

# Natural World Heritage in Latin America and the Caribbean

## Options to promote an Underutilized Conservation Instrument



An independent review prepared for IUCN

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#### 1. Background

Latin America and the Caribbean is a region well-known for its stunning landscapes and extraordinary biological and cultural diversity. Out of the World's 17 "megadiverse" countries, a remarkable six are located within the region, five of them constituting one globally unique contiguous cluster. The extremely diverse coastal-marine and island ecosystems ranging from the tropical waters of the Caribbean to the sub-antarctic waters off the Southern Cone have caught less attention internationally but are starting to enter the nature conservation stage more prominently.

There is unprecedented pressure on the region's natural capital. Among the many drivers of the loss and degradation of biodiversity and other conservation values, the GEO-5 Report highlights the conversion of natural environments to productive systems as the most pressing regional conservation challenge (UNEP, 2012). Other observers consider climate change an at least equally important concern in the longer term. The most significant response to such threats has been the expansion of the regional protected areas estate over the last decades, in particular since the 1990s. The above source suggests currently some 500 million hectares of formally protected land and sea in the region. Beyond national level activities, there are also encouraging efforts across national borders. Major regional initiatives include the Eastern Tropical Pacific Marine Corridor (CMAR), the Mesoamerican Biological Corridor (CBM) and WWF's Living Amazon Initiative.

In addition to the striking increase and spatial expansion of protected areas, the well-documented conceptual changes in recent years are noteworthy. They are reflected in conservation theory and practice but also in laws, policies, strategies, plans and, in several countries in the region, in the national constitutions. What are the implications of such fundamental and ongoing changes for the World Heritage Convention, the intergovernmental agreement adopted in 1972 to identify and conserve cultural and natural conservation gems of "Outstanding Universal Value"? Forty years into the Convention, it seems timely to analyze how natural World Heritage may best contribute to the evolving nature conservation efforts in Latin America and the Caribbean today.

#### 2. Approach, objectives and structure

This discussion paper attempts to find out why World Heritage plays a relatively marginal role only in the current nature conservation debate in Latin America and the Caribbean and what can be done to promote a more meaningful role. The underlying assumption is the conviction shared by many colleagues in the region that much of the potential of natural World Heritage remains to be realized. The overarching goal is to contribute to the realization of this potential by shedding light on the current situation and by identifying concrete options to promote natural World Heritage in the region.

While important data and analysis is available through formal Convention procedures, such as Periodic Reporting (e.g. UNESCO, 2013 and 2004), a systematic and specific regional analysis of natural World Heritage is missing. Following informal discussions with colleagues in the region and within IUCN's World Heritage Programme it was

considered useful to document basic facts, perceptions and ideas surrounding natural World Heritage in the region as a basis for a more structured discussion. Most importantly, this paper includes the perspectives of experienced practitioners in the region. For this purpose selected semi-structured interviews were conducted by phone and in person focusing on perceived challenges and concrete entry points for IUCN support.

The results are presented in the subsequent chapter according to the following structure: To set the stage, a brief overview of the inscribed natural and mixed World Heritage properties in the region is provided, including observations by the author in terms of detectable patterns. The subsequent sections look at conceptual considerations and perceived bottlenecks. Finally, distilling the many suggestions to its essence, conclusions are drawn and recommendations are derived. Even though an indepth analysis is beyond the scope of what has been possible within this exercise, it is hoped that this paper provides useful food for thought and inspires action.

#### 3. Results

#### 3.1 Natural World Heritage in the Region: Numbers and Patterns

A straightforward situation analysis based on the publicly accessible data provided by UNESCO's World Heritage Centre (http://whc.unesco.org/en/list) was conducted to set the stage. The analysis partially draws on ideas by Badman *et al.* (2008). Two overview tables compiled for the purpose of this analysis are provided as Annexes 2 and 3. The analysis is restricted to Latin America and the Caribbean as defined as a "UNESCO region".

#### Numbers and surface area

As of September 2013, there are 39 World Heritage properties in Latin America and the Caribbean inscribed according to one or more natural World Heritage criteria. According to publicly available data these areas amount to almost 37 million hectares of land and sea. Against the above UNEP estimate of some 500 million hectares of regional protected areas estate, this implies a World Heritage share of slightly over seven percent of the total protected land and sea in this region. While the accuracy of the available data should be treated with caution, both the absolute surface area and the percentage of natural World Heritage properties relative to the regional protected areas estate illustrate an impressive order of magnitude.

Out of the 39 properties, 36 are inscribed exclusively according to natural criteria, whereas three are also inscribed according to one or more cultural criteria, i.e. they constitute "mixed" World Heritage properties. As of the writing of this report, the global tally is at 222 properties involving natural criteria, of which 193 are based on natural criteria only with the remaining 29 being mixed properties. It could be argued that the region hosts a surprisingly small overall number of properties given its rich and diverse natural heritage and a very modest share of the World's "mixed" properties. While one should be careful with potentially misleading interpretations of the raw numbers, it seems fair to state that the well-documented and increasingly acknowledged spatial overlap of cultural and natural diversity in the region is not reflected in the number of

inscribed "mixed" properties. The three existing "mixed" properties are Tikal (Guatemala), Río Abiseo National Park and Machu Picchu National Park (both Peru), have iconic status in the region even though Río Abiseo National Park does not have the visibility it deserves.

