

Lecture 7: “The World Heritage Convention of UNESCO – A Flagship of the Global Nature Conservation Strategy”

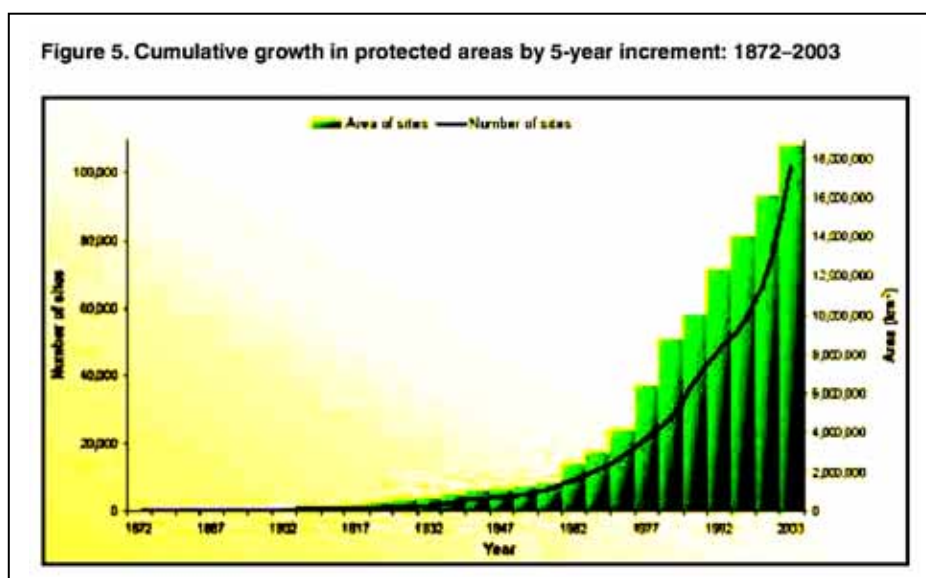
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1 INTRODUCTION

In November 2003 the World Parks Congress of the World Conservation Union IUCN in Durban / South Africa stroke the balance of the last 10 years of global conservation efforts. Among others the conclusions emphasize that

- the number and size of protected areas (PA; National Parks, reserves etc.) grew exponentially. In this year **102,102 Sites** were listed by the World Conservation Monitoring Centre WCMC of UNEP in Cambridge/UK, covering totally: 18.8 million square kilometres, of which 17 million square kilometers are terrestrial. This is more than **11.5 % of the terrestrial surface** of the world;
- however, only **0.5 % of the world’s oceans** are protected in 4.116 areas (1.6 million square kilometres). Additional strategies and measures are urgent;
- benefits from PAs for **local communities** and states should be emphasized and improved. This also consequences a better participation of local people and stakeholders in the protection and management of reserves;
- **international agreements**, programmes and conventions contributed very positively to the success of nature conservation in recent years. But the instruments for conservation, including such international designations and programmes, need clearer definitions and targets and should be applied strictly goal-orientated.

Figure 1: Cumulative growth in protected areas by 5-year increment: 1872-2003. Source: www.iucn.org/themes/wcpa/wpc2003/english/outputs/un.htm



Meanwhile there is indeed a broad spectrum of international conventions targeting nature conservation issues (see table 1), often difficult to be understood by the public and politicians. However, such a diversity of treaties is indispensable as international cooperation and the globalisation of political strategies and economy increases rapidly and, like all other fields of

society, nature conservation needs adapted tools to protect nature and to contribute to a sustainable development.

*Table 1: Examples of international conventions and programmes including nature conservation goals. ** = Comprises a specific PA system.*

<ul style="list-style-type: none">•** World Heritage Convention of UNESCO (1972)•** Biosphere Reserves of UNESCO (1971) [Program, no treaty]•** Ramsar Convention (Wetlands) (1971)•** Convention on Biodiversity (comprehensive protection and sustainable use of biodiversity) (1992)•Bonn Convention (Migratory Animal Species) (1979)•UN Convention on the Law of the Sea (UNCLOS) (1982)•Convention on the Protection and Use of Transboundary Watercourses and International Lakes (ECE Water Convention) (1992)•International Tropical Timber Agreement (ITTA) (1994)•International Convention for the Regulation of Whaling (ICRW) (1946)•Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1978)•Convention for the Conservation of Antarctic Seals (1972)•Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) (1980)•Protocol to the Antarctic Treaty on Environmental Protection (1991)
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Table 2: Protected Area categories I to VI of IUCN

<p>I. Strict Nature Reserve / Wilderness Area: Protected area managed mainly for science of wilderness protection</p> <p style="padding-left: 20px;">Ia: Strict Nature Reserve: protected area managed mainly for science</p> <p style="padding-left: 20px;">Ib: Wilderness Area: protected area managed mainly for wilderness protection</p> <p>II. National Park: protected area managed mainly for ecosystem protection and recreation</p> <p>III. Natural Monument: protected area managed mainly for the conservation of specific natural features</p> <p>IV. Habitat/Species Management Area: protected area managed mainly for conservation through management intervention</p> <p>V. Protected Landscape/Seascape: protected area managed mainly for landscape/seascape protection</p> <p>VI. Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems.</p>

Instead, the most well-known protection category the “National Park” is not derived from or included into any convention, but the worldwide adaptation of an idea first was realized in 1872 by the designation of the Yellowstone National Park in the USA. All PAs worldwide are registered by the World Conservation Monitoring Centre and affiliated to one of the six IUCN categories (table 2).

