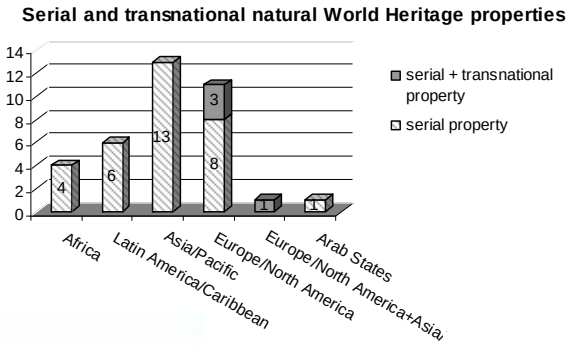
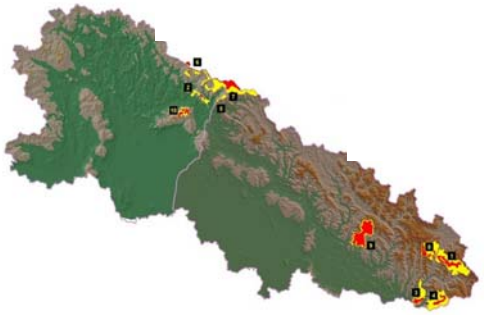
Barbara Engels, Bettina Ohnesorge and Andrea Burmester (Eds.)

Nominations and Management of Serial Natural World Heritage Properties

Present Situation, Challenges and Opportunities





Federal Agency for Nature Conservation

BfN – Skripten

2009

United Nations Educational, Scientific and Cultural Organization

Nominations and Management of Serial Natural World Heritage Properties

Present Situation, Challenges and Opportunities

Proceedings of a workshop organised by
the German Federal Agency for Nature Conservation (BfN)
in cooperation with the UNESCO World Heritage Centre
and IUCN
November 26th - 30th, 2008

Editors:
Barbara Engels
Bettina Ohnesorge
Andrea Burmester

Editors: Barbara Engels (BfN), Bettina Ohnesorge (Consultant) &
Andrea Burmester (BfN)
Federal Agency for Nature Conservation (BfN)
International Academy for Nature Conservation
Isle of Vilm
18581 Putbus / Rügen
Germany
Fon: +49 38301/86-0
Fax: +49 38301/86-150

Cover graphic: Photo credit: Vasyl Pokynchereda
Map credit: Ukrainian and Slovak World Heritage administrations
(Primeval Beech Forests of the Carpathians)
Graph: Barbara Engels (BfN)
Layout: Andrea Burmester (BfN)

This publication is included in the literature database "***DNL-online***" (www.dnl-online.de)

BfN-Skripten are not available in book trade.

Publisher: Bundesamt für Naturschutz (BfN)
Federal Agency for Nature Conservation
Konstantinstrasse 110
53179 Bonn, Germany
URL: http://www.bfn.de

Printed by the printing office of the Federal Ministry of Environment, Nature Conservation and Nuclear Safety.

Printed on 100% recycled paper.

Bonn, Germany 2009

Table of Contents

Introduction 3

Summary Report 5

1. Language and Definitions 5

2. Outstanding Universal Value and Serial Properties 7

2.1 WHAT THREATS AND OPPORTUNITIES DO SERIAL PROPERTIES POSE IN RELATION TO THE CREDIBILITY OF THE WORLD HERITAGE LIST? 7

2.2 HOW SHOULD THE OUTSTANDING UNIVERSAL VALUE BE APPLIED FOR SERIAL PROPERTIES? 7

2.3 IDENTIFYING THE SCOPE OF A SERIES AT THE TIME OF NOMINATION 8

2.4 HOW MANY COMPONENT PARTS SHOULD BE INCLUDED IN A SERIAL PROPERTY? 8

2.5 WHEN ARE EXTENSIONS OF SERIAL PROPERTIES APPROPRIATE? 9

2.6 HOW IS THE LIST OF WORLD HERITAGE IN DANGER APPLIED IF ONE COMPONENT OF A SERIAL PROPERTY IS THREATENED OR LOSES ITS VALUES? 9

3. Management requirements of Serial World Heritage Properties 10

3.1 WHAT IS THE MINIMUM LEVEL OF MANAGEMENT REQUIRED IN A SERIAL PROPERTY IN RELATION TO ALL COMPONENT PARTS OF THE SERIES AND IN RELATION TO EACH COMPONENT PART OF THE SERIES? 10

3.2 HOW SHOULD INTERPRETATION AND PROMOTION OF SERIAL PROPERTIES BE HANDLED? 11

4. Committee processes 12

4.1 BEST PRACTICE IN THE USE OF TENTATIVE LISTS 12

4.1.1 WHAT IS THE BEST WAY TO IDENTIFY POTENTIAL SERIAL PROPERTIES WITHIN TENTATIVE LISTS? 12

4.1.2 WHAT IS THE ROLE OF THE COMMITTEE, THE WORLD HERITAGE CENTRE, ADVISORY BODIES AND THE STATES PARTIES WITH REGARD TO TENTATIVE LISTS? 12

4.1.3 WHAT IS THE ROLE OF THE COMMITTEE, THE WORLD HERITAGE CENTRE, ADVISORY BODIES AND THE STATES PARTIES WITH REGARD TO TENTATIVE LISTS? 13

4.2 COMMITTEE CONSIDERATION OF SERIAL PROPERTIES 14

4.3 BEST PRACTICE IN NOMINATIONS FOR SERIAL PROPERTIES 15

4.3.1 NOMINATION FORMAT 15

4.3.2 WHAT ARE THE BASIC STANDARDS AND REQUIREMENTS FOR COMPARATIVE ANALYSIS 15

4.3.3 WHAT SHOULD BE THE RIGHT PROCESS FOR PLANNING PHASED NOMINATIONS? 15

4.4 AMENDMENTS TO THE OPERATIONAL GUIDELINES 16

4.5 PERIODIC REPORTING 18

4.6 GLOBAL STRATEGY 18

5. The roles of the World Heritage Centre, Advisory Bodies and UNESCO in relation to serial properties 19

5.1 ROLES OF CENTRE, ADVISORY BODY, UNESCO AND MANAGING CONFLICTS OF INTEREST 19

5.2 FUNDING IMPLICATIONS OF SERIAL PROPERTIES 19

5.3 HOW COULD IUCN IMPROVE ITS EVALUATION OF NOMINATIONS OF SERIAL PROPERTIES? 20

5.4. CONSIDERATION OF THE CULTURAL HERITAGE PERSPECTIVE 20

Annex 1 22

Annex 2 34

Annex 3 37

Annex 4 40

INTRODUCTION

This report presents the results of an expert meeting on "Nominations and Management of Serial Natural World Heritage Properties – Present Situation, Challenges and Opportunities". The meeting was organized by the German Federal Agency for Nature Conservation (BfN) with funding from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) as an integral part of their work on Natural World Heritage and in close cooperation with the IUCN and the UNESCO World Heritage Centre.

The proposal to hold the meeting was reported by a representative of the German delegation at the 32nd session of the World Heritage Committee as part of the discussion of Agenda point 10B and is referred to in the Committee Decision 32COM 10B as follows:

> 9. "[The World Heritage Committee] takes note that an expert workshop is proposed for November 2008 at the Isle of Vilm (Germany), which will reflect on current and future practice and strategies for nomination and management of Serial Transnational Natural World Heritage Properties, and will update the Committee on progress with this discussion at its 33rd Session in 2009".

This workshop report responds to this decision and presents the results of the workshop.

Aims of the meeting

The workshop took into account the questions outlined in Document WHC-08/32.COM/10B and the Decision 32.COM 10B when setting up the programme (see Annex 2).

The workshop aims were to:

- Develop draft guidance and recommendations for the nominations and management of serial natural World Heritage properties;
- Discuss the issues specifically outlined in paragraph 6 of the Decision 32.COM 10B with regard to natural World Heritage as well other topics related to Serial Natural World Heritage properties;
- Propose amendments to the Operational Guidelines and more detailed guidance for the nomination and management of serial national and transnational natural properties based on these conclusions.

The workshop therefore included the following steps/issues:

- Analysis of the present situation of Serial and/or Transnational Natural Properties. This was prepared as a technical study carried out by the BfN in partnership with the IUCN which will be published as Number 6 in IUCN's series of the World Heritage Studies. A first draft of this report was presented at the expert meeting.
- Presentation of different Serial Natural World Heritage Properties from different UNESCO regions (including transnational properties and examples from the cultural sector; see Annex 1).
- Discussion of requirements for nominations and management of Serial Natural World Heritage Properties (with input from the presentations and discussion of best practices).
- Review and analysis of existing guidance on serial properties (including the *Operational Guidelines*, decisions of the WH Committee, the IUCN Manuals on nomination and management of Natural World Heritage Properties).

Participants

Criteria for the participation were relevant expertise in nominating, managing and evaluating World Heritage properties. Participants had the following background:

- Representatives of Serial Natural World Heritage Properties from different UNESCO regions;
- Natural heritage experts (e.g. members of IUCN WCPA and others) and cultural heritage experts (including expertise on cultural landscapes);
- Experts involved in IUCN evaluations of natural properties;
- Members of National UNESCO Commissions;
- Representatives of the UNESCO WH Centre, UNESCO regional offices and the IUCN.

A list of participants is included in Annex 3. The meeting was also attended by representatives of the delegations of Kenya, Israel and Australia to the UNESCO World Heritage Committee, who requested to take part following the announcement of the meeting at the World Heritage Committee. Invitations were also sent to ICOMOS and ICCROM, although neither the Advisory Body was able to be formally represented at the meeting.

Outputs of the meeting

The workshop produced the following outputs:

- The workshop report (presented in this document, to be published through BfN-Skripten);
- A CD-ROM containing all background information and presentations of the workshop, included within the same report;
- The amended and updated study on Serial Natural World Heritage Properties, to be published by the IUCN as part of its Series of World Heritage Studies.

SUMMARY REPORT

1. Language and Definitions

1.1 The workshop recommended that standard and consistent terminology and language is adopted and used consistently by the World Heritage Centre, the World Heritage Committee and the Advisory Bodies. It was recognised that within the World Heritage Convention, the term "World Heritage Property" is the standard phrase that encompasses the different types of properties that may be inscribed on the World Heritage List (see Article 1 and 2 of the Convention). It was also recognised that at national levels many different terms are used by State Parties to describe their World Heritage properties, however it was strongly recommended that the language used within the Committee and the Convention in relation to serial properties should be precise and consistent.

1.2 The key phrase in the Operational Guidelines to define a serial property is set out in paragraph 137 as follows:

In English
137. Serial properties will include component parts related because they belong to:

a) the same historical – cultural group;
b) the same type of property, which is characteristic of the geographical zone;
c) the same geological, geomorphological formation, the same biogeographic province, or the same ecosystem type

and provided it is the series as a whole – and not necessarily the individual parts of it – which are of Outstanding Universal Value.

In French
137. Les biens en série peuvent inclure des éléments constitutifs reliés entre eux parce qu'ils appartiennent:

a) au même groupe historico-culturel;
b) au même type de bien caractéristique de la zone géographique;
et à condition que la série dans son ensemble – et non nécessairement ses différentes parties – ait une valeur universelle exceptionnelle.
c) à la même formation géologique ou géomorphologique, à la même province biogéographique ou au même type d'écosystème;

et à condition que la série dans son ensemble – et non nécessairement ses différentes parties – ait une valeur universelle exceptionnelle.

1.3 The key concept is therefore that "a serial property is made up of two or more component parts" ("Un bien en série inclut au moins deux elements constitutifs"). It was recommended that normal (i.e. non-serial properties) are termed "single properties" to distinguish them clearly.

1.4 A serial property can therefore be defined as a "property where two or more component parts are required to express Outstanding Universal Value". Thus, every property with more than one component part should strictly be regarded as a serial property. It was noted that some serial properties encompassed within a single management body or contiguous geographical area did not always have this element recognized (for example the Dorset and East Devon Coast is in strict terms a serial property but the component parts are directly adjacent to each other on the same stretch of coastline, with small separations between them). This implies that whilst some properties are strictly speaking serial properties, the fact of being a serial property is not significant in terms of their management, protection or presentation.

1.5 The following table of terms was agreed:

OFFICIAL TERMS	**English**	**Convention language (FR)**
RETAIN	Property	Bien
ADD	Single Property	Bien individuel
RETAIN	Serial Property	Bien en série
RETAIN	Component parts	Éléments constitutifs

It was noted that within some parts of the Operational Guidelines in both the English and French versions there was inconsistent use of this terminology. The workshop therefore recommended that the Operational Guidelines should be checked to ensure consistent use of language according to the table above.

1.6 In addition, the workshop discussed a variety of other terms that are currently used in the context of serial properties and made the following other comments on terminology:

a) Terms such as **cluster or network** might be used in relation to specific nominations, where component parts have been grouped; however such language should not be adopted into the Convention in a formal way. When such terms are used they should always still refer to "component parts" (e.g. a cluster of component parts, a network of component parts).

b) **Buffer zone terminology** should be consistent between serial properties and single properties. The language decided by the World Heritage Committee on buffer zones to distinguish the "inscribed World Heritage property" from the "buffer zone" (see paragraph 4 of Decision 32 COM 7.1) was supported. The phrase "core zone" should not be used as it causes confusion in relation to the mechanisms of the Convention and other programmes such as the UNESCO Man and the Biosphere Programme.

c) The possibility of simplifying the uses of **transboundary and transnational** within the Operational Guidelines was discussed. It was noted that for serial properties involving more than one country the phrase "**transnational Serial World Heritage Property**" should be used (i.e. transboundary serial property is not to be used). Although transnational could be used instead of transboundary for single properties as well, on balance it was concluded that **transboundary World Heritage Property** should be retained as a term for a single World Heritage Property that crosses one or more national boundaries. Transboundary should not be used to describe properties that cross federal states, provincial or other internal boundaries within a country. It should be noted that there are cases of two adjoining single properties crossing one or more national boundaries, which also can sometimes function as though they were a transboundary World Heritage Property (e.g. Iguacu/Iguazu in Argentina/Brazil).

2. Outstanding Universal Value and Serial Properties

2.1 WHAT THREATS AND OPPORTUNITIES DO SERIAL PROPERTIES POSE IN RELATION TO THE CREDIBILITY OF THE WORLD HERITAGE LIST?

The workshop concluded that serial properties have an important role in the future of the World Heritage Convention, especially in recognizing significant properties united within a single theme as of Outstanding Universal Value, as opposed to the early focus of the Convention on "icons". The workshop noted that serial properties have the function of recognizing Outstanding Universal Value where the key values are not able to be displayed in only a single property. In addition, serial properties might provide a strategy to reduce and avoid duplication of properties with similar values on the List.

Other benefits of serial nominations may be the support of national or transnational cooperation in heritage protection. Phased serial nominations can also support learning between different areas. But the overall requirement was that the series as a whole must display Outstanding Universal Value. The World Heritage criteria, the conditions of integrity, authenticity and the requirements for protection/management that together define Outstanding Universal Value are all entry points in relation to the definition of appropriate serial properties.

However, the workshop also recognised that serial properties "hide" the actual number of places included in the World Heritage List by including a number of component parts (he total number of different components included on the World Heritage List is estimated at around six times the number of properties inscribed for natural properties[1]) Furthermore, the workshop raised concern that serial nominations might be used to bypass the wish of the Committee to limit the number of nominations promoted by State Parties each year, and create a workload that the Committee could find unmanageable. The complexity of some serial nominations was also noted as a challenge in relation to both the credibility of the Convention and the workload of the Advisory Bodies and the World Heritage Centre in relation to both evaluation and monitoring.

The participants concluded that in terms of the processes of the Committee, serial properties and single properties should be regarded and treated in a consistent way.

2.2 HOW SHOULD THE OUTSTANDING UNIVERSAL VALUE BE APPLIED FOR SERIAL PROPERTIES?

The workshop discussed the concept that the Outstanding Universal Value of a property may be expressed through the metaphor of the property "telling a story". For a serial property the component parts can be thought of as different chapters of that story. Serial properties can thus add value in relation to the option of nominating a single property when a series of distinct component parts is needed to "tell the story" of the values within a coherent region, feature or set of values. Examples from the natural sector are:

- Origin and development of geological phenomena (e.g. volcanoes);
- Telling the complete story of a geological time period (community of plants, animals and the environment of a complete time);
- Representing a broad sequence of landform development;
- Representing islands within an archipelago (displaying functional integrity, complete variety of ecosystems);
- Different variations of an ecosystem/vegetation type;

Serial nominations are generally more complex and challenging than the nomination of single properties. There may also be concerns about the practicability and advisability of some serial approaches. The workshop therefore concluded that a more cautious approach is needed to the

[1] See IUCN Analysis on Serial Natural World Heritage Properties

encouragement of serial properties, especially those that are complex, e.g. regarding the number of criteria (especially when mixed sites are proposed), the number of component parts, the number of State Parties and the distance separating components (see also 4.3).

It was recognised that additional advice and support is needed for State Parties on serial properties. This could be achieved by providing a guidance section on serial properties in Annex 3 of the Operational Guidelines which deals with "specific types of properties".

2.3 IDENTIFYING THE SCOPE OF A SERIES AT THE TIME OF NOMINATION

The workshop recommended that when accepting the inscription of a serial property, there must be clarity about what the potential scope of the series might be. This was particularly important when planning a phased series. The first phase of the nomination should indicate the intended overall series that might eventually be nominated, including the different component parts and the possibility that new and additional criteria might be considered (see also 4.2.2). Allowance should be made for situations where new information (e.g. due to new research results) justifies the addition of new criteria or component parts, which were not foreseen at the time of inscription. The nomination should also state why a serial nomination is justified rather than a single property.

2.4 HOW MANY COMPONENT PARTS SHOULD BE INCLUDED IN A SERIAL PROPERTY?

The workshop considered that there is no single "right number" of component parts for a serial property. The number of components may in part vary in relation to the relevant criteria (for example criteria viii, ix and x may require a critical area or diversity of habitat to ensure the integrity). The number of component parts may be limited by the ability to effectively manage the property (as coordinated/integrated management is part of integrity).

It was recognised that there is concern that serial properties could inflate the World Heritage List by including inappropriate component parts. It was recommended that the Committee and Advisory Bodies adopt principles that are conservative in relation to the inclusion of component parts in a series. Serial properties should include as many component parts as are essential for telling the coherent "story" of the property in relation to its Outstanding Universal Value. However, adding components that do not have significant values in their own right and do not contribute significantly to the value of the property should be avoided. The workshop recommended that in principle the aim should be to include the minimum number of component parts that are adequate to (i) establish Outstanding Universal Value and (ii) assure the integrity of the property.

The workshop considered that individual component parts may add to the Outstanding Universal Value of the series by:

a) Adding distinct features necessary for the property to fulfil the criteria for inscription;
b) Enhancing significantly the integrity of the property (through elements such as reinforcement, ecosystem functioning, habitat linkages or ecological corridors);
c) Allowing more effective management and protection of the overall property.

In some rare cases a component part might justifiably be added to a series solely for reason c): however, this needs very careful consideration; however the workshop considered this circumstance to be unlikely. The workshop recommended that there should be a clear justification for the inclusion of every component included in a Serial World Heritage Property.