Five properties in the region are inscribed on the World Heritage List according to all four natural criteria. Four of these were inscribed in the early days of the Convention between 1978 and 1983, with the remaining one in 1994. This can likely be attributed to a comparatively "generous" past use of the criteria rather than compliance with all four criteria according to the current understanding of the criteria. The same may hold true for criterion (vii), dedicated to "aesthetics" and "superlative phenomena", which was accepted in 12 of the first 15 inscriptions in the region.

It is interesting to note that 27 inscriptions involved criterion (ix) and 31 involved criterion (x). Both criteria are related to biodiversity with (ix) focused on ecosystem processes, and (x) focused on habitats and species. The inscription of 24 or almost two thirds of all natural properties in the region was based on both criteria (ix) and (x), suggesting a clear predominance of these two criteria, sometimes informally referred to as the "biodiversity criteria". On the other end of the spectrum, only two inscriptions have involved geological criterion (viii) over the last 16 years. Overall, there are 12 inscriptions involving the latter criterion, mostly from the early days of the Convention.

The lack of inscriptions and the limited number of nominations in the region over the last years are conspicuous and certainly do not help the visibility of the Convention. At the same time, this does not necessarily constitute a trend. For example, there was likewise one inscription only in the region between 1988 and 1992. The all-time peak in the region with 13 inscriptions over three years between 1999 and 2001 should not be over-interpreted either. It can be partially attributed to a political window of opportunity coinciding with United Nations Foundation support in Brazil resulting in 6 inscriptions in that State Party alone within the three years under consideration.

#### Distribution patterns

The 39 properties are located in 16 out of 32 States Parties to the Convention across the region. By sub-region, 8 out of 12 States Parties in South America have one or more natural World Heritage properties within their territory. South American States Parties without natural or mixed World Heritage properties are, in alphabetical order, Chile, Guyana, Paraguay and Uruguay. Several respondents were surprised that Chile, for many a country epitomizing vast and majestic "nature", has no World Heritage property inscribed based on natural criteria.

In Central America and Mexico there are natural World Heritage properties in all countries but Nicaragua and El Salvador, i.e. in 6 out of 8 countries. Of the 12 States Parties belonging to the Insular Caribbean, Cuba, Dominica and Saint Lucia are the only States Parties with natural properties within their territory.

By sub-region, 22 out of the total 39 properties are located in South America, 13 in Central America and Mexico and four in the insular Caribbean. It appears noteworthy

that the relatively small area of Central America and Mexico taken together has more than half the number of properties of the much larger South American land mass.

There are 14 properties containing marine areas in addition to terrestrial areas. Moreover, four terrestrial properties include coastal areas even though they are better known as important forest areas. These are Atlantic Forest South-East Reserves, Discovery Coast Atlantic Forest Reserves (both Brazil), Río Plátano Biosphere Reserve (Honduras, note that there is a lack of clarity as regards the boundaries of this property. However, both the nomination and the IUCN evaluation suggest inclusion of the coast) and Darién National Park (Panama). While there is no clear-cut definition of "marine World Heritage" and the relative importance of marine versus terrestrial surface area varies substantially, it is noteworthy that almost half of the properties in the region include marine or at least coastal areas. The most remarkable regional marine conservation effort involving World Heritage properties is the "Eastern Tropical Pacific Marine Corridor", regionally known as CMAR for its Spanish language acronym. While not a World Heritage initiative per se, all but one of the protected areas to be connected are inscribed World Heritage properties (Galapagos Islands/Ecuador, Malpelo Fauna and Flora Sanctuary/Colombia, Coiba National Park/Panama, Cocos Island National Park/Costa Rica; Gorgona National Park/Colombia is not inscribed on the World Heritage List).

There is only one property formally inscribed as a transboundary property, the Talamanca Range-La Amistad Reserves / La Amistad National Park, shared by Panama and Costa Rica. This is remarkable, as there is widespread agreement that many border areas in the region are of highest conservation importance, often because they coincide with marginalized regions with poor infrastructure etc. There are also several inscribed properties that are situated within large transboundary ecosystems of major conservation significance. Striking examples include:

- the Belize Barrier Reef Reserve System, which belongs to the much larger Mesoamerican Reef extending across several countries;
- the Pantanal Conservation Area in Brazil, part of South America's largest wetland extending into neighboring Paraguay and Bolivia;
- Tikal in Guatemala, part of a valuable tropical forest block shared with neighboring Mexico and Belize (Maya Forest).

Likewise notable are two examples of contiguous properties located on opposite sides of international borders without formal recognition as a transboundary property. These are the national parks of Iguazu (Argentina) and Iguaçu (Brazil), and the national parks of Darién (Panama) and Los Katíos (Colombia), respectively. The location of many properties on or near borders suggests a high potential in terms of transboundary cooperation. At the same time, the fact that only one property has been formally inscribed as a transboundary property over the four decades of the Convention's lifespan serves as a reminder of the related challenges.

