

By signing the Convention, each country pledges to conserve the World Heritage sites situated on its territory as well as other sites that are of national importance. State Parties submit applications for sites to be inscribed on the prestigious World Heritage List which includes some 500 sites, over 350 of which are cultural, over 100 are natural while others meet both cultural and natural criteria. The apparent numerical imbalance between cultural and natural properties is less of an issue than it appears as cultural sites such as the temples in Egypt's ancient Thebes are usually of relatively small size. On the other hand, natural sites often cover very extensive areas, such as the 3.5 million ha Komi Forest in Russian Ural mountains.

There is in fact a single World Heritage list that reflects the continuum of the world's heritage from human-dominated historical city centres such as Venice, through areas that have been strongly influenced by human use but still retain natural values such as in Australia's Shark Bay, to vast wilderness parks, virtually unmodified as found in the St Elias Mountains of the Alaska/Yukon/British Columbia border between the United States and Canada.

World Heritage natural sites are usually national parks but multiple use areas, such as Ngorongoro Conservation Area in Tanzania, are also included. Listing thus does not preclude extractive use as long as the intrinsic values of the site are not affected.

The Convention, 25 years old in 1997, is one of the many products of the 1972 United Nations Conference on the Environment held in Stockholm. To understand the structure and workings of the Convention a number of World Heritage terms are key: the Convention, the Committee, the Fund, the List, the "In Danger" List and the Centre:

- The Convention itself is the ten-page text that provides the legal framework. It exists in five languages and is backed up by a working document known as the Operational Guidelines.
- The Convention provides for the World Heritage Committee to implement the Convention as an elected group of 21 State Parties who meet annually.

■ The World Heritage Fund is allocated each year by the Committee and amounts to the modest sum of US\$3 million a year, mostly coming from State Party membership dues and partially spent on field projects, training and preparatory assistance. In addition, UNESCO contributes approximately US\$3 million a year for operation of the Secretariat and States Parties pay for operational costs. These sums remain inadequate to ensure effective management of over 500 sites.

■ The World Heritage List is the official record of those sites that the Committee has decided are of outstanding universal value based on separate criteria for cultural and natural properties.

■ The World Heritage in Danger List is a second list which is kept for sites that are considered under serious threat and which deserve special attention. There are currently more than 10 natural properties on this list, including the Virunga National Park in the Democratic Republic of the Congo.

■ Finally, the Convention has a 31-member Secretariat known as the World Heritage Centre which is based in and funded by UNESCO headquarters in Paris and which is responsible for the day-to-day running of the Convention.

The Committee also bases its work on three independent advisory bodies: the International Council on Monuments and Sites (ICOMOS) and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) for cultural sites, and IUCN for natural sites. IUCN's work is coordinated by the Protected Areas and Natural Heritage Group based at the IUCN Headquarters in Gland, Switzerland. The basic tasks are fourfold: evaluation, monitoring, promotion and technical assistance.

The technical evaluation of all new natural site World Heritage nominations (averaging about 14 per year) is a major component of the work. Five steps are involved in the evaluation process – data assembly, external review, field inspections, panel-review and a final report. Data assembly is done primarily by the Protected Areas Unit of the World Conservation Monitoring Centre in Cambridge. Members of the World Commission on Protected Areas and other IUCN Commissions are the main networks from which external reviewers are drawn. Field inspections of most properties, carried out in cooperation with States Parties, once again involve both IUCN staff and Commission volunteers. After a review by a panel at IUCN headquarters, a final report is produced each year and presented to the Committee.

The whole evaluation process is a rigorous one and involves input from several hundred people every year. It should be noted that World Heritage nominations can often be controversial, with local communities not always supporting World Heritage listing. Consultation with local people by States Parties during the nomination process is consequently strongly encouraged. On the other hand most local communities have great pride in offering their site to the world. Major publicity and even pageantry often surrounds the evaluation process. The

The World Heritage Fund amounts to the modest sum of \$3 million per year, most of which comes from State Party membership dues. The Fund is used in part for field projects, such as at Kilimanjaro World Heritage Site in Tanzania. Photo: Jim Thorsell/IUCN.



whole process of World Heritage site evaluation involves working at a variety of levels of society – all the way from United Nations forums through State Parties, local governments and NGOs to meetings with staff of the nominated area and people who may be resident in the site.

So, what are the criteria that a site has to meet to merit inscription on the World Heritage List? The site will need to be of what the Convention calls **outstanding universal value** on at least one of the following four criteria:

- The first criterion is that a site must be a unique land-form or an outstanding example representing major stages of the earth's evolutionary history. An example of a property inscribed on this criterion is Huanglong in China with its extensive calcite deposits which form travertine pools, or the Giant's Causeway in Northern Ireland, a geological site that is renowned for its contribution to the science of geology.
- The second criterion is that a site must be an outstanding example representing significant ongoing ecological processes or biological evolution. An example of the use of this criterion is Ecuador's Galapagos Islands where Darwin found living evidence of evolution. A second example would be Fraser Island in Australia where the processes of coastal sand deposition are exceptionally well demonstrated.
- The third natural criterion is that a property contains superlative natural phenomena, formations or features or areas of outstanding natural beauty. An example of an area that met this criterion is the Grand Canyon National Park with its spectacular landscapes and geological exposures of two billion years of the earth's history. A second example is the Iguazu Falls on the border of Argentina and Brazil.
- The fourth criterion is that the site contains exceptional biological diversity or habitats where threatened species of outstanding universal value still survive. An example is Mauritania's Banc d'Arguin National Park with its huge numbers of migrating Palearctic birds, or Manu National Park in Peru which contains the richest biodiversity of all the Amazonian basin parks including over 10% of all the world's species of birds.

In addition to meeting one or more of the above criteria, a natural site must fulfil what the World Heritage Committee's Operational Guidelines call the **conditions of integrity**:

- It should contain all or most of the key elements in their natural relationships.
- The site should be large enough to be self perpetuating.
- The site should contain those ecosystem components required for continuity of species.
- A site containing threatened species should include the habitat requirements needed for their survival, with special measures necessary to protect migratory species when not resident within the site.
- The site must have adequate long-term legislative, regulatory or institutional protection.

When sites are shared between countries, the Committee encourages a single nomination. An example of such a transfrontier site is La Amistad between Costa Rica and Panama. Similarly, when the values of a natural feature are scattered over a geographic area, a serial nomination such as that for the Volcanoes of Kamchatka can be submitted.

The World Heritage List is thus a select one and it is not intended to apply to sites that are of national importance. In gauging whether a site is of universal and global

significance it is necessary to compare the site with other sites in the same biogeographic province or within the same biome.

In determining the relative importance of a site, five quality indicators need to be kept in mind:

■ **Distinctiveness.** Does the site contain species/habitats/physical features not duplicated elsewhere? There is nothing, for instance, that is comparable to Uluru-Kata Tjuta National Park in Australia, which is not only a natural site but now a cultural landscape.

■ **Integrity.** Does the site function as a reasonably self-contained unit? This is a key feature for biologically important sites such as the 5 million ha Salonga National Park in the Democratic Republic of the Congo.

■ **Naturalness.** To what extent has the site been affected by human activities? The Nahanni World Heritage site in northern Canada is obviously a landscape where nature dominates and where human impact has been minimal.

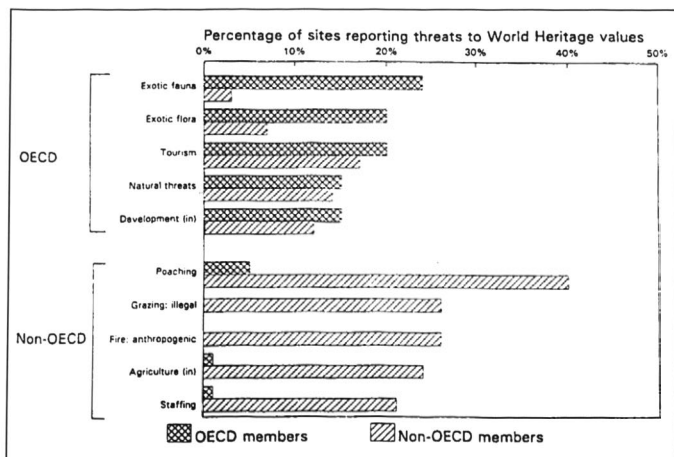
■ **Dependency.** How critical is the site to key species and ecosystems? Komodo National Park in Indonesia is an example of a site where 95% of the world's population of the Komodo dragon occurs.

■ **Diversity.** What diversity of species, habitat types and natural features does the site contain? Sites like Sian Kaan in Mexico, with a combination of marine, coastal and forest habitats along with cultural values, are always more favourably received than single feature sites.

Obviously, an area which scores highly on several of these indications would show up clearly as of World Heritage calibre.

The aim of IUCN's evaluations is to ensure that only the best sites are chosen by the Committee and that World Heritage currency is not devalued. Certainly, having a site on the WH List is an honour. But, unfortunately, it is no guarantee that the sanctity of an area will be safeguarded. Monitoring the conservation status of existing sites now requires great attention. World Heritage sites, like protected areas everywhere, are subject to a wide range of threats. The Figure (below) categorises ten of them and shows how managers perceive the problem. There are major differences between OECD and non-OECD countries in the major types of threats faced. In the non-OECD countries, for instance, poaching is reported a threat in 40% of cases while the presence of exotic fauna and flora is the main threat in OECD nations.

Ten significant threats to World Heritage Sites. Note the clear differences between OECD and non-OECD countries, with the presence of exotic species a major cause for concern in the former and poaching a threat in the latter.



One common concern noted by all, however, is the increasing impact of tourism in World Heritage sites such as at Victoria Falls in Zambia/Zimbabwe. A special publication entitled *Guidelines for Managing Tourism in World Heritage Sites* has been prepared by a group of World Heritage site managers to address this issue.

Systematic monitoring of the conservation status of World Heritage sites is the responsibility of States Parties and a report on each site is requested every five years. IUCN, through its members, networks and field offices is

also active in keeping the Committee informed of the threats sites are facing through a procedure that is compatible with that of the Ramsar Convention. One example of a site under stress is Bulgaria's Srebarna Nature Reserve, which is drying out due to upstream changes in the Danube's flow. Water quality has also suffered because of the development of an adjacent pig farm. Large colonies of waterbirds are no longer found in the site and several passerine species have disappeared. The site is now on the List of World Heritage in Danger and corrective actions are under way in an attempt to restore it.

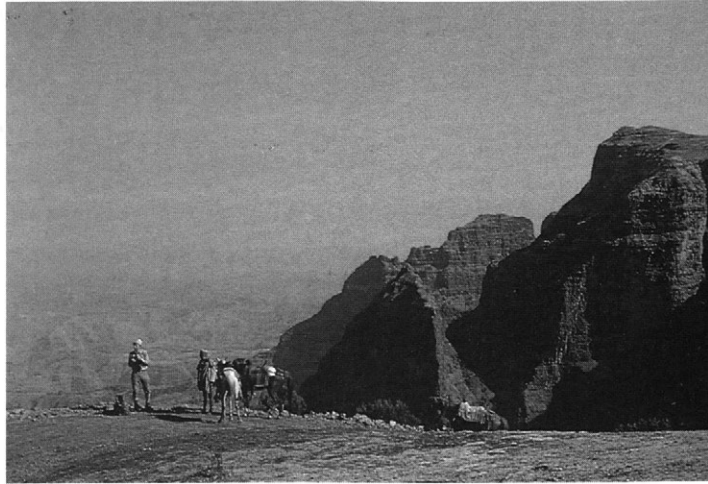
The Democratic Republic of the Congo has four World Heritage sites and all of them, but particularly the Virunga National Park, are adversely affected by political instabilities, particularly the crisis in Rwanda. Guards here often do not receive their salaries and patrols in the park have ceased. In cooperation with WWF over \$100,000 in emergency assistance from the World Heritage Fund has been provided to resume management activity.

Even among much larger parks in wealthy countries several are threatened, including the Everglades National Park in the United States which is on the Danger List. Once again this wetland is affected by water management upstream and the park provides habitat for only 5% of the avifauna found there earlier this century and is only one-fifth of the size of the original Everglades.

Many successful actions have been taken by States Parties to mitigate or prevent impacts on World Heritage sites when threats to them have been outlined, and recently 65 cases have been documented of successes achieved through timely monitoring interventions.

In spite of this, many World Heritage natural sites are under threat and losing their integrity. It is not enough to inscribe a site on the list – active follow-up in the field is needed to detect early warning signals and to encourage careful stewardship. One way to address threats is through the provision of international assistance from the World Heritage Fund. Funding is also available for a wide variety of activities including provision of equipment, management planning and training workshops. Standard application forms for technical assistance are available from the World Heritage Centre and regional IUCN field offices.

The natural places of the world are gradually disappearing and are under increasing threat. World Heritage is not the only answer to addressing the problem but it is one important part of the tool-kit that can be used effectively for those special places that humankind can not afford to lose.



Ethiopia's Simien National Park has suffered from unrest and military actions in recent years. Now, however, it is back under control of the wildlife department and surveys are being funded to assess the damage and rehabilitate the site.
Photo: Jim Thorsell/IUCN.

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The World Heritage strategy - future directions

BERND VON DROSTE

The World Heritage Convention is completing its 25th year of implementation in 1997. This paper presents a retrospective of the first 25 years of the Convention and looks ahead to its future development. The World Heritage Convention has been successful both in terms of the numbers of States Parties that have signed up to it and the number of sites inscribed on the World Heritage List, with 147 States Parties and 506 listed sites to date. However, concerns have been expressed about the balance between numbers of 'cultural' sites and 'natural' sites listed, and about the mechanisms for monitoring the conservation status of sites. Among the future developments suggested for the World Heritage Convention are an increased priority for educational and awareness-raising activities, a greater emphasis on communication between site managers and a proposal for increasing the resources available to the World Heritage Fund.

THE WORLD HERITAGE CONVENTION is completing its 25th year of implementation in 1997. This is a time for stock-taking and, based on an assessment of past successes and future potentials, elaborating a vision for the future. I attempt such an exercise as someone involved with the Convention from its very early days and who has had the privilege of being associated with some of the leading personalities who have contributed to making this unique Convention a success: Messrs Tom Lee (Canada) and Michel Batisse (France) played key roles in making the Convention operational in 1978; Mr David Hales (USA) presided over meetings drafting World Heritage criteria and chaired the first World Heritage Committee session; Mr Hal Eidsvik, IUCN's first advisor on natural heritage, who evaluated some of the earliest natural sites nominated for inclusion in the World Heritage List; and Ms Christina Cameron (Canada) and Mr Rob Milne (USA) who in and outside of their past roles as the Chairpersons of the Committee have made outstanding contributions to the work of the Convention.

The past 25 years in retrospect

Among the first sites inscribed on the World Heritage List were Yellowstone and the Galapagos, two icons of global conservation efforts. These two flagship sites, currently facing a range of threats (see pages 27-31), clearly illustrate the frontiers of our battle to leave a legacy for future generations. In September 1996, President Clinton made a bold intervention to promise monetary compensation to reclaim land in the immediate neighbourhood of Yellowstone earmarked for gold mining operations. At the same time, the President of Ecuador intervened to stop a special law which would have seriously undermined the long-term protection of the Galapagos National Park. While even the flagship sites survive precariously, others are threatened by political and civil unrest and their consequences; thousands of refugees displaced by armed conflicts along the Democratic Republic of the Congo/Rwanda/Burundi borders pour into Virunga National Park in the Democratic Republic of the Congo; the international community appears able to do nothing but stand aside as a helpless and concerned observer while a human and natural tragedy of historically unmatched proportions unravels in that resource-rich Central African nation.

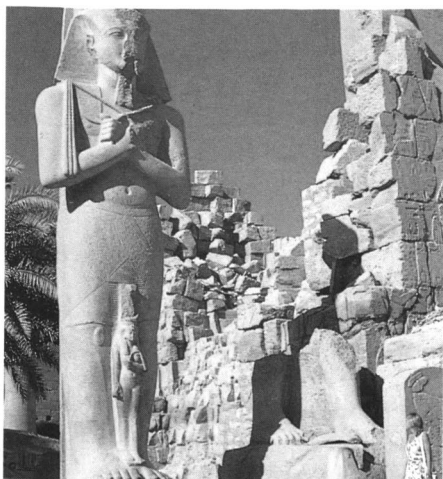
It is my deep conviction that there is, today, an even greater need for the World Heritage Convention as a system for collective protection than there was 25 years ago. These are times when we at the World Heritage Centre, as Secretariat to the World Heritage Committee, turn to IUCN, and to other partners to foster new collective bonds which can help in stemming the tides.

The overall development of the World Heritage Convention has been successful, at least in quantitative terms. To date, 147 States Parties have adhered to the Convention. In terms of the number of States Parties, this figure is second only to the Global Convention on Biological Diversity. States Parties to the World Heritage Convention pay a voluntary and/or an obligatory contribution to the World Heritage Fund as part of their commitment towards the collective efforts needed to safeguard the World Heritage.

More than 100 States Parties have nominated sites for inscription on the World Heritage List. The nomination process has become extremely important for conservation. The committee does not proceed with World Heritage listing unless site protection and management are guaranteed, and effective protection measures, for example a well-defined buffer zone, are in place. The increasing rigour introduced into the evaluation of nominations, both by IUCN as well as by the Committee, has in itself become extremely helpful for conservation of the World's Natural Heritage. The credibility of the Convention has hence grown to be acknowledged by the international community of conservationists.

After a period of nearly 20 years, since 1978, of receiving nominations for inclusion in the World Heritage List, the World Heritage Committee has recognised 506 properties located in 104 countries as World Heritage. Of this number, 380 are cultural properties, 107 are natural areas of World Heritage quality, and the remaining 19 'mixed' sites have been recognised on the basis of natural as well as cultural heritage criteria. Strict application of the World Heritage criteria is the key to maintaining the select character of the Listing process, and the practical manageability of the number of Listed sites. It is to the credit of IUCN, as World Heritage Advisory Body for Natural Heritage, that the criteria for determining the status of areas to be declared as 'World Natural Heritage' have been applied impartially and with much rigour; in fact there are individuals and organisations who are of the view that IUCN

The list of World Heritage Sites that has built up over the Convention's 25-year history covers the whole continuum of world heritage: from relatively small cultural sites such as the ancient temples of Thebes, Egypt (left), to vast wilderness parks such as the St Elias Mountains, Alaska/ Yukon/ British Colombia border. Photos: Jim Thorsell/IUCN.



is too strict in the application of natural heritage criteria in its evaluation of nominated areas.