2 FEATURES AND ALIGNMENT OF THE WORLD HERITAGE CONVENTION

2.1 THE GLOBAL CONSERVATION STRATEGY

Nature conservation targets the protection and – as far as appropriate – development of abiotic and living features of the world. First are mainly geological and paleontological features, mineral resources like ores or oil, soils, waters and the atmosphere, but also the preservation of natural beauty. Latter targets species, ecosystems, landscape and the genetic diversity within. This is recently addressed as “biodiversity”. Already in its first Global Strategy in 1980 IUCN [International Union for Conservation of Nature and Natural Resources (IUCN) (1980): World Conservation Strategy. Living Resource Conservation for Sustainable Development. – Gland, ISBN 2-88032-104-2] gave a definition of living resource conservation by three objectives

which is strikingly actual and convincing till today (cf. targets of the Convention on Biodiversity CBD):

1. to maintain essential **ecological processes and life-support systems** (such as soil regeneration and protection, the recycling of nutrients, and the cleansing of waters), on which human survival and development depend;
2. to preserve **genetic diversity** (the range of genetic material found in the world's organisms) on which depend the breeding programmes necessary for the protection and improvement of cultivated plants and domesticated animals, as well as much scientific advance, technical innovation, and the security of the many industries that use living resources;
3. to ensure the **sustainable utilization** of species and ecosystems (notably fish and other wildlife, forests and grazing lands), which support millions of rural communities as well as major industries.

This is a mere utilitarian, human-related approach. Within this concept, PAs are established not for intrinsic human-independent values but to safeguard these three objectives on a broader regional or global level (and, if given, of course to protect abiotic or visual features).

During the last World Parks Congress 2003 in Durban/South Africa the “Durban Accord” was adopted which states among others “ *...we need a fresh and innovative approach to protected areas and their role in broader conservation and development agendas.... In this way the synergy between conservation, the maintenance of life support systems and sustainable development is forged. ... We see protected areas as providers of benefits beyond boundaries – beyond their boundaries on a map, beyond the boundaries of nation-states, across societies, genders and generations.* ”

The 7th Congress of States Parties (COP 7) of the Convention on Biodiversity (CBD) some months later in Kuala Lumpur initiated a worldwide net of specific protected areas, pursuing the goals of this very important convention. This new PA system shall incorporate existing reserves and close the gaps in the existing systems by adding additional ones.

Thus, there are recently a lot of activities for a more comprehensive global system of PAs, but also for an improved management of the existing one, and for a better participation of local communities in the development of PAs and in benefit-sharing from those PAs (cf. IUCN 2005). In this context it is relevant to analyse the contributions of the World Heritage Convention (WHC) to this process.

2.2 GENERAL FEATURES OF THE WHC

The World Heritage Convention of UNESCO was established in **1972** and went into force in 1978. The preamble of the Convention text notes that “*...parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole*” and Article 6 stipulates that “*..Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned ... is situated, ..., the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate.*” Thus, the WHC targets the joint effort of all mankind to preserve the most outstanding natural and cultural features on earth.

Although dating back more than 30 years the WHC pursues a very actual approach: not to separate but to unify nature and cultures by protecting features from both in one convention, bringing together specialists and representatives from nature conservation and monument

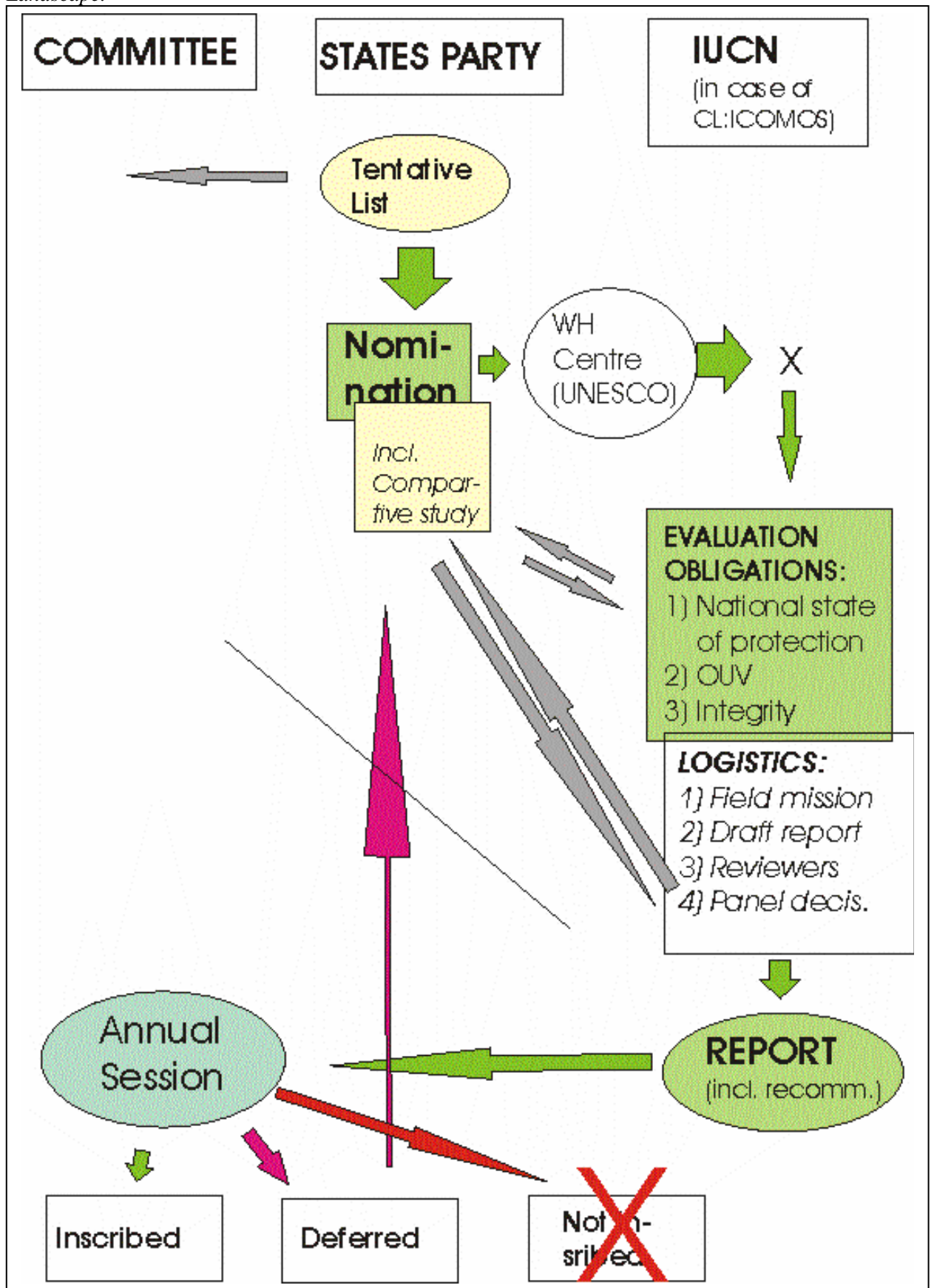
protection, from ecology and social sciences, seeking for a harmonized strategy to safeguard the best monuments, sites and landscapes disregarding whether nature or humankind has created them. Until today **180 States Parties** joined the Convention, thus forming one of the most extensive and well recognized international agreements in the field of nature conservation.