At the time of writing, three natural properties are on the List of World Heritage in Danger: Río Plátano Biosphere Reserve (Honduras), Los Katios National Park (Colombia) and Belize Barrier Reef Reserve System (Belize). Properties on this List

are by definition a priority concern of the Convention and should trigger particular attention and support.

#### Natural World Heritage and Conservation Priorities

It is interesting to note that great investments have been made in priority-setting exercises at the regional and national level since the mid-1990s, typically focusing on biodiversity conservation. A widely used landmark study was published by Dinerstein *et al.* in 1995. More recently, the systematic search for conservation priorities and gaps in national protected areas systems has been considered as an explicit goal under Programme of Work on Protected Areas of the Convention on Biological Diversity (CBD/PoWPA), typically reflected in national biodiversity conservation and protected areas strategies in one way or another. Even a superficial search reveals that most countries in the region have been conducting some type of priority-setting exercise, often supported by NGOs and academic partners. To the best of the knowledge of colleagues consulted for this paper, there appears to be no example of explicitly linking priority-setting exercises in the realm of biodiversity to natural World Heritage. As elaborated below, this seems to be a missed opportunity, particularly noting that the indicative "gap-analysis" for possible biodiversity sites indicates a very high potential for natural sites in the region (Bertzky *et al.*, 2013).

#### 3.2 Conceptual Considerations and Perceived Bottlenecks

There is a consensus amongst those consulted for this report that the World Heritage Convention is currently not a particularly relevant or visible nature conservation instrument in the region. The Enhancing our Heritage (EoH) initiative in the region revealed that responsible management units often do not even have records of World Heritage documentation of their sites. Several properties do not refer to their World Heritage status in signs and communication material. These observations were suggested as indicators that World Heritage status is often not perceived as an added value. Formal processes under the Convention may selectively involve some representatives of protected areas agencies and IUCN. However, their role tends to be restricted to attending meetings as participants as opposed to actively contributing to the shaping of regional processes. There is no systematic use of the Convention to engage with natural heritage specialists in the region. Regional colleagues consistently expressed strong interest in more active engagement in formal processes.

Asked to explain the discrepancy between the potential and the perceived reality of the World Heritage Convention, respondents repeatedly suggested that the Convention fails to involve players and themes which today constitute the essence of the conservation debate in the region. The conservation debate has long moved from a discussion driven by natural scientists to a highly political and politicized process which cannot be separated from much broader societal trends. In other words, the simplifications inherent to the early protected area concepts are not considered useful anymore. World Heritage is being perceived as lagging behind conservation thinking and in some cases even behind the evolving legal and policy frameworks.

Two interrelated key questions in the regional debate are the integration of protected areas into the broader landscape / seascape and "governance", including in particular the role and involvement of local and indigenous communities. The thinking has moved

from individual protected areas that do not or only superficially consider the (political, socio-economic, cultural) context to more complex and integrated models. As both questions are not systematically addressed in World Heritage processes, the Convention is seen as avoiding the tough questions. An instrument with a primary focus on "islands" without meaningful guidance or requirements in terms of landscape connectivity is not obviously appealing to or even compatible with today's complex conservation debate.

To illustrate this point, it might be useful to quote a regional report (restricted to Spanish-speaking countries) elaborated for the major regional conservation meeting held in 2008 in Bariloche, Argentina, which identified the following inter-related regional trends (Castaño Uribe, 2008):

- Emergence of large scale ("landscape/ seascape") approaches;
- increasing consideration of protected areas systems rather than individual protected areas;
- increasing importance of local and indigenous communities;
- joint consideration of development and conservation issues and objectives;
- broadening spectrum of protected areas categories.

To these can be added the increasing focus on the role of protected areas in climate change in terms of resilience and reduced vulnerability. While all trends are slowly starting to enter the World Heritage debate, the Convention is clearly not at the forefront of conservation thinking in the region. Consequently, there is a major lack of technical credibility of the Convention as a meaningful component of the current conservation debate.

While improvements are possible and desirable, it seems unrealistic to induce fundamental change in the approach and mechanics of the Convention in the short and medium term. The most promising approach to close the wide gap between the current conservation debate and the reality of the World Heritage Convention, both in terms of actors and substance, would be to link existing technical networks and current conservation initiatives to World Heritage in the sense of two-way communication. This means that actors like governmental protected areas agencies, as well as nongovernmental and academic institutions should be involved more strongly in the World Heritage Convention and, conversely, these actors should be encouraged and supported to consider World Heritage as a valuable conservation instrument. The current failure to involve such key actors bears the risk of further marginalizing World Heritage. The conservation community has much to offer to the development of the Convention and in the process of associating can benefit from the Convention. Capacity development is needed so as to enable governmental actors and civil society in the region to better understand the intricacies and the potential of the Convention.

Despite the sobering overall picture, there is a consistent acknowledgement of the plausibility of the idea and potential of World Heritage. One highly experienced colleague went so far as to call World Heritage the "best marketing idea in conservation ever". This suggests a major and largely untapped potential in terms of communication, awareness-raising and fund-raising, in particular given that World Heritage is a brand that is appealing beyond conservation audiences.