The workshop recommended that case studies of good practice should be identified for each criterion to illustrate the type and number of component parts required and including practical guidance on how to identify and determine the component parts. It would be valuable to note good examples of serial nominations from the case history of the Convention in a specific Compendium on this subject.

2.5 WHEN ARE EXTENSIONS OF SERIAL PROPERTIES APPROPRIATE?

Extensions of serial properties may be desirable if they:

- Significantly strengthen the values represented within the already inscribed property and/or
- significantly enhance the integrity of the already inscribed property, and
- provided that the extended property is (and will continue to be) adequately protected and managed.

An extension may also involve adding new criteria (with additional component parts) through a re-nomination.
The workshop recommended that if extensions are not identified at the time of inscription, or if component parts are proposed that were not supported as sites with Outstanding Universal Value in the Comparative Analysis, then such extensions should only be justified when significant additional information is brought forward.

2.6 HOW IS THE LIST OF WORLD HERITAGE IN DANGER APPLIED IF ONE COMPONENT OF A SERIAL PROPERTY IS THREATENED OR LOSES ITS VALUES?

The workshop considered that, in principle, the loss of values in one component part of a serial property can threaten the status of the whole series as such a loss may result in the overall Outstanding Universal Value of the series being threatened or completely lost. A working assumption is therefore that values should not be lost in any component of a serial property. In theory it is the case that if the values of a component part relevant to the Outstanding Universal Value of the property as a whole are lost in whole or in part, then the serial property as a whole might not eventually be threatened or lose its Outstanding Universal Value. Currently the only option in the Operational Guidelines where part of a serial property is in danger", is that the whole property should be regarded as being in danger. Changing this principle would result in serial properties being treated differently from single properties and this could prove very problematic. The workshop concluded that the status quo was therefore a justifiable position and did not make any further specific recommendations for change in relation to the operation of the List of World Heritage in Danger regarding Serial World Heritage Properties.

3. Management requirements of Serial World Heritage Properties

The workshop considered carefully the requirements for the management of Serial Natural World Heritage Properties taking into account the direct experience of a number of case studies presented at the workshop (see Annex 1).

3.1 WHAT IS THE MINIMUM LEVEL OF MANAGEMENT REQUIRED IN A SERIAL PROPERTY IN RELATION TO *ALL COMPONENT PARTS* OF THE SERIES AND IN RELATION TO *EACH COMPONENT PART* OF THE SERIES?

The workshop reinforced that the provisions of the Operational Guidelines contain a requirement for a management system to preserve the Outstanding Universal Value of the property for all World Heritage Properties (paragraph 108-118 of the OG). This provision applies equally to serial properties. For serial properties each component part should contribute to the achievement of the goal of the preservation of Outstanding Universal Value in the property as a whole.

A first priority in serial properties should be to ensure that adequate protection and management for each component is in place and effectively working. There should also be a management system at the level of the whole serial property that should ensure communication and coordination between all component parts in relation to at least:

- the harmonisation of management of all the component parts to meet a set of shared objectives of preserving Outstanding Universal Value;
- the identification of and response to threats to the property;
- the coordination of monitoring and reporting, in particular in relation to the requirements of World Heritage Convention.

It was also recommended that the management system for a serial property should regularly review and reinforce where feasible the coordinating mechanisms to increase the cohesion and effectiveness of its management as a World Heritage Property, and respond to changes that affect its component parts.

An evaluation of whether or not the above minimum requirements can be achieved should be regarded as a benchmark for whether the property is regarded as manageable and therefore meets the requirements of the Operational Guidelines.

The workshop identified that an integrated management framework recognizing different levels of management in an organized framework could provide a model for certain properties to follow should they wish, although it was noted that other models were possible:

- Within component parts (operational level): site managers, administering consistent site management plans or systems; the institutional coordination between the individual parts of this level should be ensured by the overall management system;
- Representation of component parts: representatives of each of the components should be identified;
- Coordination of the overall serial property: an upper representative body, with possibly decision-making authority in relation to the aspects critical for the whole of the serial property drawn from the authorities responsible for the different component parts of the property. This level should ensure that managers of the component parts cooperate and coordinate with each other and should secure adequate provision of resources as finances, staffing, and infrastructure).

The set-up of such a model may be simple for national serial properties with similar protection designation (see: South Africa: Cape Floral region protected areas) and become highly complex in the case of transnational serial properties and sometimes within Federal States with a heterogeneity of national or regional protection systems. It was noted that “bottom-up” and “top-down” mechanisms for management both are important.

3.2 HOW SHOULD INTERPRETATION AND PROMOTION OF SERIAL PROPERTIES BE HANDLED?

The workshop concluded that interpretation and presentation of a serial property should be best handled in an integrated way to ensure that a consistent message is given out at every component part. Furthermore, it was emphasised that the interpretation and presentation at the local level is also important and should not be forgotten. In each of the parts, information on the whole series and on the other parts should be displayed. The workshop recommended that where different protected areas are united as component parts of a serial property, the communication and professional exchange between the staff of the component parts could be particularly valuable to support integrated conservation, information and presentation.

4. Committee processes

The workshop discussed best practices for Serial Natural World Heritage Sites in relation to the different Committee processes including the use of Tentative Lists, screening processes for proposals of complex serial properties, nomination, periodic reporting and the global strategy. The conclusions are noted below.

4.1 BEST PRACTICE IN THE USE OF TENTATIVE LISTS

4.1.1 WHAT IS THE BEST WAY TO IDENTIFY POTENTIAL SERIAL PROPERTIES WITHIN TENTATIVE LISTS?

The workshop reinforced the importance of the identification of potential serial properties (and their component parts) within Tentative Lists as the first step in establishing appropriate serial properties. The workshop concluded that the format and process of Tentative Listing for serial properties need to be revised as a priority to clearly identify potential serial properties and their supporting concepts before nominations are put forward. The format of the Tentative List should clearly note when possible properties are serial and/or transnational in character, and key information on the possible scope of the series (see 4.1.3). A key question to be addressed is the method of indication by one State Party that a property on their Tentative List might for part of a transnational serial nomination and how it might correspond with or link to components on the territory of another State Party.

The workshop identified several processes and mechanisms that are useful in the identification of potential serial properties in tentative listing exercises. These include:

- The global strategies, gap analysis and global thematic studies;
- (Sub-)regional and thematic expert workshops;
- National and (sub)-regional screening studies for potential World Heritage Properties (such as the German screening study on potential Natural World Heritage Properties in Germany).

The workshop concluded that the harmonisation of Tentative Lists between States Parties in addition to the benefits as outlined in paragraph 73 of the Operational Guidelines are an important process for the identification of potential transnational nominations and represent the spirit of the World Heritage Convention.

The workshop noted the importance of the Comparative analysis and recommended that this should be carried out at the earliest stage in developing all (see 4.4.2).

In addition, the Periodic Reporting process was identified as a framework in which regional cooperation and identification of potential World Heritage Properties can take place and possibly be used to identify potential serial properties. Other regional cooperation processes (such as regional conventions and programmes) can also be used to identify potential serial properties.

4.1.2 WHAT IS THE ROLE OF THE COMMITTEE, THE WORLD HERITAGE CENTRE, ADVISORY BODIES AND THE STATES PARTIES WITH REGARD TO TENTATIVE LISTS?

The workshop recommended the following roles with regard to Tentative Lists:

a) The Committee:

- To provide early guidance especially in relation to complex transnational proposals (such as Mid Atlantic Ridge, Great Rift Valley, Frontiers of the Roman Empire, Silk Route, Inca

Route) based on technical advice on these initiatives. This should be provided by the Advisory Bodies (see 4.3);
- To grant assistance for relevant thematic studies through the mechanism of International Assistance
- To provide guidance on the appropriate structure and size of Tentative Lists and to encourage international cooperation to harmonise lists between State Parties.

b) The World Heritage Centre:
- To promote and facilitate the harmonisation of Tentative Lists, through organising appropriate technical workshops and other communication mechanisms;
- To encourage State Parties to implement regular (5-10 years) revision of Tentative Lists.

c) The Advisory Bodies:
- At the request of States Parties to assist with the identification of serial and transnational properties and provide guidance on appropriate Comparative analysis;
- To perform regional and sub-regional gap analysis;
- To take into account the option of serial approaches in their thematic studies;
- To provide case studies and best practice examples for the national preparation of Tentative Lists.

The workshop noted that both the Advisory Bodies and the World Heritage Centre should avoid promoting transnational approaches as a means of deflecting pressures from States Parties that wish to nominate sites with similar values. The Comparative analysis to distinguish between different properties was a preferred option, combined with encouragement to use alternative means of recognition for properties that might not be considered as being of Outstanding Universal Value.

d) States Parties:
- To revise their Tentative Lists according to the latest official format (and to ensure that serial national sites are identified as such);
- To periodically revise their Tentative Lists;
- To integrate Tentative Lists into national strategies for protected areas, thus providing a more comprehensive framework for World Heritage in national conservation policies.

4.1.3 AMENDMENTS TO CURRENT PROCESSES: TENTATIVE LISTS

With regard to Tentative Lists the workshop recommended to amend the Operational Guidelines in the following way:

a) <u>The Tentative List Submission format</u>
- two sets of boxes should be included with the options to mark whether the proposed properties is serial and/or transnational including the following options relevant to extensions of existing properties:

  For serial national properties:
  Option 1) this is an extension to an existing serial property;
  Option 2) this extension will create a new serial property (i.e. this is a serial extension of an existing single property).

  For serial transnational properties:
  Option 1) this extension is to an existing transnational property;
  Option 2) this extension creates a new transnational property by bringing a new State Party into an existing property located in one state;
  Option 3) this extension adds one or more new State Party/ies to an existing transnational property;

- the format should include the option to add a “justification for the serial approach” which should be completed for serial properties;
- the possibility to mention other States Parties that could take part in a serial approach (for transnational properties);
- the “comparison with similar properties”: should include listed properties, properties on the Tentative Lists and other comparable properties;
- The geographical location of component parts also needs to be reconsidered as a single latitude/longitude is also potentially unhelpful in noting the location of a serial property.

b) The *Operational Guidelines* text

- To add in Section II C: “States Parties are encouraged to indicate with the submission of Tentative Lists whether properties are intended to be nominated as serial and/or transnational properties. For transnational nominations it is advisable to have an overall “statement/agreement of intent” from all of the relevant State Parties before individual component parts from different State Parties are included in the Tentative Lists”. Explanation: this might be needed as for different reasons a revision of Tentative Lists at the same time is not possible for all States Parties involved due to different national procedures.

4.2 COMMITTEE CONSIDERATION OF SERIAL PROPERTIES

The workshop concluded that for transnational and other complex proposed nominations, it could be valuable to have the opportunity for discussion by the Committee prior to nominations, as in recording State Party Tentative Lists,. This discussion of the proposed concept and plan should not result in any final judgement by the Committee, but could provide guidance on whether the concept is appropriate to pursue further and guidance on its development. It would be essential to ensure that such a process was not a pre-evaluation of the possible final nomination.

Complexity in serial properties could be identified in terms of the number of criteria used (especially mixed), number of component parts, number of State Parties, distance separating component parts and other possible factors to identify properties that would benefit from consideration prior to nomination.

Once identified for discussion, such properties should be reviewed by the Advisory Bodies in order to advise the relevant States Parties, and where relevant the Committee, on key issues and concerns. Comments could be provided on such complex proposals focusing on advice related to values, Comparative analysis and manageability of the proposed property. Comments on management could include, *inter alia,* the expected level and focus of the overall management system, the key elements of management system that will be expected for the series as a whole and the adequacy of financial resources.

The workshop recommended that the Committee should consider adopting for such complex proposed properties a pre-screening process that could identify possible concerns and issues within a serial proposal and provide guidance on its practicability. This might include a desk review process by the Advisory Bodies. Further proposals for such a process should be developed.

In addition, the serial intention must be explicitly flagged to the Committee at the time of consideration of a nomination.

The workshop recommended that the results of such screening activities should be reported to the Committee for discussion but without a decision being considered in relation to the case for inscription of the property. In considering a proposal for a potential complex serial property, it was recommended that the Committee should note recommendations on:

a) The minimum timeframe expected for work on the nomination to be completed;
b) The need to carry out the Comparative analysis and at the earliest stage (noting that this should preferably before including the potential property on the Tentative List).
c) The identification of the likely costs of evaluation, and how these will be met, should be indicated by the Secretariat, noting that the costs of evaluation for complex serial properties can be much greater than for normal nominations and that the Committee currently has insufficient budget to cover these costs.

When serial nominations are eventually presented to the Committee for possible inscription, the workshop strongly recommended using the **deferral** decision where series have potential Outstanding Universal Value, but have not been developed in a coherent way, do not follow best practice or may be unmanageable.

Furthermore, the workshop recommended that the Committee should review the practice of serial properties counting on the quota of only one of the nominating States Parties. A formula that would require more than one State Party to accept the nomination within their national quota for larger "multinational" nominations should be considered.

4.3 BEST PRACTICE IN NOMINATIONS FOR SERIAL PROPERTIES

4.3.1 NOMINATION FORMAT

The workshop concluded that the existing format for the nomination of properties for inscription on the World Heritage List (Annex 5 of the OG) is not fully appropriate to cover the specific situation of serial properties as it does not allow sufficiently for description of Outstanding Universal Value and the management system of individual component parts, or provide sufficient guidance on how to present these aspects. It is currently unclear whether the components should be presented individually under the paragraph headings or the paragraph headings to contain the individual components. Therefore, the workshop suggested changes to the existing nomination format (see 4.5).

4.3.2 WHAT ARE THE BASIC STANDARDS AND REQUIREMENTS FOR COMPARATIVE ANALYSIS

The workshop concluded that the Comparative analysis is a critical element in the nomination process and should be used as early as possible in the process.
It was noted that adequate baseline data are essential to perform the Comparative Analysis. The workshop noted that two different Comparative analysis processes exist for serial properties and that both should be carried out in relation to serial nominations:

1. A global ranking (comparing the overall series with similar properties (whether currently listed as World Heritage or not) and/or their component parts worldwide).
2. An internal ranking (between proposed component parts of a serial site) to determine the appropriate scope of the series and which components should be included or not included.

The workshop concluded that there is a need for better guidance on the Comparative Analysis for serial properties and requested the Advisory Bodies to prepare such guidance for consideration by the Committee.

4.3.3 WHAT SHOULD BE THE RIGHT PROCESS FOR PLANNING PHASED NOMINATIONS?

As mentioned in chapter 4.2 the workshop noted that when planning a phased series, the overall series comprising different component parts, including new and additional criteria that might be considered, should be defined at the time of nomination. Phased nominations should clarify where

the end point of the nominated series will be. This initial assessment should provide the limits for future additions to the series, with allowance made for situations where new information justifies the addition of new criteria or component parts which were not foreseen at the time of inscription.

At the time of nomination it is advised that the envisaged nomination includes:

- An overall statement and agreement of intent (by all of the States Parties involved in the nomination); which should be referred to in the relevant Tentative Lists;
- The definition and identification of the adequate number of component parts;
- A minimal number of nomination phases (to make the nomination and evaluation process easier and less costly).

The workshop recommended that phased nominations should be discouraged for national properties, as in principle State Parties should be in the position to nominate the whole series in a single nomination.

4.4 AMENDMENTS TO THE OPERATIONAL GUIDELINES

Regarding the format of the nomination of properties for inscription on the World Heritage List, the workshop proposed to include another chapter in the Operational Guidelines besides Annex 5. Annex 5a would give guidance on the nomination of serial sites. The following changes from Annex 5 are proposed to form Annex 5a:

In the executive summary

Original	**proposed changes**
State Party	a) States Parties b) Coordinating State Party for nomination
Name of the property	a) Name of the property as a whole (to be noted as the proposed name of the property if listed) b) Name(s) of all component parts
A4 (or „letter“) size map of the nominated property, showing boundaries and buffer zone (if present)	An A4 or letter size summary map of the nominated property, and individual A4 (or letter size) maps for each nominated component part showing boundaries and buffer zone (if present), the maps of the components should ideally be at the same scale. The scale should be clearly marked on each map.

In the nomination format

Nomination Format	**proposed changes in the explanatory notes**
1. Identification	(...) In the case of serial nominations, insert a table that shows, for each component part: the name of the component part, *State Party (if different for different components)*, region (if different for different components), coordinates, area and buffer zone (if present). An example of this table should be provided. (...)
1 e) Maps and plans, showing the boundaries of the nominated property and buffer zone	*Multiple maps may be necessary for serial nominations. They should have reference numbers for identification, and should have clearly marked scales.*
1f) Area of nominated property (ha.)	In the case of serial nominations, insert a table

and proposed buffer zone (ha.)	that shows for each component part the name of the component part, *State Party (if different for different components)*, region (if different for different components), coordinates, area and buffer zone (if present). An example of this table should be provided.

2. Description	
For the following sections, we encourage first defining the values and commonalities of the property as a whole, and then to describe the component parts individually or by cluster or network if relevant in the nomination document. Peculiarities of individual component parts can then be dealt wit in the individual chapters for each component part.	
2a) Description of the property	*The description of a serial property should firstly describe the Property as a whole and summarise its key features and values. The description should then include component-specific descriptions in separate sections of the description, separately for each component.*
3c) Comparative Analysis	Section 3c should include: a) the global Comparative Analysis (as explained in Annex 5), and *b) an internal Comparative Analysis, explaining the selection of components (see 4.4.2), and providing a justification of the inclusion of each component part within the series.*
5. Protection and Management of the Property	*The nature of the overall management system should be explained and it should be demonstrated that it meets the minimum requirements (as noted in section 3.1 above). The description of the management system should then also note the component-specific issues and individual management systems for each of the component parts in a separate section for each component part.*
9. Signatures	*Transnational nominations must include signatures of all State Parties of the component parts.*

The workshop also recommended that due consideration is given to allow the demonstration of support from all relevant authorities in the nomination process, e.g. letter of support or signatures by all institutions involved, including local level authorities if they have a significant role in the property. Lack of such documentation should be explained to ensure full management capabilities.

4.5 PERIODIC REPORTING

The workshop recommended that a single joint report should be provided for each serial property as a whole within periodic reporting exercises. For serial properties, good practice for reporting arrangements should include reports for the different component parts within a coordinated format that provides sufficient detail to allow for problems and issues to be identified at a component level. A summary report should be provided for the series as a whole.

The summary report should identify if there are issues in relation to particular components.

The new Periodic Reporting questionnaire should be tested for transnational serial properties to check if it is capable of addressing this issue, and amended if required.

There may be a need for a different process of Periodic Reporting on transnational serial properties. Where transnational and transboundary properties fall across different UNESCO regions the property should be attached as a whole to the region of a single coordinating State Party for the purposes of periodic reporting.

The workshop noted that further reflection will be necessary on how to handle serial properties in the context of reactive monitoring.