The bodies of the Convention are:

- The General Assembly of UNESCO and the **Conference of the States Parties**, meeting every two years and deciding on principle questions like the composition of the Committee and financial issues;
- The **World Heritage Committee**, consisting of 21 States Parties of whom 7 are rotating every two years;
- The **Bureau**, preparing agenda items for the Committee;
- The **World Heritage Centre**, implemented as a section of UNESCO and working as the Secretariat of the Convention but also advising States Parties and disseminate information via different media;
- The **Advisory Bodies**, which are the World Monument and Cultural Sites Protection Organisation ICOMOS (for cultural monuments), the World Conservation Union IUCN (for nature-related advice) and ICCROM (mainly training and restoration for cultural sites).

The general outlines of the Convention are described in the **Convention text**. Technical **Operational Guidelines** rule the work of the Committee, the Centre and the Advisory Bodies. They were just recently revised.

Figure 2: World Heritage Convention's nomination procedure for a natural site. CL = Cultural Landscape.



A World Heritage Site must be nominated in a formal, rather sophisticated procedure by the States Party on which territory the property is situated (fig. 2). Before, the States Party must have indicated the sites to the Committee which it wants to nominate in a “**Tentative List**”. After submission and acceptance by the World Heritage Centre the **nomination dossier** is transferred to one or two of the Advisory Bodies for scientific evaluation. In the case of natural nominations this includes a field inspection by one or two specialists, a comprehensive written report, a desk validation by several, often more than ten other specialists, an extensive discussion in the Panel, based in the headquarters of IUCN in Gland/Switzerland, and a final recommendation to the next Committee session whether

- to “**inscribe**” the property in the World Heritage List, or
- to “**defer**” it (to allow the States Party to improve the nomination dossier and/or the state of conservation of the property), or
- to decide “**not to inscribe**” the proposed site. In the latter case the same property cannot be nominated for a second time.

Among the World Heritage sites are even now the most well-known and spectacular places on earth. The Convention defines “**Natural Properties**” and “**Cultural Properties**” (tables 3, 4). More specific definitions are given in the Operational Guidelines. Each World Heritage sites must meet at least one of the 10 criteria of the Operational Guidelines (see below). If a property meets criteria from the cultural as well as from the natural sector, it is called a “**Mixed Site**” (table 5). In 1992 another category, the “**Cultural Landscape**” was added to the Convention (table 6). Its values are – in contrast to the “mixed site”, where cultural and natural values stand aside each other and are independent from each other – the result of the “combined work of nature and man” (OG, para. 47). The annex defines three types:

- **Landscape designated** and created intentionally by man. This embraces garden and parkland landscapes constructed for aesthetic reasons.
- **Associative cultural landscape**. The inscription of such landscapes ... is justifiable by virtue of the powerful religious, artistic or cultural association of the natural element rather than material cultural evidence....
- **Organically evolved landscape**. These are mostly rural landscapes which can be found in all continents. Their outstanding values are often the result of a long-lasting co-evolution between local nature and culture. The OG distinguish between “relict (or fossil)” and “continuing” landscapes of this type.

Table 3: Examples of natural World Heritage sites

Name	Country	Year of inscription
Yellowstone NP	USA	1978
Galapagos Islands	Ecuador	1978 (Extension 2001)
Everglades NP	USA	1979
Serengeti NP	Tanzania	1981
Dinosaur Provincial Park	Canada	1979
Great Barrier Reef	Australia	1981
Komodo NP	Indonesia	1991
Rwenzori Mt. NP	Uganda	1994
Lake Baikal	Russ. Federation	1996
Shiretoko	Japan	2005

Table 4: Examples of cultural World Heritage sites

Name	Country	Year of inscription
City of Quito	Ecuador	1978
Nubian Monuments from Abu Simbel to Philae	Egypt	1979
Acropolis Athens	Greece	1987