It has to be kept in mind that the World Heritage Convention provides protection to those cultural and natural properties deemed to be of outstanding universal value from the international point of view. In order to build up such a select set of properties, comparative evaluation of a nominated area with other similar properties is an essential step in the nomination as well as in the evaluation processes. However, several imbalances are immediately recognisable with properties included in the List:

- More than half of all the properties in the List are cultural properties located within the European region;
- Only about 25% of Listed properties belong to Natural Heritage; it is possible that there are considerable differences in the level of scrutiny applied by the International Council on Monuments and Sites (ICOMOS) and IUCN, in the evaluation of nominations of cultural and natural properties, respectively.

For the future, a more coherent interpretation of the Convention is needed and consistent application of the criteria to reverse the imbalances. In addition, certain types of natural properties are clearly under-represented, including:

- 1) arctic and sub-arctic heritage;
- 2) natural and cultural heritage in marine and coastal areas;
- 3) some of the 'hottest' of the biodiversity hot spots of the world, in the Amazon forests, south-east Asia and the Pacific, which are yet to be represented by World Heritage sites.

A series of meetings have been held to elaborate a global strategy for World Heritage. Outcomes of these meetings have drawn attention to the significance of the unifying nature of the World Heritage concept, enhancing both cultural and natural heritage. One of the forward looking features in the work of the Convention is the increasing recognition given to inter-relationships between cultural and natural heritage.

The decision of the World Heritage Committee, taken in 1992, at its 16th session convened in Santa Fe, New Mexico, USA, to include outstanding cultural landscapes of universal importance in the World Heritage List, has opened a new era in the work and achievements of the Convention. In this connection, I must acknowledge and pay tribute to the pioneering work of Messrs Bing Lucas and Adrian Phillips. Since 1992, the Committee has recognised the following cultural landscapes to be of outstanding universal significance:

- Tongariro National Park, a sacred gift from the Maori people to New Zealand and to World Heritage.
- Uluru-Kata Tjuta National Park in Central Australia, including the Ayers Rock (Uluru), the largest monolith in the world, a deeply spiritual place to the Aboriginal people of Australia.
- The cultural landscape of Sintra in Portugal.
- The Rice terraces of the Ifuago people in the Philippines, a scenic splendour and an example of the engineering genius of the Ifugao.

Key elements of an evolving World Heritage Strategy

The World Heritage Convention is the first international legal instrument to recognise and conserve cultural landscapes and associated traditional and sacred values, life-styles and resource management systems. The concept of cultural landscape has enabled us to broaden our notions concerning the interface between biological and

cultural diversity and build synergistic plans for the conservation of both types of diversity even in areas outside the boundaries of conventional protected areas.

Where the Convention has to become more successful in the future is in monitoring the state of conservation of World Heritage Sites, in order to ensure their effective and continued conservation. So far, thanks to the leadership provided by IUCN, *ad hoc* but timely detection of potential and ascertained threats to World Heritage Sites has been possible. However, efforts to monitor the state of conservation of World Heritage Sites have to become more systematic and in this regard close cooperation between the technical advisory bodies, namely IUCN, ICOMOS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), and others such as research institutions in States Parties, and the World Conservation Monitoring Centre (WCMC, in Cambridge, UK), will be necessary. The involvement of States Parties in the monitoring process is vital to prevent sensitive sovereignty related issues becoming a hindrance to the effective conservation of World Heritage Sites. The World Heritage Committee has had considerable discussions on monitoring and has fielded studies and tested procedures. The Committee holds the view that:

1) Monitoring is primarily a task of the managers of the World Heritage Sites. They should be assisted in the preparation of yearly reports on the state of conservation of their respective World Heritage sites.

2) There is a need for periodic, 'independent' assessments of the state of conservation of sites, by a combination of experts drawn from national and international organisations. For example, it was the US Office of IUCN which first brought to the attention of the conservation community the impending gold mining threat to the Yellowstone National Park. IUCN-US was able to detect the potential threat because of the information it obtained as a result of its close links with a well-informed manager and staff of Yellowstone.

3) Article 29 of the Convention should be made an obligatory requirement in the operations of the Convention, whereby States Parties would be requested to submit, either at a two-year or longer time intervals, reports to the World Heritage Centre at UNESCO on the implementation of the World Heritage Convention, including assessments of the state of conservation of World Heritage properties.

4) State of conservation reports will be important in three respects:

- to review and update baseline information on World Heritage sites;
- to identify and prescribe actions to mitigate potential and ascertained threats; and
- to assist in setting priorities for international bi- and multi-lateral assistance to World Heritage Sites.

A challenge to IUCN and other partners cooperating in the implementation of the World Heritage Convention is to develop universally acceptable statutes for conservation; more precisely, they should attempt to define, as clearly as possible, acceptable limits of change to the ecological integrity of World Natural Heritage sites, and indicators that can measure the range of change occurring, in comparison with the acceptable limits thus defined. The outcome of monitoring activities that can be based on a clear understanding of acceptable limits and internationally agreed indicators can be of significant value in improving the effective management of sites.

World Heritage education and training

The future of the World Heritage Convention is in the hands of the youth of today. The power of a young and convinced mind can be clearly seen in the following quote

originating from 15-year old Romesh Tripathi, from Nepal, one of many such young people who actively participated in the first-ever World Heritage Youth Forum, held in Bergen, Norway, in 1995.

"In our souls, we must stress that World Heritage belongs to us, not to say it, but to do it, not just today but for the next years and even centuries. This is our responsibility as a young generation."

Education and awareness-raising activities are of growing importance to the work of the Convention, recognising that representatives of the future who are currently in their youth should become significant partners in promoting the work of the Convention. The dynamism unleashed by the World Heritage Youth Fora, now organised on an annual basis in different parts of the world, has inspired several young people to become active ambassadors of the World Heritage idea. Educational and awareness raising activities are built around the following questions and issues:

- 1) Why is heritage conservation important?
- 2) The need for, and the benefits arising from, an understanding and appreciation of different cultures, and the values, customs and traditions which have encouraged a respect for harmonious interactions between 'Nature' and 'Culture'.
- 3) Ways and means of improving communications between future and present decision makers.
- 4) Development of new educational materials, modules and methods with a focus on heritage conservation and with the goal of their eventual incorporation into secondary school curricula.
- 5) Specific actions which youth can undertake to protect natural and cultural sites.

Training of the custodians who manage World Heritage sites is a central and a growing pre-occupation of the World Heritage Convention. A Strategic Action Plan for Training Natural Heritage Specialists was developed as an outcome of an experts meeting hosted by the United States of America at the Albright Training Centre in the Grand Canyon World Heritage Site. The Strategic Action Plan focuses upon four main actions:

- 1) Curricula development.
- 2) Production of materials including videos and training modules prepared with modern multi-media techniques.
- 3) Information networks among site managers and others which can generate materials for case studies that can find greater use in training programmes.
- 4) Clear priority setting for using the financial resources available for training from the World Heritage Fund.

It is hoped that World Heritage sponsored training activities can lead the way in making protected area management a career that will become esteemed by broad sectors of society so that talented young people will seek their professional careers in that field.

Electronic communication networks, i.e. e-mail, World Wide Web etc., have multiple functions in education, information dissemination and promotion. In utilising the growing range of such electronic networks, the Centre, in cooperation with WCMC, ICOMOS, ICCROM and IUCN has set up the World Heritage Information Network (WHIN). The popularity of WHIN's Web Page as a source of information

has registered rapid growth; during September 1996, there were 12,000 requests in the Web for World Heritage related information. WHIN's future is moving towards three important goals:

- 1) Production and wide dissemination of an Electronic World Heritage Newsletter and an interactive World Heritage News Service.
- 2) Linking with the databases and Web sites of WCMC to build a system of updated information management.
- 3) Linking, to an increasing extent, directly with World Heritage site managers and staff to empower them so that their role in the implementation of the Convention becomes more and more significant.

Parallel to the electronic networking and related information dissemination activities of WHIN, there is an equally impressive growth in the demand for World Heritage related materials in print, film and in other more conventional communication channels. More than 1,000 documentary films on World Heritage will be produced during the next 3–5 years (about 100 films have been produced during the last 18 months). Numerous books and articles are published and a new World Heritage Journal – “Review” – was launched in 1996. A growing number of newspapers and television channels turn to the Centre and its partners for information that could lead to the production of articles, news items, tele-features and even advertisement clips on individual World Heritage sites.

A vision for the next 20 years

I conclude by sharing my dreams for the future of World Heritage. In 20 years from now, I would like to see the following:

- 1) An interactive World Heritage Network – a network of World Heritage site managers on the Internet with instant availability of data between sites.
- 2) A powerful world association of site managers defending the values and principles that constitute the moral basis of the World Heritage Convention. This association should form a powerful lobby with an exemplary code of ethics and conduct pertaining to field practices of conservation that emphasise social responsibility and cultural sensitivity. This association should guide, with the experience and wisdom of its members, the training of site managers to assume intergenerational responsibility for World Heritage and other conservation areas.
- 3) A World Heritage Fund of a minimum of US\$1 billion with each international tourist visiting a World Heritage site contributing a dollar to the future of World Heritage via a voluntary agreement with the world's largest industry, i.e. the tourism and travel sector of the world economy.
- 4) Fifty million teachers, accessible through UNESCO's teachers' associations, would bring conservation ethics to each classroom around the world using World Heritage as the most inspiring example.
- 5) A powerful agreement and alliance between nations and civic societies which

“... World Heritage will become a symbol for promoting solidarity and universal values common to the generations of today as well as those of tomorrow.”
Fjordland, south-west New Zealand.
 Photo: Jim Thorsell/IUCN.



would protect World Heritage sites and other conservation areas in an effective manner in the event of armed conflict. These agreements and alliances being underpinned by blue and green shield movements of involved and concerned citizens.

6) The full recognition of the cultural and natural resources of humankind as common global patrimony. The deterioration or destruction of the irreplaceable cultural and natural heritage of humankind in one part of the world affects natural and cultural systems in other parts of the world, and above all deprives future generations of their legacy and well being. While States have sovereignty over their territory, this sovereignty should be tempered by the requirements of international solidarity and intergenerational equity. All nations possess the right to use and benefit from the World Heritage and associated resources, but cannot destroy that Heritage because it is a legacy whose transmission to future generations must not be compromised under any circumstances.

It is my firm belief that the key to the future success of World Heritage conservation is increased awareness of the World Heritage concept. "Each citizen of the world should become a defender of our World Heritage." I like to imagine that World Heritage will become a symbol for promoting solidarity and universal values common to the generations of today as well as those of tomorrow.

Bernd von Droste is the Director of the World Heritage Centre, UNESCO, Paris, France.

IUCN - The World Conservation Union

Founded in 1948, The World Conservation Union brings together States, government agencies and a diverse range of non-governmental organisations in a unique world partnership: over 800 members in all, spread across some 125 countries.

As a Union, IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

The World Conservation Union builds on the strengths of its members, networks and partners to enhance their capacity and to support global alliances to safeguard natural resources at local, regional and global levels.

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World Commission on Protected Areas (WCPA)

WCPA is the largest worldwide network of protected area managers and specialists. It comprises over 1,100 members in 150 countries. WCPA is one of the six voluntary Commissions of IUCN - The World Conservation Union, and is serviced by the Protected Areas Programme at the IUCN Headquarters in Gland, Switzerland. WCPA can be contacted at the IUCN address above.

The WCPA mission is to promote the establishment and effective management of a worldwide network of terrestrial and marine protected areas.

From Caracas to Montreal and beyond

P.H.C. (BING) LUCAS

This paper presents a summary of what has been achieved in World Heritage since the IVth World Congress on National Parks, held at Caracas, Venezuela, in 1992, and what needs to be done to enhance the draft implementation of the Convention. A workshop held as part of the 1996 Montreal World Conservation Congress reviewed the progress that had been made since 1992, covering issues such as natural heritage criteria, monitoring, international assistance and cultural landscapes. One intriguing outcome has been that work originally aimed at separating and clarifying the natural heritage criteria has subsequently resulted in the suggestion that a common set of criteria might be applicable to both natural and cultural sites.

Overall, the World Heritage Convention has been a very effective tool for conservation, but much can be done to make it even more effective. Future themes to be addressed include the concept of listing serial sites that may be spread across several countries, and how more resources and support can be provided to maintain the integrity of existing sites. IUCN members should urge their own governments to be active in support of the World Heritage Convention.

IN FEBRUARY 1992, the Western Hemisphere hosted the IVth World Congress on National Parks and Protected Areas when over 1,500 leaders in conservation met in Caracas, Venezuela. That was the year of the Earth Summit and was also a milestone year in the history of the World Heritage Convention, marking its first 20 years.

The Parks Congress became part of a review being undertaken by the World Heritage Committee, with the World Heritage Workshop at Caracas an important part of that process. The workshop involved around 100 participants and its conclusions were included in *World Heritage: Twenty Years Later* compiled by Jim Thorsell and published by IUCN. The 1992 workshop focused on the 96 sites then inscribed on the list for their natural values, including 14 also inscribed for cultural values. The workshop's objectives were to:

- Review the implementation of the World Heritage Convention during 1972–1991.
- Discuss strengths and weaknesses.
- Provide inputs to the evaluation of the implementation of the Convention and the elaboration of a future strategy.

The workshop's conclusions and recommendations fell under six headings: criteria, monitoring, management, international assistance, cultural landscapes and outputs and follow-up activities. This paper takes each of these headings, identifying what has evolved since Caracas and what, in my view, still needs to be done to enhance the implementation of the Convention.

The workshop at Caracas fed into other products of the Parks Congress including the Caracas Declaration which urged governments "to participate actively in global and regional Conventions ... to promote protected terrestrial, coastal and marine areas and the conservation of biological diversity."

Participants in the Caracas Congress also adopted 23 recommendations. There was a strong focus on World Heritage in Recommendation 4 dealing with "Legal regimes for protected areas". The World Heritage and Ramsar Conventions were identified as

"the two major global treaties for protected area establishment and management" and the Congress recommended *inter alia* "that all states which have not done so adhere as soon as possible to conventions important for protected areas". More specifically, Recommendation 4 went on to recommend "that the World Heritage Convention criteria be amended to take account of natural/cultural landscapes/seascapes and living cultures which are a harmonious blend of nature and culture." Recommendation 7 dealing with "Financial support for protected areas" recommended *inter alia* that "increased funding be provided to existing treaties, especially the Convention of Wetlands of international importance, the World Heritage Convention, and the international network of biosphere reserves."

The road from Caracas to Montreal 1996

The Montreal workshop provided a very timely opportunity to identify progress with the recommendations from the 1992 Caracas Workshop.

Outputs and follow-up activities

The Convention's Secretariat in UNESCO, established later in 1992 as the World Heritage Centre, incorporated the workshop's recommendations and conclusions into the process of evaluating the Convention and elaborating a future strategy. This was done very effectively. For example, some key decisions were taken by the World Heritage Committee at its 16th Session held in Santa Fe, New Mexico, USA, in December 1992. However, the issue of a global strategy, since actioned for cultural sites, still needs action to identify potential natural sites.

Sites such as Shark Bay in Australia have been strongly influenced by human use but still retain natural values. Recent discussion of the World Heritage criteria has moved towards specifying a single, unifying set of criteria for all sites, both 'cultural' and 'natural'.

Photo: Jim Thorsell/IUCN.

Natural heritage criteria

The Caracas Workshop came to the following important conclusions on the criteria for natural sites as then set out in the World Heritage Committee's Operational Guidelines:

- That natural heritage criteria were not sufficiently precise to enable a rigorous evaluation of nominated sites.
- That references to "man's interaction with nature" and to "exceptional combinations of natural and cultural elements" were inconsistent with the legal definition of natural heritage in Article 2 of the Convention.
- That geological and geomorphological features were relevant to three criteria.

■ That biological diversity was not explicitly referred to in the existing criteria.

The workshop recommended that the criteria be revised to deal with these points and led, along with the products of other reviews during 1992, to the criteria for natural heritage being revised, when the World Heritage Committee met at Santa Fe in December 1992. The four criteria for natural heritage properties were revised to cover, in brief, areas of outstanding universal value from the point of view of:



- i) geological processes and geomorphological features;
- ii) ecological and biological processes;
- iii) superlative natural phenomena/exceptional natural beauty and aesthetic importance;
- iv) biological diversity including threatened species.

The references to “man’s interaction with nature” and to “exceptional combinations of natural and cultural elements” were deleted and the point was made in the Operational Guidelines that “most inscribed sites have met two or more criteria”.

Removal of references to people from the natural criteria cleared the way for the concept of cultural landscapes to be accommodated under the cultural criteria. It also led to unease among some delegations on the World Heritage Committee about the increasing numerical gap between the numbers of sites listed for cultural and natural values and to claims that IUCN was too rigid in its interpretation of the “Conditions of Integrity” laid down in the Operational Guidelines for natural sites.

When it met at Phuket, Thailand, in December 1994, the Committee acted in response to these concerns, on the suggestion of the German Delegation, by proposing measures to address imbalances on the List between natural and cultural sites and regions of the world. These proposals included expansion of the Global Strategy to give an equal emphasis to natural properties; adjustment of the formal and scientific criteria for the evaluation of nominated cultural and natural sites taking into consideration also the cultural landscape approach, giving priority to thematic studies on the main types of ecosystems and developing strategies to implement the results without delay; and reconsideration of the procedure for the assessment of nominated natural sites with special respect to the term “integrity”.