4.6 GLOBAL STRATEGY

The workshop discussed the availability of other mechanisms to reach the same goals as intended with serial nominations. The workshop concluded that these do not exist through the formal mechanisms of the World Heritage Convention and recommended that more thematic work within the Global Strategy would be valuable to better define concepts and configurations for future nominations and could provide a better alternative to provide manageable serial nominations.
The workshop noted the importance of the Global Strategy in guiding the inclusion of the most appropriate properties within Tentative Lists of States Parties to the Convention. Stronger partnerships between the Advisory Bodies, The WH Centre and States Parties are needed in order to translate the Global Strategy into local initiatives and nominations.

5. The roles of the World Heritage Centre, Advisory Bodies and UNESCO in relation to serial properties

5.1 ROLES OF CENTRE, ADVISORY BODY, UNESCO AND MANAGING CONFLICTS OF INTEREST

The workshop concluded that thematic activity (such as thematic studies or initiatives) that might lead to serial nominations should be better carried out by the Advisory Bodies rather than by the World Heritage Centre. The workshop recognized that the Operational Guidelines make clear that the World Heritage Centre has a role to provide "guidance" on serial properties, but considered that clear limits of this role were needed. The workshop noted that any guidance activity by the World Heritage Centre should not judge the values, but be primarily related to procedural advice, coordination and facilitation.

It was concluded that further clarification on the roles and responsibilities of the World Heritage Centre, Advisory Bodies and States Parties was needed. It was noted that an analysis of the history of the development of this issue would be helpful when developing for guidance on roles and responsibilities.

The workshop recommended that:

a) A Committee mandate was needed for any activity carried out by the UNESCO (World Heritage Centre and field offices) on specific nominations clearly defining the role ("coordination"/"facilitation") in order to avoid unrealistic expectations by States Parties. When agreeing on such a mandate the Committee should adhere to the following principles:
   - There must be sufficient value to warrant further exploration of a nomination concept (this requires both an Advisory Bodies analysis and the Committee to consider prior to project initiation);
   - There must be confidence that resulting serial nominations will be manageable sites, based also on the analysis of the Advisory Bodies.

   A proposed pre-screening process (see 4.3) is recommended to be used to assist in this process and ensure that the World Heritage Centre is able to work on the basis of a clearly defined Committee mandate, financial commitment.
b) UNESCO's activity should essentially consist neither of facilitating and coordinating serial nominations, not advocating nor of replacing the role of the States Parties or the Advisory Bodies.
c) Regular communication between the World Heritage Centre and the UNESCO field offices as well as training in the field offices is needed.
d) A protocol for the activities of the World Heritage Centre in relation to potential conflicts of interest should be developed in the same way as has been already prepared by IUCN and ICOMOS.

5.2 FUNDING IMPLICATIONS OF SERIAL PROPERTIES

The workshop's participants noted that the implementation of best practice for serial nominations, and especially transnational serial nominations had significant resource implications in relation to: evaluation; the preparation of additional strategic and thematic guidance; support for Comparative Analysis including of Tentative Lists; training and capacity building. Given the pressure on resources already affecting the World Heritage System, the Committee should clearly identify the potential costs of serial nominations and also the priority to encouraging this mechanism relative to other areas where funding within the Convention is not adequate.

5.3 HOW COULD IUCN IMPROVE ITS EVALUATION OF NOMINATIONS OF SERIAL PROPERTIES?

The workshop recognised that IUCN has developed and used a practical approach to serial nominations by asking the following three questions when evaluating serial properties:

a) What is the rationale for a serial nomination?
b) Are the separate components of the property functionally linked?
c) Is there an overall management framework for the components?

The workshop agreed on the following recommendations to IUCN:

a) To take into account the conclusions from this workshop when evaluating serial nominations.

b) To continue to use the above mentioned questions, however to review them in relation to the findings of this workshop (including an analysis of how IUCN has used the three questions in the past).

c) To define and reconsider the use of the word “functional” in the question “are the elements functionally linked?” as functional linkages mean different things for the different criteria and different biota. A list of possible linkages should be established.

d) To ask for desk reports from Ramsar, MAB and Geoparks during their evaluations and monitoring processes from other conventions when a World Heritage Property or a component part of a serial property is covered by a Ramsar Site, a MAB site or an UNESCO Geopark.

e) To develop better guidance on how to prepare the Comparative Analysis for consideration by the Committee especially in the context of Global Strategy and thematic studies.

f) To develop better guidance to evaluators for evaluations of serial nominations.

5.4. CONSIDERATION OF THE CULTURAL HERITAGE PERSPECTIVE

The workshop suggested that the recommendations and conclusions from this workshop should be considered from the cultural heritage perspective forwarded (possibly at the Advisory Bodies meeting in January) to ICOMOS and ICCROM for their commentary in advance of the 33rd session of the World Heritage Committee. Regarding sub-chapter 2.2 of this report, ICOMOS might wish to add cultural examples.

This report includes the following annexes:

ANNEX 1: Summaries of presentations
ANNEX 2: Programme
ANNEX 3: List of participants
ANNEX 4: Serial Natural World Heritage Properties - An initial analysis of the present situation of serial natural World Heritage properties

Annex 1: Summaries of presentations of serial World Heritage Properties

This Annex displays a selection of summaries of some of the presentations on (inscribed and proposed) Serial World Heritage Properties presented during the workshop. The full list of presentations can be found in the programme (Annex 2).

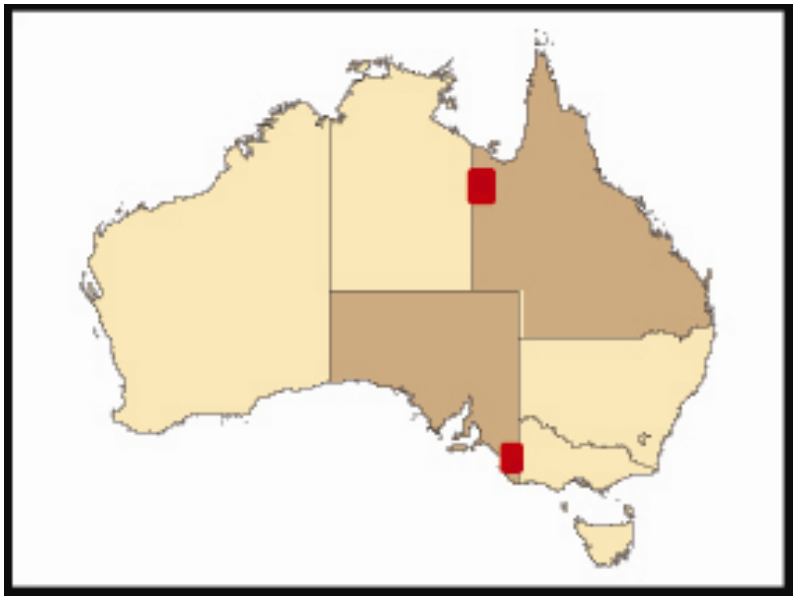
INSCRIBED SERIAL NATURAL WORLD HERITAGE PROPERTIES

1 Australian Fossil Mammal Sites (Riversleigh/Naracoorte), Australia

Steven Bourne, Naracoorte and Tantanoola Caves South East Region, Department for Environment and Heritage, email: Bourne.Steven@saugov.sa.gov.au

Year of Inscription:	1994	**Number of component parts:**	3
Criteria:	viii, ix	**Size:**	10,300 ha

The two component parts of the Australian Fossil Mammal Sites World Heritage Property are over 2,000 kilometres apart. Riversleigh covers 10,000 hectares in the remote north west of the state of Queensland while Naracoorte is just 307 hectares in the south east of South Australia.



Together the sites tell the story of the evolution of Australia's fauna, the Riversleigh fossil sites spanning a period from 25-15 million years ago and Naracoorte from 500,000 years to the present. Individually, the sites are significant but together they tell a more compelling story of the changing Australian landscape and its fauna. Riversleigh fossils represent a fauna adapting from a rainforest environment to a more arid landscape while Naracoorte's fossil record spans a time of global climate change and the arrival of human populations to Australia.

Research methodologies differ quite dramatically, with Riversleigh's fossils encased in a hard limestone matrix requiring light explosives and hammers to break rocks to reveal the fossils, which are then dissolved from the matrix in a weak acid solution. Naracoorte's fossils are buried in soft sediment within caves and require careful extraction using fine excavation tools and brushes. Visitation and visitor infrastructure at Riversleigh is limited due to its remote location. In contrast, Naracoorte is a focal point for regional tourism and is a highly developed visitor attraction.

Riversleigh is managed by the Queensland Government and Naracoorte by the South Australian Government. As the State Party, the Australian Government provides support for World Heritage objectives including financial support for projects and governance regarding Periodic Reporting and other matters.

2 Cape Floral Region Protected Areas World Heritage Site, South Africa

Guy Palmer, Western Cape Nature Conservation Board, email: gpalmer@capenature.co.za

Year of Inscription:	2004	**Number of component parts:**	8
Criteria:	ix, x	**Size:**	553,000 ha

The Cape Floral Kingdom is the smallest and relatively the most diverse of the six floral kingdoms of the world. It is only 90,000 km² 0,5% of Africa´s surface area, but contains 20% of it's plant species. It is listed as one of the worlds biodiversity hotspots, having 9,500 species of plants with almost 70% level of endemism. 2,500 species are listed in the recently revised Red Data Book.

Currently this property consists of 8 protected areas with a combined area of 553,000 ha and has a buffer zone of 1.315,000 ha. It was added to the World Heritage list in 2004 at the 28th World Heritage Committee meeting in Suzhou China. The nomination "argument" was based on Criteria IX and X.

The Cape Floral Region (CFR) is adjacent to and enmeshed with two other biodiversity hotspots, the succulent Karoo and the Albany Thicket. The succulent Karoo is on South Africa's Tentative List as a potential Transboundary Serial Nomination and is listed in the IUCN "Gap Analysis".

The buffer zone connects virtually all the 8 protected areas and is comprised of other formally protected areas, and "Declared Private Mountain Catchment Areas". The buffer is in turn augmented by initiatives of the Stewardship Programme which involves various levels of protection negotiated with landowners. These areas are selected primarily on their degree of threat and contribution to the maintenance of biodiversity through either "pattern" or "process", or both.

An extension nomination is in progress to increase the representativeness of the property. There are 130 vegetation types making up the CFR, many of which are not currently represented in the CFRPA WHS. The objectives of this extension are to increase the representativeness, strengthen connectivity through consolidation and expansion of the protected areas as well as the extension of the buffer zone. All this is contributing to the mitigation of the effects of the Global Climate Change.

3 Islands and Protected Areas of the Gulf of California, Mexico

María Pia Gallina Tessaro, National Commission of Protected Natural Areas (CONANP), Mexico, email: mgallina@conanp.gob.mx

Year of Inscription:	2005 Ext.2007	**Number of component parts:**	244 islands in 11 PAs
Criteria:	vii, ix, x	**Size:**	687,361 ha

Main Features of the Property:
It is an area of desert land but fertile seas, described by Cousteau as 'the world's aquarium' and one of the most ecologically intact ecosystems in the world, valuable both to science and for fisheries, with great diversity of marine mammals and macro-invertebrates, endemic reptiles and cacti. It is one of the World Wildlife Fund's 200 globally most important ecoregions, recognised by Mexico as a priority for conservation.

Location
The property is located in the Gulf of California, and presents a gradation of habitats that go from temperate, in the upper Gulf, to tropical in the South. The Gulf of California, in North-eastern Mexico, between the Baja California Peninsula and the main land states of Sonora, Sinaloa and Nayarit, extends 1,557 km from the Colorado River Delta in the North to 270 km South-east of the tip of the Baja California Peninsula, which parallels the mainland for about 1,130 km. It represents a unique example in which, in a very short distance, there are simultaneously "bridge islands" (populated by land in ocean level decline during glaciations) and oceanic islands (populated by sea and air).

Serial Property
The serial property comprises 244 islands, coastal islets and marine areas that are located in the Gulf of California in North-eastern Mexico. All the component areas included in this serial property lie within eleven protected areas. The total area of the property is 1,897,838 ha, of which the Core zone is 687,361 ha and the buffer zone 1.210,477. Terrestrial surface is 405,313 ha and the rest, 1.492,525 ha are marine areas, which represents 5% of the total area of the Gulf of California.

The property was inscribed in 2005 and extended in 2007 on the basis of natural Criteria vii, ix, x.

Why is it a Serial Property?
All the islands are in the waters of the Sea of Cortes or Gulf of California, sharing the marine ecosystem with all its biodiversity. The Gulf can be divided into four oceanographic zones, and the serial nomination includes representative component sites of each of these zones, thus showing the whole spectrum of natural values and ecological processes occurring in the Gulf.

(a) What is the justification for the serial approach?
The Gulf of California represents a unique ecoregion where the huge biodiversity and marine productivity is the result of complex ocean-land-islands interactions supported by complex ecological and oceanographic processes. Also all of the islands are different, representing a complex natural puzzle, in which each of them plays a particular ecological role. Individually, each island and marine area displays different geological, geomorphological and ecological features that fit within the overall framework of the Gulf of California. It is therefore very difficult, if not impossible, to try to identify a single area that could be representative of this complex region.

(b) Are the separate components of the property functionally linked?
There is a strong functional linkage between all components included in this serial property associated to the influence of the climatic, geomorphological and complex oceanographic processes occurring in the Gulf. There are also strong biological connections among them. For example, marine mammals and frigate birds that have been marked by photographic techniques

are changing locations between the islands throughout the year as the marine productivity patterns change, particularly during the autumn and winter.

(c) Is there an overall management framework for all of the components?
There is an Integrated Management Programme for the entire serial property (Programa de Manejo del Área de Protección de las Islas del Golfo de California), approved by the government of Mexico in the year 2000, which guides conservation and management activities in all of the protected areas of the Gulf. Additionally, each protected area has its own Management Programme integrating the terrestrial and marine areas (9 Management Programmes).

Problems and Management Constraints
Isolation, desert heat and scarce water have largely preserved the Gulf islands in the past, but threats to marine resources and the fragile islands ecosystems are present. Alien species like predators have been introduced in some islands, threatening the native and endemic species and the delicate existing balance. Tourism developments will also put a great pressure, as tourists and even research scientists degrade habitats, cause erosion, leave waste and disturb the breeding grounds of birds and sea lions. Increasing numbers of fishermen using improved equipment and illegal fishing are affecting resources, and large distances between islands and mainland make government surveillance, monitoring and closed seasons observation very difficult to attend.

How is the property managed? (Organisational and practical issues).
Conservation Management
The Gulf is an area valuable to science, increasingly for tourism and for an economic fishery.

- All the components are federal and managed by The National Commission of Protected Natural Areas (CONANP). The administrative organisation of Conanp is represented by nine Directors in charge of the 11 Protected Areas, depending of three Regional Offices (there are nine in the country). They report to a General Director and he does to the National Commissioner.

- There is an Integrated Management Programme for the entire serial property, the Islands of the Gulf of California, which guides conservation and management activities and other ten PA have their own management programme, integrating the terrestrial and marine areas. A wide participative process in included.

- A system for monitoring key indicators of the state of conservation is in place.

- Law enforcement through the Secretary of Navy and the National Attorney for Environment Protection in coordination with Conanp.

- The government and the society participated in a regional planning process to define a better balance between the productive activities and the environmental protection, resulting in the Marine Ecological Planning Programme for the Gulf of California in 2006.

- Another valuable planning instrument is the Marine Gap Analysis of Priority Areas for Conservation, concluded in 2007, that will guide the directions for conservation and sustainable use of resources.

- Sources of expertise and training are being sought from national and international sources. A Coalition for Sustainability in the Gulf of California brings together Mexican and international funds as well as NGOs collaboration.

4 The Rainforest of Atsinanana, Madagascar

Serge Ratsirahonana, UNESCO World Heritage Project in Madagascar, email: Ratsirahonana_s@mel.moov.mg

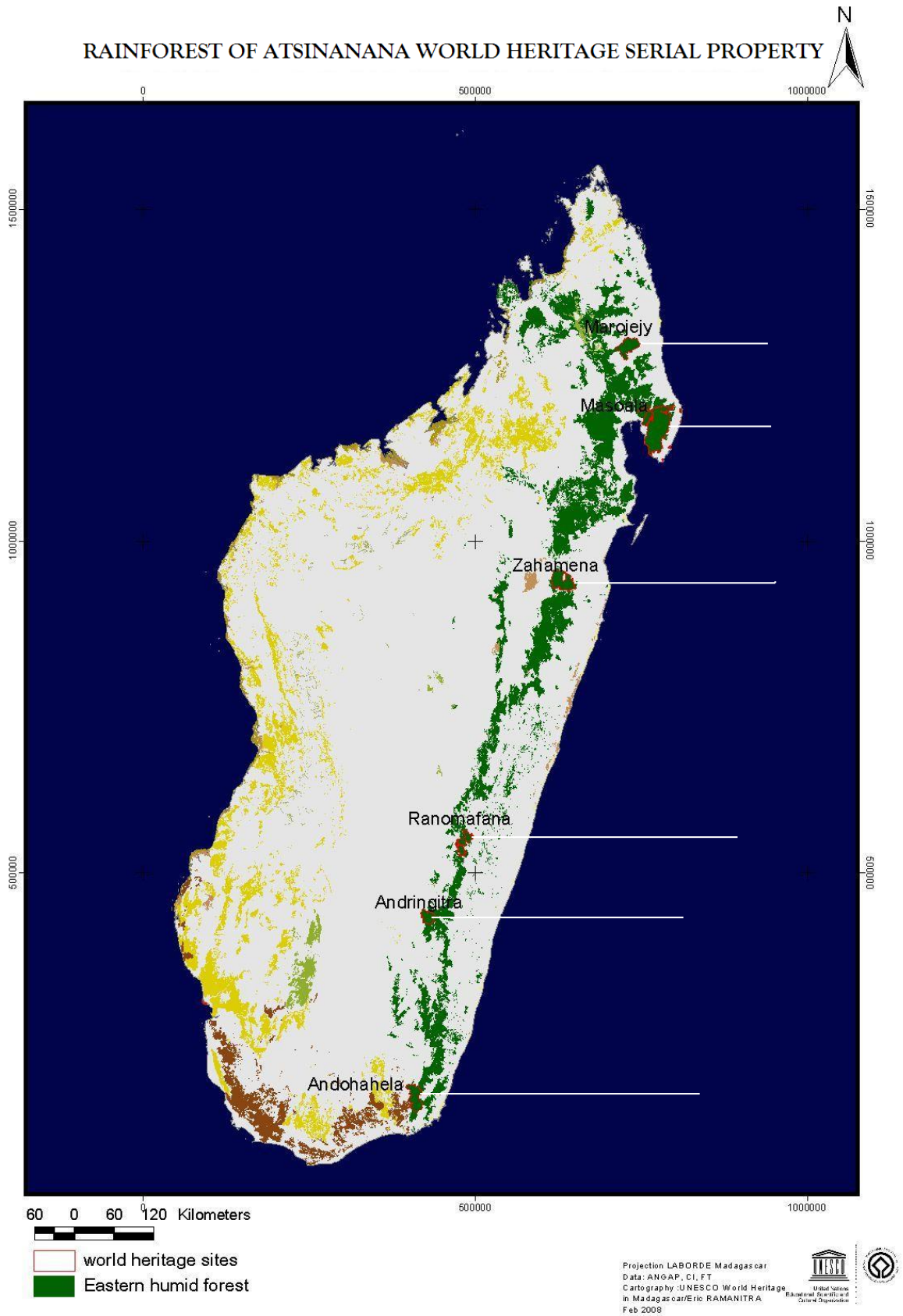
Year of Inscription:	2007	**Number of component parts:**	6
Criteria:	ix, x	**Size:**	479,660.7 ha

The serial property represents the rainforest ecosystem of Madagascar, alongside the eastern side of the island. It has been inscribed on the World Heritage list in June 2007 (31st World Heritage Committee session in Christchurch, New Zealand).
The nomination of the rainforests of Atsinanana meets the two criteria IX (ecological process) and X (biological richness).