Vatican City	Vatican City State	1984
Pre-Hispanic City of Chichen Itza	Mexico	1988
Angkor	Cambodia	1992
Rock-art of the Mediterranean Basin on the Iberian Peninsula	Spain	1998
Historic Monuments of Ancient Nara	Japan	1998

Table 5: Examples of “mixed” World Heritage sites (Outstanding natural and cultural values at one place)

Name	Country	Year of inscription
Tikal NP	Guatemala	1979
Historic Sanctuary of Machu Piccu	Peru	1983
Mount Emei, incl. Leshan Giant Buddha	China	1996
Mount Wuyi	China	1999

Table 6: Examples of “Cultural Landscapes” on the World Heritage List

Name	Country	Type	Year of inscription
Tongariro NP	New Zealand	Associative	1990 (nature), 1993(CL)
Uluru-Katatjuta NP	Australia	Associative	1987 (nature), 1994 (CL)
Rice Terraces of the Philippine Cordilleras	Philippines	Organ.Evolved	1995
Agricultural Landscape of Southern Oeland	Sweden	Organ. Evolved	2000
Garden Kingdom of Dessau-Woerlitz	Germany	Designed	2000

Currently **812 properties** from **137 countries** are inscribed on the World Heritage List, of which 652 are cultural and 160 are natural sites. 24 meet cultural as well as natural criteria and are therefore “mixed sites”. More than 30 cultural properties are “Cultural Landscapes”.

2.3 QUALITY STANDARDS

Each nomination runs through a rigid procedure of quality control before it is accepted and listed on the World Heritage List. The Committee orders the Advisory Bodies to follow these principles (OG, para 148) „...

- b) be objective, **rigorous** and scientific in their evaluations
- c) be conducted to a consistent standard of professionalism;
- d) indicate clearly and separately whether the property has outstanding universal value, meets the conditions of integrity and/or authenticity, a management plan/system and legislative protection ...“

A nomination dossier must include a “comparative analysis” which proves that the nominated property is “one of the best of its type”. While IUCN balances this attribute on a global and biogeographic background, ICOMOS follows a more regionalized approach, emphasizing representativity, according to the sometimes sophisticated spatial differentiation of human cultures.

Thus, the nomination dossier and the evaluation process must prove that the proposed site

1. Is **sufficiently protected on national** or local level (any international assignment is not necessary);
2. Has a juridically valid **management plan** or is subject to a management process conducted by local communities or stakeholders who are enforced to decide on the development of the site;
3. Has “**outstanding universal value**”
4. Meets the conditions of **integrity** and/or authenticity (latter only for cultural properties)

While the first two conditions are normally rather easily to be assessed, the latter two can cause considerable problems. “Integrity” in the case of natural properties could only mean that the ecosystems are intact and un-impacted, and the ecological processes are still at work. However, in a puristic sense, this might be no longer the case at any place in the world. Human influence was or is almost omnipresent. So, it is up to IUCN to assess, whether those influences already caused an irreversible change of the character of the embraced ecosystems, especially regarding the values for which the property is nominated. Often, the nominated sites still harbour outstanding values but it is feared that the current human impacts will damage these values, if persisting. Then, the management plan must offer specific perspectives how to mitigate the given impacts.

The core of the World Heritage Convention is the term “**outstanding universal value**” (OUV). Within the nature conservation conventions the World Heritage Convention is the one with the strictest limitation in terms of “values”. Only properties which meet this quality standard should become members of the exclusive “club” of World Heritage Sites. It is a constantly ongoing discussion since the early days of the Convention how to define this predicate. A three-day seminar was conducted in April 2005 in Kazan/Russian Federation to specify this term. Surely related definitions are to some degree subjective and do not directly derive from mere scientific data. Nevertheless, the application of the term OUV is by far not any one likes. There are clear indications in the Convention text, and the Operational Guidelines, and there is the case law of decisions of the Committee over years.

Implicitly, the Convention text stipulates in its preamble that “*parts of the cultural and natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole*”. Thus, the Convention was not conceived to ensure the protection of **all** cultural and natural heritage, but only those **parts** that are outstanding; and this statement emphasises a global approach by stressing that this heritage is to be preserved for **mankind as a whole**. The Operational Guidelines specify the term by setting up **10 criteria**, of which a nomination must meet at least one (most were inscribed for more than one) (table 7). Formerly, 6 of these criteria were affiliated to cultural, the other 4 to natural nominations. In the new Operational Guidelines the set of criteria is unified and criterion VII is standing in between cultural and natural criteria. However, crit. vi and vii for its alone normally do not rectify an inscription due to its highly subjective quality.

The interpretation of these specifications by the Committee is to some degree dependent on the single case. Still several dozens of States Parties have no site on the WH List and were repeatedly urged to nominate. There is also some uncertainty on the evaluation of examples from modern culture of the 19th and 20th century, as well as on scientific objects from geology and palaeontology (criterion viii). As Europe as one of the smallest continents holds 46 % of all WH sites (often claimed as “Eurocentrism” within the convention work) nominations from under-represented continents and regions are most welcomed. Beyond this, the general tendency of the Committee’s decisions changed over time. In tendency, the final decision became more rigorous. For natural nominations the rate of inscription was high (average 70%) in the first ten years of the Convention. Afterwards, between 1989 and 2004: the average percentage of positive recommendations dropped to 48%, mainly because:

- (a) The most well-known and outstanding natural properties worldwide (“Icones”) were already inscribed;
- (b) of better information, particularly a number of global and thematic studies prepared by IUCN and other partners, thus increasing the rigour and objectivity of the evaluation process.

(c) of a more rigorous application of the Conditions of Integrity of proposed mixed and natural sites.

