Assessment of natural heritage value on the future trans-boundary World Heritage nomination; identification of statement of Outstanding Universal Value

Elery Hamilton-Smith, AM, D App. Sci.
Chair, IUCN WCPA Task Force on Caves and Karst

Introduction

Let me commence by saying how delighted I am to be at this meeting – the trans-boundary agreement on this site has been a persistent dream of mine for 10 years now and it is so good to know it is really happening. I am sure many of you shared this dream.

In short, I believe the new park will be the most important karst Protected Area of Southeast Asia. This brief presentation will summarise the values of the site at both the world and the trans-national levels.

It is not the purpose of this paper to summarise the detailed scientific evidence that has been developed, primarily over only the last 15 years. Rather, at that level, I will focus on the need for much more comprehensive exploration and research. There is still too much that we do not know, largely because the area is so difficult of genuine access, and hence the necessary investigation will be very costly.

Finally in this introduction, I want to pay tribute to Howard Limbert and his colleagues who have so thoroughly explored the remarkable caves of Phong Nha. It was their investigation and Howard's continuing advocacy of the area that laid the basis for both protection and World Heritage recognition of the area.

The trans-boundary concept in itself

The very concept of a trans-boundary agreement in conservation and protected area management is more than a relatively new arrangement for management – it creates new values in and of itself.

In particular, the area concerned can be an icon of the spirit of international co-operation and joint action. It does not create instantaneous change in relationships, but it establishes a process through which changes are born and evolve as they mature.

From the environmental perspective, Hin Namno and Phong Nha / Ke Bang will be brought together within the natural boundary of the Ecosystem and that, in itself, both enhances understanding of the eco-system and highlights the importance of ecosystems as the most appropriate basis for land management. Although the plants and animals within the system do not recognise artificial boundaries, the human beings who threaten their very survival do, and without trans-boundary agreement and co-operation, negative impacts are very likely to be the result of arbitrary and artificial boundaries.

Further, the very existence of a trans-boundary agreement emphasises the importance of the natural and/or cultural values of the site. It thus serves as a resource that will support both research and protection. At a recent meeting in Europe, I argued that we must not allow disciplinary boundaries to fragment and so reduce the quality of our research and learning. At the same time, a colleague argued that research and learning must not come to a halt at international political boundaries. Several of those present said these two things had exerted a very strong and very negative influence in Europe – I am sure the same is true in Southeast Asia. Hopefully this very agreement that we are discussing will set a new pattern for co-operation.

At the 2003 World Parks Congress in Durban, Budowski summarised the benefits of trans-boundary agreements as:

- ***Promoting international co-operation at different levels and in different subject matters while allowing many joint activities.***
- ***Enhancing environmental protection across ecosystems, often including a significant higher number of ecosystems when compared to what pertained to each country.***
- ***Facilitating more effective exchange of information and research.***
- ***Bringing economic benefits to local and national economies.***
- ***Ensuring better cross-border control of problems such as illegal explotation of timber trees and posts fire, pests, poaching, pollution and smuggling. To this may be added the promotion of peace and the possibility of enhancing the visit by tourists (ecotourists), providing them with a larger territory.***

An overview of heritage values

Let us commence with the criteria for assessment of natural values as laid down in the Operational Guidelines for the World Heritage Convention (para 77):

vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;

(viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;

(ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;

(x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Currently, the Phong Nha / Ke Bang area is inscribed only on the basis of Criterion viii – essentially the Geologic and Geomorphic values of the site. However, the other three criteria must each be examined in the light of our increasing knowledge and understanding of the area. I will then conclude by commenting upon the cultural values of the site.

Superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance

There is no question that the remarkable caves of the area are both 'superlative natural phenomena' and 'of exceptional natural beauty and aesthetic importance'. Personally, I believe the many of the surface features also warrant recognition here, e.g., the great polje of Phong Nha and the Limestone ramparts of Hin Namno.

Then the forests provide an outstanding example of the Montane Tropical rainforests of Southeast Asia. The spectrum from giant trees through to ferns and mosses, and the immense diversity of the flora as a whole are a continuing source of wonder and beauty as one moves through the forests.

Significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features

By their very nature, karst landscapes are always engaged in a continuing process of development and evolution. The formal World Heritage description of the site says:

'*Phong Nha is part of a larger dissected plateau, which also encompasses the Ke Bang and Hin Namno karsts. The limestone is not continuous and demonstrates complex interbedding with shales and sandstones. This, together with the capping of schists and apparent granites has led to a particularly distinctive topography.*

The caves demonstrate discrete episodic sequences of events, leaving behind various levels of fossil passages, formerly buried and now uncovered palaeokarst (karst from previous, perhaps very ancient, periods of solution); evidence of major changes in the routes of underground rivers; changes in the solutional regime; deposition and later re-solution of giant speleothems and unusual features such as sub-aerial stromatolites. The location and form of the caves suggests that they might owe much of their size and morphology to some as yet undetermined implications of the schists and granites which overlay the limestone. On the surface, there is a striking series of landscapes, ranging from deeply dissected ranges and plateaux to an immense polje. There is evidence of at least one period of hydrothermal activity in the evolution of this ancient mature karst system. The plateau is probably one of the finest and most distinctive examples of a complex karst landform in SE Asia.