In support of the German proposal, the Delegate from France claimed that the imbalance noted was partly due to the decisions taken at Santa Fe, deleting references to the interaction between man and nature and modifying the cultural criteria to allow the inscription of cultural landscapes. The cultural landscapes concept was strongly endorsed by France but France considered that the “natural” part of cultural landscapes had not been sufficiently taken into account and that it would be appropriate to revise the procedures under the Operational Guidelines so that, in future, the International Council on Monuments and Sites (ICOMOS) and IUCN undertook joint evaluations of cultural landscapes proposed for inscription. Subsequently, the Operational Guidelines (para. 57) were revised to provide that “as appropriate”, ICOMOS will carry out its evaluation of ‘cultural landscapes’ “in consultation with” IUCN.

During the debate at Phuket on criteria, the Delegate from Niger is recorded as expressing “his hope that eventually, separate criteria for Natural and Cultural sites could be eliminated in favour of a unified set of criteria applicable for all types of World Heritage Sites.” The Committee decided that, to facilitate consideration of these issues, a specialists’ meeting should be organised and this was held in March 1996.

The discussion on balance continued at the June 1995 session of the Bureau in Paris, when it was agreed to adopt as an agenda item for the session of the Committee at Berlin in December 1995 the “Balanced representation of natural and cultural heritage on the World Heritage List”. The report from Paris says that “The Delegate of Germany ... recalled that a meeting is planned on the notion of integrity to be organised jointly by the Centre and France. He noted that the imbalance between natural and cultural properties is growing and that there is a serious need to take action.” More specifically he drew the attention of the Bureau to the fact that there were three times as many cultural as natural sites on the World Heritage List; that there were 26 new

cultural nominations and nine new natural nominations (on the 1995 agenda); that a global strategy is still lacking for natural heritage; that there is a striking imbalance in the staffing of the World Heritage Centre; that there is a continuing concern about the balance of specialists representing States Parties at the statutory meetings; that the notion of "outstanding universal value" is being applied differently by the advisory bodies; and that there is a need to rationalise the technical evaluation process to ensure that both advisory bodies apply similar judgement values with respect to their recommendations.

The discussion continued when the Committee met in Berlin in December 1995 and commended the French authorities for their plans to host a small meeting of mainly natural heritage specialists on "the notion of integrity" and asked that this meeting also address other relevant issues.

The expert meeting on "Evaluation of general principles and criteria for nominations of natural World Heritage sites" was held at Parc national de la Vanoise, France, in March 1996 and its report was received by the World Heritage Bureau when it met in Paris in June 1996. The Bureau decided that the Secretariat should transmit the recommendations of the expert group to all States Parties for comment and discussion when the Committee met at Merida, Mexico, in December 1996.

The expert meeting at la Vanoise consisted mainly of experts in the natural field but included members of delegations to the World Heritage Committee, the ICOMOS World Heritage coordinator as well as others with much experience of the Convention, such as the Director of the World Heritage Centre. It was understandable that its discussion looked at issues of principle as well as practice. Specifically, it proposed a number of changes to the Operational Guidelines.

The absence in the Convention of any definition of what is meant by the crucial concept of "outstanding universal value" led to a recommendation to add to the Guidelines that "Inscription on the World Heritage List is reserved for only a selection of the most outstanding properties from an international point of view". The experts recommended that the Guidelines be changed to emphasise that "A comparative evaluation of similar properties is an essential part of the process of evaluation" and that IUCN as well as ICOMOS should make such comparative evaluations.

The expert group noted the difficulty of assessing objectively natural criterion 3, dealing with natural beauty, and recommended that because of this, criterion 3 "should justify inclusion on the List only in exceptional circumstances or in conjunction with other natural or cultural criteria" and suggested a study of methodologies for more objective assessment.

The debates on the application of the Conditions of Integrity for natural property nominations had their sequel at la Vanoise when the experts noted "that human influence can be found in all natural sites and that the notion of pristine nature is therefore a relative one." As a consequence, the group recommended the inclusion of the following definition in the Glossary of World Heritage Terms being developed by the World Heritage Centre:

"A natural area is one where biophysical processes and landform features are still relatively intact and where a primary management goal of the area is to ensure that natural values are protected. The term "natural" is a relative one. It is recognised that no area is totally pristine and that all natural areas are in a dynamic state. Human activities in natural areas often occur and when sustainable may complement the natural values of the area." This recognition of the human aspects of natural sites,

illustrates, to my mind, a significant evolution of thinking since Caracas. The successful initiative at Caracas to remove references to human aspects from the natural criteria led to a backlash at successive sessions of the Bureau and Committee resulting in IUCN being criticised, incorrectly in my view, as being too rigid in its evaluations when it was simply endeavouring to interpret without fear or favour the criteria and Conditions of Integrity as they now stand and to carry out the World Heritage Committee's injunction that IUCN and ICOMOS "be as strict as possible in their evaluations".

Discussion at la Vanoise reflected the comment from Niger at Phuket suggesting "a unified set of criteria applicable for all types of World Heritage Sites." The expert group discussed "the continuum from nature to culture that is covered by World Heritage and acknowledged the complexity of the interactions between nature and culture" illustrated by so-called mixed sites listed for both their cultural and natural values as well as the incorporation of cultural landscapes under the cultural criteria. The meeting agreed that "the use of terminologies such as 'natural', 'cultural', 'mixed' and 'cultural landscapes' to distinguish World Heritage sites was undermining the Convention's uniqueness in its recognition of the nature-culture continuum". The outcome was that "the expert group recommended that the Committee consider developing one set of criteria, incorporating existing natural and cultural heritage criteria, and promoting a unified identity for all World Heritage sites as the outstanding heritage of humankind."

The expert group noted differences of interpretations of the concept of integrity including structural integrity (e.g. species composition of an ecosystem), functional integrity (e.g. glacial series with the glacier itself and its deposition patterns) and visual integrity (a notion which relates to both natural and cultural heritage).

The meeting went further, noting the application of "Conditions of Integrity" to natural sites and the "Test of Authenticity" applicable to cultural sites and recommended a study of the possibility of applying common conditions of integrity to both natural and cultural heritage.

Discussion of these fundamental issues is in my view timely, and it is intriguing that the approach at the Caracas workshop focusing on the separation and clarification of natural criteria should have led full circle to emphasising the unity of the Convention in its goal of conserving the world's cultural and natural heritage.

The debate on these fundamental issues will no doubt be a continuing one.

Monitoring

The Caracas Workshop discussed monitoring at some length noting the procedures used by IUCN and WCMC with the World Heritage Secretariat to gather information and build systematic databases and for making interventions to avert specific threats to sites. It noted the need to verify information obtained from secondary sources at field level and that, while voluntary monitoring reports from States Parties "are welcome", they "may not always reflect fully the threats facing World Heritage sites." It also noted that monitoring the conservation status of sites "is operationally linked to other aspects of implementation of the Convention, such as identification and nomination of sites, provision of international assistance, and so on."

The workshop proposed a number of actions:

- An agreed format for reporting under international conventions.
- States Parties reporting to the Secretariat changes in legal status and boundaries of sites and providing copies of new information and publications.

- WCMC working with the Secretariat, IUCN and States Parties to update descriptions on a three-year cycle.
- WCMC and the Secretariat making recommendations for information management.
- IUCN with the Secretariat continuing to implement its monitoring procedures and reporting threats to sites to the Secretariat.
- Seeking cooperation of national/local organisations in monitoring conservation status of sites.
- Undertaking field visits to verify information.
- Consideration by the World Heritage Committee to including, in the Operational Guidelines, a 'sunset' clause requiring re-evaluation of a site's World Heritage values after 10–20 years.
- The Committee using its authority to include sites on the "in Danger List" even in the absence of requests from States Parties concerned, and requesting support from international and national communities to remove threats.

The implementation of these proposals has been patchy. There has been some cooperation in monitoring between IUCN and the Ramsar Secretariat. The World Heritage Centre has worked with the advisory bodies under the Convention and with WCMC on information flow and the establishment of a World Heritage information database with periodic updating.

There have been some field visits initiated by IUCN and, in cases of sites on or candidates for the World Heritage in Danger List, by teams organised by the World Heritage Centre. These have, however, been to some degree opportunistic and/or emergency in nature. However, realistically, resources in funding and staffing at the Centre and in the advisory bodies are limiting factors in developing a truly systematic approach to monitoring, while there is yet to be developed a systematic pattern of periodic reporting by States Parties.

The Committee has 'bitten the bullet' during the period since Caracas by inscribing some sites on the World Heritage in Danger List without the prior agreement of the State Party concerned, but moves towards in Danger listing have met with a vastly varied reaction. For example, at the 1995 Committee session in Berlin, while the United States delegation asked for "in Danger" listing for Yellowstone, Ecuador strongly resisted similar moves in relation to the Galapagos (see pages 27–31).

This underlines what has threatened to be a divisive issue in the Committee and Bureau with north/south overtones and has prompted a negative response by some States Parties to reactive monitoring. The fact is that the Committee's Operational Guidelines devote section H to "Monitoring the State of Conservation of properties inscribed on the World Heritage List" under the two headings of "Systematic monitoring and reporting" and "Reactive monitoring".

Systematic monitoring and reporting is defined as "the continuous process of observation of the conditions" of a World Heritage site "with periodic reporting of its state of conservation" with the improved site management, advanced planning and early warning of problems; improved policies and practices at the national level, regional cooperation and bona fide understanding of the condition and needs of sites by the World Heritage Committee and Secretariat. Systematic on-site monitoring is seen as the prime responsibility of the State Party, with reporting every five years to the Committee through the World Heritage Centre.

Reactive monitoring is defined in the Guidelines as "the reporting by the World Heritage Centre, other sectors of UNESCO and the advisory bodies to the Bureau and

the Committee on the state of conservation of specific World Heritage sites that are under threat."

A fundamental debate on monitoring has developed, with some States Parties pointing out that the term "monitoring" was not used in or at the time of the negotiation of the Convention and there is a school of thought which feels that "reporting" and/or "follow-up" would be less controversial terms to use in this context.

Be that as it may, the issue of monitoring has been debated at both the most recent General Assembly of the States Parties to the Convention and at the General Conference of UNESCO, during which the General Assembly was held.

As a consequence, there was much debate on monitoring and reporting at the Committee session in Berlin in December 1995 and at the June 1996 Bureau session in Paris. The outcome was a draft text of two resolutions for consideration by the Committee session in Mexico in December 1996 to go forward to the 1997 General Assembly of the States Parties and the 29th General Conference of UNESCO.

The draft resolutions recognise "the sovereign right of the State Party concerned over the World Heritage sites situated on its territory" and emphasise that "regular reporting should be a part of a consultative process and not treated as a sanction or a coercive mechanism." They note that "the form, nature and extent of the regular reporting must respect the principles of State sovereignty" and that "the involvement of the Committee, through its Secretariat or advisory bodies, in the preparation of the regular reports would be with the agreement of the State Party concerned."

The draft resolutions relate to **systematic** monitoring and the draft report of the June 1996 Bureau session states that, while the report addresses the concept of systematic monitoring and reporting described in the Operational Guidelines, "the World Heritage Committee recognises the important and continuing role of reactive monitoring as described in paragraph 75 of the Operational Guidelines."

Management

The Caracas Workshop identified six points in relation to management of World Heritage natural sites:

- The long-term maintenance of outstanding universal values which distinguish World Heritage sites requires special consideration in management plans.
- In developing a management plan, States Parties should consider bringing all stakeholders together to develop a vision which demonstrates understanding of the responsibilities of all sectors to maintain World Heritage site values.
- States Parties should consider developing annual operational plans to complement long-term visions defined in management plans with monitoring of conservation of World Heritage site values.
- Development pressures beyond the borders of any World Heritage site should be among the concerns of managers of that site.
- In making a nomination, there should be a commitment to a process of bringing together affected and interested parties to develop a long-term vision for conservation of World Heritage site values.

Development pressures beyond the borders of World Heritage sites can have significant impacts. Here at Bulgaria's Srebarna Nature Reserve water quality has suffered due to upstream changes in the flow of the River Danube, and to the development of a pig farm on adjacent land. Many waterbirds have been lost from the site as a result. Photo: Jim Thorsell/IUCN.



■ In developing management plans, States Parties should define a World Heritage Site management area that transcends the site's boundaries, on the lines of the Biosphere Reserve approach.

How far States Parties and World Heritage site managers have gone in meeting these goals identified at Caracas could be judged by presentations at the workshop in Montreal, almost five years after Caracas. Examples from the Rocky Mountains and Galapagos illustrated, among other issues, the importance of the regional and national context of a World Heritage site, as did the presentation on Yellowstone, in response to both external and internal threats to its integrity.

International assistance

The Caracas Workshop correctly noted that the World Heritage Fund is very small in relation to the task and, to increase international assistance, the workshop suggested:

- The World Heritage Committee and UNESCO appeal to all countries, particularly developed ones, to increase their contributions to the Fund.
- The Fund's operation should be designed to fully exploit the Fund's pre-investment and/or catalytic function with potential for initiatives with multiplier effects.
- International assistance should wherever possible be used for long-term benefits, such as institution building and linking World Heritage site values to provision of benefits to local people.
- International assistance should take into account the absorptive capacities of recipient countries and establish mechanisms to measure quality of output.
- International assistance projects already successfully implemented should be used to launch campaigns to raise funds.
- International intergovernmental funding agencies such as GEF and UNDP, and NGO funding agencies such as WWF, should coordinate operations with those of the World Heritage Fund to substantially increase the financial resources available for conservation of World Heritage sites.

There have been examples of additional contributions to the World Heritage Fund from some States Parties, but the Fund remains relatively small. As most States are now parties to the Convention there is **limited capacity** for growth in normal income. The problem of funding is also aggravated by non-payment of some contributions.

There seems to be no clear and consistent approach to the manner in which assistance under the Fund is applied, relying rather on *ad hoc* applications in relation to specific sites, although there have been some examples of initiatives to call donor conferences to bring both government and NGO conservation funders together.

The World Heritage Centre and IUCN are both identifying and publicising World Heritage success stories but, overall, more remains to be done than has been done.

Cultural landscapes

The Caracas Workshop discussed the issue of those cultural and/or rural landscapes which may have the potential to meet World Heritage criteria but which would not qualify if considered separately under cultural and natural criteria. The workshop recommended:

- That landscapes be included within the cultural heritage section of the Convention with ICOMOS primarily responsible for evaluation, but with a working group made up of ICOMOS, IUCN and other relevant technical agencies such as IFLA being established to develop a procedure for evaluation.

This was one recommendation which was dealt with expeditiously. The Centre and the French Government cooperated to organise an expert meeting in October 1992 at La Petite Pierre and its recommendations led to the concept of cultural landscapes being recognised under the cultural criteria through amendments to the Operational Guidelines adopted by the Committee when it met in Santa Fe in December 1992.

Of the sub-categories of cultural landscapes identified in paragraph 39 of the Operational Guidelines, the second category of “organically evolved landscape” generally includes significant natural values while sites in the third category of “associative cultural landscape” may well qualify also for World Heritage listing as a natural site, as do the first two associative cultural landscapes listed – Tongariro National Park (New Zealand) and Uluru-Kata Tjuta National Park (Australia).

One implication of the inclusion of cultural landscapes under the cultural criteria has been to further aggravate the numerical imbalance between natural and cultural sites which is addressed in part VI of the Operational Guidelines.

Beyond Montreal and into the 21st century

Numerical imbalance

Overall, the World Heritage Convention has been a very effective tool for conservation but much remains to be done to make it more effective. Some of the issues which need to be addressed to make the Convention more effective were identified in the workshop at Caracas and others have since been highlighted by the World Heritage Committee and such gatherings as the Vanoise expert meeting.

The ongoing debate on the issue of imbalance between natural and cultural sites on the list is not particularly productive. It has, however, served a very useful purpose in focusing on the artificiality of any clear separation between natural and cultural which was inherent in the removal of “man” from the natural criteria after Caracas and which is at the centre of the attempt to define “natural” arising from the record of the Expert Meeting at la Vanoise.

An integrated list

The Convention, as its full title says, concerns “the Protection of the World Cultural and Natural Heritage”. Yet, while the Convention identifies natural and cultural sites separately, it provides for a single World Heritage list which includes sites along the continuum discussed at la Vanoise. This is so whether they are cultural sites like Angkor (Cambodia) with significant natural values, natural sites like Sagarmatha (Nepal) with significant cultural values or mixed sites listed for both their natural and cultural values or cultural landscapes. Whatever the route taken, those sites which are assessed by the World Heritage Committee to be of “outstanding universal value” and meet either the Conditions of Integrity or the Test of Authenticity are inscribed on the single and prestigious World Heritage list.

The idea of **a common set of criteria** encompassing the nature/culture continuum seems to me to have a compelling logic. It would produce a World Heritage “menu” from which a State Party can select those “courses” – those criteria – which most appropriately contribute to establishing the “outstanding universal value” of a site.

Taking the process a stage further, the Expert Meeting at la Vanoise questioned the logic of separate sets of guidelines to identify issues of integrity and/or authenticity

and recommended a study to consider the possibility of identifying **conditions of integrity applicable to both cultural and natural heritage**. To my mind, this also has much to commend it. For one thing, it would remove inconsistencies which exist now in the Operational Guidelines. For example, paragraph 24 of the Guidelines goes to great lengths to recognise the role of "traditional protection and management mechanisms" in ensuring that a cultural site meets the Test of Authenticity but there is no parallel provision recognising traditional mechanisms in the Conditions of Integrity for natural sites (paragraph 44) even though these mechanisms are at least as relevant to conserving natural values as they are to conserving cultural ones.

With such changes in approach, the current emphasis on the division between cultural and natural sites would be less sharp and, hopefully, the debate over the numerical imbalance between the two categories of sites would recede. In any case, how can a site conserving a single building be compared with a vast natural site such as the Great Barrier Reef, one and a half times the size of the United Kingdom?

Another benefit of such an approach would be **to bring closer together the two advisory bodies** responsible for technical evaluations of nominations. There has been a growing and closer relationship between IUCN and ICOMOS. This is highly desirable as both work to the same strictures in the Operational Guidelines and the Bureau and Committee have been critical of what some perceive as differing approaches. During 1996, IUCN and ICOMOS undertook joint missions to inspect nominations in China and Sweden with IUCN personnel carrying out the Swedish mission for both advisory bodies.