Why is the site a serial/transnational site?
The serial property has six component parts which contribute all to reinforce the OUV of the serial property. Although a single component part of the serial property might have an OUV on its own right, it could never represent the compelling OUV of the whole serial property because of the tremendous latitudinal and altitudinal variations (habitat, flora and fauna with high level of endemism and micro endemism).

Main challenges in the nomination process
The unique Natural World Heritage Site in Madagascar was the National Park of Bemaraha (inscribed in 1993), before the inscription of the rainforest of Atsinanana in 2007. The whole nomination process was launched in Madagascar in 2003 with the international workshop to identify the potential WH properties. Three serial properties were then identified: the rainforest of Atsinanana, the dry forest of Andrefana and the coastal and marine protected areas.
Elaboration of the Tentative List according to the identified criteria was one of the main challenges during the nomination process. The component parts of the serial property are linked to each other by forest corridors that have not yet an IUCN park category and their inclusion in the serial property was strongly recommended at the 31st WH committee meeting in 2007 to strengthen the ecological integrity of the serial property.
The State Party has had to deal also with weak field database which is not centralised and available at the national level for the elaboration of the nomination dossier.

Main challenges in the management of the site
In the nomination dossier, an integrated management plan for the serial property was outlined but it is not yet functional. The State Party is working in the elaboration of this integrated management plan which will include a business plan, a conservation management plan with an ecological monitoring component, and a development plan (ecotourism). As Madagascar will increase its protected area surface up to 6 millions of hectare (presently 1.7 million ha), the integrated management plan will be part of the national endeavour in elaborating effective management plans for the whole park network.
This integrated management plan could be finished by the end of 2008 and its implementation at the field level will be effective in the beginning of 2009. Involvement of stakeholders at all scales of intervention is one of the main challenges in the management of the property.
The State Party makes efforts also in using the World Heritage Convention and its Operational Guidelines as conservation toolkits at the regional and local levels.


RAINFOREST OF ATSINANANA WORLD HERITAGE SERIAL PROPERTY
N
0
500000
1000000
1500000
1000000
500000
Marojejy
Masoala
Zahamena
Ranomafana
Andringitra
Andohahela
60 0 60 120 Kilometers
world heritage sites
Eastern humid forest
Projection LABORDE Madagascar
Data: ANGAP, CI, FT
Cartography :UNESCO World Heritage in Madagascar/Eric RAMANITRA
Feb 2008

5 Serial and Transnational World Heritage Properties in Russia

Alexey Butorin, Natural Heritage Protection Fund/Institute of Geography of the RAS, email: butorin@nhpfund.ru

Natural World Heritage in Russia: current situation

- Eight natural properties with a total area of more than 20 million ha
- Two properties inscribed according to all four natural criteria
- 30 SPAs including eleven Nature Reserves and five NP
- Three serial and two transnational properties (*picture1)

Serial property Volcanoes of Kamchatka (*picture2)

Name of the component part	Area, ha
1. Kronotsky State Biosphere Reserve	1.007,134
2. Bystrinsky Nature Park	1.333,478
3. Nalychevo Nature Park	285,970
4. Southern Kamchatsky Nature Park and Southern Kamchatsky Federal Preserve	480,000 + 225,000
5. Kluchevskoy Nature Park	376,000

The nomination was prepared in a year. Five years after the **Volcanoes of Kamchatka** property was included in the List, the serial property was extended to include another component part – the Kluchevskoy Nature Park.
The property consists of six separate SPAs of different status: a federal reserve, a federal preserve and four regional nature parks. The territories ranging from 0,225 mill ha to 1,333 mill ha in the surface area and are located in up to 450 km from one another. Each SPA is managed individually, according to a separately designed plan. There is neither a central management of the World Heritage Property nor a unified management plan. At present the creation of a unified administration for the **Volcanoes of Kamchatka** property is under consideration at the regional level.

Serial property Golden Mountains of Altai (*picture3)

Name of the component part	Area, ha
1. Altaisky State Biosphere Reserve and Teletskoye Lake Protected Area	881,238 + 93,753
2. Katunsky State Biosphere Reserve and Belukha Mount Nature Park	151,664 + 131,337
3. Ukok Nature Park	254,204

The nomination was prepared in about four years. As a result of the first of the two IUCN Field Visits the area of the nominated territory was considerably cut down and the single property was transformed into a serial one.
The property consists of four separate SPAs of different status: two federal reserves, two regional nature parks. The territories ranging from 0,254 mill ha to 0,881 mill ha in the surface area and are located in up to 200 km from one another. Each SPA is managed individually to a separately designed plan. There is neither a central management of the World heritage Property nor a unified

management plan. At present the property's development strategy implying an improved management scheme is under consideration at the regional level.

Transnational property Curonian Spit (*picture4)

1. Curonian Spit National Park (Russia)	6,627
2. Kursiu Nerija National Park (Lithuania)	24,600

The preparation of the nomination took two years. A joint Russian-Lithuanian workgroup put the separately prepared descriptions of the Russian and the Lithuanian parts into a single nomination dossier. The property consists of the two bordering Russian and Lithuanian national parks. The key management questions for the Transnational World Heritage Property are settled at the meetings of the Russian-Lithuanian intergovernmental commission on environmental protection as well as in the framework of cooperation between the two national parks (a mixed workgroup). A unified management plan has been worked out.

Serial transnational property Uvs Nuur Basin (*picture5)

Name of the component part	Area, ha
1. Mongun Taiga, Russian Federation	1,589
2. Ubsu-Nur, Russian Federation	4,490
3. Oroku-Shinaa, Russian Federation	28,750
4. Aryskannyg, Russian Federation	15,000
5. Jamaalyg, Russian Federation	800
6. Tsugeer els, Russian Federation	4,900
7. Ular, Russian Federation	18,000
8. Tsagan shuvuut, Mongolia	23,170
9. Turgen, Mongolia	116,831
10. Uvs Lake, Mongolia	424,298
11. Altan els, Mongolia	148,246
12. Tes River, Mongolia	97,688.5

The preparation of the nomination took over eight years. As a result of the first of the two IUCN Field Visits the initially prepared nomination of the Russian part of the Uvs Nuur basin (seven separate areas of the Ubsu-Nur Hollow State Biosphere Reserve) was complemented with the documents on the Mongolian part of the basin, including five areas of the Uvs Nuur Reserve.
The property consists of 12 separate SPAs ranging from 800 ha to 424,000 ha in the surface area which are located in up to 400 km from one another.
There are two separate management plans for the Russian and the Mongolian parts of the property. The key management questions for the Transnational World Heritage Property are settled at the meetings of the Russian-Mongolian intergovernmental commission on environmental protection as well as in the framework of cooperation between the two reserves (a mixed workgroup).

6 Struve Geodetic Arc

Pekka Tätilä, National Land Survey of Finland, email pekka.tatila@nls.fi

Year of Inscription:	2005	**Number of component parts:**	34
Criteria:	ii, iii, vi	**Size:**	length: 2,820 km

The Struve Geodetic Arc is a chain of triangulation survey stretching more or less down the 25º E line of longitude from Hammerfest in North Norway on the Arctic Ocean over 2,820 km south to Izmail on the Black Sea in the Ukraine. The Arc was set up and measured from 1816 to 1855.

The goal was to determine the shape of the Earth. To approach the goal, F.G.W. Struve and other leaders of the arc measurement have set a high level of international co-operation in various directions, from political and administrative to scientific and technical. The arc measurement had unprecedented stretch and accuracy; therefore it made substantial and long-term impact regarding science and practise.

In today's geography the Struve Geodetic Arc passes through ten countries, i.e. Norway, Sweden, Finland, Russian Federation, Estonia, Latvia, Lithuania, Belarus, Republic of Moldova and Ukraine. Each of these countries possesses some sites with reliable signs, which mark on the ground the positions of the geographical points where the measurements were performed.

The Struve Arc is an international Transnational Serial World Heritage Site with the selection of 34 elements, i.e. original, preserved Arc stations. Each of the ten countries is responsible to take care of the preservation and other management of the properties within its territory. The Struve Arc was inscribed on the List in 2005.

In the Nomination Dossier the status and procedures of the national legislation, preservation, management, etc. have been described. All this kind of activities are solely ruled and guided by each country itself, but there is a need for an additional common management mechanism agreed and implemented by all the ten countries jointly.

The jointly approved document of the "management mechanism" provides also basic guidelines for activities of a special international Coordinating Committee of the ten Struve countries. This Committee has a working group of four members.

The main objectives of the State Parties are, by stages through co-operation in the Coordinating Committee, to create and develop the common rules and good practice in order to protect, preserve, present and promote the Arc. This goal involves active collaboration with the national instruments of management over the separate stations – parts of the Arc, as well as effective coordination in making it more substantial and more known for the public.

Particular objectives that result from the main goal will be realized through common management practice agreed by the participating State Parties. Through the established Coordinating

Committee necessary coordination of the ten Arc countries will be ensured, as well as joint responsibility for the World Heritage Struve Geodetic Arc.

The aim is based on Arc's proper protection, conservation, management, presentation and understanding. The selected 34 properties present the whole chain of the Struve Geodetic Arc. Besides these selected points, also other survived points will be preserved according to the normal national practice of the country concerned.

The basic responsibility for all kind of management and actions of individual properties must be taken by the individual State Parties and be carried out by each of them in accordance with their legislative and management systems. The role of the Coordinating Committee is to produce common guidelines for management and to monitor the progress of preservation of the sites.

The Coordinating Committee has working sessions with the Plenary every second year by invitation of one of the Arc countries. The working group of the Committee forms the agenda of a working session and Plenary. The decisions of the Plenary are reflected in the resolutions. The decisions of the Coordinating Committee are taken unanimously.

Based on the practice gained within the nomination process, the main actors are the national surveying agencies of the ten countries. Almost all the 34 sites are also today used for surveying purposes and these agencies are dealing in any case with the sites. They also have professional staff and other means for management purposes. The national boards of the antiquities are the most immediate partners of the collaboration.

7 Property on the Tentative List of the State Party to be considered for nomination

Western Ghats, India: A Potential Serial Natural World Heritage Site

M.C. Kiran and Jagdish Krishnaswamy, Ashoka Trust for Research in Ecology and the Environment, Bangalore, India, email: kiran@atree.org

Year of Inscription:	on the tentative list since 2006	**Number of component parts:**	7 sub-clusters, 39 site elements
Criteria:	vii, viii, ix and x	**Size:**	~150,000 km²

The Western Ghats Mountains, running parallel to India's west coast, is internationally recognized as a biodiversity hotspot, which also contains areas of great geological, cultural and aesthetic importance. The Ghats traverses through five states of India covering an area of ~ 150,000 km^2 in a ~ 1,600 km long stretch. The presence of Ghats influences the regional climate, hydrology and habitat types by creating major precipitation gradients. The Western Ghats is a reservoir of exceptionally high biological diversity and endemism. Plants, amphibians, reptiles and fishes show high levels of diversity and endemism.

The distribution of rainfall (500 – 7,000 mm), latitudinal increase of length of dry periods, the elevation gradient and the complex terrain create a variety of habitat types and localized centres of endemism. Areas around Western Ghats have high population density and witness associated stress. In the past, large areas were cleared for expansion of agriculture, timber and infrastructure development. It is estimated that only 23% of the original natural habitat is remaining. Millions of people living on the Indian peninsula depend on the ecosystem services provided by Western Ghats.

Photo: Priyadarsanan D. R.

Many global assessments using varied criteria (e.g. Biodiversity Hotspots, Endemic Bird Areas, Global 200 Ecoregions, etc.) have highlighted the importance of Western Ghats. An initial assessment concluded that the Ghats qualifies as a World Heritage Site meeting criteria vii, viii, ix and x. The site was planned as a serial property to capture all aspects of its Outstanding Universal Values, represented in the diverse habitat types and localized centres of endemism, distributed along the Western Ghats. The component parts were identified through a two-pronged site selection process. (i) a Comparative ranking of sites based on independent feed back by conservationists and (ii) a conservation prioritization based on a spatial analytical framework using species and habitat surrogates derived from secondary data and satellite images, identified seven large contiguous areas representing the exceptional qualities of Western Ghats and suitable for nominating as a World Heritage Site.

A good connectivity exists between the component parts through the forests, protected area network and many production landscapes which retain natural tree cover. The lack of detailed information about the patterns of biodiversity was a major challenge during the site selection process. As most of the information was available from protected areas and about large mammals and birds, the site selection process had to use surrogates developed from secondary data and satellite imageries.

Photo: Jagdish Krishnaswamy

The varying legal status and transboundary (across various states) nature of the component parts require developing suitable co-ordination mechanisms. There is an urgent need to develop biodiversity friendly agriculture, harvesting and infrastructure development practices for the entire region in order to address the rights of forest dwelling communities and enable their harmonized existence within these forests. It is also important to develop strategies to tackle the emerging threats from the spread of invasive species and haphazard growth of tourism evident in many areas of Western Ghats. The impact of climate change on these ecosystems also should be evaluated and appropriate management strategies should be developed.

Annex 2: Programme of the workshop

Expert workshop "Nominations and Management of Serial Natural World Heritage sites – PRESENT Situation, Challenges and Opportunities"
November 26th – 30th, 2008

Wednesday, 26th November, 2008	
18:20	*Registration and dinner*
19:30	Welcome by the Federal Agency for Nature Conservation (A. BURMESTER, BfN) Introduction to the workshop (T. BADMAN, IUCN & B. ENGELS, BfN) Introduction of participants
Thursday, 27th November, 2008	
07:30	*Breakfast*
Introduction and Overview	
09:00	Definitions and role of serials and transnational sites in the WH Convention, including provisions in the OG, presentation of latest Committee debate (Document 10 B) (K. RAO, WH Centre)
09:20	IUCN's current practice/approach to serial and transnational natural WH, including presentation of analysis (T. BADMAN, IUCN & B. ENGELS, BfN)
10:00	A WH Committee Member's perspective (M. TURNER, Israel)
10:10	Questions/Discussion (Facilitator: B. ENGELS, BfN)
10:40	*Coffee*
	Examples and challenges of existing serial / transnational WH sites Short case studies (10 min each) following a defined format
11:10	Primary Beech Forests of the Carpathians (V. POKYNCHEREDA, Ukraine)
11:20	Australian Fossil site (S. BOURNE, Australia)
11:30	Rainforests of Atisanana (S. RATSIRAHONANA, MADAGASCAR)
11:40	Rhatian railway (C. OSSOLA, Switzerland)
11:50	Cultural serial WH sites: Limes (B. RINGBECK, German UNESCO World Heritage Committee)
12:00	Struve Geodetic Arc (P. TATILA, Finland)
12:10	Volcanoes of Kamtchatka and Uvs Nuur (A. BUTORIN, Russian Natural Heritage Fund)
12:20	Summary
12:30	*Lunch*
13:30	Guided tour of Vilm Island (A. BURMESTER, BfN)

15:00 *Coffee*

Situation of serial and transnational natural sites: New ideas and current developments

General issues

15:30 What makes an achievable serial WH property? (P. DINGWALL, IUCN-WCPA)

15:50 Questions and Answers

16:00 How serial WH could contribute to connectivity in conservation? (J. STEFFEN, UNESCO Office Jakarta)

16:10 Serial approach in other conventions? Linkages to other conventions? (P. GALLAND, IUCN-WCPA)

16:30 Questions and answers

New ideas for future WH sites

16:40 The Great Rift Valley (M. KIBUNJIA, Kenia & M. LAMBERTINI, BirdLifeInternational)

16:55 Proposed Serial Marine Nominations in the Coral Triangle (J. STEFFEN, UNESCO Office Jakarta)

17:10 Western Ghats (M.C. KIRAN, ATREE)

17:30 **Plenary discussion (Facilitator: B. Engels)**

Expected output: identified questions/issues for group work

Potential questions for discussion (see document elaborated on basis of WHC 10b):

- What advice is needed for future nominations?
- What are the requirements/challenges for the management of serial and transnational sites?

18:30 *Dinner*

20:00 Informal get-together

Friday, 28th November, 2008

07:30 *Breakfast*

Developing guidance

09:00 Wrap-up of yesterday and Introduction

Input to working groups: Examples from the practice

09:15 The concept of a serial nomination: The Cape Floral region WH site (G. PALMER, Western Cape Nature Conservation Board, South Africa)

09:30 How to manage a serial Natural WH site: Islands and Protected Areas of the Gulf of California (M. P. GALLINA, Comisión Nacional de Áreas Naturales Protegidas)

09:45 Introduction to working groups

10:00 Group work:3 groups (Facilitors: B. PAULOWITZ, P. GALLAND, M. TURNER), Rapporteurs: T. BADMAN, K. RAO, B. ENGELS

11:00 *Coffee (during working groups)*

11:30 Working groups (contd.)