Table 7: Quality criteria of the World Heritage Convention according to para. 77 of the Operational Guidelines

(i)	represent a masterpiece of human creative genius;
(ii)	exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
(iii)	bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
(iv)	be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
(v)	be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
(vi)	be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
(vii)	contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
(viii)	be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
(ix)	be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
(x)	contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation

2.4 RECENT DEVELOPMENT

The development of the Convention during the '90s of the last century and up to now is characterized by two diverging tendencies

A) As a follow-up to a series of specialists' meeting new categories and "types" were introduced into the discussions of the Committee, like cultural landscapes of different types (terraced landscapes, channels) or clusters of isolated sites linked by their ecological origin or an outstanding perspective of culture (fragmented forest plots, pilgrim routes). The **Convention opened for immaterial perspectives** like Associative Cultural Landscapes and important steps of industrial cultural development, although both aspects are not fully covered by the Convention text. Basis of any judgement on the OUV should be a typology. But the scientific schemes became more and more sophisticated, resulting in an immense number of types and subtypes. It is undecided until now whether the best of each of these scientific types should have a place on the World Heritage List. Until this question is settled the Committee hesitated to reject a nomination which proved its outstanding position within the type it belongs to.

B) The number of nominations per year increased significantly (to more than 60) and heavily overstressed the working capacities of the Committee and the Advisory Bodies. This resulted even in a series of extraordinary sessions to manage the workload. During its session 2000 in Cairns/Australia, the Committee approved for the first time strict regulations for the access of additional sites to the World Heritage List (so-called "Cairns Decisions"). As a consequence to

the intervention of several States Parties those regulations were adjusted in 2004 during the Committee Session in Suzhou/China. According to these “**Suzhou Decisions**”:

- Overall only 45 nominations per year are regarded by the Committee, including referred and deferred, transboundary ones (which are in principle favoured by the Committee) and extensions,
- Each States Party may submit only one nomination per year. Two nominations per year/state are accepted, if one is a natural nomination. Priority is given to States Parties without WH sites and under-represented categories.

In general, there is a broad harmony among the States Parties, that the quality standards to join the World Heritage List must be kept on a high level and that the number of World Heritage Sites must be limited. On the other hand, there are still severe gaps in the representativity of the list. Member states without sites should not be hampered in presenting “the Best” they have, and scientific progress results in increasingly sophisticated typologies and thus nominations of new “types”. The Committee today faces not only these problems but also the fact that a “specialists convention” of the early days turned into a politically well recognized instrument for the management of the most outstanding places on earth. Competition on places on the World Heritage List plays an increasing role in the activities of the States Parties.

3 GAPS

In 1994 the WH Committee recognized substantial thematic and regional gaps in the World Heritage List. This led to a comprehensive “Global Strategy”. Paras 54 and 55 of the Operational Guidelines state: “The Committee seeks to establish a representative, balanced and credible World Heritage List... The Global Strategy ... is designed to identify and fill the major gaps in the World Heritage List...”. It does so by:

- Encouraging more countries to become States Party to the Convention
- Develop Tentative Lists (which are recently prerequisite for further nominations)
- Regional and thematic Global strategy meetings
- Appoint the Advisory Bodies IUCN and ICOMOS to conduct a comprehensive global analysis on the state of the WH List.

The drafts of these studies were presented by the Advisory Bodies in 2004. In science there are quite a lot of different schemes how to classify the earth’s biodiversity by regions (biogeographically) and themes (species- and ecosystem approaches). Some of them seek to unify both. But none of these schemes is generally adopted in the scientific world. Therefore, IUCN in its Global Study analysed the state of the WH List by regarding different assessment schemes in parallel:

- (a) the Udvardy’s Biogeographical classification;
- (b) the IUCN/SSC habitat classification;
- (c) WWF Ecoregions;
- (d) Conservational International Biodiversity ”Hotspots”;
- (e) BirdLife International Endemic Bird Areas; and
- (f) (f) IUCN/WWF Centres of Plant Diversity.

IUCN has also reviewed Tentative Lists of States Parties as an input to its review. A number of conclusions can be drawn from the analysis (table 8, figure 3):

1. *Natural and mixed sites on the WH List cover almost all biogeographic regions, biomes, and habitats of the world with a relatively balanced distribution.*

2. The biomes most commonly found in WH sites are Mountains, Humid Tropical Forests, Tropical Dry Forests and Mixed Island Systems.
3. There are major gaps in the WH coverage of the following biomes: Tropical Grassland/Savanna; Lake Systems; Tundra and Polar Systems; Temperate Grasslands; and Cold Winter Deserts. There is thus potential for listing natural and mixed WH sites within these biomes.
4. There are also some terrestrial and marine habitat types within these biomes which may have potential for WH inscription. These include sites that have been defined as priorities by CI, IUCN/SSC, WWF and BirdLife International. Nominations from any of the areas listed below should receive priority¹:

Grasslands

- ~ Sudd-Sahelian savanna and flooded grasslands
- ~ Sub-Antarctic grasslands, including South Georgia
- ~ Sub-polar and arctic tundra

Wetlands

- ~ Flooded grasslands such as Okavango and the Sudd swamps
- ~ Volga and Lena River deltas
- ~ Western Ghats rivers

Deserts

- ~ Succulent Karoo
- ~ Namib desert
- ~ Central Asian deserts
- ~ Socotra desert

Forests

- ~ Madagascar moist forests
- ~ Forests in southern Chile and southern Argentina
- ~ Dry and moist forests in New Caledonia
- ~ Western Ghats forests