The potential for serial sites

One issue which was not the subject of a recommendation at the Caracas Workshop is that of international sites. Transboundary World Heritage sites are not uncommon (e.g. the Mosi-oa-Tunya/Victoria Falls site (Zambia and Zimbabwe) was discussed at the Montreal workshop), but I perceive suggestions for an even bolder approach. This would involve applying the idea of serial sites covered in paragraph 19 of the Operational Guidelines internationally as well as nationally with, for example, a single serial international World Heritage site in the Southern Ocean with a range of primarily natural values and another across the Pacific which might convey the story of Polynesian migration, both involving a series of sites in several States. It is even possible that under this approach, the multiplicity of existing cultural Gothic cathedral sites could be incorporated in a single serial site!

Themes and Global Strategy

The serial site concept is one which could be considered for wider application in a Global Strategy. As la Vanoise participants identified and the Committee has long recognised, more progress has been made towards a global strategy covering the cultural heritage than the natural heritage.

The thematic approach to the identification of potential World Heritage sites is as applicable to the natural heritage as to the cultural and the Vanoise meeting identified some examples of thematic audits which could be undertaken covering, say, the circumpolar region, marine sites and mountains. The meeting also noted the progress made towards a framework for fossil sites. Progress in this direction should involve, as the Expert Meeting noted, the completion of tentative national lists and their harmonisation with the global thematic frameworks.

The development of a Global Strategy would be greatly enhanced by increased efforts in **building partnerships** using existing organisations and their regular international meetings. One such example was in seeing the 1996 International Geological Congress in Beijing as a tool for the identification of fossil sites. A greater emphasis on partnerships could well see much more cooperation with other international conservation conventions and with regional bodies involved in protected areas such as the Council of Europe. There is continuing scope, too, for using IUCN regional meetings and partner organisations in implementing a Global Strategy focusing on natural values.

Protecting existing sites

The identification of potential new World Heritage sites is one issue. Another is concern for the integrity of existing sites. I detect increasing concern at the imbalance in the application of the limited human and financial resources available nationally and internationally to administering the World Heritage Convention which are applied to new listings compared with the resources applied to ensuring the effective management of sites already inscribed on the list.

Again and again at meetings of the Bureau and Committee, there are monitoring reports indicating problems. Some high profile sites such as the Pyramid Fields have benefited from the personal intervention of the Director-General of UNESCO with the President of Egypt. But all too often, reports on problems with less visible sites are simply noted and the relevant State Party is urged to take appropriate action when the problems have often occurred because of a lack of resources in the State concerned.

A support strategy?

Technical assistance from the World Heritage Fund is limited but could, I believe, be more effectively used if time was allowed in Bureau/Committee programmes for representatives of States Parties with problem sites to sit down in informal sessions with other interested States Parties and representatives of the World Heritage Centre and the advisory bodies to develop strategies to seek appropriate support for the World Heritage sites in need.

As the World Heritage Fund can play no more than a catalytic role, I believe it could be used to fund strategic follow-up designed to develop partnerships and projects which could be marketed to agencies with a greater capacity to assist than the limited World Heritage Fund. Before such an approach was adopted, there would be great merit in reaching out to **build funding partnerships** with other conservation conventions, with the Global Environment Facility, with governments that have links with the State Party needing help and with international NGOs such as WWF, TNC and others. The approach would be based on the fact that the World Heritage List is an independent mechanism designed to

Funding partnerships with other conservation bodies are of great importance. The Virunga National Park in the Democratic Republic of the Congo has been severely affected by the crisis in Rwanda. Park guards have often not received their salary, and patrols had ceased. With assistance from the World Wide Fund for Nature, the World Heritage Fund was able to provide over \$100,000 of emergency assistance to help restore park management. Photo: Jim Thorsell/IUCN.



identify sites of "outstanding universal value" and that these should logically be priority areas for support.

Credibility of the list

The workshop at la Vanoise rightly concluded that "the critical issue is maintaining the credibility of, and respect for, the World Heritage List." While it was addressing mainly sites of marginal quality already on the list, I believe the Convention is in much greater danger of losing credibility if sites lose their integrity than if it were to divert resources to the politically difficult task of purging the list.

Monitoring is critical to the list's credibility and every effort must be made to encourage States Parties to undertake systematic monitoring, while refining the very important concept of reactive monitoring. It is essential that monitoring, both systematic and reactive, is seen as a mechanism to support States Parties and site managers and is undertaken in a positive and constructive manner consistent with the Convention's approach of international cooperation and support. Clearly, sensitivity is needed in the approach of those involved and my suggestion of supportive follow-up may be worth discussing in a 'think-tank', seeking creative solutions to the problem.

I commend recent initiatives by the World Heritage Centre and others to assist States Parties and World Heritage managers to better understand the Convention. World Heritage Centre material is helpful as are initiatives such as that of the Wet Tropics Management Authority in Queensland, Australia, in hosting a workshop in 1996 to enhance management of World Heritage sites in the Asia/Pacific region and to build a network of site managers. This is an approach which must be replicated.

IUCN itself has been persuaded to adopt a more collegial approach to its important World Heritage work with the establishment of an IUCN World Heritage Policy Panel co-chaired by the Global Programme Director of IUCN and the Vice-Chair, World Heritage, of its World Commission on Protected Areas (WCPA) and including the WCPA Chair in its membership.

What IUCN members can do

IUCN played a significant part in the development of the Convention and continues to be influential in its implementation. IUCN can be justifiably proud of the great force the Convention has been for conservation. However, the Convention can be much more effective in the future and I urge that IUCN member organisations and Commission members urge their own governments to be active in support of the World Heritage Convention.

This means accepting responsibility for enhancing the Convention's effectiveness. It means all States Parties taking their fair share of responsibility, making their financial contributions and contributing to the work of the Bureau and Committee. It means ensuring that members of delegations have the technical expertise in both the natural and the cultural heritage to ensure that decision making is based primarily on technical considerations rather than on political ones.

By personal and institutional commitment and by building partnerships the universality of the world's heritage in nature and culture can be recognised and the World Heritage Convention can be an increasingly effective global conservation force.

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World Heritage in Danger

The World Heritage in Danger List is kept for sites that are considered under serious threat and which deserve special attention. Currently, more than ten World Heritage sites listed for their natural importance are on the "in Danger" list. The listing of "in Danger" sites is a controversial matter, and has resulted in accusations that the World Heritage Committee is violating the sovereignty of countries whose sites are classified in this way. The listing of "in Danger" sites has certainly been successful in focusing international attention on the threats facing such sites.

The case studies presented below focus on two World Heritage sites in Danger that have been the subject of much attention in recent years. Two perspectives on the listing of Yellowstone World Heritage site as "in Danger" are given by Harold K. Eidsvik, formerly of the World Heritage Centre, and Michael Clark, of the Greater Yellowstone Coalition. Following this, Michael Bliemrieder of the Galapagos National Park acknowledges the international support which "in Danger" listing has attracted, but questions whether the problems faced in the Galapagos are significantly different to those affecting many protected areas around the world.

Yellowstone - a perspective from the World Heritage Centre

The World Heritage Centre, as the 'secretariat' of the World Heritage Committee, in association with the non-governmental Advisory Bodies, provides technical advice on the implementation of the Convention. In February 1995, the World Heritage Centre received from the National Parks and Conservation Association (USA) a letter signed on behalf of major American NGOs requesting that the Committee should place the Yellowstone World Heritage site on the World Heritage in Danger List. The Centre wrote to the American Assistant Secretary of the Interior drawing the letter to his attention and requesting a response to the concerns raised by the NGOs. In reply the Assistant Secretary, on behalf of the State Party, invited the Committee to send a Mission to the site to ascertain the current situation. The Mission took place in September 1995 and consisted of the Chair of the Committee, the Director of the Centre and a representative of IUCN, as well as Centre staff.

Public meetings were organised by the United States National Park Service (USNPS) in cooperation with the mining company which proposed to develop a mine on Federal land outside the World Heritage site but in its upper catchment. The NGO community and local people were also deeply involved. Some 300 people participated in the meetings and 50 individuals took part in a field visit to the potential mine site. It was clear from the meetings and the field visits that there were strongly divergent views on the degree of the threats posed. It was also clear that some participants felt that the World Heritage Committee had no role to play in what they considered to be an internal United States matter.

Article 11 of the Convention provides the authority for the Committee to place sites on the World Heritage in Danger List in "consultation with the State Party". These procedures were followed and it was determined with certainty that there were "Potential Dangers" to the site. The advantage of invoking the Convention at this time related to threats from outside the site coming into consideration whereas the USNPS was restricted to considering only threats within the national park.

The outcome was that in December 1995 at its meeting in Berlin the World Heritage Committee decided to place Yellowstone on the World Heritage in Danger List.

Harold Eidsvik was Senior Adviser, Natural Heritage, at the World Heritage Centre, 1993–1996.

Yellowstone as a “World Heritage in Danger” site

In December 1995 the World Heritage Committee agreed to include Yellowstone National Park on the list of World Heritage Sites in Danger, in large part due to the threat of a large gold mine north-east of the Park. This decision came at the request of fourteen American environmental groups who were involved in a six-year campaign to stop the gold mine.

The decision to list Yellowstone Park as an endangered site brought international attention to this situation and touched off a major public debate within the Western United States regarding the role and power of the World Heritage Committee and whether or not the decision was a violation of national sovereignty. That debate continues sporadically, maintained largely by right-wing extremists and property rights activists who are intent on opposing any efforts to limit the ability of corporations and individuals to exploit the nation's natural resources.

The Campaign to stop the proposed gold mine was built around three key elements:

- 1) ensuring that the federal permitting process was held to the highest possible environmental standards in order to protect Yellowstone National Park and surrounding watersheds;
- 2) public advocacy using both legal and scientific means; and
- 3) informing citizens about the threat to the Park and involving them in public efforts to oppose the mine.

The site visit by representatives of World Heritage Committee, the Centre and IUCN and the subsequent decision to include Yellowstone National Park on the List of World Heritage in Danger helped to propel the Clinton Administration into an unprecedented decision to stop the mine by trading other federal assets for the property owned by the gold company. This trade, announced in mid-August 1996 by President Clinton during a visit to the Park, has effectively removed the threat of the mine from Yellowstone National Park.

However, there are a myriad of other threats to the Park as detailed in the letter we wrote on 28 February 1995 asking the World Heritage Committee to intervene in the battle to stop the mine. Our letter noted that these threats include the following:

- The Park's world-renowned geothermal resources remain at risk from potential geothermal development and other drilling in subsurface aquifers beyond the Park boundaries.
- Timber harvest, oil and gas development, road building, mining, home building and new population clusters continue to encroach on sensitive wildlands and important wildlife habitat which surround the Park and on which the Park's health and integrity depend.
- Destruction of habitat and increasing human-bear conflict jeopardises the threatened grizzly bear.

- Bison from the once free-roaming herds within the Park are routinely slaughtered if they cross Park boundaries.
- Illegally introduced lake trout threaten to displace Yellowstone's native cutthroat trout, an important food source for grizzlies, small mammals and birds.
- An enormous pile of toxic tailings located only several miles upstream of Yellowstone's north-east boundary continues to leach heavy metals and acids into Soda Butte Creek despite numerous clean-up attempts.
- Ever-increasing levels of visitation create problems related to overcrowding, including disturbances to wildlife, during winter as well as summer.

Despite the victory over the proposed mine, all of these threats continue today.

What are the lessons to be drawn from our recent victory? Should the World Heritage Committee remain concerned about the future of Yellowstone and should it keep Yellowstone on the "World Heritage Site in Danger" list? How should the Committee react to the criticisms that its actions violated the national sovereignty of the United States?

First, the World Heritage Committee's decision to list Yellowstone as a site "in Danger" advanced the NGO campaign to seek international attention and helped stop the mine. It provided, for the first time, a platform through which a variety of scientific expertise could be marshalled and shared with the general public. It brought major federal agencies into the public arena where they had to take a stand on the proposed gold mine. It gave the national media a new understanding of the threats to the Park.

At the same time, the listing gave property rights advocates and right-wing extremists a tool which they used, and are still using, to attack efforts to protect the Park. Many of these critics of the World Heritage Committee's efforts believe that the United Nations has seized control of Yellowstone Park, has troops quartered there, and routinely flies black helicopters over the region on mysterious missions. The right-wing leaders include powerful senior member of Congress.

If the World Heritage Committee seeks to investigate another United States site for "in Danger" designation in the near future, it should give serious consideration to the political fall-out of such action and it should initiate thoughtful efforts to educate Congressional leaders about its role and authority under the World Heritage Convention. There is massive misunderstanding about the Convention's power among US citizens, and numerous right-wing groups within the United States will seek to exploit any future actions for their own nefarious purposes.

Second, the myriad of threats outlined still pose major problems for the future viability of Yellowstone National Park. While no single industrial threat comparable to the mine now exists, the general environmental status and health of the ecosystem continues to decline. Perhaps the most perplexing of these threats is the rapid human population growth occurring upon private lands around the Greater Yellowstone Ecosystem. If these population trends continue, the long-term viability of the ecosystem will be imperilled by the accumulative impacts of human activities in the region.

Third, the World Heritage Committee site visit team was rightly concerned about the long-term management of federal forests which surround Yellowstone National Park. These lands are managed for multiple use, with the highest use being mining, a condition which made possible the proposed siting of the gold mine facilities on national forest land adjacent to Yellowstone National Park. However, comments by the site visit team about the need for a formal 'buffer' zone around the Park were

interpreted by private property rights groups as a 'land grab' or an attempt to expand the Park far beyond its current boundary. This illustrates the charged nature of political debates within the United States about land management approaches. The World Heritage Committee needs to carefully consider these political nuances when it contemplates future requests within the United States to list a site as "in Danger".

Finally, in 1997 we will celebrate the 125th anniversary of the founding of Yellowstone National Park. Such an event offers special opportunities to examine how Yellowstone is being managed, how the idea of protected reserves and parks is now being implemented around the world, and how all of us can better work to protect these unique resources. We took forward to exploring these themes with our colleagues from around the world.

Michael Clark is Executive Director of the Greater Yellowstone Coalition.

The Galapagos National Park: under threat but not in danger?

One of the dogmas of the management of protected areas states that the presence of human populations inside or closely around one of those areas will slowly, but certainly, destroy it. This is a disturbing thought indeed, considering the hundreds of national parks and reserves throughout the world, many of which are on the World Heritage list, which include significant human settlements. It is all the more disturbing because the world population shows no sign of a slower increase as people seem to love to have lots of healthy children. If that dogma were to be true, I believe we could say goodbye to all our protected areas, to the conservation of nature and to the hope of preserving a functional and natural environment for generations to come.

Fortunately, all those who have had the masochistic pleasure of managing a national park know that this statement might or might not be true, depending on how every situation is handled. A human settlement does not necessarily mean the death of the park but neither does it mean a happy life for the park manager.

The situation on the Galapagos Islands perhaps is a reflection of this. Our situation might be unique in the fact that only 3% of the whole land areas of the islands are inhabited. The remainder is protected and, I dare to say, very well protected. But I have emphasised the Galapagos Islands and not the Galapagos National Park since, if it comes to the threats, it may be that all of the archipelago is actually threatened.

Here are some facts:

- The population increase on the islands due mainly to migration from mainland Ecuador amounts to 8% annually, a very high figure.
- The approximate number of inhabitants on the islands is 15,000. Compared with the 1.2 million people living on Okinawa, the small group of islands in the south of Japan and very much like the Galapagos, this number might seem small. However, 15,000

*The Galapagos Islands, Ecuador.
Photo: Jim Thorsell/IUCN.*



people are a lot considering the space available for urban development and agricultural activities.

■ Uncontrolled tourism has always been blamed for all kinds of troubles we face. Although it is true that tourism has a potential for disaster, on the Galapagos it is far from uncontrolled and we believe we have been quite successful in managing an ever-growing industry, now already more than 25 years old, without experiencing major damages to the environment. In 1995, the Galapagos received some 56,000 visitors, up from 54,000 and 46,000 in the previous two years. The expected figure for 1996 is 60,000–62,000 people. However, the most recent carrying capacity study shows that this is far below the limit we can handle with our present management capabilities.

■ All the money the Galapagos National Park gets from entrance fees and concession rights has to be sent to the Central Bank in Quito. From there, it comes back in the form of an annual budget. However, our records show that, at present, we only receive 32% of those funds, which is a long way from enough to cover all operational expenses. It has been like this for a long time, but we are now trying to bring a law through our Congress which would allow us to use the money directly. This is a difficult task, since no government wants to lose one of its main sources of income.

■ Since 1992, Galapagos has become famous for its illegal fisheries. It is true, we are facing a real problem, which threatens to destroy part of highly sensitive ecosystems in certain parts of the islands. We are talking specifically about the sea cucumber harvest, about shark fins, about sea lions being used as bait, about long lines. We are talking about problems which are very difficult to control, because they are rooted in the poor social and economic conditions of some sectors of the local human population. But we are not alone. Overfishing and irrational harvest of marine resources is a common and worldwide problem, with no solution in near sight.

■ Finally, there are the politicians. We all know how they work, especially when they think that there is a difference to make and a decision to take between the protection of natural resources and the needs of potential voters.

To summarise. We do have problems and there is no point in denying it. There are threats to the park but we have to be aware of their size. The Galapagos National Park is a huge area, more than 7,600 km², and this includes only terrestrial areas. There are also 38,000 km² of interior waters, which make up the Marine Reserve. The problems we are facing are highly localised; if we had the financial and material resources to control them, there would not be any serious problems at all. But then, of course, that would be an ideal national park, which is not known to exist by the Laws of Nature.

So, what is the conclusion? We can hardly say that there is nothing to worry about. There is, but these are situations which have been recognised, and which can be solved. The Galapagos National Park is threatened for various reasons, and it has been recognised by friend and foe, in our country and abroad. However, I think that we are still out of danger, that we are still a 'normal' national park, with its problems and virtues. Maybe we are too well known all over the world. But, on the other hand, it has probably been that same international support which has kept us out of peril, and if we can keep it up, there will not be, for long, such a thing as a Galapagos National Park World Heritage Site "in Danger".