12:30 Lunch

Developing guidance (continuation)

14:00 Short update on the on-going working groups and continuation of work (with people changing from group to group if needed)

16:00 Coffee

16:30 Report from working groups to the plenary

17:30 Feedback and discussion

18:30 Dinner

19:30 Informal get-together with the participants of the trilateral meeting „Beech forests as Natural World Heritage“

Small group working on the report (Facilitators: B. ENGELS & T. BADMAN)

Saturday, 29th November, 2008

07:30 Breakfast

Conclusions and recommendations

09:00 Presentation of draft report (report group)

09:30 Discussion and identification of issues for the following discussion

10:30 *Coffee*

10:45 Group work on the report (if needed)

12:30 Lunch

14:00 Finalising the report to the Committee/input to the overall process (G. TERILL)

15:30 Coffee

16:00 Translating advice into action (Facilitator: P. GALLAND)

17:00 Identification of key issues requiring further discussion in later workshops within the series (Facilitator: B. ENGELS)

18:00 Workshop evaluation (A. BURMESTER, BfN)

18:30 Dinner

20:00 Farewell party (to be organised by the participants)

Sunday, 30th November, 2008

07:30 Breakfast

09:20 Departure from Vilm (alternative: departure 07:25)

15:10 Arrival Hamburg Airport (alternative: arrival ca. 13:00) or

15:00 Arrival Berlin Tegel Airport (alternative: arrival ca. 13:00)

Annex 3: List of Participants

No.	Name	Institution	Address	Country	Phone/Fax/e-mail
1.	Badman, Tim	IUCN Programme on Protected Areas, IUCN Headquarters	Rue Mauverney 28 1196 Gland	Switzerland	Tel.1: +41 22/999-0278 Fax: +41 22/999-0025,1 e-mail1: Tim.BADMAN@iucn.org
2.	Bourne, Steven	Naracoorte and Tantanoola Caves South East Region Department for Environment and Heritage	PO Box 134 South Au Naracoorte	Australia	Tel.1: +618 87620301 Fax: +618 87621231 e-mail1: Bourne.Steven@saugov.sa.gov.au
3.	Britz, Heike	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	Robert-Schuman-Platz 3 53179 Bonn	Germany	Tel.1: +49 01888/305-2612 Fax: +49 01888/305-2684 e-mail1: Heike.Britz@bmu.bund.de
4.	Burmester, Andrea	Federal Agency for Nature Conservation International Academy for Nature Conservation Isle of Vilm	Isle of Vilm 18581 Putbus	Germany	Tel.1: +49 38301-86-147 Fax: +49 38301/86-150 e-mail1: andrea.burmester@bfn-vilm.de
5.	Butorin, Alexey	Natural Heritage Protection Fund Institute of Geography of the RAS	Viborgskaya 8-3 125212 Moscow	Russian Federation	Tel.1: +7 499/238-03 60 Fax: +7 499/150-92 93 e-mail1: butorin@nhpfund.ru
6.	Dingwall, Paul		35 Cheshire Street Wilton, Wellington	New Zealand	Tel.1: 644/934-9477 e-mail1: dingwall@paradise.net.nz
7.	Engels, Barbara	Federal Agency for Nature Conservation, Division for International Nature Conservation	Konstantinstr. 110 53179 Bonn	Germany	Tel.1: +49 228 8491 242 e-mail1: engelsb@bfn.de
8.	Galland, Pierre	IUCN WCPA	Chesaulx 6 2035 Corcelles	Switzerland	Tel.1: +41 32 725 54 57 Fax: +41 /32/ 731 01 93 e-mail1: Pierre.galland@bluewin.ch
9.	Gallina, María Pia	Comisión Nacional de Áreas Naturales Protegidas Camino al Ajusco No. 200,	piso3. Col. Jardines en la Montaña, Tlalpan CP14210 México, D.F	Mexico	Tel.1: +52 55/54497006 e-mail1: mgallina@conanp.gob.mx

No.	Name	Institution	Address	Country	Phone/Fax/e-mail
10.	Kibunjia, Mzalendo	National Museums of Kenya	Museum Hill Road, P.O. Box 40658 00100 Nairobi	Kenia	Tel.1: +254 723 926666 Tel.2: +254 20/3741-759 Fax: +254 20 3741424 e-mail1: kibunjia@yahoo.com, mkibunjia@museums.or.ke
11.	Kiran, M. C.	Ashoka Trust For Research in Ecology and the Environment (ATREE)	#659, 5A Main, Hebbal 560 024 Bangalore, India	India	Tel.1: 9180/2353-0069 Fax: 9180/2353-0070 e-mail1: kiran@atree.org e-mail2: kiranmc@gmail.com
12.	Lambertini, Marco	Birdlife International	Wellbrook Court, Girton Road CB3 ONA Cambridge	United Kingdom	Tel.1: 01223-277318 Fax: 01223-277300 e-mail1: marco.lambertini@birdlife.org
13.	Lisitzin, Katri	SLU Sweden	P.O.Box 7012 75007 Uppsala	Sweden	Tel.1: +46 708/974418 e-mail1: Katri.Lisitzin@sol.slu.se
14.	Ohnesorge, Bettina	Consultant	Gustav-Müller-Platz 1 10829 Berlin	Germany	Tel.1: +49 30/4176 3038 Tel.2: +49 178/133-4344 e-mail1: ohnesorge@gmail.com
15.	Ossola, Carlo	Swiss Federal Office for Environment (FOEN)	3003 Bern	Switzerland	Tel.1: 0041 31/3229373 Fax: +41 31 324 75 79 e-mail1: carlo.ossola@bafu.admin.ch
16.	Palmer, Guy	Western Cape Nature Conservation Board	Scientific Service, Private Bag X5014 7599 Stellenbosch	South Africa	Tel.1: +27 218/66-009 Tel.2: +27 82/4151-884 Fax: +27 218/66-1523 e-mail1: gpalmer@capenature.co.za
17.	Paulowitz, Bernd	HisGIS	Le Petit Bouchet 41170 Choue	France	Tel.1: +33 689953417 Fax: 0033 254808946 e-mail1: bernd@paulowitz.com
18.	Pichler, William	Technical University Zvolen	T.G. Masaryka 24 96053 Zvolen	Slovak Republic	e-mail1: pichler@vsld.tuzvo.sk
19.	Pokynchereda, Vasyl	Carpathian Biosphere Reserve	Krasne Pleso 77, Post Box 8 90600 Rakhiv	Ukraine	Tel.1: +380 /667619075 Tel.2: +380 /673100158

No.	Name	Institution	Address	Country	Phone/Fax/e-mail
					Fax: +380 /313225156 e-mail1: pokynchereda@ukr.net
20.	Rao, Kishore	UNESCO World Heritage Centre Deputy Director	7, Place de Fontenoy 75007 Paris	France	Tel.1: +331 /45681559 Fax: +331 /45685570 e-mail1: k.rao@unesco.org
21.	Ratsirahonana, Serge	UNESCO World Heritage Project in Madagascar	22 rue Rainitovo, Antsahavola 101 Antananarivo	Madagascar	Tel.1: +261 3240/81159 Tel.2: +261 3312/175-07 e-mail1: Ratsirahonana_s@mel.moov.mg e-mail2: Ratsirahonana.sh@gmail.com
22.	Schnelle, Rolf-Dieter	Deutsche UNESCO-Kommission (früher Auswärtiges Amt)	Fregestraße 65 12159 Berlin	Germany	Tel.1: +49 030/85967784 Fax: +49 030/85967784 e-mail1: schnelle6v@yahoo.com
23.	Steffen, Jan Henning	UNESCO Office, Jakarta, Regional Science Bureau for Asia and the Pacific	Jl. Galuh (II) No. 5, Kebayoran Baru 12110 Jakarta	Indonesia	Tel.1: +62 21/7399 818-828 Fax: +62 21/7279 6489 e-mail1: j.steffen@unesco.org
24.	Stolpe, Gisela	Federal Agency for Nature Conservation Academy for Nature Conservation Isle of Vilm	Isle of Vilm 18581 Putbus	Germany	Tel.1: +49 (0)38301/86-113 Fax: +49 (0)38301/86-117 e-mail1: gisela.stolpe@bfn-vilm.de
25.	Tätilä, Pekka	National Land Survey of Finland	P.O. Box 84 00521 Helsinki	Finland	Tel.1: +358 40 551 2226 Fax: +358 20541 5454 e-mail1: pekka.tatila@nls.fi
26.	Terrill, Greg	International Heritage & Policy Branch Dept of Environment, Water, Heritage & the Arts	GPO Box 787 2600 Civic ACT	Australia	Tel.1: +61 2/62742099 Fax: +61 2/62742095 e-mail1: Greg.Terrill@environment.gov.au Christina.Hellawell@environment.gov.au
27.	Turner, Michael	Bezalel, Academy of Arts and Design, Jerusalem, Member of the UNESCO World Heritage Committee	25, Caspi Street, North Talpiot 25 93554 Jerusalem	Israel	Tel.1: +972 /02 /6716492 Fax: +972 /02/ 6732801 e-mail1: turnerm@013.net

Annex 4:

Serial Natural World Heritage Properties

An initial analysis of the present situation of serial natural World Heritage properties.

Authors: Barbara Engels**, Philipp Koch** and Tim Badman*

***IUCN**
Programme on Protected Areas
Rue Mauverney 28
CH-1196 Gland
Switzerland
www.iucn.org

****BfN Federal Agency for Nature Conservation**
Division for International Nature Conservation
Konstantinstr. 110
D-53179 Bonn
Germany
www.bfn.de

Acknowledgements

IUCN and BfN acknowledge sources included on the website of the UNESCO World Heritage Centre (whc.unesco.org) including nomination documents, past IUCN evaluations and other materials which are the sources of the raw data summarized in this report. IUCN would like to thank Barbara Engels and Philipp Koch from the German Federal Agency for Nature Conservation (BfN) for their contribution to this compilation. Comments are acknowledged from staff of IUCN Programme on Protected Areas and the participants of the Expert meeting “Serial and transnational natural World Heritage sites” held at the International Academy for Nature Conservation Isle of Vilm, Germany from November 26th to 30th 2008.

Disclaimer

The designation of geographical entities in this report, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organizations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN or its members or partners.

IUCN and other participating organizations disclaim any errors or omissions in the translation of this document from the original version in English, or from primary errors in any of the data interpreted within it.

Serial Natural World Heritage Properties

This report presents an initial analysis of the present situation with regard to serial (and transnational serial) natural properties inscribed in the UNESCO World Heritage List. It is primarily based on the information included in the nomination dossiers and evaluation reports for these properties, as included on the website of the UNESCO World Heritage Centre (whc.unesco.org). The document was originally prepared, in draft, as an input to the seminar on "Serial and transnational Natural World Heritage Properties" held from 26th-30th November 2008 at the International Academy for Nature Conservation, Isle of Vilm, Germany. The report is not a policy statement but rather aims to summarize the current range of serial natural World Heritage Properties and the parameters.

Introduction

Serial World Heritage properties are defined as properties with two or more distinct, geographically separated areas that together are included as a World Heritage List. A serial property may be an appropriate mechanism for the development of World Heritage nominations where the Outstanding Universal Value is revealed at the scale of more than a single area.

According to paragraph 138 of the *Operational Guidelines to the World Heritage Convention*[2], a serial nominated property may occur:

a) *on the territory of a single State Party (serial national property); or*
b) *within the territory of different States Parties, which need not be contiguous and is nominated with the consent of all States Parties concerned (serial transnational property)*

According to the paragraph 137 the serial properties (national and transnational): *"include component parts related because they belong to:*

a) *the same historico – cultural group;*
b) *the same type of property which is characteristic of the geographical zone;*
c) *the same geological, geomorphological formation, the same biogeographic province, or the same ecosystem type;*

and provided it is the series as a whole – and not necessarily the individual parts of it – which are of outstanding universal value".

Serial World Heritage properties have been discussed by the World Heritage Committee on a number of occasions. At its 32nd Session in July 2008, the World Heritage Committee discussed the issue in detail and in its decision WHC-08/32.COM/10B the Committee, *inter alia*, acknowledged the need to enhance the guidance to States Parties, Advisory Bodies and the World Heritage Centre on the policies and procedures linked to the nomination and management of serial national and transnational properties. It also requested the World Heritage Centre and the Advisory Bodies to propose amendments to the *Operational Guidelines* and more detailed guidelines, if necessary, for the nomination of serial national and transnational properties, for consideration at the 33rd session of the Committee in 2009; and it took note that an expert workshop is proposed for November 2008 in Vilm (Germany), which will reflect on current and future practice and strategies for nomination and management of serial transnational natural World Heritage properties.

This report, prepared by IUCN and BfN for the meeting in Vilm referred to above contributes to this request and presents an initial analysis of the current status (March 2009) of serial natural World Heritage properties.

[2] Available from: http://whc.unesco.org/en/guidelines/

Notes on the analysis

A number of points should be noted in relation to the analysis presented in this report:

1. Unless otherwise stated the figures quoted are from material included on the UNESCO World Heritage Centre website.

2. No attempt has been made to check systematically the information held by UNESCO in this initial evaluation. It is possible that there may be some individual errors in the data that could affect any figures cited in the analysis, and especially those that are based on small numbers of properties. The list of serial natural World Heritage properties presented in this analysis is considered to be complete based on the information reviewed, although there is a slight possibility that some properties might be missing.

3. Some of the properties included in the analysis are considered as serial properties because minor discontinuities of the property, etc. but may not function differently to a single property.

Question 1: How many serial natural World Heritage properties are there?

Answer: Taking into account decisions up to and including the 32nd Session of the World Heritage Committee (Québec City, 2008), there are 36 serial natural World Heritage properties that have been recognized by the UNESCO World Heritage Committee as being of "Outstanding Universal Value"[3]. Of these, 34 are listed only for their natural values, and two are "mixed" properties which are listed for both natural and cultural values (Laponian Area (Sweden), Tongariro National Park (New Zealand)). These serial natural World Heritage properties are listed in Table 1.

Table 1: Serial Natural World Heritage Properties inscribed in the World Heritage List

No	Country	Region	Name
1	Australia	AP	Gondwana Rainforests of Australia
2	Australia	AP	Wet Tropics of Queensland
3	Australia	AP	Heard and McDonald Islands
4	Australia	AP	Greater Blue Mountains Area
5	Australia	AP	Australian Fossil Mammal Sites (Riversleigh / Naracoorte (Murgon))
6	Belize	LA/C	Belize Barrier Reef Reserve System
7	Brazil	LA/C	Fernando de Noronha and Atol das Rocas Reserves (2001)
8	Brazil	LA/C	Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks
9	Brazil	LA/C	Discovery Coast Atlantic Forest Reserves
10	China	AP	Three Parallel Rivers of Yunnan Protected Areas
11	China	AP	South China Karst
12	Finland/ Sweden	EU/NA	Kvarken Archipelago / High Coast
13	Frankreich	EU/NA	Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems
14	Hungary/ Slovakia	EU/NA	Caves of Aggtelek Karst and Slovak Karst
15	India	AP	Nanda Devi and Valley of Flowers National Parks
16	Indonesia	AP	Tropical Rainforests of Sumatra
17	Kazakhstan	EU/NA	Saryarka – Steppe and Lakes of Northern Kazakhstan
18	Kenya	AF	Lake Turkana National Parks
19	Madagascar	AF	Rainforests of the Atsinanana
20	Mexico	LA/C	Islands and Protected Areas of the Gulf of California
21	Mexico	LA/C	Monarch Butterfly Biosphere Reserve
22	Mongolia/ Russian Federation	EU/NA/AP	Uvs Nuur Basin
23	New Zealand	AP	Tongariro National Park
24	New Zealand	AP	New Zealand Sub-Antarctic Islands
25	Norway	EU/NA	West Norwegian Fjords – Geirangerfjord and Nærøyfjord
26	Republic of Korea	AP	Jeju Volcanic Island and Lava Tubes
27	Russian Federation	EU/NA	Volcanoes of Kamchatka
28	Russian Federation	EU/NA	Golden Mountains of Altai
29	Slovakia/Ukraine	EU/NA	Primeval Beech Forests of the Carpathians
30	South Africa	AF	Vredefort Dome
31	South Africa	AF	Cape Floral Region Protected Areas
32	Sweden	EU/NA	Laponian Area
33	Thailand	AP	Dong Phayayen-Khao Yai Forest Complex
34	United Kingdom of Great Britain and Northern Ireland	EU/NA	Gough and Inaccessible Islands
35	United Kingdom of Great Britain and Northern Ireland	EU/NA	Dorset and East Devon Coast
36	Yemen	AR	Socotra Archipelago

Note: The properties are listed in alphabetical order by State Party.
Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States

[3] Outstanding Universal Value is the key phrase used in the World Heritage Convention to define the threshold for recognizing a property on the World Heritage List.

Question 2: How many serial natural properties are transnational?

Answer: Four serial properties contain areas in the territory of more than one State Party to the Convention and thus are "transnational serial properties" (see Table 2). All four properties are situated in Europe, although Uvs Nuur (Russian Federation/Mongolia) is also situated in Asia-Pacific region of UNESCO.

Table 2: Transnational serial natural World Heritage Properties

States Parties	UNESCO Region	Name of serial property
Finland/ Sweden	EU/NA	Kvarken Archipelago / High Coast
Hungary/ Slovakia	EU/NA	Caves of Aggtelek Karst and Slovak Karst
Mongolia/ Russian Federation	EU/NA/AP	Uvs Nuur Basin
Slovakia/ Ukraine	EU/NA	Primeval Beech Forests of the Carpathians

Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States

Each of these four transnational serial natural properties has been inscribed within the territory of two States Parties. IUCN is aware of current projects promoting new large serial transnational nominations covering the territory of three state parties (e.g. European Beech Forests: Ukraine, Slovak Republic, Germany) or potentially even more (Mid Atlantic Ridge, The Great Rift Valley).

Question 3: How many serial natural properties have been inscribed each year?

Answer: No serial natural properties were inscribed in the early years of the Convention. The first serial natural property was inscribed in 1986: the Gondwana Rainforests (Australia). From the mid-1990s onwards, there has been between one and five inscriptions of serial natural World Heritage properties in almost every year (see Figure 1). Table 3 also shows that the percentage of nominations of natural serial properties has also increased in the last 7 years. The average annual rate of inscriptions of serial natural properties on the World Heritage List since 1993 has been 2.6 properties, and the number of inscriptions is also going up annually. Table 3 and Figure 1 indicate on average a fairly steady rate of growth of serial natural properties, although there is a suggestion of an increase in rates in the last four years: the years with the highest rates of annual inscription of serial natural properties are 2005, 2007 and 2008.

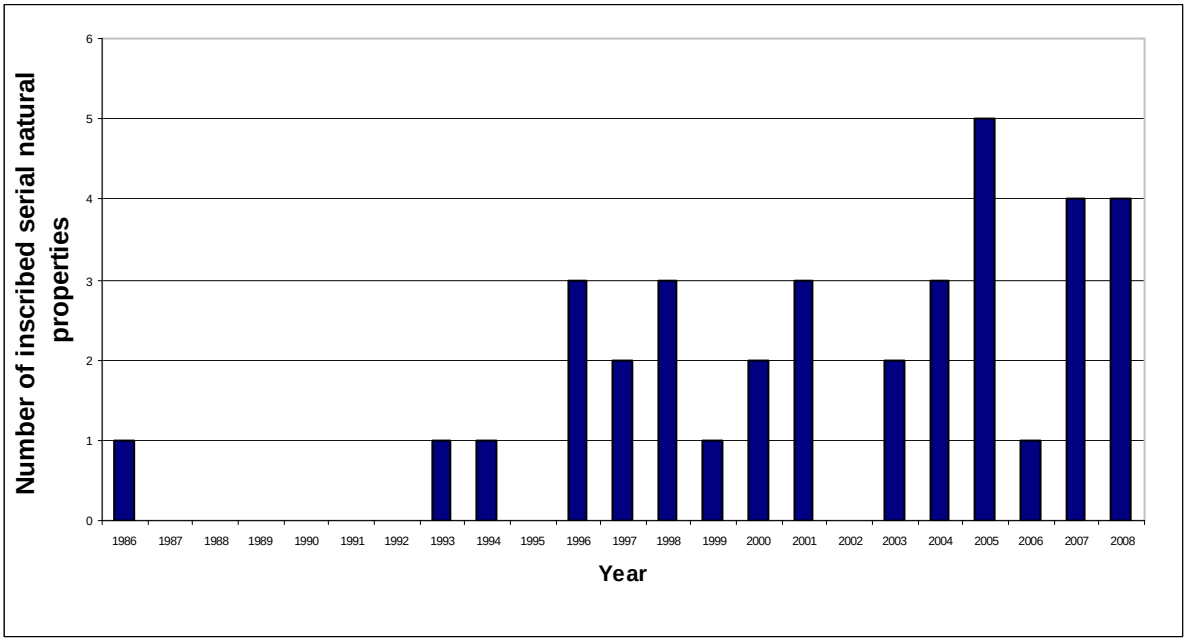


Figure 1: Inscriptions of serial natural World Heritage properties per year
Note: In cases where a serial property was created by an extension of a single property, the inscription has been counted in the year the single property became a serial one.