#### 4. Conclusions and Recommendations for IUCN

There is a conspicuous discrepancy between a strong and consistent endorsement of the idea and "spirit" of World Heritage versus the observable lack of momentum. The protected areas community is not actively and systematically involved in formal Convention procedures. There is a consistent perception of formal World Heritage procedures as an obligation rather than an opportunity. Formal World Heritage efforts in the region insufficiently involve key governmental, non-governmental and academic actors and the political and technical debate surrounding protected areas. World Heritage could become a more meaningful conservation tool by linking it to nature conservation actors, existing and functional networks and ongoing debates.

World Heritage is not a routine element of the regional protected areas debate. In its dual role as a conservation organization and advisory body, IUCN is in a unique position to try and bridge the gap between World Heritage and the broader protected areas discussion. Many, if not most of the above governmental and non-governmental actors are IUCN members. There is also a regional presence of the IUCN Secretariat through offices in San Jose, Costa Rica (ORMA), Quito, Ecuador (SUR) and Brasilia, Brazil. All 6 IUCN Commissions are active in the region and do support IUCN's World Heritage work but this could no doubt be strengthened. There are also opportunities to work with regional UNESCO Offices and the emerging UNESCO Category II Centres.

Based on responses from colleagues from the region or actively involved in the region, entry points for IUCN are suggested for further discussion hereafter.

# 4.1 More meaningful involvement of the regional and sub-regional nature conservation communities in formal World Heritage processes

Many of the consulted conservation practitioners were only marginally aware of formal procedures and processes under the World Heritage Convention. One promising way forward could be to invest in capacity development so as to ensure a pool of regional experts in a position to actively contribute to regional World Heritage processes and to carry out evaluation and monitoring missions on behalf of IUCN (see point 4.5). As for future regional reporting exercises (Periodic Reporting) and derived action planning, it would seem most constructive to eventually go beyond formal attendance of meetings. As major stakeholders and holders of knowledge, protected areas agencies and regional technical networks deserve to be involved in more meaningful fashion in such exercises, including in the very design of reporting exercises and meeting agendas. This could lead to more profound discussions and guidance and work plans beyond statements of intentions. Strategic discussions about the role of the Convention in dealing with very real threats from resource extraction, infrastructure development and climate change are needed and so are real-life planning tools adapted to the properties in the region. Obvious actors to be involved may include focal points for CBD/PoWPA, Heads of protected areas agencies, regional representatives of IUCN Commissions, offices and members. Civil society representation should not be restricted to conservation actors but institutions and organizations involved in overlapping social and cultural issues.

#### 4.2 Refining the "Global Biodiversity Gap Analysis" and "Upstream Support"

As stated above, much work and investment has gone into different types and various levels of conservation priority-setting over the last years. Even though the information generated would lend itself for use in the elaboration of Tentative Lists, there is no evidence that such linkages have ever been systematically established.

The global study on "Biodiversity priorities and the World Heritage List" (Bertzky *et al.*, 2013) indicates that a majority of global biodiversity gaps on the World Heritage List may be situated in Latin America and the Caribbean. While regional refining of the global study is desirable in all global regions, Latin America and the Caribbean region therefore lends itself as a priority for regional follow-up. There are well-known global (biodiversity) conservation priorities in the region which are not considered as natural or mixed World Heritage candidates or properties. Suggested action could focus on (a mix of) the following elements:

- Refine the global IUCN study on "biodiversity gaps", taking advantage of and synthesizing the many existing regional and country studies. The attractive global study could be used to raise funds for follow-up activities;
- the six "megadiverse" countries in the region would lend themselves as a particularly valuable sub-set of countries (States Parties) in the region. Five of them are contiguous and harbor many areas of particular conservation importance along international borders (Brazil, Colombia, Ecuador, Peru, Venezuela with Mexico being the remaining "megadiverse" State Party). Priority work could address individual, several or all six State Parties. In all six State Parties there is room for enhanced Tentative Lists. It deserves to be noted that Ecuador has recently submitted an International Assistance Request for this very purpose. It is these governmental efforts that should be underpinned with the best possible technical information and support;
- Systematic work on identifying marine priorities is increasingly becoming available in several countries of the region but does not appear to be used from a World Heritage perspective. This gap could be approached as a regional or country level refinement of a forthcoming global marine World Heritage study.

"Upstream Support" under the Convention is by no means restricted to Tentative Lists and the above linkages to priority-setting exercises. Several colleagues from various countries have indicated an interest in IUCN support to individual nomination processes. For both Tentative Lists and individual nominations there is a specific albeit relatively modest funding option under the World Heritage Fund. Surprisingly, and serving as another indicator of insufficient communication, this opportunity appears to be poorly known in the protected areas community. Direct communication on World Heritage is needed between IUCN, the World Heritage Centre and protected areas agencies. In terms of nomination processes, IUCN should focus on processes in areas scientifically established as conservation priorities rather than on politically defined priorities. Concrete support could include:

- The serial property concept could be further applied and developed to cover functional protected areas networks in areas of major conservation importance. One concrete example could be the Mesoamerican Reef beyond the inscribed property in Belize, involving Mexico and possibly additional State Parties:
- The Amazon Basin, including the particularly valuable and threatened transition into the Eastern Tropical Andes in several "megadiverse" countries. While there are quite a few, often large World Heritage properties in the Basin (Central Suriname Nature Reserve/Suriname, Central Amazon Conservation Complex/Brazil, Canaima National Park/Venezuela, Manu National Park/Peru, R'io Abiseo/Peru, Historic Sanctuary of Machu Picchu/Peru, Sangay/Ecuador, Noel Kempff Mercado National Park/Bolivia) there appears to be no systematic effort to develop these important properties into a regional network and/or to identify remaining priority areas. Initiatives in the framework of the Amazon Cooperation Treaty Organization and WWF's "Living Amazon Initiative" could be partners (WWF, 2011; ACTO, 2011);
- Contiguous conservation complexes comprised of different categories and governance set-ups (and in some cases various forms of indigenous lands) are emerging in various State Parties as contemporary protected area models, sometimes referred to as mosaics. State Parties do not seem to consider such complex initiatives as compatible with World Heritage initiatives. This may be because World Heritage has a connotation of "conventional" nature conservation. Direct support to such initiatives could go a long way in terms of re-positioning the Convention as a "modern" conservation instrument. One concrete example is Colombia's Chiribiquete National Park, which is in the process of becoming the State Party's largest conservation area in a remote and politically complex setting. Brazil legally recognizes "mosaics" and may also have opportunities in this regard;
- Another particular and very promising case is the Chilean Winter Rainfall-Valdivian Forest. One of only five "hotspots" defined by CI in South America it stands out as the only one without any World Heritage property as of today. It is difficult to think of a more obvious candidate in the region, certainly in the Southern Cone. Interaction with Chilean IUCN members would help shed light on the interest, feasibility and support options.

#### 4.3 Re-visiting existing properties

There are several highly valuable natural World Heritage properties inscribed in the early days of the Convention where much has happened since inscription in terms of research, boundaries, zonation, governance, community engagement, legal and policy framework etc. In these properties the reality has grown out of the simplistic framework described in nominations written decades ago to justify inscription at the time. It would be highly interesting to re-visit such areas so as to build a "second generation" of improved and more effective World Heritage properties on the foundation of the "first generation" rather than only focusing on the listing of new properties. Besides "refreshing" an international layer of protection in ongoing national initiatives it would

prevent World Heritage status from becoming outdated in such (dynamic and evolving) situations. The assumption is that in quite a few cases the selection of the ecosystem or conservation values as such were adequate in World Heritage nominations but the design may have been imperfect at the time of inscription. Among other factors, this may be related to (i) the lack of the option or consideration of serial approaches, (ii) small surface areas of formally protected land or water at the time of nomination, (iii) poor information base at the time of nomination, (iv) small political windows of opportunity not permitting in-depth nomination processes, (v) poor scrutiny in early evaluations as regards "integrity". The (political) sense of "mission accomplished" once properties are inscribed often appears to prevent the consideration of adapting World Heritage properties over time, even though the protected area design at the national level and many other parameters have been changing significantly over the last years in many large-scale protected areas. There is no shortage of natural World Heritage properties within recognized global conservation priorities in the region with less than ideal boundary designs or with World Heritage boundaries differing from revised boundaries of national level protected areas. Striking examples include four of the five CI-Hotspots in South America (Tropical Andes, Atlantic Forest, Tumbes-Choco-Magdalena, Cerrado). All of them do contain World Heritage properties but even a superficial analysis reveals that in all four hotspots many new protected areas have been created post-inscription, in several cases directly adjacent or in the vicinity of the World Heritage properties. There are also several cases where the very protected areas constituting the basis for the World Heritage inscription have been expanded post-inscription. The usefulness of re-visiting these properties appears to be obvious and assessment methodologies are readily available, including the lessons learned from the Enhancing our Heritage initiative. Some concrete examples may include:

- Manu National Park (Peru): a national sanctuary (Megantoni) of extraordinary cultural and biological value has been declared adjacent to the property in a location of major strategic importance. Recent rapid biodiversity assessments have revealed astonishing conservation values and include the scientific discovery of numerous vertebrate species. Via Megantoni Manu National Park is linked to the Vilcabamba Range to the West. In addition, a national park exceeding the massive Manu property in size has been established just East of the property (Alto Purus) connecting Manu all the way to protected areas in neighbouring Brazil. While no doubt much more complex and too significant to be dealt with as a minor boundary modification (unlike Megantoni), such ideas deserve to be analyzed;
- Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks in Brazil is a striking example of evolving conservation areas and approaches. Despite a lack of clarity about the boundaries and increasing overall pressure on the biome there have been a number of positive developments since inscription, namely (i) a much better understanding of the Cerrado and conservation priorities within an extremely large biome, (ii) the recent establishment of several protected areas, (iii) a completely revised protected areas legislation since 2002 providing the new option to establish "mosaics", i.e. contiguous conservation complexes comprised of different categories. The Brazilian authorities in charge (ICMBio) have

developed a proposal which is very close to the above idea of "re-visiting" existing properties. ICMBio has approached UNESCO's Brasilia Office and there may be opportunities to join forces;

- The nomination of Mexico's Islands and Protected Areas of the Gulf of California property acknowledges a limited information basis and explicitly formulates the vision of future additions to the property. This has since been implemented but there is clearly potential for further amendments of both marine and terrestrial areas in this truly outstanding area, as new information is being generated continuously;
- Río Plátano Biosphere Reserve (Honduras): This early inscription suffers from a major lack of clarity in terms of its boundaries and surface area. Much of the work on the ground, including a zonation scheme, has occurred post-inscription focusing on the "biosphere reserve" without ever having been formalized from a World Heritage perspective. There is clearly a need and a Committee mandate to re-visit this property and its boundaries, to address the challenges that have led to its inscription on the World Heritage List in Danger;
- Properties on the List of World Heritage in Danger could routinely trigger a systematic IUCN assessment in the sense of "re-visiting" a World Heritage property if desired by the States Parties.