Michael Bliemrieder is Head of the Technical Department of the Galapagos National Park, Ecuador.

World Heritage operations in south-east Asia - current status and future directions

NATARAJAN ISHWARAN

World Heritage activities within ten countries within the geographical region broadly referred to as south-east Asia are considered. Of these ten countries, eight have ratified the World Heritage Convention, but the two countries with the most developed economies in the region have not yet done so. The paper updates the current status of the implementation of the Convention in the eight countries concerned. This is followed by an overview of protected area management issues common to the eight countries. Finally, some suggestions for planning future operations of the Convention's natural heritage and cultural landscapes aspects are described. The World Heritage Convention is called upon to pursue an operational strategy which addresses the concerns of the region and aims to reach two goals: an 'internal' goal of maintaining the Convention's credibility by applying the listing process strictly to the most outstanding sites, and an 'external' goal of providing support for site management so that World Heritage sites become centres of excellence for protected area management at local, regional and national levels.

THE GEOGRAPHICAL REGION broadly referred to as south-east Asia, and the geopolitical grouping known as ASEAN (Association of South-East Asian Nations), are increasingly becoming synonymous. The founding members of ASEAN were: Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand. Vietnam became ASEAN's seventh member in 1995. Three other south-east Asian countries, namely Cambodia, Myanmar (previously Burma) and Laos, are expected to join ASEAN by the year 2000.

Of the ten countries under consideration, Brunei and Singapore, perhaps the wealthiest nations and the most developed economies within ASEAN, are neither UNESCO Member States nor States Parties to the World Heritage Convention. The other eight members of ASEAN (often referred to as the 'ASEAN-8' in this paper) have all ratified the World Heritage Convention; Philippines was the first to become a State Party, in 1985; others entered the fold of the Convention in the following order: Laos, Thailand and Vietnam (1987); Malaysia (1988); Indonesia (1989); Cambodia (1991) and Myanmar (1994). As the Pacific Rim grew to be one of the motors driving the global economy, equivalent in power to Europe and North America, these eight ASEAN countries have benefited to varying extents. Economically, Malaysia and Thailand appear to be ahead of others, while Indonesia and the Philippines follow closely. The other four nation states, namely, Cambodia, Laos, Myanmar, and Vietnam have opened their economies only partially and/or more recently, in the early 1990s. Nevertheless, rapid economic development in these countries has rarely meant parallel increases in resources available to conserve biological and cultural diversity.

This article updates the current status of the implementation of the Convention with regard to the 'ASEAN-8'. This is followed by an overview of protected area management issues common to those eight ASEAN countries. Finally, some

suggestions for planning future operations of the Convention's natural heritage and cultural landscapes aspects are described.

Implementation of the World Heritage Convention among the 'ASEAN-8'

The World Heritage sites among the 'ASEAN-8' recognised solely on the basis of natural heritage criteria are:

- Ujung Kulon National Park (Indonesia).
- Komodo National Park (Indonesia).
- Tubataha Reef Marine Park (Philippines).
- Thung Yai Huay Kha Khaeng Wildlife Sanctuaries (Thailand).
- Ha Long Bay (Vietnam).

Only one site within the 'ASEAN-8' has thus far been recognised as a cultural landscape of outstanding universal significance: Ifugao Rice Terraces (Philippines). Together with other Pacific Rim countries of Australia and New Zealand, the Philippines has been a pioneer in testing the application of the cultural landscape criterion, adopted only recently by the World Heritage Committee at its sixteenth session held in Santa Fe, New Mexico, USA, in December 1992. The Ifugao Rice Terraces World Heritage Site is an ingenious illustration of the use of the World Heritage Convention to strengthen the conservation status of a traditional agricultural system. A unique system of terrace construction, irrigation and water resources management, and the continued use of traditional crop varieties, it has valuable lessons to offer to current global debates on the significance of indigenous agro-ecosystems management to biodiversity conservation (Jianchu and Ruscoe 1993).

There are three sites among the 'ASEAN-8' group of countries which have been nominated by the States Parties concerned, but the decision on their inclusion in the World Heritage List has been deferred by the Committee pending revisions to the nominated area. The three sites are:

- Lore Lindu Biosphere Reserve (Indonesia).
- St Paul's Subterranean River Park (Philippines).
- Khao Yai National Park (Thailand).

The governments of the Philippines and Thailand are actively considering, as recommended by the Committee, expanding the nominated areas by including adjacent protected areas. In the case of St Paul's in the Philippines, this requires complex legal negotiations to settle ancestral land claims of indigenous populations. Efforts to revive the Lore Lindu Biosphere Reserve as a World Heritage Area have, however, remained dormant since the Committee deferred the nomination of this site in 1991. Areas in the vicinity of Lore Lindu are home to the interesting cultural features of people indigenous to Sulawesi, where this site is located. Hence, the nomination of Lore Lindu has the potential to be re-nominated as a mixed site; i.e. a site whose nomination on the World Heritage List is justified by the State Party under both cultural and natural heritage criteria. At present there are no mixed World Heritage sites in south-east Asia. The cultural landscape criterion is part of the 'cultural set' of criteria for inscription of a site on the World Heritage List. It is however, interesting to note that IUCN (1982) identified Angkor Wat as one of the 'World's Greatest Natural Areas', suggesting that it merited inscription on the World Heritage List. But when Cambodia became a State Party to the Convention, in 1991, and nominated Angkor

for inclusion in the World Heritage List, the nomination was based purely on cultural heritage criteria.

At present, Indonesia is preparing a nomination for the Lorentz Nature Reserve in the province of Irian Jaya. Some discussions and/or efforts have been made with regard to the preparation of nominations for parts of the Tonle Sap Lake (Cambodia), a cluster of protected areas in the Khammouane Province (Central Laos) and for a group of islands off the Andaman Coast (Thailand). Malaysia, having ratified the Convention in 1987, has not yet nominated any of its national parks and similar reserves for consideration as World Heritage by the Committee. Identification of potential areas for nomination as World Heritage in Malaysia may have to follow the development of a national consensus of potential sites deriving from negotiations between authorities in Peninsular Malaysia and the States of Sabah and Sarawak. The other country which is yet to become active in identifying sites for nomination as World Heritage is Myanmar, the last of the ASEAN-8 Countries to ratify the Convention in 1994.

Interest in the work of the Convention has been growing within south-east Asia. Thailand became the first country in the sub-Region to host a session (eighteenth) of the World Heritage Committee, in Phuket, Thailand, in December 1994. The two Indonesian natural heritage sites, namely Ujung Kulon and Komodo National Parks, have used the resources of the World Heritage Fund to significantly improve site management. The management of the Ujung Kulon National Park, which has benefited from bilateral cooperation from the government of New Zealand during the last five years, has in addition, used the resources of the World Heritage Fund to construct a ranger's station and implement an innovative water resources development project in the buffer zone village of Cigorondong. In return for the project's provision of a water delivery mechanism for drinking, fishing and irrigation, the villagers of Cigorondong entered into a formal agreement with the Park's management to protect the catchment of the river whose water benefited them. With water being obtained from storage and purification tanks, the villagers have stopped entering the Park to collect water, cut or collect firewood and hunt wildlife.

The management of Komodo National Park of Indonesia has obtained assistance from the Fund for purchasing motor boats for effective patrolling of coastal areas

against dynamite fishing and other illegal activities. The Park has been provided with a GIS-GPS system, including training of a Park staff member on the system's operations and maintenance. The system has been used in the preparation of a map of the Park showing the different zones. Komodo staff also received considerable training assistance from the World Heritage Fund, including the training of two members of its staff on Coastal and Marine Protected Area Management, in a course jointly organised by the Great Barrier Reef Marine Park Authority (GBRMPA), and the University of Queensland, Australia.

Indonesia's Komodo National Park contains 95% of the world's population of Komodo dragons, and is a World Heritage Site partly because of its importance for this species. Photo: Jim Thorsell/IUCN.



An overview of key protected area management issues in south-east Asia

From the point of view of their relationship to the future of the implementation of the natural heritage and cultural landscape aspects of the World Heritage Convention, the following four issues are worthy of special consideration.

Integrating biodiversity conservation and socio-economic development

The Integrated Conservation and Development Project (ICDP) approach is identified with the work of Wells *et al.* (1992) and "draws upon experience in both development and conservation projects" and looks for "ways to complement biological considerations with socio-economic analysis" (Miller 1996). As Miller (1996) has rightly noted, UNESCO-MAB's Biosphere Reserve approach to management is comparable to, and pre-dates, the ICDP approach; other approaches, such as that promoted by Ecosystem Management (Ecological Society of America 1995) are also complementary to ICDP. As efforts grow to evaluate the experience in applying these approaches in site-specific situations (see Wells 1994, UNESCO 1995) some key lessons are emerging:

- Integration of biodiversity conservation and socio-economic development concerns are made easier at larger geographical scales of planning. In recognition of this, some countries, such as Indonesia, have made 'spatial planning' a legal requirement in development planning at the regional (provincial) level.
- There are likely to be limits to integration; i.e. there may be minimum levels of protection needed for biodiversity conservation and even the lowest intensity of resource use may have to be sanctioned against in some 'core' areas or zones.
- Greater efforts may be needed to raise awareness of the role of 'core area biodiversity' in socio-economic development in buffer and other zones outside the core; in addition, provision of conditions for the survival of satisfactory levels of biodiversity outside of the core require greater levels of commitment and investment.

A growing trend towards decentralised governance

In most south-east Asian countries, legislation is being enacted to strengthen the hand of local government authorities in identifying priorities, elaborating policies and implementing programmes of socio-economic development. The responsibilities of government conservation agencies are following a similar path of devolution of power or 'vertical decentralisation'. Parallel to this process, there has occurred a trend towards a 'horizontal decentralisation' (Mintzberg 1983) of management decision making – most decisions made by protected area managers are increasingly influenced by a broad range of groups, e.g. non-governmental and voluntary organisations, scientists and academics, international donor agencies, local industrial and private sector organisations etc. These trends in decentralisation of governance and decision making can have significant impacts on the prospects for conserving large tracts of natural areas and reducing the rate of habitat fragmentation.

Protected areas in coastal and marine (including small island) ecosystems

Identification and designation of protected areas in coastal and marine ecosystems has always lagged behind the pace of those activities in terrestrial ecosystems. In

addition, protected area management principles and practices, developed on the basis of experience in working with terrestrial ecosystems, have to undergo considerable modification in their application in coastal and marine areas. Protected area management in coastal and marine areas must contend with high population and development pressure. People tend to depend heavily on coastal areas for food and other livelihood needs and these same areas often tend to be of significant interest to biodiversity conservation. South-east Asia, with large archipelago-nations such as Indonesia, must accelerate its efforts to protect whatever remains of its coastal and marine ecosystems from indiscriminate use. The East Asian Seas, adjacent to the south-east Asian nations of concern in this paper, are recognised to be the global centre of coral reef diversity (Bleakley and Wells 1995).

Capacity building and training

The south-east Asian Region may be facing a dilemma in the growing mismatch between the increase in the need for well qualified and effective protected area managers and the near total lack of attraction, among youth, for protected area management as a preferred career pathway. The 'disciplinary core' of protected area management has undergone fundamental changes, as management has to contend more and more with socio-economic development concerns and less with biology and ecology of the managed area. The primary set of skills and knowledge needed for a protected area manager are more in the realm of political negotiations, interpersonal communications, advocacy and fund-raising rather than in building species inventories or undertaking habitat surveys. Needless to say, the manager has to be able to acknowledge the need for biological and ecological studies as aids to the decision-making process and be able to commission the necessary studies to be carried out by academic and research institutions. Perhaps the prestige of protected area management as a profession has grown far more quickly in the international, than at the national or local levels. Social prestige and economic rewards that protected area managers or staff receive remain modest and are still far below those associated with conventionally favoured professions in the medical, engineering and scientific spheres.

The future of World Heritage operations in south-east Asia - possible directions

The World Heritage Convention, in fulfilling its role as an international legal instrument that conserves natural and cultural heritage diversity, must pursue an operational strategy in south-east Asia that addresses and helps to resolve the major protected area management concerns mentioned above. In attempting to do so the Convention's operations should aim to reach two, sometimes divergent, goals:

- An 'internal' goal of maintaining and enhancing the Convention's credibility by treating the listing process as an aid to the conservation of only the best and most outstanding sites.
- An 'external' goal whereby the Convention's back-up and support of site management becomes a predictable and a reliable resource so that World Heritage sites become nodal points of excellence for protected area management at the local, regional and national levels.

In meeting the 'internal' goal mentioned above, there are innovative approaches to managing the operations of the World Heritage Convention, as illustrated by other States Parties like Australia and New Zealand, which are worth taking note of:

1) The credibility of the Listing process is often seen as being inversely proportional to the number of sites listed. However, to advise States Parties who are newly entering the family of the international World Heritage community to cut back on the number of sites which they intend to nominate is often seen as unfair and unacceptable by such States Parties.

2) The solution to the contradictions introduced by the need to maintain the credibility of a 'select Listing process' can be resolved by moving away from the thinking of "one protected area = one World Heritage site", which has dominated the Convention's operations until now. The government of New Zealand showed leadership in this regard when it submitted the nomination of the World Heritage Area (and not 'a site') for south-west New Zealand – Te Wahipounamu. This nomination actually integrated two existing World Heritage Areas, i.e. Mount Cook Wetland and Fiordland National Parks, and added several other protected areas into the new 'Area' nominated as World Heritage. The south-west New Zealand – Te Wahipounamu World Heritage Area is a model ICDP area, where a cluster of core areas have been given World Heritage status. In doing so, and recognising the management of buffer and other zones surrounding the cluster of cores as integral to the maintenance of the integrity of the whole World Heritage Area, the south-west New Zealand nomination achieved the twin objectives of reducing the number of World Heritage Sites from 2 to 1 while expanding the influence of the management of the World Heritage Area to a whole geographic region within New Zealand. Other World Heritage Areas in Australia, e.g. the Wet Tropics of Queensland, Australia, have also built on the 'cluster-based' nomination strategy. It is clear that similar clustering of both natural and cultural heritage areas has significant potential for application in south-east Asia, particularly in Indonesian and Philippine islands. It is imperative that such World Heritage Area nominations be attempted for a cluster of protected cores and their adjacent habitats in Sumatra (Indonesia), Palawan (Philippines) etc.; such islands are already recognised as separate biogeographic provinces within the Indo-Malayan realm.

3) If World Heritage operations are to turn towards an 'area', instead of a 'site', in designing nominations it follows that far greater efforts must go into identifying and preparing the basis for such 'areas' to be nominated as World Heritage than is current practice. This would also require that other related aspects of the Convention are reviewed; for example, at present, preparatory assistance is the only kind of support offered from the World Heritage Fund, which has a formal ceiling set by the World Heritage Committee at US\$15,000. If nomination strategies adopted by States Parties in south-east Asia and elsewhere in the future are to move away from a 'site' to an 'area' approach, then this ceiling may either have to be increased considerably or other financing arrangements may have to be worked out. Nomination of an area as World Heritage should preferably be preceded by thorough research in order to gather data to illustrate and justify World Heritage values and set up satisfactory management regimes and international finance support mechanisms.

These points will have an impact on the 'external goal' of operations mentioned; i.e. World Heritage Areas becoming nodal points of excellence for protected area management at the local, regional and national levels. A large World Heritage Area built on an approach of clustering individual protected areas has greater potential to network between site managers within that World Heritage Area, as well as between the managers of the World Heritage Area and others within the State Party and the broader global Region.

In recognition of the need to build networks of site managers a first workshop was organised under the sponsorship of the Wet Tropics Management Authority, responsible for the Wet Tropics of Queensland, in Australia. The workshop, convened during April 1997, has led to the establishment of a Regional Network for the Management of World Heritage for south-east Asia, south-west Pacific, Australia and New Zealand.

Site managers' workshops are seen as a mechanism for generating information that can enable the drafting of case studies for use as training materials in future workshops and seminars. It appears that, while the global conservation community has shown considerable leadership in seeking alliances with a range of actors among indigenous populations, business communities, NGOs etc., and brought new knowledge to benefit protected area management practice, it has lagged behind in documenting the vast store of management experience and knowledge possessed by current managers as teaching aids and/or training materials for future practitioners.

The Strategic Action Plan for Training Natural Heritage Specialists, which was approved by the World Heritage Committee, in Berlin, Germany, in December 1995, foresees the development of training materials based on case studies drawn from World Heritage Areas to be a priority activity. It seems ironic that during the last three decades, while 'management' has grown to be an area of expertise widely sought after by youth, protected area management remains an obscure and ill-defined area of speciality among broad sectors of society. The reason for this may be related to the fact that there is insufficient interaction between practising managers and academic and training institutes to build a 'knowledge-base' that has been verified and tested by practitioners. The World Heritage Convention has a significant potential leadership role to play in building such a knowledge base and an associated training methodology and system that will establish and maintain linkages between current and future protected area managers. In doing so, the Convention can significantly contribute to raising the profile of the profession of protected area management in society.

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Strategic Environmental Assessment of development around Victoria Falls, Zambia/Zimbabwe

NYAMBE NALAMINO AND PETER-JOHN MEYNELL

The governments of Zambia and Zimbabwe, aware of the increasing pressure from tourism developments around the World Heritage Site of Victoria Falls, requested IUCN to coordinate a bi-national team to carry out a Strategic Environmental Assessment (SEA) of developments around the Falls, and to prepare a skeleton Management Plan. A ten-year time horizon was used to develop four growth scenarios for visitor numbers and the impacts of increased visitor accommodation, tourism activities and urban growth were considered. The different aspects considered included urban and land-use planning, tourism analysis, sociological and cultural studies, landscape and visual impact analysis, hydrological changes, wildlife and vegetation ecology, archaeological aspects, noise and environmental economics.