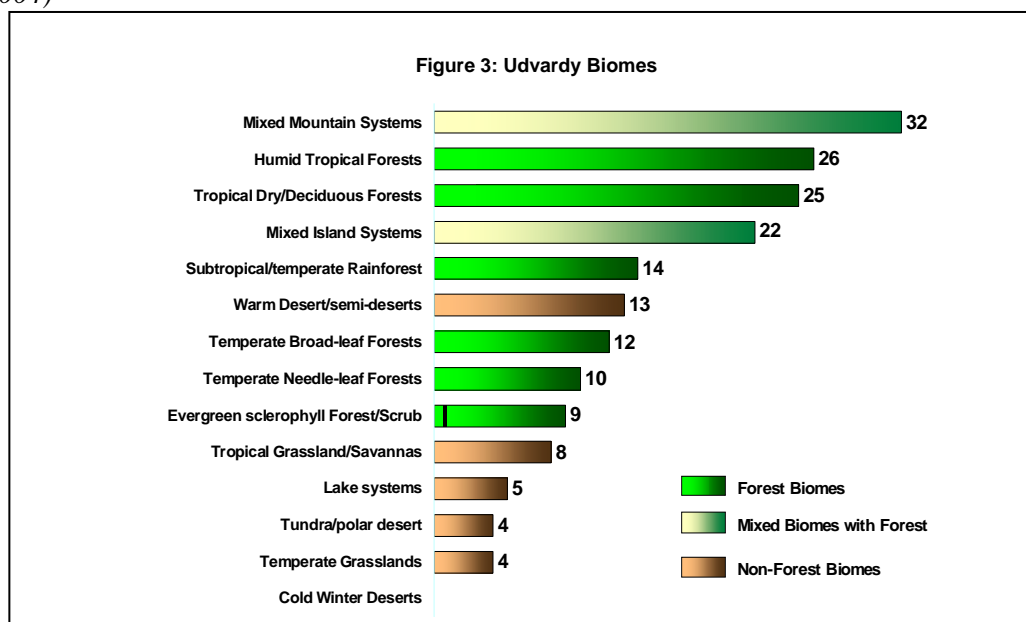
Marine

- ~ Red Sea corals
- ~ Andaman Sea (sites within the marine ecoregion)
- ~ Benguela Current (marine)
- ~ Marine sites within the following WWF ecoregions: Fiji, Palau and Tahiti
- ~ Gulf of California
- ~ Maldives/Chagos atolls

Table 8: WH sites' distribution in Udvardy's biogeographical realms. Note: All natural WH sites cover 0.92 % of the world's terrestrial surface (Source: IUCN 2004)

Udvardy Realm	# of WH Sites	Land Area (km ²)	Area of WH sites (km ²)	% Realm in WH sites
Afrotropical	32	22,156,119.20	285,454.01	1.29
Antarctic	6	285,805.65	25,021.04	8.75
Australian	12	7,704,908.69	69,786.06	0.91
Indomalayan	16	7,533,958.05	12,051.90	0.16
Nearctic	18	22,895,770.40	210,068.41	0.92
Neotropical	33	18,975,799.20	243,531.11	1.28
Oceanian	5	1,035,302.22	16,934.21	1.64
Palaearctic	53	54,137,006.84	387,626.64	0.72
TOTAL	175	135,195,853.37	1,250,473.40	0.92

Figure 3: Number of natural and mixed WH sites by Udvardy Biomes (Source: UNEP-WCMC 2004)



During the past years IUCN also produced a series of thematic studies on:

1. Geological history and fossil sites
2. Wetland and marine protected areas
3. Forest protected areas
4. Human use of natural WH sites
5. WH sites of importance for biodiversity
6. Mountain protected areas
7. Boreal forests protected areas, Geological sites, landforms and processes (to be completed in 2005)

Tab. 9 balances the current WH List according to these thematic studies.

Table 9: Natural and mixed WH sites in different habitats as derived from IUCN Theme Studies (Source: IUCN 2004)

IUCN Theme (No. of Thematic Studies)	No. of natural / mixed WH Sites
Terrestrial wetlands (1)	60
Marine (1)	26
Coastal areas (2)	25
Mountains (6)	56
Tropical forests (3)	50
Geological Sites (2)	46
Grassland/savannas	21
Temperate forests (3)	20
Deserts (non polar)	12
Subtropical forests (3)	12
Boreal forests (7)	10
Sub-polar/polar tundra (7)	7

4 THE FLAGSHIP ROLE OF THE WORLD HERITAGE CONVENTION

There are many conventions, international programmes and designations (like Biosphere reserves or National Parks) in the field of nature conservation. Regarding this, the World Heritage Convention might be assessed as being only of secondary relevance within a Global Programme of nature conservation. As mentioned, properties must already be well protected on a national level before they are nominated for World Heritage. What could a World Heritage designation add more to this? The Committee has no direct means to safeguard the listed properties. What, then, could the World Heritage status be more than a noble, but just an additional label?

The public and political perception of the World Heritage Convention changed fundamentally during the past decade. A rather small (with respect to delegation representativity and financial means), scientifically orientated agreement turned into an instrument which is well recognized in societies all over the world, which is constantly present in the media and receives attention of the most powerful international donors. In the field of cultural monuments' protection the World Heritage Convention is already today one of the most powerful instruments and for nature conservation it is on the best way to be so.

Within the more than 10,000 protected areas on earth, the 160 natural World Heritage sites and very few cultural landscapes with nature conservation significance play a really insignificant role by number. However, due to the convincing and independent procedure of designation and the high quality standards for inscription, the World Heritage sites are currently on the way to become the “flagships” of the global nature conservation strategy. They are “The best of the best”, many of them the “Icones” of the nature conservation movement in sciences as well as in public. It sounds logical, not only to protect them better than all the other ones, but also to use them as models for the further development of nature protected areas.