Table 3: Nominations of serial natural properties 2002-2008

Year	Number of nominated serial natural properties	Committee decisions on serial natural nominations					Total number of natural nominations*** (% serial)
		Inscribed	Not inscribed	Deferred	Referred	Withdrawn by State Party	
2002	-	-	-	-	-	-	4 (0)
2003	3	2		1*	-	-	8 (37.5%)
2004	6	3	-	-	-	3	15 (40%)
2005	5	5	-	-	-	-	11 (45%)
2006	5	1	-	3**	-	1	10 (50%)
2007	6	4	1	-	-	1	11 (54%)
2008	6	4	1	-	-	1	13 (46%)

** The nomination of the "Saryarka - Steppe and Lakes of Northern Kazakhstan" was deferred in 2003 and has been re-nominated and been inscribed in 2008.*
*** One property had been nominated as a serial property (Gorgona Natural Parks and Malpelo Sanctuary/Colombia; with two component parts) but only one component (the Malpelo Flora and Fauna Sanctuary) was finally inscribed.*
**** includes extensions of properties inscribed on the World Heritage List*

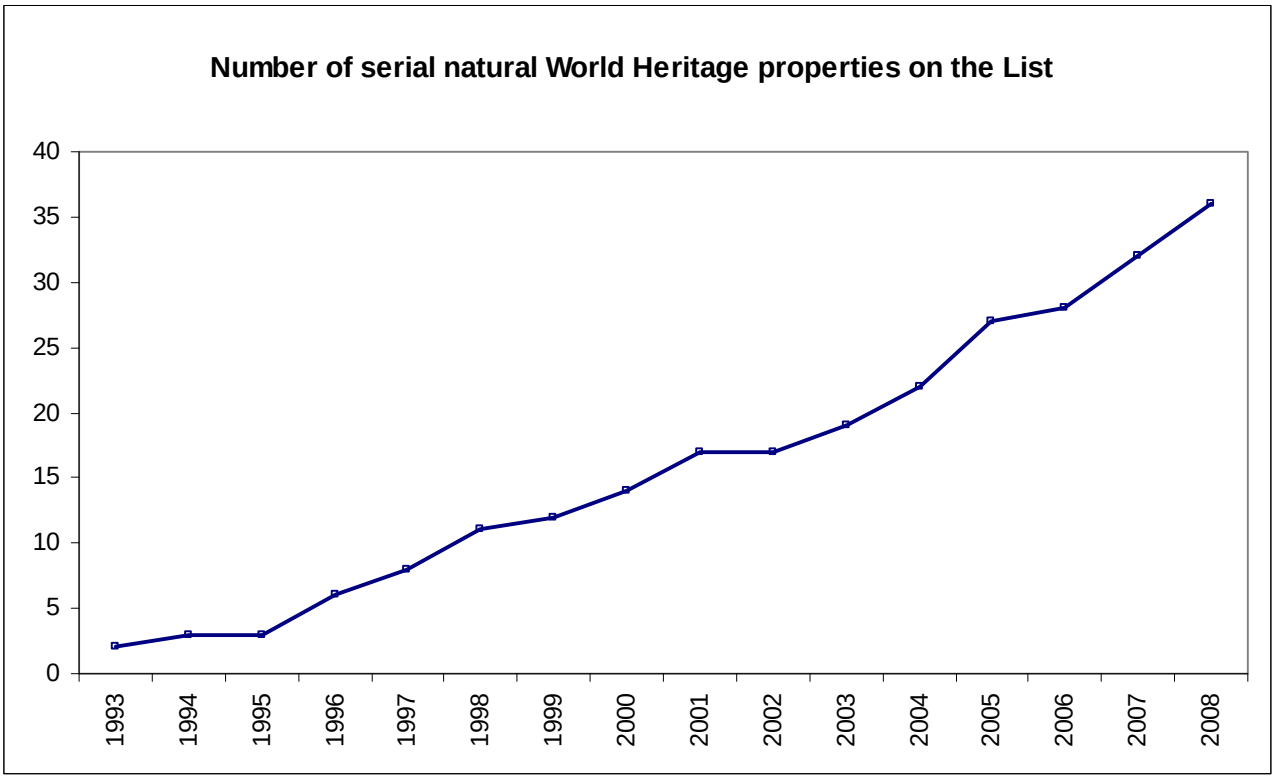


Figure 2: Growth in the number of serial natural World Heritage properties on the List (1993-2008)
Note: In cases where a serial property was created by an extension of a single property, the inscription has been counted in the year the single property became a serial one

Question 4: How are serial natural World Heritage properties distributed between the different UNESCO regions?

Answer: The serial natural World Heritage properties are currently unevenly distributed in the UNESCO regions: only one property is located in the Arab States, four in Africa, six in Latin America/Caribbean, thirteen are situated in the Asia-Pacific region and eleven properties in Europe/North America (see Figure 3). One property (Uvs Nuur (Mongolia/Russian Federation)) is located partly in the Asia-Pacific region and partly in Europe/North-America.

Comparison of these numbers to the total numbers of natural World Heritage properties in the various regions suggests that the high numbers of serial natural properties in Europe/North America and Asia-Pacific correlate well with the overall number of natural World Heritage properties in these regions. With one property out of four the percentage of serial natural properties in the Arab States is comparatively high (see Table 4).

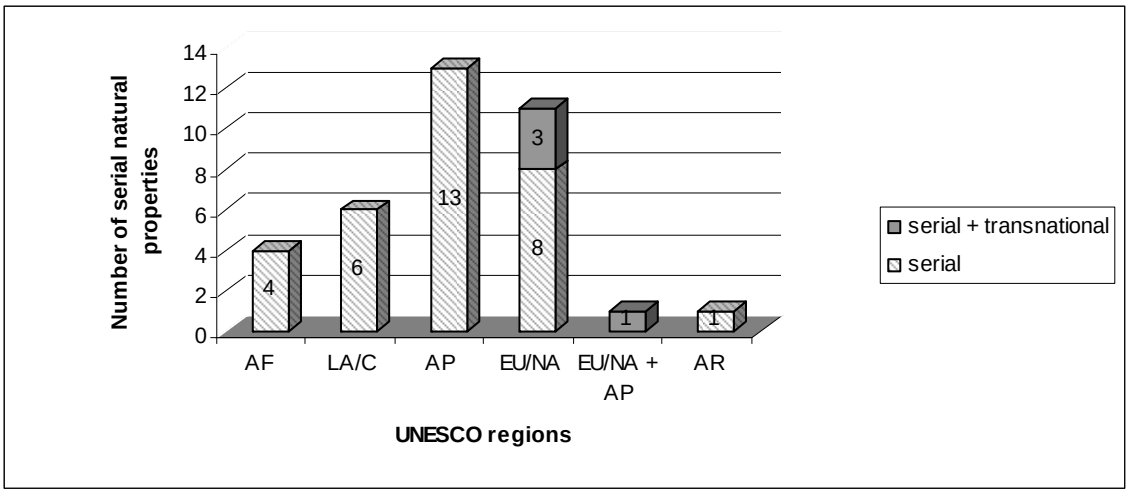


Figure 3: Distribution of serial natural World Heritage properties in the UNESCO regions
Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States
Note: the property Uvs Nuur has been counted in both the figure for the AP and EU/NA regions.

Table 4: Numbers of serial natural World Heritage properties compared to total natural World Heritage properties

UNESCO Region	Serial natural	Total natural	% serial natural
AF	4	33	12.1
LA/C	6	35	17.1
AP	14	48	29.2
EU/NA	12	54	22.2
AR	1	4	25.0

Note: the property Uvs Nuur has been counted in both the figure for the AP and EU/NA regions.
Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States

Question 5: Under which criteria have serial natural World Heritage properties been inscribed?

Serial natural World Heritage properties have been inscribed under all four natural criteria (vii, viii, ix, x). The overall distribution of the criteria is presented in Figure 4, with criterion (x) used most frequently. The combinations of different criteria used for inscriptions in shown in figure 5. Among the different combination of criteria, the combination (ix and x) has been used most frequently, followed by the combination (vii, ix and x).

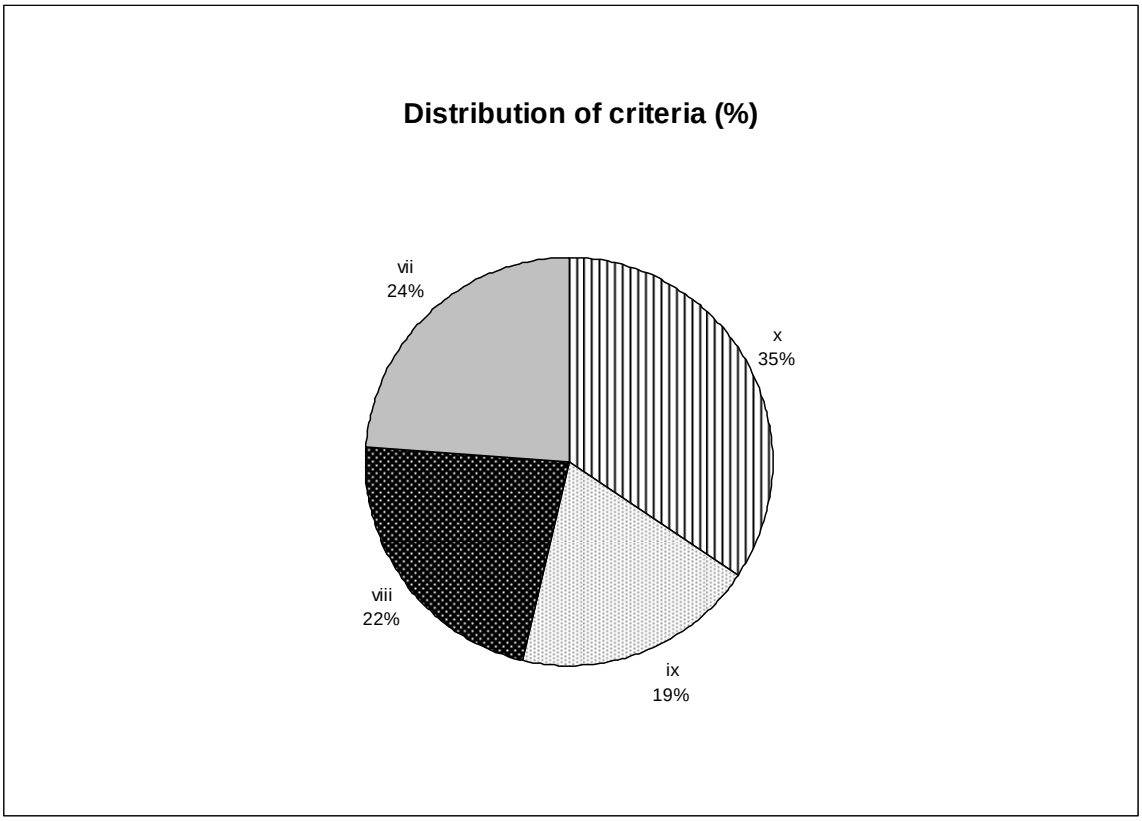


Figure 4: Frequency of use of the natural criteria for inscription of serial natural World Heritage properties.

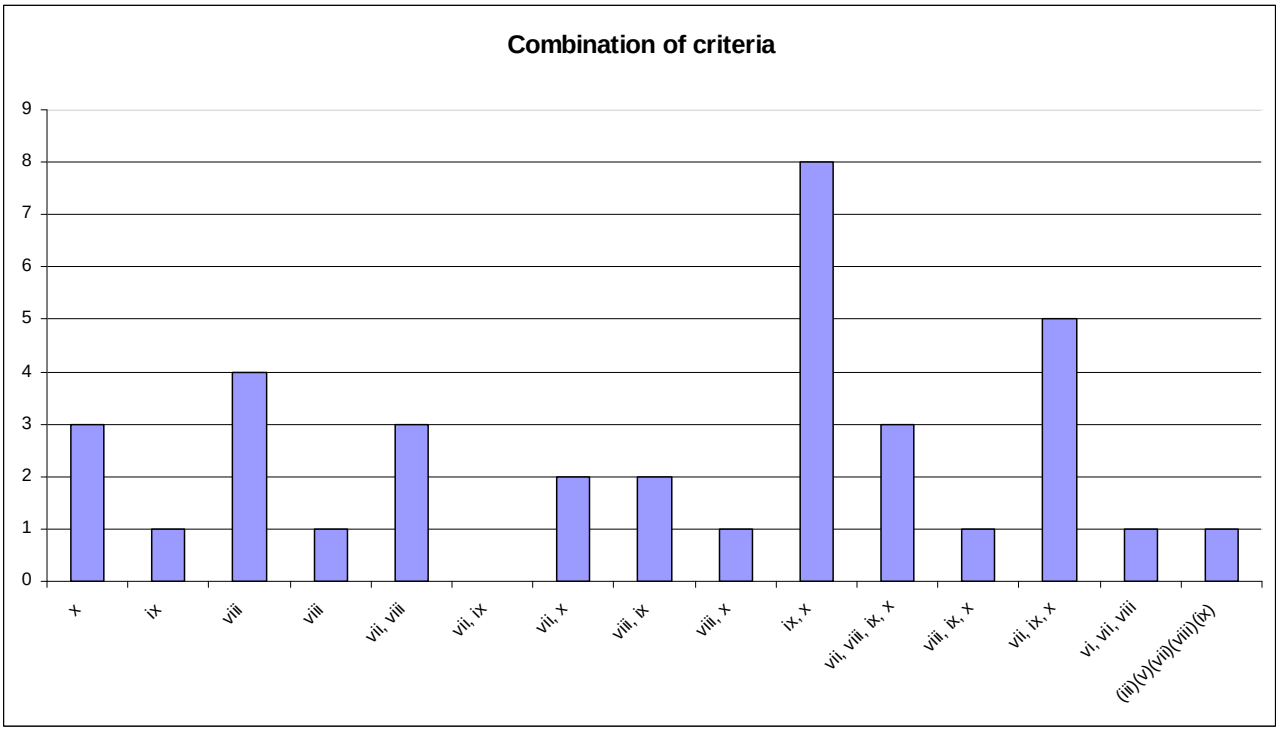


Figure 5: Combination of criteria under which serial natural World Heritage properties have been inscribed

Question 6: What ecosystem types are represented in the serial natural World Heritage properties?

Answer: At present, 24 serial natural World Heritage properties are inscribed on values related to one (or more) principal ecosystem types: forests (13), islands and marine ecosystems (8), wetlands combined with steppe (3) and inland waters or wetlands (3) (see Figure 6). The individual properties with the ecosystem types represented are listed in Table 5.

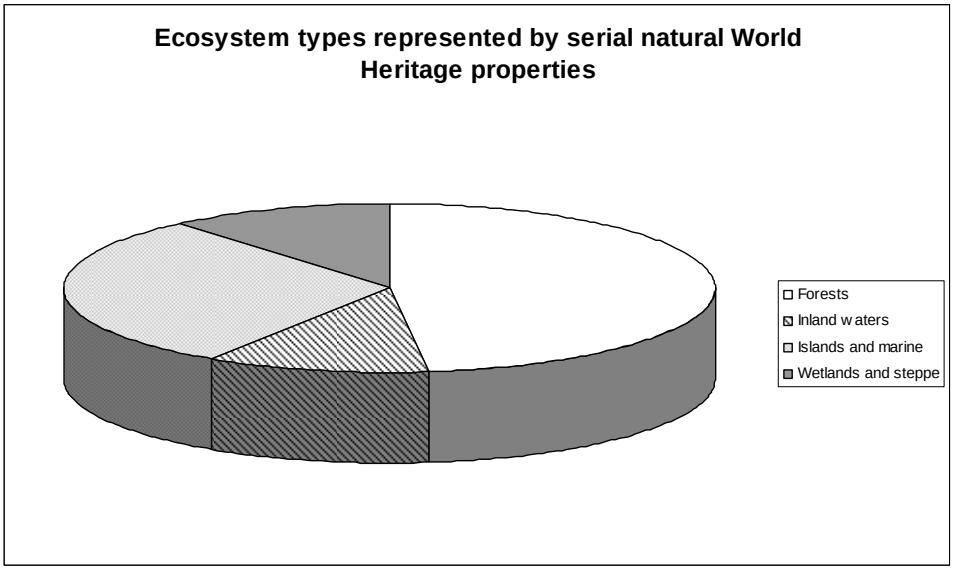


Figure 6: Principal ecosystem types represented in serial natural World Heritage properties.

Table 5: Principal ecosystem types represented in serial natural World Heritage properties

Name	Country	Region	Ecosystem Type
Gondwana Rainforests of Australia	Australia	AP	Forests
Wet Tropics of Queensland	Australia	AP	Forests
Heard and McDonald Islands	Australia	AP	Islands and Marine
Greater Blue Mountains Area	Australia	AP	Forests
Belize Barrier Reef Reserve System	Belize	LA/C	Islands and Marine
Fernando de Noronha and Atol das Rocas Reserves	Brazil	LA/C	Islands and Marine
Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks	Brazil	LA/C	Wetlands
Discovery Coast Atlantic Forest Reserves	Brazil	LA/C	Forests
Three Parallel Rivers of Yunnan Protected Areas	China	AP	Inland waters
Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems	France	EU/NA	Islands and Marine
Nanda Devi and Valley of Flowers National Parks	India	AP	Forests
Tropical Rainforests of Sumatra	Indonesia	AP	Forests
Saryarka – Steppe and Lakes of Northern Kazakhstan	Kazakhstan	EU/NA	Wetlands, Steppe
Lake Turkana National Parks	Kenya	AF	Inland waters
Rainforests of the Atsinanana	Madagascar	AF	Forests
Islands and Protected Areas of the Gulf of California	Mexico	LA/C	Islands and Marine
Monarch Butterfly Biosphere Reserve	Mexico	LA/C	Forests
Uvs Nuur Basin	Mongolia/ Russian Federation	EU/NA/ AP	Wetlands, Steppe
New Zealand Sub-Antarctic Islands	New Zealand	AP	Islands and Marine
Volkanoes of Kamtchatka	Russian Federation	EU/NA	Forests
Primeval Beech Forests of the Carpathians	Slovakia/Ukraine	EU/NA	Forests
Dong Phayayen-Khao Yai Forest Complex	Thailand	AP	Forests
Gough and Inaccessible Islands	United Kingdom	EU/NA	Islands and Marine
Socotra Archipelago	Yemen	AR	Islands and Marine

Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States

Question 7: How many different component parts are included within serial natural World Heritage properties?

Answer: The number of different component parts included in serial natural World Heritage properties is shown in figure 7, and varies from 2 to 41. In the case of the Gondwana Rainforests (Australia) there are 8 clusters of components, although these include 41 smaller individual elements. The average number of components is c. 6.5 but it should be noted that the majority of properties is composed of 2 to 8 components. All 36 serial natural World Heritage properties together consist of 246 component parts.