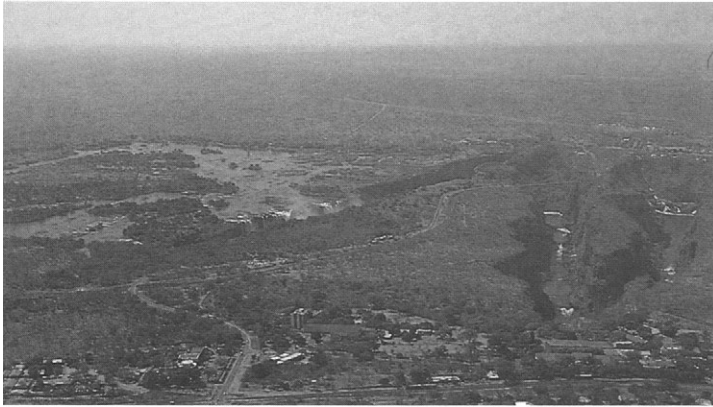
The SEA concluded that the level of sustainable development in the area lay around the medium growth scenario, but was lower on the Zimbabwean side (where developments were already well advanced) than on the Zambian side which had been experiencing long-standing economic decline. A number of specific management measures and guidelines were suggested and at a final workshop in March 1996, which was attended by representatives of all the major stakeholders, a commitment was given by the governments of both Zambia and Zimbabwe to prohibit any further development within the boundary of the World Heritage Site, and to use the planning and management guidelines suggested by the study team for future developments.

One of the major concerns for the future was the lack of coordination for planning and management within the different agencies in each country and between the two countries. There have also been no formal mechanisms for stakeholder involvement in the planning and management processes. Proposals were put forward for a number of different institutional options for cross-border coordination and stakeholder participation which are currently under consideration by the two countries.

The Strategic Environmental Assessment process is a good example of a process for moving towards greater cross-border cooperation in the management of shared World Heritage Sites.

The development of an area surrounding an important natural resource, the careful planning of tourism facilities and the environmental management of protected areas are difficult tasks under any circumstances. Care has to be exercised not to allow tourism development to destroy the very thing which the visitors have come to enjoy, and hence undermine the economic and social viability of the whole area. The planning process should take place with rounds of consultation with local communities and stakeholders, discussions with different agencies, detailed studies and the production of master planning documents. The ongoing management should provide ample opportunity for local involvement and openness about the state of the natural resource.

Where the natural resource in question is shared between two countries, especially where it is considered to be one of the wonders of the natural world – indeed a World



*An aerial view of
the Victoria Falls.
Photo: Peter-John
Meynell.*

Heritage Site – and where it is an essential tourist ‘hot spot’ and economic ‘gold mine’, the stakes are much higher and the difficulties of getting agreement about the limits to development and the use of the site are much greater. The situation is exacerbated when there is a strong imbalance in the development which has already taken place on one side compared to the other; this brings with it a feeling of resentment on the less developed side that the site is being damaged before much economic benefit can accrue to

that side. Then there are differences of policy in relation to conservation, tourism development, privatisation, national security etc., coupled with any previous history of conflict which may have taken place in the past.

This paper describes the process of moving towards cross-border coordination in the planning and management of the area around a World Heritage Site through the mechanism of a jointly commissioned Strategic Environmental Assessment. This is the situation at Victoria Falls, a World Heritage Site, lying on the border between Zambia and Zimbabwe. Until recently no real mechanisms for cross-border management of the site were in place, and developments were taking place at an extremely rapid rate on the Zimbabwean side, while the Zambian side was suffering from prolonged economic decline. Indeed, when in 1989 World Heritage Status was granted to the site jointly between the two governments, no mechanisms for cross-border coordination were identified although management agencies on both sides were clearly identified.

The other critical consideration was that since the World Heritage Site itself is quite small, most of the development pressures are on areas around the Victoria Falls outside of the World Heritage Site. Thus management of the site has to include a much wider area around it, including planning for the expanding urban areas. Thus coordination in planning for the wider area is necessary in order to protect the World Heritage Site, involving coordination with a wide variety of different agencies not normally involved with planning in natural World Heritage Sites.

During 1994, the governments of both Zambia and Zimbabwe were worried about the situation around Victoria Falls and agreed that a Strategic Environmental Assessment should be carried out to assess the cumulative impacts of development over the next ten years and that a skeleton management plan for the area should be prepared. They requested IUCN'S Regional Office for Southern Africa to coordinate the study and Canadian CIDA agreed to fund the process. The study was started with a scoping workshop in Livingstone in November 1994 and, after a detailed study period between May and December 1995, finished with a final consultative workshop in March 1996.

What is a Strategic Environmental Assessment?

A Strategic Environmental Assessment (SEA) has a different perspective and purpose compared to conventional Environmental Impact Assessments which tend to consider the impact of one development upon an area, e.g. a dam or single hotel complex, or to compare a few alternative options at different sites. They rarely consider the

cumulative impacts and only give guidance about whether the development should go ahead or not, and the necessary mitigation measures if it does.

The SEA is a much more generic planning tool which takes the longer-term, cumulative view without considering particular developments. It can be applied to policy changes at the sectoral level or, as in this case, at a regional planning level. In such an instance, one assesses the status of the natural and social resources and their capacity to carry different levels of development. The SEA makes a contribution to land use and urban planning, identifying zones for different uses from strict protection through to land for development: it tries to show what the overall level of development the area as a whole can accept without damaging both the principal natural resource – in this case, the Falls and the adjacent stretches of the Zambezi River – and the less sensitive areas around it.

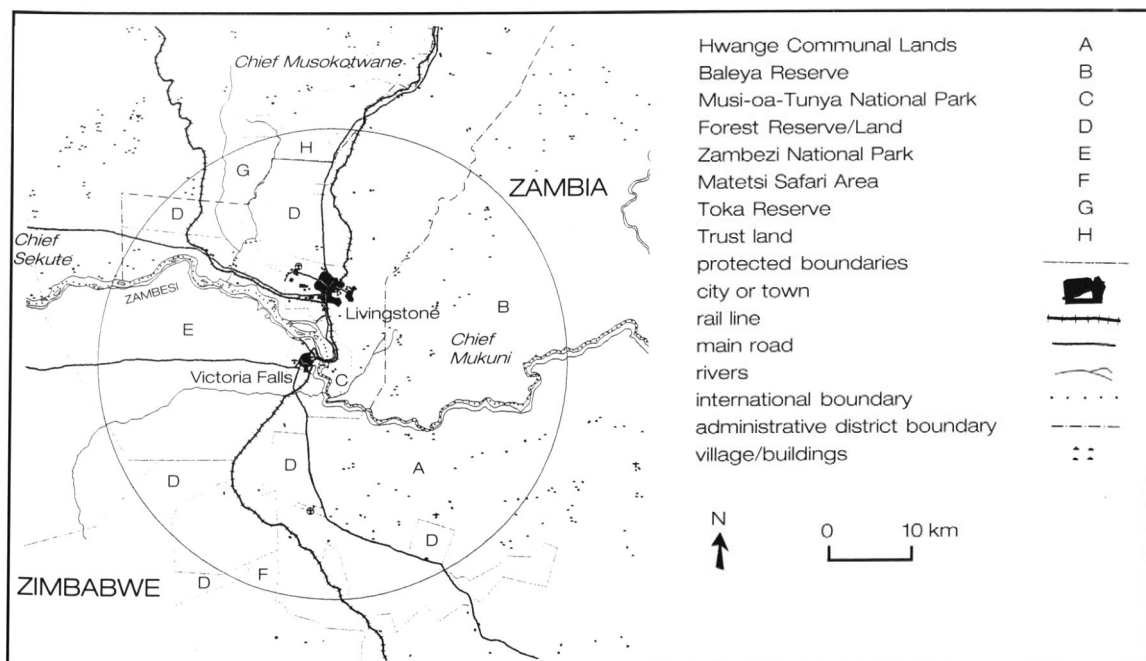
Victoria Falls - a brief site description

Victoria Falls is a unique geomorphological feature lying on the Zambezi River, dividing the Upper and Middle sections of the river. Its uniqueness lies in the fact that it is the widest single curtain of falling water in the world – 1.4 km wide and 108 m deep – and clearly exhibits the geological processes of the steady cutting back of the basalt through time, forming a series of eight zig-zag gorges. Its attractiveness to visitors comes from the fact that it can be viewed for the full width of the Falls from the bank on either the Zambian or Zimbabwean side, and the great cloud of spray gives rise to its African name – Mosi-oa-Tunya or “the Smoke that Thunders”.

The Falls were granted World Heritage Status on two counts – as a “superlative natural feature” (criterion iii) and as an exceptional example of significant on-going geological processes (criterion ii). The site comprises:

- A series of eight basalt gorges formed by the retreating waterfall.

Figure 1. Location of Victoria Falls on the Zambia/Zimbabwe border.



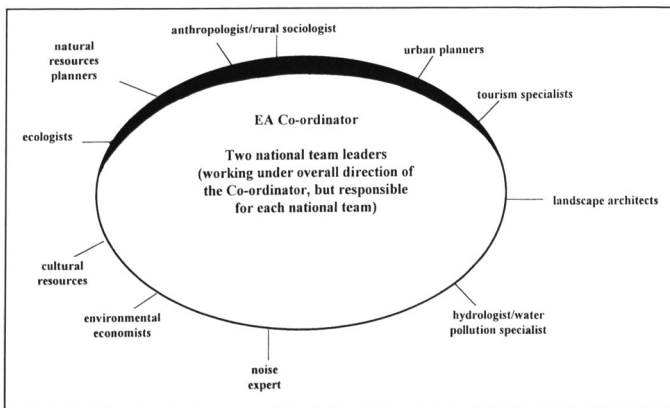
- The Falls themselves forming the spray cloud rising several hundred metres into the sky.
- The 'rainforest' maintained by the perennial spray in the air on the opposite bank to the Falls.
- The wide, meandering and braided river valley above the Falls, together with its typical riverine forest and islands.
- Cultural resources consisting of archaeological (Stone Age) and historical sites and the bridge across the Zambezi built in 1905 across the first gorge.

The map (Figure 1) shows the World Heritage Site which encompasses three National Parks – Mosi-oa-Tunya National Park on the Zambian side and Zambezi and Victoria Falls National Parks on the Zimbabwean side. Of particular note are the two towns – Livingstone on the Zambian side with a population of 95,000 people about 20 km north-east of the Falls, and Victoria Falls Town, a rapidly growing tourist town of 25,000 people sited immediately to the south of the Falls on the Zimbabwean side. There are also a number of rural communities on both sides of the border, with their particular cultural and sacred sites.

Since 1988, tourism has been growing very rapidly in Zimbabwe and nowhere more so than at Victoria Falls, where the annual number of visitors has grown at a rate of 23% per year. This has been boosted by the opening up of the South African market and has required an increasing number of hotels and lodges to be built and ever more activities provided for visitors, including canoeing, white water rafting, bungee jumping from the bridge (the highest commercial jump in the world) and helicopter and light aircraft flights over the falls, as well as the traditional safari type activities.

In contrast, on the Zambian side, there has been a fairly continual economic decline since the 1970s; at that time Livingstone had a significant agricultural and industrial base, but many companies have now gone out of business, and tourism has not yet replaced them as a major employer, although there are a number of hotels and lodges on the Zambian side.

Figure 2.
Composition of the strategic environmental assessment team by skill and relative time input (the larger the area of shading near a specialist the greater his or her time input).



The Strategic Environmental Assessment process

The Joint Permanent Commission is the formal mechanism for bi-lateral negotiation and discussion of issues at ministerial level between the two countries. Through its Technical Sub-committee on Tourism and Natural Resources it commissioned IUCN to coordinate the Strategic Environmental Assessment of developments around the

Falls. In November 1994, a scoping workshop with representation of the major stakeholders was convened in Livingstone which established the following criteria for the study. It should:

- Cover a 30 km radius around the Falls, on both sides of the Falls.
- Have a 10-year time horizon, i.e. consider cumulative developments to the year 2005.
- Be carried out using a series of scenarios to model changes and their impacts.

The SEA proper started in May 1994 and a team of experts drawn mainly from

government agencies was assembled to carry out detailed studies (see Figure 2). The SEA was to be coordinated by an international IUCN Team coordinator and co-Team Leaders from both Zambia and Zimbabwe. Balance in the team and in the expertise required was one of the most important criteria. The two national co-team leaders were selected from the lead agencies on each side – the National Heritage Conservation Commission in Zambia and the Department of Natural Resources in Zimbabwe.

A Steering Committee consisted of representatives from the key agencies on both sides with an interest in the management of the area. These included Tourism Ministries, Town/Municipal Councils, planning and land-use departments and National Parks, as well as the two lead agencies. This Steering Committee met at critical points during the process and especially when considering the recommendations for the future institutional mechanism for cross-border coordination.

The process was marked by a series of exercises in public consultation, since the involvement of all stakeholders and communities was necessary for the identification of all concerns, problems and management measures. These included a detailed sociological study involving interviews with community leaders and members, community organisations, from both rural and urban areas, business leaders and staff of local agencies. Public consultative meetings were held on both sides of the border, open house opportunities for private interviews were provided and the process was well-publicised in the media. At the end of the study a final consultative meeting was organised, bringing together representatives from all stakeholders on both sides of the border; the purpose of this meeting was to present the findings and allow discussion and suggestions for amendment of the recommendations for management measures to be agreed.

Analysis

The first task of the study was to establish appropriate scenarios. An analysis of the issues identified led through the development of a series of 'problem trees' (an example is shown in Figure 3) to the highlighting of visitor numbers as the key criterion which would lead to changes in the quality of life in four areas – wildlife and general environment, tourism, urban life and rural life. When trends in visitor numbers were assessed the following scenarios were developed as models for the study. It is stressed that these are not necessarily predictions for planning for the year 2005 but models against which to assess impacts. The scenarios used are shown in Table 1.

Growth in visitor numbers implies an increase in related activities, and these were qualified as far as possible. Such activities include: the building of hotels and lodges in different areas, urban growth dependent upon the need to service the increased visitor numbers, the rate of deforestation for fuelwood, curio carving and agricultural land and the various tourist activities. The detailed studies led to the identification of a series of impacts and their assessment according to whether they would be beneficial or adverse, and their degree – low impact, significant impact and major impact. These impacts were described graphically in a series of matrices. The cumulative impacts of each scenario were calculated by summing the numbers of impacts for each activity/issue. It is apparent that with the higher growth scenarios, the economic benefits increase, but major environmentally and socially adverse impacts also increase, as well as economic costs to mitigate these adverse impacts.

In addition to a qualitative assessment of the cumulative impacts, an estimate of the likely effect upon the revenue from tourism resulting from loss of wilderness

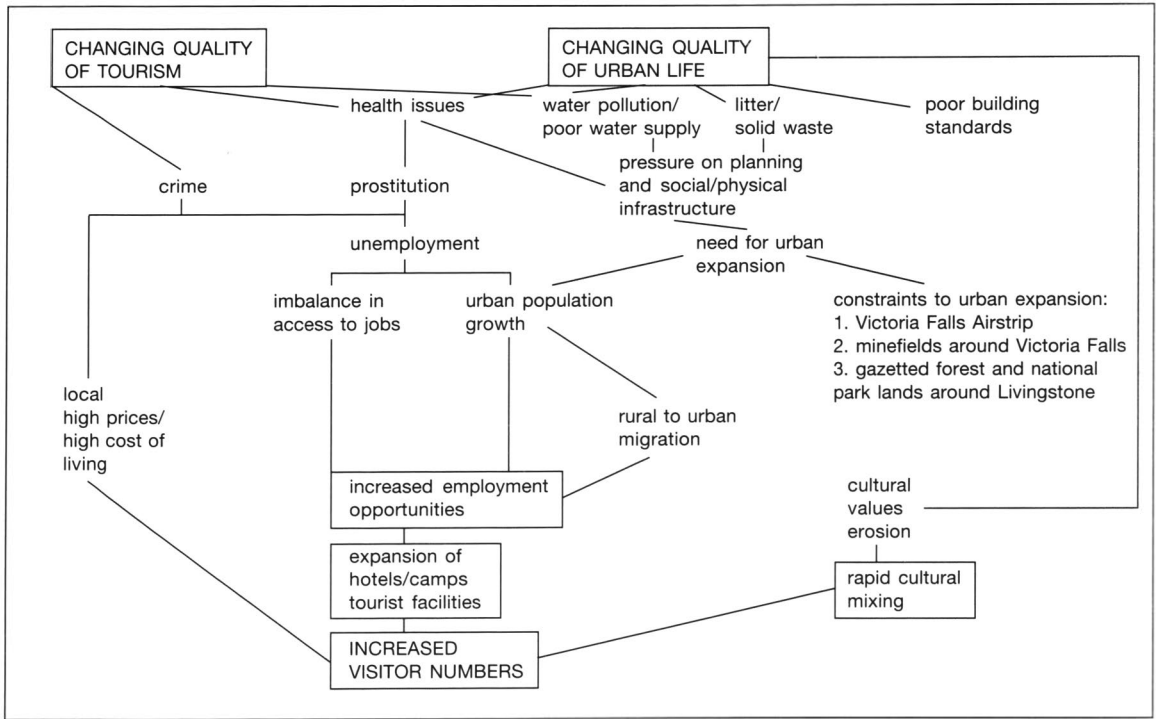


Figure 3. Example of a 'problem tree' analysis, showing cause and effect linkages leading to changing quality of tourism and urban life.

value with the different scenarios indicated that substantial reductions might be expected for the high and supergrowth scenarios as a result of visitors not returning and spreading a poor reputation about the Falls due to over-development.

The conclusion of the analysis showed that under current conditions of planning control and resource management at Victoria Falls, the overall limits to growth lay between the low and medium growth scenarios. Hotel and lodge development in and around Victoria Falls Town is at the limit now and any further developments of the town will strain the existing water supply, waste water treatment, refuse disposal and other urban facilities. The limits of sustainable use for other activities were suggested.

In the skeleton management plan for the whole area, these limits were used to indicate usage zones from strictly protected zones, such as the islands in the river, through to zones for hotel and lodge development and urban zones. Guidelines for planning and management of the biophysical resources, especially the rainforest, the gorges and the riverine forest areas upstream, were developed. In addition planning guidelines for the urban areas and for addressing the social issues of poverty and

Table 1. Scenarios for visitor numbers to the Victoria Falls area.