#### 4.4 Regional networking and capacity development

While the existing formal World Heritage processes, such as the two rounds of Periodic Reporting (PR), have generated useful information they do not appear to have sparked effective networking or capacity development in the realm of natural World Heritage. In fact, the second cycle appears to constitute a step backwards, as there was no equivalent of the successful technical expert group involving IUCN established for the first cycle, and mentoring and support to engage with natural heritage sectors has been absent. IUCN involvement in formal processes can and should be strengthened.

Several colleagues also suggested the usefulness of independent IUCN efforts. This could for example include further regional elaboration of ongoing independent work on the state of conservation. IUCN and its World Commission on Protected Areas (WCPA) are currently working on independent assessments of the Conservation Outlook for all listed natural World Heritage sites. The product which will be launched in 2013-14 as a specific tool to better connect World Heritage to IUCN networks, members, commissions and other partners. Given the need to rekindle interest in the Convention, a clear challenge for IUCN will be to ensure that the work on Conservation Outlook is positioned to be relevant and engage with the concerns of the regional and subregional conservation communities. While it is appealing to consider the development of an independent and more inclusive system complementary to the formal procedures of the World Heritage Convention, a sustainable long term funding model would be required. It is, however, unclear whether such a "system" would be considered a priority by the conservation community. It is therefore considered most promising to build upon established structures of the regional protected areas community with the objective to systemically promote World Heritage as a sub-discussion of the protected areas discussion rather than a parallel or separate discussion. The work on

Conservation Outlook should therefore be positioned in the region to contribute to this goal. The following ingredients are suggested:

- Association with key regional networks: Redparques, regional World Commission on Protected Areas network, regional Convention on Biological Diversity/Programme of Work on Protected Areas (PoWPA) efforts. IUCN should facilitate a discussion on World Heritage as a sub-discussion of regional nature conservation jointly with regional offices, Commissions and members at the occasion of regional meetings, such as the next Mesoamerican Protected Areas Congress scheduled for March 2014 and including regional run-up to the World Parks Congress in November of 2014;
- Association with key regional training institutions: As an example, CATIE runs a longstanding and regionally well-known protected areas course. Even though the World Heritage Fund has routinely contributed to the course over many years, there is room for a more systematic consideration of the basics of the World Heritage Convention through concise training modules. Such modules would expose a large number of colleagues to the potential and procedures and would also increase the likelihood of future funding through the World Heritage Fund for CATIE. Training material would have to be tailored to the specific context but could build upon existing material. CATIE and others could also serve as information and communication platforms jointly with IUCN offices, members and commissions. IUCN could also directly contribute to teaching, including through its regional offices. Regional training institutions could also develop a role as regional natural World Heritage think tanks;
- In order to develop a pool of regional experts capable of carrying out evaluation and monitoring missions, promising candidates should be systematically teamed up with experienced colleagues so as to facilitate training on the job. Such a consolidation and "regionalization" of formal World Heritage procedures using credible and experienced regional colleagues would help increase the technical and political visibility and momentum;
- IUCN should seek arrangements with the employing institutions, typically protected areas agencies or conservation NGOs to enable staff to participate in IUCN missions as a training opportunity. This was identified as a practical obstacle when attempting to engage regional colleagues in evaluation and monitoring missions;
- International initiatives and projects supporting protected areas agencies should be encouraged to financially support the participation of protected area staff in IUCN missions as a capacity development measure.

#### 4.5 Communication, Education and Awareness-Raising

Several respondents pointed out the public appeal of World Heritage which clearly exceeds that of other environmental agreements, which may be unknown to or

perceived as technical by most people. World Heritage has without any doubt a great potential in terms of communicating conservation values and benefits, including cultural values which are an integral part of the very identity of regions, countries and people. While World Heritage can and should be used to convey the dramatic pressure on the region's natural capital both in the media and educational material, World Heritage can also convey a rare positive message in nature conservation. Ideally, regional and/or sub-regional communication strategies targeting various audiences should be developed bringing together the many ongoing activities in many countries and protected areas under the umbrella of World Heritage.

#### 4.6 Consolidating a marine corridor of global significance (CMAR)

Marine natural World Heritage is still in its infancy but likely to gain importance in the near future. There also seems to be emerging interest in marine conservation more broadly, a momentum that could be linked to World Heritage. The probably most remarkable opportunity in the region besides the above mentioned systematic identification of marine conservation priorities may well be the existing network "Eastern Tropical Pacific Marine Corridor" (CMAR, www.cmarpacifico.org), bringing together marine protected areas in Colombia (Malpelo and Gorgona), Costa Rica (Cocos), Ecuador (Galapagos) and Panama (Coiba). All but one of the included protected areas (Gorgona) are World Heritage properties. The voluntary agreement established by the Ministers of the Environment of the involved countries in 2004 encourages regional management of the Eastern Tropical Pacific seascape and is intended to serve as an umbrella for cooperation between governments many nongovernmental organizations, research organizations, local community groups and the private sector. The rotating Secretariat is currently hosted by Colombia and it would seem feasible to discuss the options to support the initiative with the Colombian colleagues. Given the involvement of many institutions, a more in-depth analysis is needed about the current needs, a possible niche for IUCN and funding opportunities.