Figure 8 shows a graph of the growth in the total number of component parts of serial natural properties and tends to suggest an approximately exponential trend in growth, with the rate of growth of the number of components being greater than that rate of growth of the number of serial natural properties.

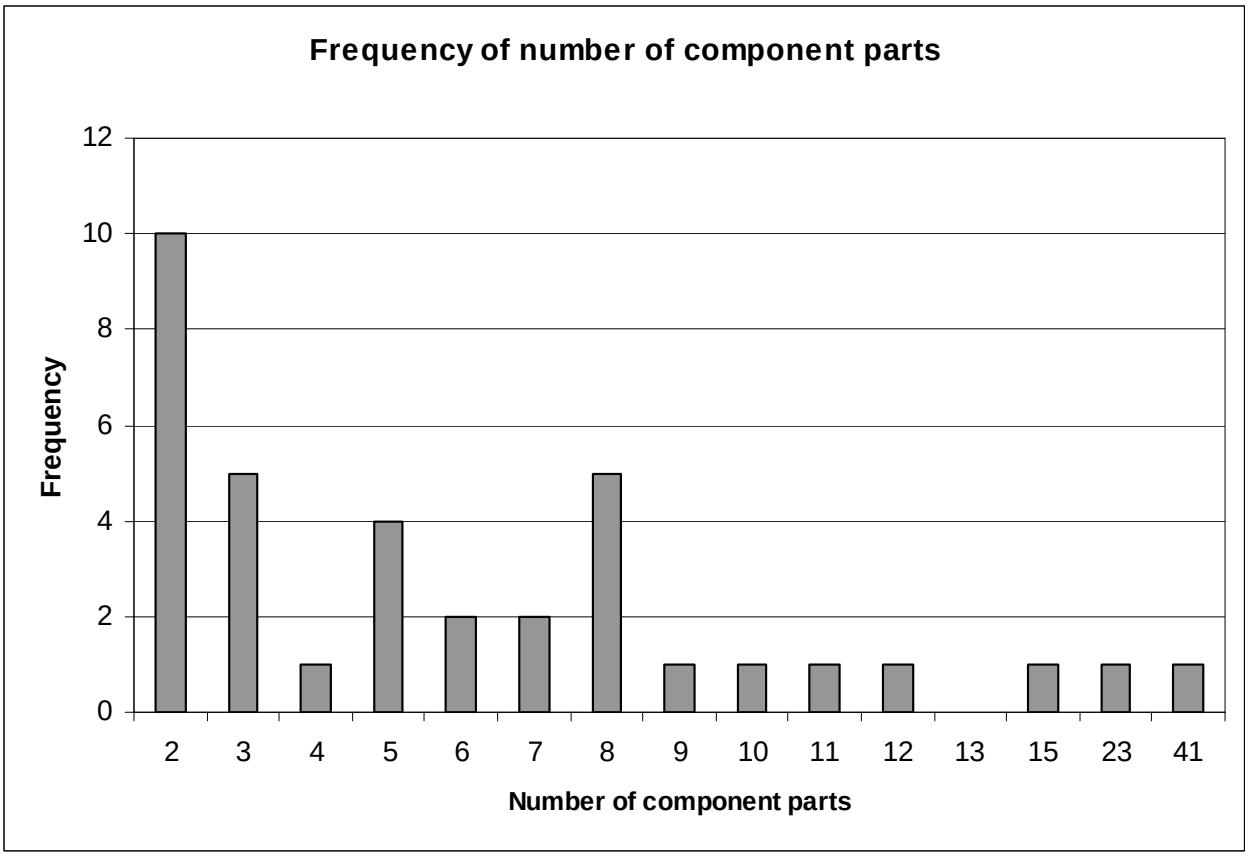


Figure 7: Number of different component parts included in serial natural World Heritage properties

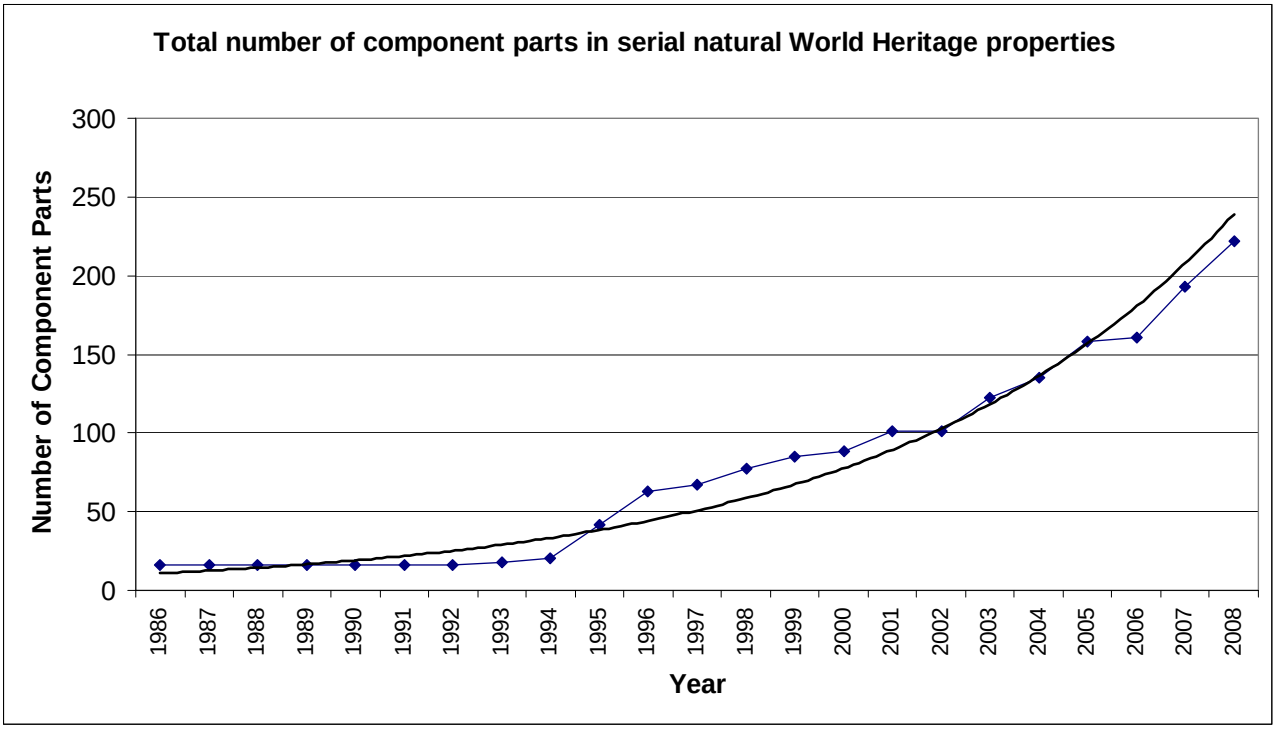


Figure 8: Growth in the number of component parts of serial natural World Heritage properties
Note: Best fit line suggests an exponential trend in growth in the number of component parts of serial natural properties

Question 8: How large are natural World Heritage properties?

Answer: The average size of a serial natural World Heritage property is c. 537,000 hectares (compared to the average size of all natural World Heritage Properties of c. 929,000 hectares[4]). The size of serial natural World Heritage properties varies from 2,550 ha to 3,830,200 ha. The distribution of serial natural World Heritage properties in different size classes is as follows:

- 1 million hectares or more: 5 properties
- 500,000 – 999,999 hectares: 7 properties
- 100,000 – 499,999 hectares: 9 properties
- 50,000 – 99,999 hectares: 5 properties
- 10,000 – 49,999 hectares: 7 properties
- Less than 10,000 hectares: 3 properties.

The largest serial natural property is Volcanoes of Kamchatka at 3,830,200 hectares; the smallest serial natural property is Dorset and East Devon Coast with 2,550 hectares.

The current range of serial natural World Heritage properties include a significant number of large protected areas. Such large areas are considered to have particular importance in relation to the extinction crisis being experienced by global biodiversity as they include large tracts of the last remaining wilderness areas of the world and areas that provide large-scale connectivity between protected and unprotected areas.

[4] The average size of a natural World Heritage property is 928,925 hectares although if the Great Barrier Reef is excluded from the analysis the average size is just over 746,823 hectares (Source: IUCN World Heritage Studies No. 3, **World Heritage and Protected Areas**, 2008).

Table 6: The sizes of serial natural World Heritage properties

Name of World Heritage property	Country	Criteria	Total Area (ha)
Russian Federation	Volcanoes of Kamchatka	(vii)(viii)(ix)(x)	3,830,200
Indonesia	Tropical Rainforests of Sumatra	(vii)(ix)(x)	2,595,124
Russian Federation	Golden Mountains of Altai	(x)	1,611,457
Frankreich	Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems	(vii)(ix)(x)	1,574,300
Australia	Greater Blue Mountains Area	(ix)(x)	1,032,649
Sweden	Laponian Area	(iii)(v)(vii)(viii)(ix)	940,000
China	Three Parallel Rivers of Yunnan Protected Areas	(vii)(viii)(ix)(x)	939441
Mongolia/ Russian Federation	Uvs Nuur Basin	(ix)(x)	898,064
Australia	Wet Tropics of Queensland	(vii)(viii)(ix)(x)	894,420
Mexico	Islands and Protected Areas of the Gulf of California	(vii)(ix)(x)	736,812
Thailand	Dong Phayayen-Khao Yai Forest Complex	(x)	615,500
South Africa	Cape Floral Region Protected Areas	(ix)(x)	553,000
Madagascar	Rainforests of the Atsinanana	(ix)(x)	479,661
Kazakhstan	Saryarka – Steppe and Lakes of Northern Kazakhstan	(ix)(x)	450,344
Yemen	Socotra Archipelago	(x)	410,460
Australia	Gondwana Rainforests of Australia	(viii)(ix)(x)	370,000
Brazil	Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks	(ix)(x)	197,382
Finland/ Sweden	Kvarken Archipelago / High Coast	(viii)	194,400
Kenya	Lake Turkana National Parks	(viii)(x)	161,485
Norway	West Norwegian Fjords – Geirangerfjord and Nærøyfjord	(vii)(viii)	122,712
Brazil	Discovery Coast Atlantic Forest Reserves	(ix)(x)	111,930
Belize	Belize Barrier Reef Reserve System	(vii)(ix)(x)	96,300
New Zealand	Tongariro National Park	(vi)(vii)(viii)	79,596
New Zealand	New Zealand Sub-Antarctic Islands	(ix)(x)	76,458
India	Nanda Devi and Valley of Flowers National Parks	(vii)(x)	71,783
Hungary/ Slovakia	Caves of Aggtelek Karst and Slovak Karst	(viii)	56,563
China	South China Karst	(vii)(viii)	47,588
Brazil	Fernando de Noronha and Atol das Rocas Reserves (1)	(vii)(ix)(x)	42,270
Australia	Heard and McDonald Islands	(viii)(ix)	38,600
South Africa	Vredefort Dome	(viii)	30,000
Slovakia/Ukraine	Primeval Beech Forests of the Carpathians	(ix)	29,279
Mexico	Monarch Butterfly Biosphere Reserve	(vii)	13,552
Australia	Australian Fossil Mammal Sites (Riversleigh / Naracoorte (Murgon))	(viii)(ix)	10,300
Republic of Korea	Jeju Volcanic Island and Lava Tubes	(vii)(viii)	9,475
United Kingdom of Great Britain and Northern Ireland	Gough and Inaccessible Islands	(vii)(x)	7,900
United Kingdom of Great Britain and Northern Ireland	Dorset and East Devon Coast	(viii)	2,550

Question 9: What are the sizes of the individual component parts of serial natural World Heritage properties?

Answer: The size of the individual components of serial natural properties varies considerably. The smallest recorded components are 1 hectare in area (Australian Fossil Mammal Sites and Vredefort Dome), the largest component included in a serial property measures 1,375,350 ha (within the Tropical Rainforest Heritage of Sumatra). The variability in the sizes of component parts of serial natural World Heritage properties is shown in Figure 9 below. Each serial property is plotted with a line that shows the smallest and largest component parts, and a tick on the line indicates the average size of the component parts within that particular serial natural property.

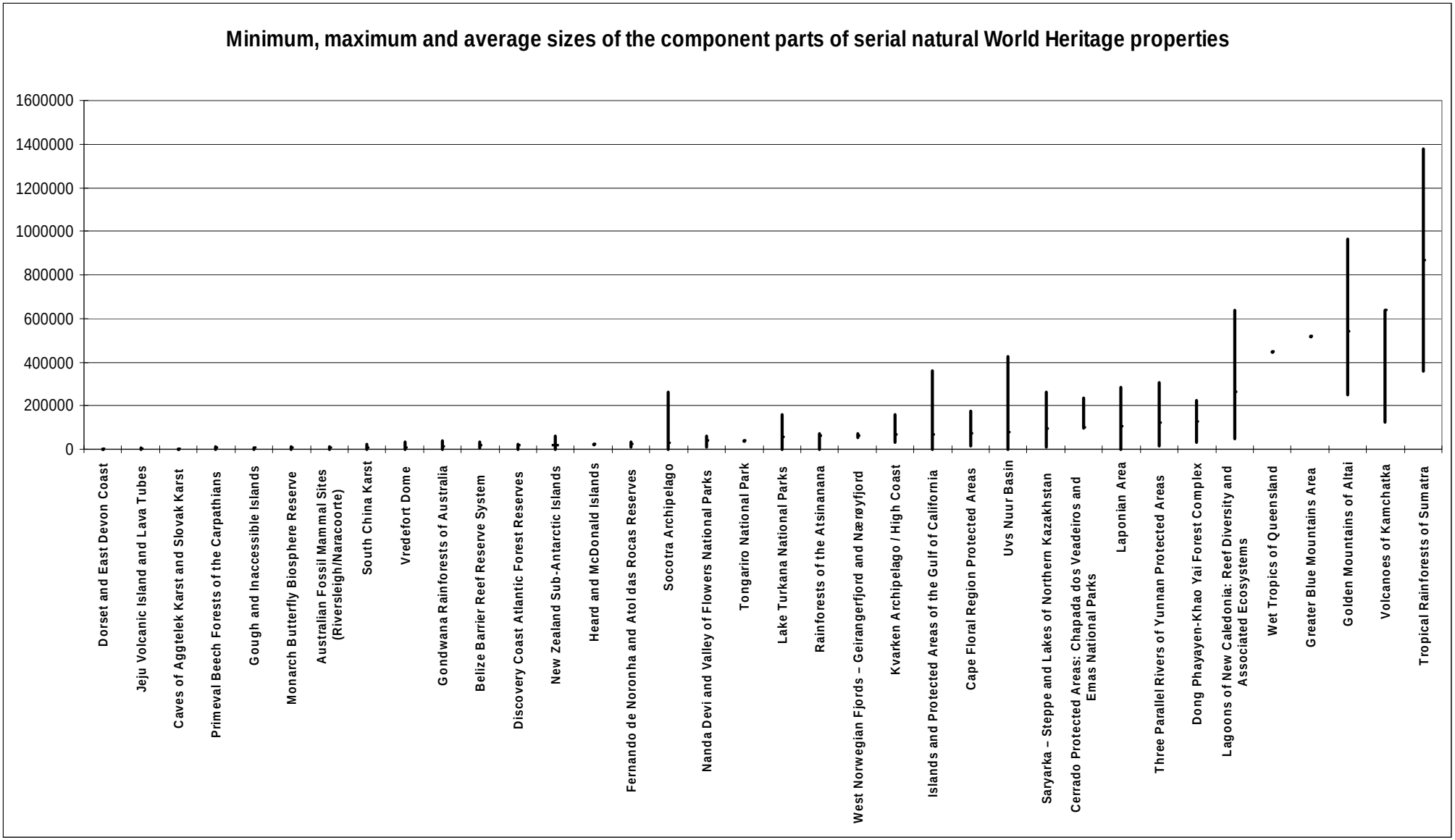


Figure 9: Minimum, maximum and average sizes of the components of serial natural World Heritage properties.
Note: Some properties are only displayed with their average component part size due to lack of data.

Question 10: To what extent have serial natural World Heritage properties been nominated in phases?

Answer: Eight serial natural World Heritage properties have been inscribed in phases (mostly two phases, see Table 7). In three cases an extension of a single natural property has created a serial natural property (High Coast/Kvarken Archipelago (Sweden/Finland), Gough and Inaccessible Islands (United Kingdom), Nandi Devi and the Valley of Flowers (India)). In the case of the High Coast/Kvarken Archipelago an extension not only made the property serial, but also made it transnational (after inscription of the Swedish High coast in 2000, two Finnish parts were added as an extension in 2006).

Table 7: List of phased nominations among the serial natural World Heritage properties

Country	Name of property	Dates of inscriptions
Australia	Gondwana Rainforests of Australia	1986/ 1994
India	Nanda Devi and Valley of Flowers National Parks	1988/ 2005
Hungary/Slovakia	Caves of Aggtelek Karst and Slovak Karst	1995/ 2000
United Kingdom	Gough and Inaccessible Islands	1995/ 2004
Russian Federation	Volcanoes of Kamchatka	1996/ 2001
Kenya	Lake Turkana National Parks	1997/ 2001
Finland/Sweden	Kvarken Archipelago / High Coast	2000/ 2006
Mexico	Islands and Protected Areas of the Gulf of California	2005/ 2007

Question 11: Do the serial natural World Heritage properties have a single management plan?

Answer: 36 % of the serial natural World Heritage properties inscribed have a single (joint) management plan (or system) for the different components. The management models for the properties vary greatly and range from “no management plan” at all, to separate management plans and authorities for the components, to separate management plans which are linked by joint frameworks, concepts, guidelines etc. to joint management plans. IUCN in their evaluation of serial natural World Heritage properties always asks whether there is an overall management framework for all the components. The position is summarized in Figure 10 below and Annex 1 notes the management arrangement for each currently inscribed property.

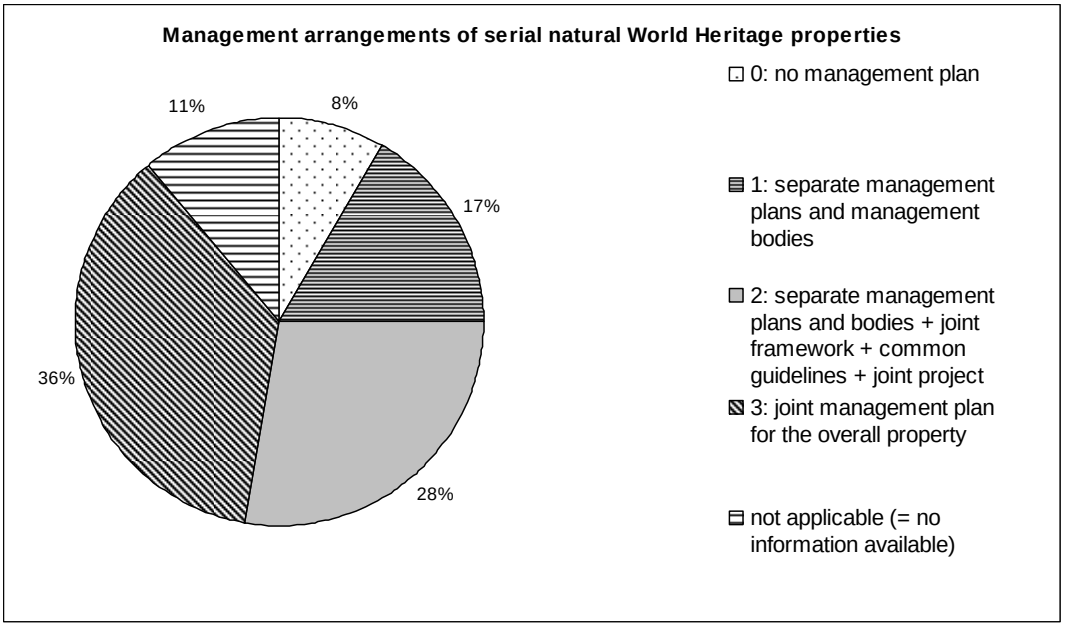


Figure 10: Management arrangements of serial natural World Heritage properties

Question 12: How many serial properties are included in the present Tentative lists?