	Zimbabwe	Zambia	total
present	220,000	66,000	286,000
low growth	440,000	119,000	559,000
medium growth	660,000	165,000	825,000
high growth	1,100,000	300,000	1,400,000
super growth	1,100,000	760,000	1,860,000

inequity which, by fostering social unrest, have the potential to undermine the credibility of the area as a tourist venue.

Mechanisms for cross-border coordination

It was clear from the start that one of the errors made when the World Heritage site status was granted was that no mechanism for local cross-border coordination in the management of the area existed. Official coordination could only take place at the top bi-lateral level, and issues such as the building of hotels which had significant landscape impact from the other side of the river were allowed to go ahead.

One of the major recommendations of the study was therefore that a cross border mechanism should be put in place. Various options for such an institution were put forward and judged against the following criteria:

- Authority – the institution would need the power to apply and enforce joint decisions on planning guidelines, land-use policies and management practices.
- Objectivity and autonomy – the institution should not be subject to the interests of any one agency, but should strive to balance the different interests, while remaining ultimately responsible to the governments of Zambia and Zimbabwe.
- Representativeness – the institution should incorporate representation from the various communities, interest groups and stakeholders.
- Respect for existing institutions – the institution should seek to complement and strengthen the different agencies responsible for different areas and aspects of the environment and society around the Falls.
- Location – the institution should be based locally, with ease of access to its staff from both countries.
- Financing – in addition to some government finance, the institution should be able to raise its own finance to carry out its work.

Its functions were to include:

- Reviewing existing policies and developing common policies.
- Initiating these policies within the legal framework of each country.
- Monitoring, evaluating and adapting these policies as necessary.
- Enforcing these policies, guidelines and management measures.
- Carrying out environmental, social and economic research within the Victoria Falls area and publishing the results.
- Taking special responsibility for coordinating the management of the World Heritage Site.
- Providing a mechanism for participation of all stakeholders.
- Increasing public awareness about development and environmental issues around the Falls.
- Advocating decision makers in both countries to address various issues and concerns outside its jurisdiction.

The various options included mechanisms such as setting up a Victoria Falls Unit within the Zambezi River Authority, setting up a Technical Committee of the Joint Permanent Commission, and setting up an autonomous authority for the area or setting up a Victoria Falls Trust. These basically spanned the continuum of more or less government predominance and autonomy with more or less room for stakeholder involvement. Essentially the choice may depend upon the degree to which the institution has the power to enforce its decisions, or whether it relies more upon stakeholder pressure and influence to conform to the decisions taken.

Present situation

At the final workshop in March 1996 both governments committed themselves to setting up an appropriate cross-border mechanism. They also committed themselves not to allow further development within the World Heritage Site. The Strategic Environmental Assessment report was well received since it was recognised that at last there was some sort of comprehensive baseline document on which to base policies and to monitor changes.

However, six months down the line no formal agreement has yet been reached on the appropriate cross-border institution. Nevertheless, on each side steps have been taken to use and implement some of the recommendations and guidelines in the report. Indeed some are being used to resolve conflicts. A number of new activities on the Zambian side are being proposed, e.g. abseiling and ballooning. Appropriate EIAs are required for these proposals, as recommended by the report.

On the Zambian side, the National Heritage Conservation Commission and the National Parks Department have set up a joint management committee to agree on management measures for their side of the World Heritage Site, and similar, but less advanced, discussions are being held on the Zimbabwean side between National Museums and Monuments and National Parks and Wildlife Management.

Also on the Zimbabwean side, although some hotel and lodge development is still proceeding, IUCN-ROSA have prepared a funding proposal for the preparation of the statutory Master Plan for Victoria Falls town and the wider area around it in conjunction with the Department of Physical Planning.

Conclusions

- When approving new World Heritage Sites which straddle a border between two nations or even provinces, an institutional mechanism needs to be put into place for cross-border coordination as well as identifying responsible management agencies on each side.
- In existing cross-border World Heritage Sites, the options for such institutional mechanisms need to be actively explored and appropriate mechanisms set up.
- The mechanism of a jointly commissioned Strategic Environmental Assessment can provide the starting point for on-going collaboration on the management of key natural resources shared by two nations, especially cross-border World Heritage Sites.
- The importance of maintaining a balance with representation from each country at the level of the Steering Committee, the lead agencies and the two national co-team leaders, and in the team undertaking the detailed studies, should be stressed.
- The role of IUCN and the team leader in providing neutral, objective coordination of such a study until more formal mechanisms for collaboration can be established should not be underestimated.

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Social and economic considerations: funding the flagships

KENNETH E. HORNBACK

For the last ten years the National Park Service (NPS) of the United States has used an economic model called the Money Generation Model (MGM). This model serves to express the value of parks in terms of the economic impact made by people who visit them. To calculate the MGM a park counts non-local attendance in terms of visitor days, a product of number of visitors and their length of stay. The expenditures per day are estimated using a variety of techniques. Visitor days and expenditures are multiplied together to create an estimate of direct expenditures. The MGM is designed with two objectives in mind: to be widely applicable without alteration or modification in order to create a body of comparable estimates, and to produce a basic and conservative estimate upon which further economic analysis can be based.

Due to its simplicity, the MGM is currently calculated for over 300 NPS parks, providing a range of examples from a variety of economic situations for comparison with similar parks in other countries. Although the MGM has many limitations, it serves a purpose of initiating economic dialogue that has proven useful and informative to many people, for many purposes and widely different circumstances.

For the last ten years the National Park Service (NPS) of the United States (US) has used an economic model called the Money Generation Model (MGM). This model serves to express the value of parks in terms of the economic impact made by people who visit them. The MGM produces an initial, provisional or benchmark estimate of spending, taxes and jobs. It costs nothing to compute and can be completed by park managers themselves.

The MGM is like a piece of coloured glass. When you look at the world through the MGM glass, the natural, cultural or historic values can be seen from an economic point of view. It becomes apparent that the economic value varies depending on resource use. The use varies according to the season, location, facilities and supporting activities of business, government and the surrounding community.

Basically the MGM works like this. The park counts non-local attendance in terms of visitor days, which are a product of number of visitors and their length of stay. The expenditures per day are estimated using a variety of techniques. Visitor days and expenditures are multiplied together to create an estimate of direct expenditures. A multiplier can also be used to add the effect of indirect (induced) expenditures. The entire explanation, definition of terms, and calculations are all covered in The Money Generation Model, available free from the Socio-Economic Studies Division, United States National Park Service, PO Box 25287, Denver, Colorado, 80225. The MGM is designed with two objectives in mind. First, to be widely applicable without alteration or modification in order to create a body of comparable estimates. Second, to produce a basic and conservative estimate upon which further economic analysis can be based.

The MGM was created to promote discussion of economic factors by community leaders and park managers. The MGM is designed to be the lowest rung on a ladder

of more complete and sophisticated economic models. Although the MGM has many limitations, it serves the purpose of initiating economic dialogue that has proven useful and informative to many people, for many purposes and widely different circumstances.

The varied economic impact: 312 MGM examples

Because of its simplicity, the MGM is annually calculated for 312 different NPS parks. These parks are spread all over the country. Although the US economy is generally portrayed as highly developed, it is actually a mixture of diverse regional economies. These economies include scores of large population centres, characterised by active service and manufacturing activities. They also include thousands of smaller population centres, characterised by small commercial and agrarian activities. Some examples from the 1994 MGM are given in Table 1.

With so many examples available, the chances are that there is a US park within a regional economy that is roughly comparable to that found around parks in many other countries. The database of MGMs for US parks provides a valuable point of reference for economic analysis in other areas.

One advantage of a simple economic model for parks is that it makes it easier to see how tourism economies can vary.

■ Some parks, such as Death Valley National Park, are geographically remote. Visitors to Death Valley need to be resupplied from local sources soon after the long road trip into the park. In Alaska, however, visitors usually fly in and bring their own provisions because there is no local base of commercial activity. At the gateway to Isle Royale National Park, visitors have a double impact. They stock up on supplies before they ship out to the Lake Superior island for a stay of 3–7 days. On the way back visitors check into accommodations at the gateway community for the steak and hot showers they have earned by ‘roughing it’.

■ Some parks are small enough that it takes only a few hours to see them while others are so large it takes days to travel from one end to another. Of course, the longer the stay in the local area, the greater the economic impact. There are areas of the country where the parks themselves actually serve as staging zones for visits to gateway communities. A place like Gatlinburg, Tennessee, outside of Great Smoky Mountains National Park, is itself an attraction.

■ Some parks like Gateway National Recreation Area in New York receive millions of visits a year, yet have relatively little economic impact on their local communities. Gateway is essentially a local park that draws few visitors from more than 40 miles away. Within that ring, visitors are considered local and are excluded as contributors

Table 1. US World Heritage parks: 1995 economic benefits.

	Mesa Verde National Park	Yellowstone National Park	Independence National Historic Park	Wrangell-St. Elias National Park	Statue of Liberty National Monument
visitor days	474,796	5,626,379	385,185	54,430	1,179,606
visitor sales	\$3,7574,596	\$734,242,460	\$52,665,575	\$18,946,811	\$216,810,816
tax revenue	\$1,502,984	\$29,369,698	\$3,159,934	N.A.	N.A.
local jobs	751	14,685	1,053	189	6,504

N.A.: not available

to their own welfare. Other areas like Canyon de Chelly National Monument have relatively modest attendance volume, yet generate high levels of economic benefit to the local economy.

■ Parks can vary with respect to the location and kinds of expenditures made by visitors. Visitors can spend money for goods and services from local trades people or buy pre-packaged tours from distant tour managers. Some sites are suited to and well supported by activity services (transport, guides, rental equipment), appropriate accommodations (meals and lodging) and consumer goods (mementos, film, local apparel, etc.). Where benefits accumulate depends on who sees and seizes the opportunity.

The essence of the economic issues can be seen more easily through the coloured lens of the MGM. The economic consequence of a park is not simply the by-product of travel expenditures. It is also related to how the park is used by visitors. Use of the park depends on services provided by local people. Additionally, visitation is related to park condition, management and the publicity provided by public media. In other words, the tourism economy is shaped and defined by people, starting with the area manager and including the visitor, tour operator, village mayor and media.

Balancing park use and park protection

By measuring the economic value of the park, the MGM enables it to compete with other economic values and enterprises. However, the real object of value for a community near a park is the experience people pay for, not just the revenue from tourists. For optimum and sustainable benefits from tourism there must be a balance between park use and park protection.

Parks must remain in a relatively natural state to be of value as attractions. If the wild animals of African parks behaved like the semi-domesticated 'begging bears' in some over-visited US parks it would be a disaster for African tourism. On the other hand, if wildlife is so sequestered that it cannot be observed by visitors, it ceases to fill a socio-economic function.

Commercial over-development is another threat to a park's integrity. Excessive commercialisation of a cultural or natural attraction can be a problem in two respects. First, the public attracted to natural and cultural sites is different from the public attracted to commercial developments. When the balance shifts in the direction of commercial development, the market shifts and the economic picture changes. The outcome may not be sustainable. Second, commercial development requires greater infrastructure (waste treatment, transportation systems, public safety support, etc.). The infrastructure costs are paid by the community at large. The benefits, however, may not accrue to the community on an even basis. Considering the seasonal nature of benefits and the chronic nature of infrastructure maintenance, benefits may be much less than claimed. Since commercialisation usually occurs in a piecemeal fashion, it is seldom subject to the detailed level of economic study that is warranted.

The use of the MGM draws attention to a host of relevant factors in addition to basic economic and resource attributes. The process of preparing the MGM requires consideration of such circumstantial factors as logistics, location, access, activities, seasonality, image, markets, demand and turnover. Superintendent Larry Gall of Minute Man National Historic Park notes "the process here is perhaps more important than the economic impact analysis itself". The MGM as a process serves these purposes:

- The MGM enables officials, legislators and taxpayers to see a park's annual 'Return on Investment'.
- The MGM illustrates how visitors, community activities and park management relate.
- The MGM enlarges the perspective of individual participants.
- The MGM creates a basis for cooperative action between people with different objectives.
- The MGM enables the resource manager to communicate with business interests.
- The MGM measures the effectiveness of efforts to maximise revenue and coordinate community efforts while conserving resources for the future.

Park tourism is a renewable resource as long as the park provides the desired experience. The essential value of the MGM is as a device by which one gains new perspectives. To that extent, the MGM is more than an economic model in the usual sense.

What the MGM is not

The MGM is a versatile and thought provoking tool that is finding international application for its immediate and practical utility. Nevertheless, it is nothing other than a rudimentary, first-cut, beginners estimate. It is also designed to be a conservative estimate. The MGM does not take into account such factors as:

- Adjustments in real estate values or taxes.
- Displacement of people and alteration of land use patterns.
- Re-distribution of income between all taxpayers and tourism investors.
- Modification of cultural uses or recreational opportunities.
- Transformation of the commercial environment.
- Shifts in demographic characteristics.
- Conversion or creation of demand for infrastructure.
- Alteration of community lifestyle.
- Additive effects of tourism spending other than meals and accommodations.
- Distributive effects of travel spending outside of the local area.

Other economic models will provide more complete accounting of relevant factors, greater precision among individual calculations, and professional refinement. Unfortunately, for every increment of precision there is an increment of measurement error. Economic factors may include both net costs as well as benefits that cancel out. Ultimately, the value of any model depends on the accuracy of the data it relies on. The first improvement that can be made to the MGM is a visitor use study which measures exact expenditures and where expenditures are made.

Nevertheless, the MGM is a starting point. Use of the MGM will usually raise questions that will require further economic analysis based on user needs. Indeed, the MGM has often been used in conjunction with consultation with experienced economists to produce affordable and credible information for decision-making.

Suggested reading

Walsh, R.G. 1986. *Recreation Economic Decisions*. Venture Pub., State College, Pa.

Kenneth E. Hornback is Chief of the Socio-Economic Studies Division of the United States National Park Service.

The World Heritage Convention workshop, Montreal, 1996

HAROLD K. EIDSVIK

Papers presented and subsequent discussion during the World Heritage Convention workshop, held at the 1996 World Conservation Congress, reflected the professional opinions of the individuals participating in the programme and did not reflect formal positions taken by governments or organisations. The workshop did not receive any formal resolutions or recommendations which were discussed and voted upon. However, the attention of workshop participants was drawn to draft Congress General Resolution 1.67 with respect to the World Heritage Convention. This resolution was subsequently passed in a slightly modified form by the World Conservation Congress and thus forms an official IUCN position with respect to the Convention.

In summary, **RESOLUTION 1.67** commends UNESCO and the World Heritage Committee for the actions they have taken over the first 25 years of the Convention and:

1. Affirms that the World Heritage Convention is one of the most important international instruments available for the realisation of IUCN's mission.

2. Reminds States Parties that many natural sites of outstanding universal value remain unlisted and that the new criteria for cultural landscapes creates an opportunity to include sites in association with the human use of natural resources in an ecologically sustainable manner.

3. Encourages States Parties to:

- Meet their financial obligations to the Convention.
- Include natural heritage specialists on their delegations to the Committee meetings.
- Submit voluntary monitoring reports in compliance with the Operational Guidelines.
- Prepare indicative lists of natural sites.

4. Requests donor communities to recognise the importance of the Convention for conservation and ecologically sustainable development and to give a priority to the funding of World Heritage Sites in Danger.

5. Asks UNESCO to further strengthen the professional resources available to the natural heritage sector in the World Heritage Centre.

6. Calls on IUCN in its various capacities to enhance its commitment to

The Huanglong World Heritage Site in China. Photo: Jim Thorsell/IUCN.



World Heritage with a special emphasis on the work of the Commission on National Parks and Protected Areas [now World Commission on Protected Areas].

7. Calls for specific recognition by IUCN of the 25th Anniversary of the World Heritage Convention during the 1997 programme year.

The Resolution is available in the proceedings of the World Conservation Congress.

Workshop participants made some useful comments on World Heritage, as follows:

- World Heritage is about tomorrow and not about the past.
- A Global Strategy is needed to assist States Parties in the selection of Natural Sites.
- Cultural Landscapes provide new opportunities for site designations.
- Heritage is a bridge between our grandparents and our grandchildren.
- World Heritage in Yellowstone and the Galapagos is a concern of PRESIDENTS.
- World Heritage is a political issue.
- In States having a federated system of government the rights and responsibilities of the different levels of government require elaboration.
- World Heritage involves sovereignty.
- World Heritage flagships are exposed and threatened.
- There is a need for the flagships to be funded.

On technical matters, Workshop participants commented that:

- World Heritage cannot be protected without adequate funding.
- World Heritage cannot be protected without adequate training.
- The criteria for the designation of sites to be placed on the list of World Heritage in Danger require elaboration.
- The requirement that World Heritage nominations have management plans in place is in need of renewed attention.

On other issues, participants urged:

- States Parties to employ World Heritage site designation as a mechanism of support for sites with biodiversity values.
- States Parties to prepare national protected area system plans that place World Heritage sites in a broader context.
- Recognition that World Heritage sites may generate very significant income.
- Linking World Heritage sites with adjacent communities and local people.
- Linkages with organisations such as the International Rangers Federation to provide excellent opportunities for staff and technical information exchanges.
- World Heritage sites to be exemplary in their concerns for the environment.
- Building awareness through enhanced communications and partnerships.

Harold K. Eidsvik, Parcs International, Protected Areas Consulting Services, 135 Dorothea Drive, Ottawa, Ontario, Canada, served as convener of the workshop.

Résumés

Le Panthéon de la nature: IUCN et la Convention sur le patrimoine mondial

JIM THORSELL

Ce document présente l'aperçu du travail effectué par la Convention sur le Patrimoine mondial notamment à propos de son composant naturel. Ce texte est fondé sur celui qui a été préparé pour des présentations par diapositives, celles-ci étant à votre disposition comme outil de formation pour susciter un plus grand intérêt du public et des gouvernements au travail de la Convention. Les photographies ci-jointes ont été prises à partir des diapositives pour illustrer les sites faisant partie maintenant du Patrimoine mondial.