Thus, World Heritage status is much more but only another ambiguous label for an area which might already be National Park, Biosphere Reserve, Ramsar Site It approves the deliberate will of the States Party nominating and the World Community accepting to protect a property by all means, techniques and strategies available and to hand it over to future generations in an unspoilt state, demonstrating thereby that they are capable and willing to safeguard the best places our planet has created.

4.1 ACHIEVEMENTS DURING THE NOMINATION PROCESS

Normally, several years elapse between the first idea to nominate a site for World Heritage and the date when appearing on the national Tentative List. It needs another couple of years until the nomination dossier is prepared and presented to the Committee. If properly done, this process:

- creates local awareness on the potentially outstanding value of the protected area;
- enhances the pride of local communities that “their” piece of nature might be worth to be on the exclusive World Heritage List;
- induces an in-depth analysis within the authorities whether the material state and the degree of protection meets the high standards of the WH Convention and facilitates improvements;
- creates a better scientific understanding on the specific values of the nominated site;
- improves an existing management plan and often induces activities to set up a first version of a missing management plan.

Thus, even if not accepted in the end, the protected area receives a substantial improvement of its conservation status during the nomination process and is better managed afterwards.

4.2 MODEL SOLUTIONS FOR COMPLEX PROBLEMS

During the 1990s, mining activities increasingly posed threats to protected areas all over the world. This tendency is understandable from the fact that well accessible mineral resources are increasingly exhausted, mining activities in the vicinity of communities are often rejected by local people and high nature conservation and mineral resource values are often linked by basic environmental features. Among those impacted protected areas were also World Heritage sites: first Mt. Nimba (Guinea/Liberia/Cote d'Ivoire) and Yellowstone (USA), then Kamchatka (Russian Fed.) and Kakadu (Australia), currently the parks in the east of the Democratic Republic of Congo (Coltan/Tantal, Gold) (table 10).

Table 10: Natural World Heritage sites with mining problems during recent years

Site	State(s)	Issue	Current situation
Mt. Nimba	Guinea, Cote d'Ivoire, Liberia	Iron ore	Pending since 12 years
Yellowstone	USA	Mining plans outside watershed	Settled by re-buying the concession
Coto Donana	Spain	Waste dump leakage	Settled (long-term effects?)
Kakadu NP	Australia	Uranium mine in an enclave (Jabiluka)	Pending, however improving
Kamchatka	Russ.Fed.	Gold mining at the border	Resumed
St. Lorentz NP	Indonesia	Mining at the border	Settled, however sewage water?
Kahuzi-Biega NP	DR Congo	Illegal colombo-tantalite, gold, cassiterite	Continuing
W NP	Niger	Phosphate exploration	SP: no intentions to exploit within WHS
Dja Faunal Reserve	Cameroon	Oil exploration around the site	Results pending
Banc d'Arguin NP	Mauretania	Petroleum offloading & transport (ship; Australian Comp.)	EIS in prep.
Arabian Oryx Sanctuary	Oman	Oil	Planned in the area
Greater Blue Mountains Area	Australia	Proposed sand and clay mine at the border (river pollution)	EIS in prep.
Te Wahipounamu	New Zealand	Oil spill (13,000 l)	Apparently no effects
Nahanni NP	Canada	Zinc (Canadian enterprise)	On court
Aeolian Islands	Italy	Pumice quarries extensions	Pending

Induced by the conflicts in WH sites, during the World Summit on Sustainable Development held in Johannesburg in 2002, IUCN and the International Council of Mining and Metals (ICMM) agreed to a dialogue on improving the performance of the mining industry in relation to biodiversity conservation and protected areas. In 2003 ICMM acknowledged in a Memorandum of Understanding with IUCN that existing World Heritage sites as "no go" areas where any kind of mining activities are suspended (<http://www.icmm.com>). By this, World Heritage proved as an excellent model of how to harmoniously solve conflicts between the protection of nature and vigorous stakeholders for the exploitation of natural resources. Similar approaches seem reasonable e.g. for the protection and use of marine World Heritage Sites, or touristic activities in World Heritage sites.

4.3 INTERNATIONAL ATTENTION

The most valuable natural places on earth are increasingly subject to fundamental impacts, threatening their most outstanding features. More and more, not at least as a consequence of globalisation and ethnic and religious conflicts across national borders, the quality of those impacts is beyond the jurisdiction and material capabilities of the single state. If those places are World Heritage sites they can be transferred to a specific list of “World Heritage in Danger” (para. 177 ff. of the Operational Guidelines; currently 33 sites). This normally occurs on request of the States Party on which territory the site is located, but there are increasingly cases, where the Committee decided to do so without explicit request of the States Party (e.g. Yellowstone, Cologne Cathedral) (table 11). The target of this “In-Danger”-List is quite clear (although often misunderstood, due to emotional reasons): Not to punish or to condemn the States Parties and its authorities but to focus international support to an utmost level to those places (see general goal of the Convention in the preamble of the Convention text). Of course, it is sometimes politically not so easy for a States Party to accept shortcomings to protect a World Heritage site only by national means. It has a bit of a surrender. However, in a globalized world, developments are increasingly out of the jurisdiction of a single state and international support then should be accepted without harming the “national pride”.