#### 4.7 Local and indigenous communities

Even a superficial analysis reveals that a large number of natural World Heritage properties has been or is inhabited by local and often indigenous peoples. This includes dramatic examples of forced re-settlements. Another extraordinary situation is the presence of non-contacted indigenous peoples, such as for example in Peru's Manu National Park. In Colombia's Los Katíos National Park, indigenous peoples are currently in the process of re-establishing themselves on their ancestral land. While a situation analysis is beyond the scope of this paper, the research and discussions revealed sufficient evidence of the usefulness of a more in-depth analysis. Such an analysis would have to consider the emergence of new legal frameworks as regards local and indigenous rights. A Convention explicitly and uniquely addressing culture and nature lends itself as a framework for this type of analysis. It is widely acknowledged that there is room for better conceptual and practical integration and cooperation between involved actors, including the formal advisory bodies to the Convention.

It is hoped that the ideas compiled in this discussion paper will stimulate further discussion and will be further developed and supported by IUCN's World Heritage Programme in collaboration with existing and new partners.

#### 5. References

ACTO (Amazon Treaty Cooperation Agency). 2011. Amazon Strategic Cooperation Agenda. Approved at the X. Meeting of the TCA's Ministers of Foreign Affairs. OTCA, Brasilia, Brazil.

Badman, T.; Bomhard, B. 2008. World Heritage and Protected Areas. An initial analysis of the contribution of the World Heritage Convention to the global network of protected areas presented to the 32nd session of the World Heritage Committee, Québec City, Canada, in July 2008. IUCN, Gland, Switzerland.

Bertzky, B.; Shi, Y.; Hughes, A.; Engels, B.; Ali, M.K. and Badman, T. (2013) Terrestrial Biodiversity and the World Heritage List: Identifying broad gaps and potential candidate sites for inclusion in the natural World Heritage network. IUCN, Gland, Switzerland and UNEP-WCMC, Cambridge, UK. xiv + 70 pp.

Castaño Uribe, C. 2008. Diagnóstico y situación actual de las áreas protegidas en América Latina y el Caribe. Informe Regional. Corporación Andina de Fomento (CAF).

Dinerstein, E.; Olson, D. M.; Graham, D. J.; Webster, A. L.; Primm, S. A.; Bookbinder, M. P.; Ledec, G. 1995. A Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean. World Bank in association with the World Wildlife Fund. Washington, D.C., U.S.A.

UNEP. 2012.Global Environment Outlook (GEO-5). Environment for the Future we want. Nairobi, Kenya.

UNESCO. 2013. Final Report on the results of the second cycle of the Periodic Reporting Exercise for Latin American and the Caribbean. Item 10 of the Provisional Agenda: Periodic Reports. 10A.

UNESCO. 2004. Periodic Report 2004. The State of World Heritage in Latin American and the Caribbean. Summary Version. World Heritage Papers Series. World Heritage Paper 18. UNESCO. Paris, France.

WWF, 2011. Iniciativa Amazonia Viva. Un enfoque integral para la conservación del bosque tropical y la cuenca más grande del mundo.

#### **Annexes**

#### **Annex 1: World Heritage Selection Criteria**

Source: UNESCO/World Heritage Centre

- (i) represent a masterpiece of human creative genius;
- (ii) to 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) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- (iv) to 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) to be an outstanding example of a traditional human settlement, land-use, or seause 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) to 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) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- (viii) to 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) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- (x) to 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.

Annex 2: Natural World Heritage properties in Latin America and the Caribbean by inscription date