La Stratégie pour le Patrimoine mondial - Perspective pour l'avenir

BERND VON DROSTE

La Convention sur le Patrimoine mondial termine sa 25^{ème} année en 1997. Ce document présente une rétrospective des 25 premières années de la Convention et analyse son futur développement. La Convention sur le Patrimoine mondial est un succès à la fois pour certains organismes des Etats signataires de la Convention et pour un certain nombre de sites inscrits sur la liste du Patrimoine mondial, soit 147 Etats signataires et 506 sites listés sur le Patrimoine mondial à ce jour. Cependant, on a exprimé récemment certaines préoccupations à propos de l'équilibre entre le nombre de sites "culturels" et "naturels", et sur les mécanismes du contrôle de l'état de conservation des sites. Parmi les futurs développements suggérés lors de la Convention sur le Patrimoine mondial, on note la priorité croissante mise sur les activités éducatives et l'éveil de l'intérêt suscité auprès du public et des gouvernements ainsi que de mettre l'accent sur la communication entre les directeurs du site et la proposition d'augmenter les ressources mises à la disposition du Fonds du Patrimoine mondial.

De Caracas à Montréal et au-delà

P.H.C. (BING) LUCAS

Ce document présente un sommaire des réussites faites par le Patrimoine mondial depuis le IV^{ème} congrès mondial sur les parcs nationaux qui s'était déroulé à Caracas au Venezuela en 1992 et les nécessités à prendre pour appliquer les directives de la Convention. Un atelier de travail s'est tenu lors du Congrès de la Conservation mondiale qui s'était déroulé à Montréal en 1996 où on a revu les progrès réalisés depuis 1992 à savoir sur les problèmes des critères du patrimoine naturel, du contrôle, des sites, de l'assistance internationale et des paysages culturels. L'un des résultats intrigant a été le travail ciblé originellement sur la distinction et la clarification des critères utilisés pour la définition du patrimoine naturel car on a suggéré un ensemble communs de critères pouvant être appliqués à la fois aux sites naturels et culturels.

En bref, la Convention du Patrimoine mondial s'est révélée être un outil très efficace pour la conservation, mais on peut en faire encore beaucoup plus pour augmenter l'efficacité de la convention. Les futurs thèmes à traiter sont entre autres le concept des listes pour les sites en série se trouvant à la fois sur plusieurs pays et la manière dont on peut attribuer plus de ressources et de soutien pour maintenir l'intégrité des sites existants. Les membres d'IUCN devraient faire pression sur leurs gouvernements respectifs pour devenir actifs afin de soutenir la Convention du Patrimoine mondial.

Patrimoine mondial en danger

La liste du Patrimoine mondial en danger est tenue pour les sites qui sont menacés et qui doivent recevoir une attention particulière. Actuellement, plus de dix sites du Patrimoine mondial d'une importance naturelle sont sur la liste des sites menacés étant donné leur importance. La liste des sites en danger est une controverse, et on a accusé le Comité du Patrimoine mondial de violer la souveraineté des pays dont les sites sont classés ainsi. La liste des sites en danger a été un succès pour susciter l'attention internationale sur les dangers menaçant ces sites.

Les études de cas ont centré l'attention sur deux sites menacés du Patrimoine mondial qui ont reçu beaucoup plus d'attention ces dernières années. Deux perspectives sur l'insertion de Yellowstone sur la liste des sites menacés du Patrimoine mondial sont présentées par Harold K. Eidsvik, anciennement le Centre du Patrimoine mondial, et Michael Clark, de Greater Yellowstone Coalition. Ensuite, Michael Bliemrieder du Parc National des Galapagos reconnaît le soutien international que la liste des sites menacés a reçu mais il remet en question les problèmes menaçant les Galapagos comme étant complètement différents de ceux menaçant de nombreuses zones protégées dans le monde entier.

Opérations du Patrimoine mondial en Asie du sud-est - état actuel et perspectives pour l'avenir

NATARAJAN ISHWARAN

Les activités du Patrimoine mondial dans dix pays de cette région géographique sont appelées en gros comme étant celles de l'Asie du sud-est. Sur ces dix pays, huit ont ratifié la Convention du Patrimoine mondial mais les

deux pays ayant les économies les plus développées de la région ne l'ont pas signée. Ce document donne l'état actuel de l'application de la Convention dans les huit pays concernés. Puis, il y a un aperçu global des problèmes liés à la gestion des zones protégées qui sont communs aux huit pays concernés. Finalement, on décrit certaines suggestions pour la planification de l'avenir des opérations concernant les aspects d'aménagement culturel et du patrimoine naturel de la Convention. La Convention du Patrimoine mondial a pour objectif de continuer la stratégie opérationnelle traitant des préoccupations de la région ayant pour but d'atteindre deux objectifs: un objectif "interne" du maintien de la crédibilité de la Convention en appliquant strictement le processus d'ajout de sites sur la liste des sites les plus merveilleux et un objectif "externe" de soutien à l'administration des sites afin que les sites du Patrimoine mondial puissent devenir des centres d'excellence pour l'administration des zones protégées aux niveaux locaux, régionaux et nationaux.

Evaluation stratégique environnementale des développements près des chutes de Victoria en Zambie et Zimbabwe

NYAMBE NALAMIRO ET PETER-JOHN MEYNELL

Les gouvernements de la Zambie et du Zimbabwe sont conscients de la pression croissante des développements touristiques autour du site du Patrimoine mondial des chutes de Victoria, et ils ont demandé à l'IUCN de coordonner une équipe binationale pour effectuer l'évaluation stratégique environnementale (SEA) des développements autour des chutes, et de préparer une esquisse du plan d'administration. Une date limite de dix ans a été accordée pour développer quatre scénarios de croissance et on a considéré les impacts de l'augmentation du parc hôtelier, des activités touristiques et de la croissance urbaine. Les différents aspects considérés comprenaient une planification urbaine et territoriale, une analyse du tourisme, des études sociologiques et culturelles, un aménagement du territoire et une analyse visuelle de l'impact, des changements hydrologiques, l'écologie de la faune et flore, les aspects archéologiques, l'économie environnementale et la pollution du bruit.

La SEA en a conclu que le niveau de développement soutenable dans la région avoisinait le scénario de croissance moyenne mais était plus faible du côté du Zimbabwe (où les développements étaient déjà bien avancés) que du côté de la Zambie (où il y avait un déclin économique depuis bien longtemps). On a suggéré un nombre de mesures et directives administratives et lors d'un atelier de travail en mars 1996 où les représentants des principaux participants se sont réunis, les gouvernements de la Zambie et du Zimbabwe ont pris l'engagement d'interdire tout développement ultérieur dans la limite du site du Patrimoine mondial et d'user des directives de planification et d'administration suggérées par l'équipe ayant effectué l'étude pour les appliquer sur les futurs développements.

L'une des principales préoccupations pour l'avenir était le manque de coordination de la planification et l'administration dans les différentes agences gouvernementales et entre les deux pays concernés. Il n'y avait aussi aucun mécanisme officiel invitant les principaux participants à prendre part aux processus de planification et d'administration. On a présenté des propositions pour un certain nombre d'options institutionnelles différentes pour obtenir une coordination frontalière et pour demander la participation des principaux participants, ce qui est sous considération actuellement par les deux pays.

Le processus d'évaluation stratégique de l'environnement est un bon exemple du processus pour obtenir une plus grande coopération frontalière pour le partage de la gestion des sites du Patrimoine mondial.

Considérations sociales et économiques: financement des grands projets

KENNETH E. HORNBACK

Ces dix dernières années, le service des parcs nationaux (NPS) des Etats-Unis d'Amérique a utilisé un modèle économique appelé le *Money Generation Model* (MGM). Ce modèle de financement a permis d'exprimer la valeur des parcs en terme d'impact économique produit par les visiteurs. Afin de calculer le MGM, un parc compte les visiteurs (en dehors des résidents) en journées de visites, soit un produit du nombre de visiteurs et de la durée de leur séjour. Les recettes quotidiennes sont estimées par plusieurs techniques. Les jours de visites et les recettes sont multipliés ensemble pour créer une estimation des revenus directs. Le MGM est conçu pour respecter deux objectifs: une application globale sans modification ou altération afin de créer des estimations comparables et produire une estimation fondamentale et conservatrice sur laquelle on peut baser d'autres analyses économiques.

Grâce à sa simplicité, le MGM est calculé actuellement pour plus de 300 parcs NPS, fournissant beaucoup d'exemples à partir d'une variété de situations pour permettre une comparaison des parcs similaires dans d'autres pays. Bien que le MGM ait de nombreuses limitations, il répond au besoin d'initier un dialogue économique qui s'est révélé utile et informatif pour de nombreuses personnes dans de nombreuses circonstances afin de répondre à de nombreux objectifs.

Resúmenes

Exposición de la fama de la naturaleza: IUCN y la Convención del Patrimonio Mundial

JIM THORSELL

Este artículo provee una vista general del trabajo de la Convención del Patrimonio Mundial y particularmente de su componente natural. El texto se basa en lo que se ha preparado para acompañar un conjunto de diapositivas producido como herramienta de entrenamiento para aumentar el conocimiento sobre la Convención. Las fotos que le acompañan han sido tomadas de las diapositivas e ilustran una serie de sitios enlistados como Patrimonio Mundial.

La estrategia del Patrimonio Mundial, direcciones futuras

BERND VON DROSTE

La Convención del Patrimonio Mundial completa, en 1997, el vigésimoquinto aniversario de su implementación. Este artículo presenta una retrospectiva de los primeros 25 años de la Convención y mira con anticipo a su futuro desarrollo. La Convención del Patrimonio Mundial ha sido exitosa tanto en el número de estados que toman parte y que son signatarios, como en el número de sitios incluidos en la Lista del Patrimonio Mundial con 147 estados participantes y 506 áreas enlistadas hasta la fecha. Sin embargo, se ha expresado la preocupación acerca del balance entre el número de áreas "culturales" y áreas "naturales" en la lista y acerca de los mecanismos de monitoreo del estado de conservación de los sitios. Entre los desarrollos futuros que se sugieren para la Convención del Patrimonio Mundial, hay un aumento prioritativo para actividades educativas y de información, un mayor énfasis en la comunicación entre administradores de los sitios y una propuesta para el aumento de recursos disponibles para el Fondo del Patrimonio Mundial.

De Caracas a Montreal y más allá

P.H.C. (BING) LUCAS

Este artículo presenta un sumario de lo que se ha logrado en el Patrimonio Mundial desde el Cuarto Congreso Mundial de Parques Nacionales, que tuvo lugar en Caracas, Venezuela, en 1992, y de lo que es necesario hacer para realzar la versión preliminar de implementación de la Convención. Un taller llevado a cabo como parte del Congreso de Conservación Mundial en 1996 en Montreal, revisó el progreso realizado desde 1992, cubriendo cuestiones tales como el criterio de patrimonio natural, monitoreo, ayuda internacional y el paisaje cultural. Un resultado intrigante ha sido que el trabajo que originalmente tenía como fin la separación y clarificación del criterio de patrimonio natural ha resultado posteriormente en la sugerencia de que un conjunto común de criterios podría ser aplicado tanto a los sitios naturales como a los culturales.

Sobre todo, la Convención del Patrimonio Mundial ha sido un instrumento muy efectivo para la conservación, pero hay aún mucho más que se puede realizar para hacerla más efectiva. Los futuros temas que hay que tomar en cuenta incluyen el concepto del listado de sitios seriados que pueden abarcar varios países y como se pueden proveer más recursos y apoyo a fin de mantener la integridad de los sitios existentes. Los miembros de IUCN deberían presionar sus respectivos gobiernos para que apoyen activamente la Convención del Patrimonio Mundial.

El Patrimonio Mundial en peligro

La lista del Patrimonio Mundial en peligro está reservada para sitios que están considerados bajo seria amenaza y que merecen atención especial. Hasta el presente, más de diez de los sitios del Patrimonio Mundial enlistados por su importancia natural están en la lista "en peligro". El listado de sitios "en peligro" es un asunto que causa controversia y ha resultado en acusaciones de que el Comité del Patrimonio Mundial está violando la soberanía de los países cuyos sitios están clasificados en esta forma. El listado de los sitios "en peligro" ha tenido éxito, indudablemente, al enfocar la atención internacional en las amenazas que esos sitios enfrentan.

Los casos de estudio que se han presentado, se concentran en dos sitios de Patrimonio Mundial en peligro, que han sido el sujeto de mucha atención en los últimos años. Harold K. Eidsvik, anteriormente del Centro del Patrimonio Mundial y Michael Clark, de la Coalición para un Yellowstone más grande, ofrecen dos perspectivas en el listado del sitio Yellowstone del Patrimonio Mundial como "en peligro". Esto ha sido seguido con el reconocimiento que Michael Bliemrieder del Parque Nacional de Galápagos, ha expresado, de que el listado "en peligro" ha atraído apoyo internacional, pero cuestiona si los problemas que se enfrentan en las islas Galápagos son significativamente diferentes de aquellos enfrentados por numerosas áreas protegidas alrededor del mundo.

Las operaciones del Patrimonio Mundial en el sureste de Asia - las condiciones actuales y las direcciones futuras

NATARAJAN ISHWARAN

Aquí se consideran las actividades del Patrimonio Mundial en los diez países dentro de la región geográfica referida generalmente como Asia del sureste. De esos diez países, ocho han ratificado la Convención del

Patrimonio Mundial, pero los dos países con economías más desarrolladas todavía no lo han hecho. El artículo pone al día la condición actual de la implementación de la Convención en los ocho países mencionados. A esto le sigue una panorámica general de los problemas comunes del manejo del área protegida en los ocho países. Finalmente, se describen algunas sugerencias para el planeamiento del futuro de las operaciones del patrimonio natural de la Convención y de los aspectos del paisaje cultural. Se le solicita a la Convención del Patrimonio Mundial que persiga una estrategia operacional dirigida a los problemas de la región y que aspire a la realización de dos goles: el gol "interno" de mantener la credibilidad de la Convención a través de la aplicación del proceso de listado estrictamente a los sitios más destacados, y el gol "externo" de proveer soporte para el manejo del sitio, de modo que los sitios del Patrimonio Mundial se conviertan en centros de excelencia en la administración de áreas protegidas a nivel local, regional y nacional.

Una evaluación de la estrategia ambiental de los desarrollos alrededor de las cataratas de Victoria en Zambia-Zimbabwe

NYAMBE NALAMINO Y PETER-JOHN MEYNELL

Los gobiernos de Zambia y Zimbabwe, conscientes del aumento de la presión de los desarrollos turísticos alrededor del sitio de Patrimonio Mundial de las cataratas de Victoria, pidió a UICN que coordinara un equipo binacional para llevar a cabo una evaluación de la estrategia ambiental (SEA) de los desarrollos alrededor de las cataratas, y que preparara un plan esquemático de gestión. Se usó un límite de diez años para desarrollar cuatro escenarios de crecimiento, tomando en cuenta el número de visitantes, el impacto del aumento del alojamiento para los visitantes, las actividades turísticas y el crecimiento urbano. Los diferentes aspectos considerados incluyeron el planeamiento urbano y el uso del terreno, el análisis turístico, sociológico y los estudios culturales, el paisaje y el análisis del impacto visual, los cambios hidrológicos, la ecología de la vegetación y la vida salvaje, los aspectos arqueológicos, el ruido y la economía ambiental.

El SEA concluyó que el nivel de desarrollo sostenible en el área descansa alrededor del escenario de crecimiento medio, pero que era más bajo en el lado de Zimbabwe (donde el desarrollo estaba bastante avanzado) que en el lado de Zambia, que ha experimentado una declinación económica durante muchos años. Un número de medidas administrativas específicas y líneas de dirección fueron sugeridas, y en un taller final en marzo de 1996, al que asistieron representantes de todos los mayores inversores, ambos gobiernos, Zambia y Zimbabwe, prometieron la prohibición de futuros desarrollos dentro de los límites del sitio del Patrimonio Mundial y el uso del planeamiento y las direcciones sugeridos por el equipo de estudio en los futuros desarrollos.

Una de las mayores preocupaciones para el futuro fue la falta de coordinación en el planeamiento y administración de las diferentes agencias en cada país y entre los dos países. Tampoco ha habido un mecanismo normal para que los inversores estén integrados en los procesos de planeamiento y gestión. Algunas proposiciones fueron sugeridas para un número de opciones institucionales diferentes, para una coordinación general y la participación de los inversores. Todas están actualmente bajo consideración por parte de ambos países.

El proceso de la SEA es un buen ejemplo de un proceso que se está moviendo hacia una mayor cooperación transfronteriza en la administración de los sitios del Patrimonio Mundial.

Consideraciones sociales y económicas: fundando las insignias

KENNETH E. HORNBACK

Durante los últimos diez años el Servicio Nacional de Parques (NPS) de los Estados Unidos ha usado un modelo económico denominado "El modelo de generación de dinero" (MGM). Este modelo sirve para expresar el valor de los parques en términos del impacto económico hecho por la gente que los visita. Para calcular el MGM el parque cuenta el público no local en términos de días por visitante, un producto del número de visitantes y la duración de su estadía. Los gastos diarios se estiman usando una variedad de técnicas. Los días por visitante y los gastos se multiplican juntos para crear una estimación de los gastos directos. El MGM está diseñado teniendo en cuenta dos objetivos: que se puedan aplicar ampliamente sin modificación o alteración con el propósito de crear un cuerpo de estimaciones comparables y que se produzca una estimación básica y conservativa sobre la cual se pueden basar futuros análisis económicos.

Debido a su simplicidad, el MGM está calculado hasta el presente para más de 300 parques NPS suministrando una serie de ejemplos de una variedad de situaciones económicas para su comparación con parques similares en otros países. A pesar de las muchas limitaciones del MGM, éste tiene el propósito de iniciar el diálogo económico que ha demostrado ser tan útil e informativo para mucha gente, para muchos fines y para circunstancias ampliamente distintas.

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