Table 11: Examples of natural sites on the World Heritage List in Danger (Source: *whc.unesco.org*)

Name	State	Year of “In-Danger” listing	Reason
Manovo-Gounda St Floris NP	Central African Republic	1997	Illegal grazing and poaching by heavily armed hunters Shooting of four members of the park staff in early 1997 General state of deteriorating security All development projects and tourism at a halt
Mount Nimba Strict Nature Reserve	Cote d’Ivoire	1992	Proposed iron-ore mining concession to an international consortium Arrival of a large number of refugees to areas in and around the Guinean part of the site
Garamba NP	Democratic Republic of the Congo	1996	Civil unrest over years Severe poaching by Sudanese hunters, resulting in a decline of the White Rhino population from 30 to only 5 to 10
Virunga NP	Democratic Republic of the Congo	1994	War in neighbouring Rwanda and the subsequent massive influx of refugees Massive deforestation and poaching at the site. Poaching of wildlife Staff lacks the means of patrolling the Park’s 650 km long boundary
Everglades NP	USA	1993	Extensive damage to Everglades’ ecology due to a number of causes including nearby urban growth, pollution from fertilisers, mercury

			poisoning of fish and wildlife, and a fall in water levels caused by flood protection measures. 1992: Hurricane Andrew altered much of Florida Bay and its ecological systems and destroyed the park's visitor centre.
Río Plátano Biosphere Reserve	Honduras	1996	Commercial and agricultural intrusions into the site. Massive extraction of precious wood such as Caoba (<i>Swietenia macrophylla</i>). Uncontrolled commercial hunting of wild animals Introduction of exotic species Absence of any management plan Almost no park staff

The World Heritage List in Danger is a powerful tool. After having been listed there, quite a series of sites could be re-transferred to the normal list, due to the fact that extensive measures for improvement were implemented. Among those are such famous sites as the Yellowstone NP (USA) and the very important Ramsar Site Ishkeul (Tunisia).

As important as the formal listing on the World Heritage List in Danger might be the discussions taking place before that. Lake Baikal (Russian Federation) was inscribed in 1997 and is since then constantly on discussion in the Committee to be transferred to the List in Danger. The States Party seeks to avoid this step. Significant improvements in the legal status of protection, international support for the re-organisation of a paper mill, water improvement facilities of the main inflows, and a pending discussion on a 17 billion oil pipeline to the Far East, intended to support Japan with crude oil are the respectable results.

In principle, substantial threats to natural World Heritage sites can be arranged into three categories:

- Internal developmental project, like dam projects for power generation (e.g. Three parallel rivers/China) or the intrusion of agriculture and forest use (e.g. Rio Platano/Honduras);
- Internal civil unrest (e.g. Manas/India, Virunga/DRC) and in consequence intrusion of militaries and refugees, exploiting the natural resources of the sites (poaching, fuel wood, wildlife for international trade to buy additional weapons)
- Regional ethnic conflicts.

All three reasons, including the first two, which are at the first glance “national”, have also international implications. Dam projects are often planned to sell power to neighbouring states, agriculture and forestry are highly internationally structured (wood is “valuable” because it achieves high prizes on international markets). Internal civil unrest are often the consequence of the failure of international policies in preceding negotiations and/or a battle on the access to natural values, being of internationally extremely high value (like Coltan). Regional ethnic conflicts (like currently in the Sudan and many regions of West Africa) are the inevitable consequence of a post-colonial policy of western states disregarding ethnics in the delineation of the “new independent states”.

The World Heritage Convention plays a major role in this regard, demonstrating by case studies (the World Heritage sites) that compromises are possible even in apparently hopeless situations. Since more than one decade the World Heritage Centre focussed the international attention on the dramatic situation in the World Heritage Sites around the Rift Valley, in Uganda, Rwanda,

and the eastern Democratic Republic of the Congo. A remote place like the Djoudj National Bird Sanctuary in Senegal never would have been target of international support if it would not be World Heritage. By this, the World Heritage Convention delineates ways and measures how to keep the natural heritage of this planet as a whole.

4.4 TRANSBOUNDARY CO-OPERATION

UNESCO is a global organisation and one of its basic targets is to support and facilitate international co-operation beyond national borders. Therefore so-called “transboundary nominations” are most favoured by the WH Committee. Para 135 of the Operational Guidelines state: “Wherever possible, transboundary nominations should be prepared and submitted by States Parties jointly in conformity with Article 11.3 of the Convention. It is highly recommended that the States Parties concerned establish a joint management committee or similar body to oversee the management of the whole of the transboundary property.”

Despite this clear invitation the number of transboundary WH sites is not yet very numerous on the List (table 12). However, the few examples speak for its own: Borders between adjacent states are broken up despite of any conflicts in history. The idea to cross national borders by joint protected area programmes is one of the noblest and convincing ones in current days. Trans-national projects like the Meso-American-Corridor or the Green Belt of Europe were inspired by the idea of the World Heritage Convention to bring nations closer to each other by joint international designations. For further examples of transboundary protected area co-operation see Brunner (1999).

Table 12: *Examples of transboundary natural World Heritage Sites*

Name	States
Waterton Glacier International Peace Park	USA/Canada
Belovezhskaya Pushcha / Białowieża Forest	Belarus/Poland
Pyrénées - Mont Perdu	Spain/France
Uvs Nuur Basin	Mongolia/Russian Fed.

FURTHER READINGS:

- Brunner, R. (1999): Parks for Life: Transboundary Protected Areas in Europe.- 145 pp., Ljubiana
 Droste, B. von, Plachter, H. & Rössler, M. (Eds.) (1995): Cultural landscapes of universal value. – 464 pp., Fischer Verl.; Jena.
 IUCN (1980): World Conservation Strategy. Living resource conservation for sustainable development.- 44 pp., Gland/Switzerland.
 IUCN (2005): The IUCN programme 2005-2008. Many voices, one earth.- 52 pp. Bangkok.
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