Year	Number	Property Names	State Party(ies)		
1978	1	Galapagos Islands	Ecuador		
1979	1	Tikal National Park	Guatemala		
1980	0				
1981	2	Los Glaciares National Park, Darien National Park	Argentina, Panama		
1982	1	Rio Platano Biosphere Reserve	Honduras		
1983	2	Talamanca Range-La Amistad Reserves / La Amistad National Park, Sangay National Park	Costa Rica/Panama, Ecuador		
1984	1	Iguazu National Park	Argentina		
1985	1	Huascaran National Park	Peru		
1986	1	Iguacu National Park	Brazil		
1987	2	Sian Ka'an, Manu National Park	Mexico, Peru		
1988	0				
1989	0				
1990	1	Rio Abiseo National Park	Peru		
1991	0				
1992	0				
1993	2	Whale Sanctuary of El Vizcaino, Historic Sanctuary of Machu Picchu	Mexico, Peru		
1994	2	Los Katios National Park, Canaima National Park	Colombia, Venezuela		
1995	0				
1996	1	Belize Barrier Reef Reserve System	Belize		
1997	2	Cocos Island National Park, Morne Trois Pitons National Park	Costa Rica, Dominica		
1998	0				
1999	5	Península Valdés, Atlantic Forest South-East Reserves, Discovery Coast Atlantic Forest Reserves, Area de Conservación Guanacaste, Desembarco del Granma National Park	Argentina, Brazil, Brazil, Costa Rica, Cuba		
2000	5	Ischigualasto / Talampaya Natural Parks, Noel Kempff Mercado National Park, Central Amazon Conservation Complex, Pantanal Conservation Area, Central Suriname Nature Reserve	Argentina, Bolivia, Brazil, Brazil, Suriname		
2001	3	Brazilian Atlantic Islands: Fernando de Noronha and Atol das Rocas Reserves, Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks, Alejandro de Humboldt National Park	Brazil, Cuba		
2002	0				
2003	0				
2004	1	Pitons Management Area	Saint Lucia		
2005	2	Islands and Protected Areas of the Gulf of California, Coiba National Park and its Special Zone of Marine Protection	Mexico, Panama		
2006	1	Malpelo Fauna and Flora Sanctuary	Colombia		
2007	0				
2008	1	Monarch Butterfly Biosphere Reserve	Mexico		
2009	0				
2010	0				
2011	0				
2012	0				
2013	1	El Pinacate and Gran Desierto de Altar Biosphere Reserve	Mexico		

Annex 3: Selected data on natural World Heritage properties in Latin America and the Caribbean

No	Property Name	State Party(ies)	Inscription Criteria					Marine-	Transboundary	Danger List	Surface
	(abbreviated in some cases)		(vii)	(viii)	(ix)	(x)	cultural	Coastal			area (ha)
1	Galapagos Islands	Ecuador	Х	Х	Х	Х		mc	part of CMAR		14,066,514
2	Tikal National Park	Guatemala			Х	Х	Х		border setting		57,600
3	Los Glaciares National Park	Argentina	Х	Х					border setting		727,927
4	Darien National Park	Panama	Х		Х	Х		С	contiguity		575,000
5	Río Platano	Honduras	Х	Х	Х	Х		С	part of "Heart of Corridor"	Х	350,000
6	Talamanca - Amistad	Panama/Costa Rica	Х	Х	Х	Х			formalized		570,045
7	Sangay	Ecuador	Х	Х	Х	Х					271,925
8	Iguazu National Park	Argentina	Х			Х			contiguity		55,000
9	Huascaran National Park	Peru	Х	Х							340,000
10	Iguacu National Park	Brazil	Х			Х			contiguity		170,086
11	Sian Ka'an	Mexico	Х			Х		mc			528,000
12	Manu National Park	Peru			Х	Х					1,716,295
13	Rio Abiseo National Park	Peru	Х		Х	Х	Х				274,520
14	Whale Sanctuary El Vizcaino	Mexico				Х		mc			370,950
15	Machu Picchu	Peru	Х		Х		Х				32,592
16	Los Katios National Park	Colombia			Х	Х			contiguity	Х	72,000
17	Canaima National Park	Venezuela	Х	Х	Х	Х			border setting		3,000,000
18	Belize Barrier Reef Reserve System	Belize	Х		Х	Х		mc	part of Mesoamerican Reef	х	96,300
19	Cocos Island National Park	Costa Rica			Х	Х		mc	part of CMAR		199,790
20	MorneTrois Pitons National Park	Dominica		Х		Х					6,857
21	Peninsula Valdes	Argentina				Х		mc			360,000
22	Atlantic Forest South-East Reserves	Brazil	Х		Х	Х		С			468,193
23	Discovery Coast Atlantic Forest	Brazil			Х	Х		С			111,930
24	Area de Conservacion Guanacaste	Costa Rica			Х	Х		mc			147,000
25	Desembarco del Granma National Park	Cuba	Х	Х				mc			41,863
26	Ischigualasto/Talampaya Natural Parks	Argentina		Х							275,369
27	Noel Kempff Mercado National Park	Bolivia			Х	Х			border setting		1,523,446
28	Central Amazon Conservation Complex	Brazil			Х	Х					5,323,018
29	Pantanal Conservation Area	Brazil	Х		Х	Х					187,818
30	Central Suriname Nature Reserve	Suriname			Х	Х					1,600,000
31	F. de Noronha/Atol das Rocas Reserves	Brazil	Х		Х	Х		mc			140,713
32	Cerrado Protected Areas	Brazil			Х	х					367,365

No	Property Name	State Party(ies)	Inscription Criteria					Marine-	Transboundary	Danger List	Surface
33	Alejandro de Humboldt National Park	Cuba			Х	Х		mc			71,140
34	Pitons Management Area	Saint Lucia	Х	Х				mc			2,909
35	Gulf of California	Mexico	Х		Χ	Х		mc			688,558
36	Coiba National Park	Panama			Х	Х		mc	part of CMAR		270,125
37	Malpelo Fauna and Flora Sanctuary	Colombia	Х		Х			mc	part of CMAR		857,000
38	Monarch Butterfly Biosphere Reserve	Mexico	Х		Х						13,552
39	El Pinacate and Gran Desierto de Altar Biosphere Reserve	Mexico	х	Х		х			border setting		714,566