In summary, Phong Nha displays an impressive amount of evidence of earth's history. It is a site of very great importance for increasing our understanding of the geologic, geomorphic and geo-chronological history of the region.'

The Hin Namno area can only add greater significance to this story.

Biodiversity values

The Northern Annamites, including the Truong Son, are now world-famous for their remarkable biodiversity. The discovery of the Saola, two new Muntjacs, a Tiger Rabbit and various other totally unexpected new species are commonly cited as key examples. But as well as the mammals and other vertebrates there is also a great diversity of invertebrates. For example, the incredibly diverse and unexpected spider fauna discovered

in a recent survey (as yet unpublished) included thirty-eight families, most of which were not previously recorded from Vietnam. In overview, it is one of the great biodiversity hot spots of both the Asian continent and the world.

The character of the forests not only exhibits a comparable diversity with many new endemic species, but it provides such a great barrier to access that new discoveries will be made for many years to come. An apparently endemic porcupine has recently been discovered and there is good evidence that a large hominoid still survives in the forests.

There is not yet a clear picture of the distribution of even the large mammal species. Thus it is difficult to say whether or not some of the more infrequently seen species occur within the park or not. The long-term stability of the ranges also means that some of the species are almost certainly relictual survivors of once more widely distributed populations and this provides a very serious challenge to conservation management. Many other species have been greatly reduced in numbers as a result of fragmentation of the forest environment and hunting.

But what is already known would now certainly justify nomination for World Heritage inscription on one or both of the biodiversity criteria.

Cultural values

The cultural values of the site may not be judged as significant at world level, but certainly deserve much greater recognition (and continuing research) than has been given to the site so far.

- Firstly, there are the archaeological values of the site, with both Neolithic sites and the Cham temple and pottery of Phong Nha Cave. Again, further investigation will probably yield much more of interest.

- Secondly there are the relatively undisturbed minority cultures of the park. I am deeply concerned to hear the notion expressed that their inclusion into mainstream modern culture should be fostered. The principle of allowing them and even supporting them to preserve their current life style if they so wish is an extremely healthy and positive one. I am also concerned to know that little or nothing has ever been done to learn about their knowledge of the forest environment.

Such cultures while un-modernised are often the guardians of traditional understandings of immense value. I know several examples from my own experience that illustrate what we have often lost by not even listening:

- At about the time that the ultrasonic echo-location of bats was first discovered by white scientists, I was told about it by tribal Aboriginal people in Australia. 'The bat talks to the rocks and they talk back to him'.
- A stinging caterpillar in the Borneo jungle causes intense pain that often demands hospitalisation and which could only be treated by painkiller medications. It was only recently discovered that one of the nomadic tribes knew of a herb which provided immediate relief and total cure.
- The Shui people of China developed principles and systems of sustainable forest management over 1,000 years ago.

This kind of knowledge is very rapidly lost when people are pushed into settlement and modernisation.

- Thirdly, the Ho Chi Minh trail, or trail network to be more precise, is an invaluable resource, both historically and to the present day. It should be restored where necessary and maintained. It could certainly become a very valuable tourism destination amongst the 'Great Walks of the World'.

The question of Outstanding Universal Value

Given the

(a) above summary of values,
(b) way in which the trans-boundary agreement will enhance site integrity, and
(c) steady improvement in quality of management

the site should be accepted as being of Outstanding Universal Value.

Further questions

There is clearly an opportunity and need for continuing exploration and research on virtually all aspects of the park. In my professional opinion, questions of particular importance include:

- The high level caves, particularly in the Ke Bang Forest where there are a great number of relatively small caves isolated at higher levels.

These are likely to be valuable sources of fossils, invertebrate fauna, minerals and other materials of scientific value. Many would also provide valuable opportunities for eco-tourism journeys.

- Further investigation of archaeological sites
- Studying the environmental perceptions and knowledge of the minority peoples
- Assessing the feasibility of re-developing the Ho Chi Minh Trails System as one the World's Great Walks

Conclusion

In concluding, I must say I am sure there are many things I have omitted, probably simply because of ignorance. But I hope to have provided a useful global overview that will serve to both stimulate more action and provide a basis for conservation and protection.