Currently (at March 2009) the Tentative Lists of States Parties contain a total of 299 natural properties. Although the current format for the Tentative list does not provide for a indication of potential serial properties, an analysis of these suggest that at least 75 (26,4 %) of the natural properties included within Tentative Lists are serial in character, as shown below in Table 8. Sixteen properties have a potential transnational character. The actual numbers might be even higher as the information provided in the Tentative List database is not sufficient to determine whether the properties are potentially serial.

Table 8: Potential serial natural properties included in the Tentative Lists (preliminary analysis)

Country	Name of proposed property	Date of Tentative List	Serial	Trans-national	Extension?	Number of Component Parts	Criteria
Argentina	Sierra de las Quijadas National Park	(24/02/2005)	X			2	(vii) (viii) (ix)
Australia	Ningaloo Reef and Cape Range peninsula	(01/07/2008)	X				(vii) (viii) (ix) (x)
Azerbaijan	Hyrkan State Reservation	(30/09/1998)	X	X			(vii) (x)
Bahrain	Hawar Islands Reserve	(07/11/2001)	X				(vii) (ix)
Botswana	Gcwihaba	(21/07/1999)	X				(viii) (ix)
Burkina Faso	Parc National du W du Niger et aires protégées adjacentes	(30/01/2004)	X	X			(ix) (x)
Cape Verde	ova e Montantes de Ribeiras da Torre et do Paul	(07/05/2004)	X				
Central African Republic	La Réserve intégrale de la Mbaéré-Bondingué	(11/04/2006)	X			2	(ix) (x)
China	Danxia Landform of China	(07/04/2008)	X			5	(vii) (viii) (ix) (x)
Comoros	Ecosystèmes Marins de l'Archipel des Comores	(31/01/2007)	X			3	(ix) (x)
Costa Rica	Corcovado National Park and Isla del Caño Biological Reserve	(30/01/2003)	X			2	(vii) (x)
Côte d'Ivoire	Parc national des Iles Ehotilé	(17/03/2006)	X				
Croatia	Kornati National Park and Telašcica Nature Park	(29/01/2007)	X				(vii) (viii) (x)
Cuba	Reef System in the Cuban Caribbean	(28/02/2003)	X				(vii) (x)
Cyprus*	Khandria	(04/02/2002)	X				(viii) (ix)
Cyprus*	Malounta Bridge	(04/02/2002)	X				(viii) (ix)
Cyprus*	Kionia	(04/02/2002)	X				(viii) (ix)
Cyprus*	Troodos, Mt. Olympus	(04/02/2002)	X				(viii) (ix)
Cyprus*	Klirou Bridge	(04/02/2002)	X				(viii) (ix)
Czech Republic	Ceský ráj (Czech Paradise) Rock Cities	(19/01/2001)	X			11	
Egypt	Southern and Smaller Oases, the Western Desert Egypt	(12/06/2003)	X			5	(vii) (viii) (ix) (x)
Egypt	Desert Wadis	(12/06/2003)	X			3	(vii) (viii) (ix) (x)
Egypt	Great Desert Landscapes	(12/06/2003)	X			3	(vii) (viii) (ix)
Egypt	Bird Migration Routes	(12/06/2003)	X			7	(vii) (x)
Egypt	Mountain Chains	(12/06/2003)	X			5	(vii) (viii) (ix) (x)
Estonia	Baltic Klint	(06/01/2004)	X				
Finland	Saimaa-Pielinen Lake System	(28/01/2004)	X				(vii) (viii) (ix)
France	Bouches de Bonifacio	(01/02/2002)	X	X			(vii) (ix) (x)
France	Ensemble de grottes à concrétions du Sud de la France	(01/02/2002)	X			19	(vii) (viii) (ix)
Germany	Beech Primeval Forests of Germany	(01/02/2007)	X	X	X	5	(ix)
Germany	The German Wadden Sea	(20/09/1999)	X	X		?	(viii) (ix) (x)
Grenada	Grenadines Island Group	(05/08/2004)	X				(vii) (x)
Hungary	Caves of the Buda Thermal Karst System	(11/08/1993)	X			5+	(viii)
Iceland	Herðubreiðarlindir and Askja	(18/12/2001)	X			2	(vii) (viii) (ix) (x)
India	Western Ghats (sub cluster nomination)	(15/03/2006)	X			7	(vii) (ix) (x)

Country	Name of proposed property	Date of Tentative List	Serial	Trans-national	Extension?	Number of Component Parts	Criteria
Iran (Islamic Republic of)	Hyrcanian Forest (Caspian Forest)	(09/08/2007)	X	X			(vii) (viii) (ix) (x)
Ireland	Northwest Mayo Boglands (28/09/1992) Ireland	(28/09/1992)	X				?
Israel	The Great Rift Valley - migratory routes - The Hula	(15/04/2004)	X				
Italy	Alps: a) Western Alps, b) Dolomites, c) Eastern Alps	(01/06/2006)	X				(vii) (viii) (ix) (x)
Italy	Archipelago of La Maddalena and Islands of Bocche di Bonifacio	(01/06/2006)	X	X			(vii) (ix) (x)
Italy	Sulcis Iglesiente	(01/06/2006)	X				
Italy	Ponds in the Bay of Oristano and the Sinis Peninsula island of Mal di Ventre	(01/06/2006)	X				(ix) (x)
Italy	Bradyseism in the Flegrea Area	(01/06/2006)	X				(vii) (viii) (x)
Japan	Ogasawara Islands	(30/01/2007)	X				(viii) (ix) (x)
Kazakhstan	Northern Tyan-Shan (Ile-Alatau State National Park)	(06/02/2002)	X	X			(x)
Kiribati	Phoenix Islands World Heritage Area	(07/03/2007)	X				(vii) (viii) (ix) (x)
Korea, Democratic People's Republic of	Caves in Kujang Area	(25/05/2000)	X				
Korea, Republic of	Sites of fossilized dinosaurs throughout the Southern seacoast	(25/01/2002)	X			5	(viii) (ix) (x)
Madagascar	Réserve Spéciale d'Anjanaharibe-Sud (extension des forêts l'Atsinanana)	(14/03/2008)	X		X	1	ix, x
Madagascar	Les forêts sèches de l'Andrefana	(14/03/2008)	X			7	(ix) (x)
Malaysia	Lanjak Entimau Wildlife Sanctuary (LEWS) and Batang Ai National Park (BANP)	(23/06/2004)	X			2	(viii) (ix) (x)
Malta	Coastal Cliffs	(19/05/1998)	X				
Mexico	Vallée des Cierges	(06/12/2004)	X			2	
Mexico	Réserve de la Biosphère Selva El Ocote	(06/12/2004)	X			2	
Mexico	Sierra de San Francisco et ses peintures rupestres* [proposed for natural criteria]	(06/12/2004)	X			2	(viii) (x)
Mexico	Aire de protection de la flore et de la faune Cuatrociénegas	(06/12/2004)	X			2	
Mexico	Réserve de la Biosphère El Pinacate et le Grand désert d'Altar	(06/12/2004)	X			2	
Netherlands	The Dutch Wadden Sea	(13/02/2007)	X	X			
New Zealand	Kahurangi National Park, Farewell Spit and Canaan karst system New Zealand	(30/03/2007)	X				(vii) (viii) (ix) (x)
New Zealand	Whakarua Moutere (North East Islands)	(30/03/2007)	X			9	(vii) (viii) (ix) (x)
New Zealand	Waters and seabed of Fiordland (Te Moana O Atawhenua)	(30/03/2007)	X				(vii) (viii) (ix) (x)
New Zealand	Kermadec Islands and Marine reserve	(30/03/2007)	X			2	(vii) (viii) (ix) (x)
Nicaragua	The Natural Reserve Miskitos Keys"	(19/06/1995)	X			2	
Niger	L'ensemble des forêts protégées de la région d'Agadez	(26/05/2006)	X				(vii) (x)
Niger	Mare d'Ounsolo ou N'Solo	(26/05/2006)	X			2	(ix)
Norway	Islands of Jan Mayen and Bouvet as parts of a serial transnational nomination of the Mid-Atlantic Ridge system	(21/06/2007)	X	X			
Philippines	Mount Apo and Mount Hamiguitan: Sanctuaries of Endemism in Mindanao	(10/09/2008)	X			2	
Portugal	ICNITOS de Dinossáurios	(31/01/2008)	X			3	(vii) (viii)

Country	Name of proposed property	Date of Tentative List	Serial	Trans-national	Extension?	Number of Component Parts	Criteria
Russian Federation	Daurian Steppes (Daursky State Biosphere Reserve)	(07/02/2005)	X	X			
Russian Federation	The Teberdinskiy Reserve (extension of the "The Western Caucasus")	(18/01/1994)	X		X	2	(vii) (viii) (ix) (x)
Slovakia	Karst Valleys of Slovakia	(12/06/2002)	X				(viii) (ix) (x)
Slovakia	Natural Reserves of Tatras Mountain Slovakia	(12/06/2002)	X				(vii) (viii) (ix) (x)
Slovakia	Fungal Flora of Bukovské Hills	(12/06/2002)	X				(x)
South Africa	The Prince Edward Islands	(24/06/2004)	X				(vii) (viii) (ix) (x)
Spain	Dinosaur Ichnite Sites of the Iberian Peninsula	(20/12/2002)	X	X			
Togo	Parc national de la Kéran et la réserve de faune Oti-Mandouri	(08/01/2002)	X			2	(vii) (x)
Uzbekistan	Mountains of the Western Tien Shan (Transboundary nomination of Uzbekistan, Kyrgyzstan, Kazakhstan) "Chatkal Sate Biosphere Reserve"	(18/01/2008)	X	X			(viii) (x)
Uzbekistan	Gissar Mountains	(18/01/2008)	X			2	(vii) (viii) (x)
Uzbekistan	Zaamin Mountains	(18/01/2008)	X			2	(viii) (ix) (x)
TOTAL			79	14			

**Note: Although listed separately on the Tentative List, the five properties in Cyprus are individual component parts of one proposed serial property and have been counted as one. Properties included in tentative lists have not been evaluated for inclusion in the World Heritage List, and inclusion on a Tentative List does not indicate that a property necessarily has* Outstanding Universal Value *under the World Heritage Convention.*

Concluding Remarks

This preliminary analysis is a first attempt to clarify the situation of the serial natural World Heritage properties inscribed in the World Heritage list. This analysis implies a range of areas of follow up work that should be considered for further work, including:

- The relationship of serial World Heritage properties to other designations (RAMSAR, UNESCO Biosphere Reserves, European Diploma, etc.)
- A synthetic case history of IUCN evaluations and Committee decisions on serial nominations to identify key decisions and thresholds
- The identification of case studies of best practice for nomination, management, monitoring etc. of serial natural World Heritage properties.
- Extension of this analysis to consider cultural and natural properties.

IUCN and BfN welcome feedback on this analysis.

IUCN Programme on Protected Areas
BfN German Federal Agency for Nature Conservation (Division of International Nature Conservation)
March 2009

ANNEX 1: List of serial natural and mixed World Heritage properties in alphabetical order of the countries

No	Country	Region*	Name	Cate-gory**	trans-national	Criteria	Year of inscrip-tion	Extension	Size (ha) ***	No. of compo-nent parts	Size range of component parts	Average compo-nent size	Management Arrangement (Question10) ****
1	Australia	AP	Gondwana Rainforests of Australia	N		(viii)(ix)(x)	1986/ 1994	1994: cluster parts 17-41	370,000	41	min: 36 max:39,120	9024	3
2	Australia	AP	Wet Tropics of Queensland	N		(vii)(viii)(ix)(x)	1998		894,420	2	No min/max	447,210	3
3	Australia	AP	Heard and McDonald Islands	N		(viii)(ix)	1997		38,600	2	No min/max	19,300	n.a.
4	Australia	AP	Greater Blue Mountains Area	N		(ix)(x)	2000		1,032,649	2	No min/max	516,325	3
5	Australia	AP	Australian Fossil Mammal Sites (Riversleigh / Naracoorte)	N		(viii)(ix)	1994		10,300	2	min: 1 max: 10,000	3,433	2
6	Belize	LA/C	Belize Barrier Reef Reserve System	N		(vii)(ix)(x)	1996		96,300	7	min: 3,900 max: 30,800	13,757	3
7	Brazil	LA/C	Fernando de Noronha and Atol das Rocas Reserves	N		(vii)(ix)(x)	2001		42,270	2	min: 11,270 max: 32,000	21,135	2
8	Brazil	LA/C	Cerrado Protected Areas: Chapada dos Veadeiros and Emas National Parks	N		(ix)(x)	2001		197,382	2	min: 131,386 max: 235,970	98,691	2
9	Brazil	LA/C	Discovery Coast Atlantic Forest Reserves	N		(ix)(x)	1999		111,930	8	min:1,145 max: 24,000	13,991	1
10	China	AP	Three Parallel Rivers of Yunnan Protected Areas	N		(vii)(viii)(ix)(x)	2003		939,441	8	min: 17,426 max: 305,306	117,430	1
11	China	AP	South China Karst	N		(vii)(viii)	2007		47,588	7	min:1,246 max: 21,684	6,798	2
12	Finland/ Sweden	EU/NA	Kvarken Archipelago / High Coast	N	x	(viii)	2000/ 2006	2006: 2. and 3. part of cluster	194,400	3	min 34,400 max 160,000	64,800	2
13	France	EU/NA	Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems	N		(vii)(ix)(x)	2008		1,574,300	6	min: 48,200 max: 635,700	262,383	3
14	Hungary/ Slovakia	EU/NA	Caves of Aggtelek Karst and Slovak Karst	N	x	(viii)	1995/ 2000	2000: cluster part 23	56,563	23	no min/max	2,459	1
15	India	AP	Nanda Devi and Valley of Flowers National Parks	N		(vii)(x)	1988/ 2005	2005: 2. part of cluster	71,783	2	min: 8,750 max: 62,460	35,892	n.a.
16	Indonesia	AP	Tropical Rainforsts of Sumatra	N		(vii)(ix)(x)	2004		2,595,124	3	min: 356,800 max: 1,375,350	865,041	1
17	Kazakhstan	EU/NA	Saryarka – Steppe and Lakes of Northern Kazakhstan	N		(ix)(x)	2008		450,344	5	min: 12,947 max:258,963	90,069	3
18	Kenya	AF	Lake Turkana National Parks	N		(viii)(x)	1997/20 01	2001: 3. part of cluster	161,485	3	min:500 max:157,085	53,828	0
19	Madagascar	AF	Rainforests of the Atsinanana	N		(ix)(x)	2007		479,661	8	min: 84 max: 69,898.5	59,958	1
20	Mexico	LA/C	Islands and Protected Areas of the Gulf of California	N		(vii)(ix)(x)	2005/20 07	2007: cluster parts 10 and 11	736,812	11	min: 79 max: 358,000	66,983	3
21	Mexico	LA/C	Monarch Butterfly Biosphere Reserve	N		(vii)	2008		13,552	3	min: 588 max: 9,233	4,517	3

No	Country	Region*	Name	Cate-gory**	trans-national	Criteria	Year of inscrip-tion	Extension	Size (ha) ***	No. of compo-nent parts	Size range of component parts	Average compo-nent size	Management Arrangement (Question10) ****
22	Mongolia/ Russian Federation	EU/NA/ AP	Uvs Nuur Basin	N	x	(ix)(x)	2003		898,064	12	min: 800 max:424,298	74,839	2
23	New Zealand	AP	Tongariro National Park	M		(vi)(vii)(viii)	1990/1993	1993: inscribed under cultural criteria	79,596	2		39,798	3
24	New Zealand	AP	New Zealand Sub-Antarctic Islands	N		(ix)(x)	1998		76,458	5	min: 135 max: 62,560	15,292	1
25	Norway	EU/NA	West Norwegian Fjords – Geirangerfjord and Nærøyfjord	N		(vii)(viii)	2005		122,712	2	min: 51,802 max: 70,910	61,356	2
26	Republic of Korea	AP	Jeju Volcanic Island and Lava Tubes	N		(vii)(viii)	2007		9,475	5	min: 23.8 max: 9,093.1	1,895	3
27	Russian Federation	EU/NA	Volcanoes of Kamchatka	N		(vii)(viii)(ix)(x)	1996/2001	2001: 6.part of cluster	3,830,200	6	min: 123,000 max:1,325,000	638,367	n.a.
28	Russian Federation	EU/NA	Golden Mountains of Altai	N		(x)	1998		1,611,457	3	min: 252,904 max: 965,753	537,152	0
29	Slovakia/Ukraine	EU/NA	Primeval Beech Forests of the Carpathians	N	x	(ix)	2007		29,279	10	min: 67.1 max:11,860	2,928	2
30	South Africa	AF	Vredefort Dome	N		(viii)	2005		30,000	4	min: 1 max: 30,108	7,500	2
31	South Afrika	AF	Cape Floral Region Protected Areas	N		(ix)(x)	2004		553,000	8	min:15,000 max: 174,000	69,125	2
32	Sweden	EU/NA	Laponian Area	M		(iii)(v)(vii)(viii)(ix)	1996		940,000	9	min: 2,000 max: 285,000	104,444	0
33	Thailand	AP	Dong Phayayen-Khao Yai Forest Complex	N		(x)	2005		615,500	5	min: 31,300 max:223,600	123,100	n.a.
34	United Kingdom of Great Britain and Northern Ireland	EU/NA	Gough and Inaccessible Islands	N		(vii)(x)	1995/2004	2004: 2. part of cluster	7,900	2	min:1,400 max:6,500	3,950	3
35	United Kingdom of Great Britain and Northern Ireland	EU/NA	Dorset and East Devon Coast	N		(viii)	2001		2,550	8	no min/max	319	3
36	Yemen	AR	Socotra Archipelago	N		(x)	2008		410,460	15	min: 8 max: 260,008	27,364	3

** Key to abbreviations: AF: Africa; LA/C: Latin America and the Caribbean; AP: Asia and the Pacific; EU/NA: Europe and North America; AR: Arab States*

** N=Natural. M=mixed

*** Size figures are for areas to be nominated, i.e. not including buffer zones.

**** At time of inscription