

Adventurous tourism-a potetial realm of world Natural Heritage - National Park Phong Nha - Ke Bang

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Received 27 April 2011; received in revised form 5 May 2011

Abstract. World Heritage National Park Phong Nha - Ke Bang has been and is being invested by the government in general and by Quang Binh province in particular to expand into a population with different types of tourism in order to invite domestic and foreign tourists. Since the 60s of 20th century, the Phong Nha - Ke Bang zone has been regarded as a tourism spot that attracts the most number of tourists among the tourism industry of Quang Binh province. However, since then this National Park has only exploited the exterior caves and has not, together with other types of tourism, extended its activities in all national Forest's territory. Therefore, in this article the authors's group will begin to explain in details of other potential adventurous tour types of Phong Nha - Ke Bang region in particular and of Quang Binh province in general, these are: to explore the caves in adventurous tours upon limestone mountains with perpendicular cliffs by road 20, cable - riding tours through National Park zone where the cables are put on the highest mountain peaks, adventurous eco-tours inside proteozoic forests famous for a most diversified and abundant ecosystem in South East Asia. These are the potential and valuable types of tour assuring a great charm for a huge number of tourists inside and outside the country.

1. Introduction

As for Quang Binh, people have for many years referred to it as "Laotian wind, white sand", as a barren land struck by poverty. Few people talk of the advantages that nature has given to it. That land is potentially rich regarding tourism, possessing beautiful beaches such as Da Nhay which is located at the foot of Ly Hoa mountain pass and decorated with tortuous seashores and billowing stone tops, or

for example in Dong Hoi, where the gold dust plain expands kilometers long by Nhat Le estuary, and the historical Gianh river - the river used to be, for hundreds of years, a boundary line to separate North and South Vietnam. The poetic scenery of this water region will accompany the tourists all the way up to river Son, onto the renowned Phong Nha cave, through Toi cave and onto Chay river, threading one's way through limestone mountain of the Ke Bang block.

This is a limestone region rated as most grandiose in the world, with diversified and rich

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flora and fauna, and also spectacular caves. Due to the diversified value of a yin-yang terrain, and the interference between the stone and soil mountains, and an interlacing hydrology system together with a vegetational cover, Phong Nha - Ke Bang gives itself the potentials to develop various forms of tourism, satisfying increasing demand of inbound and outbound tourists. Among those forms, adventurous tourism in Phong Nha - Ke Bang should be taken in mind, invested and exploited. Through research on the terrains, geomorphology and geology of the heritage zone, we have found out that the following adventurous tour patterns and specific characteristics are suitable for the heritage zone: cave exploring, adventure journeys in addition to eco-tours, mountain climbing and cable-riding tours.

2. Cave exploring

In this article we won't have a great ambition to introduce the grandeur of the cave system of Phong Nha which is more than 80km long, which had been jointly researched by the officers from the Faculty of Geography and Geology of the Synthetic University and the

explorers' delegation from the English Royal Cave Association at the end of the last century. The results mentioned have been widely introduced to the press inside and outside the country especially the series by Howard Limbert about the cave Heavens of Phong Nha - Ke Bang published on "Inter. Caver" magazine since 1992, which have many colorful pictures.

For the time being only 2 caves belonging to the Phong Nha - Ke Bang cave system have been brought into exploitation for the sake of tourism, these are Phong Nha cave and Kho cave. Phong Nha cave is a water cave discovered long ago. Tourists riding on motor-boats are permitted to penetrate the cave up to 600m inside, along a way filled with stalactites of various shapes. Some stalactites droop down like the hair of a fairy, some stalactites elsewhere gather together like an ethereal palace, some stalactites in other places are arranged like a "boudoir" full of tender silk and satin made from ... stones. Also many other stalactites while being hit will make sounds like musical instruments, or will shine sparkingly through millions of tiny calcium crystals. From time unmemorable Phong Nha has been well-known as a natural wonder.

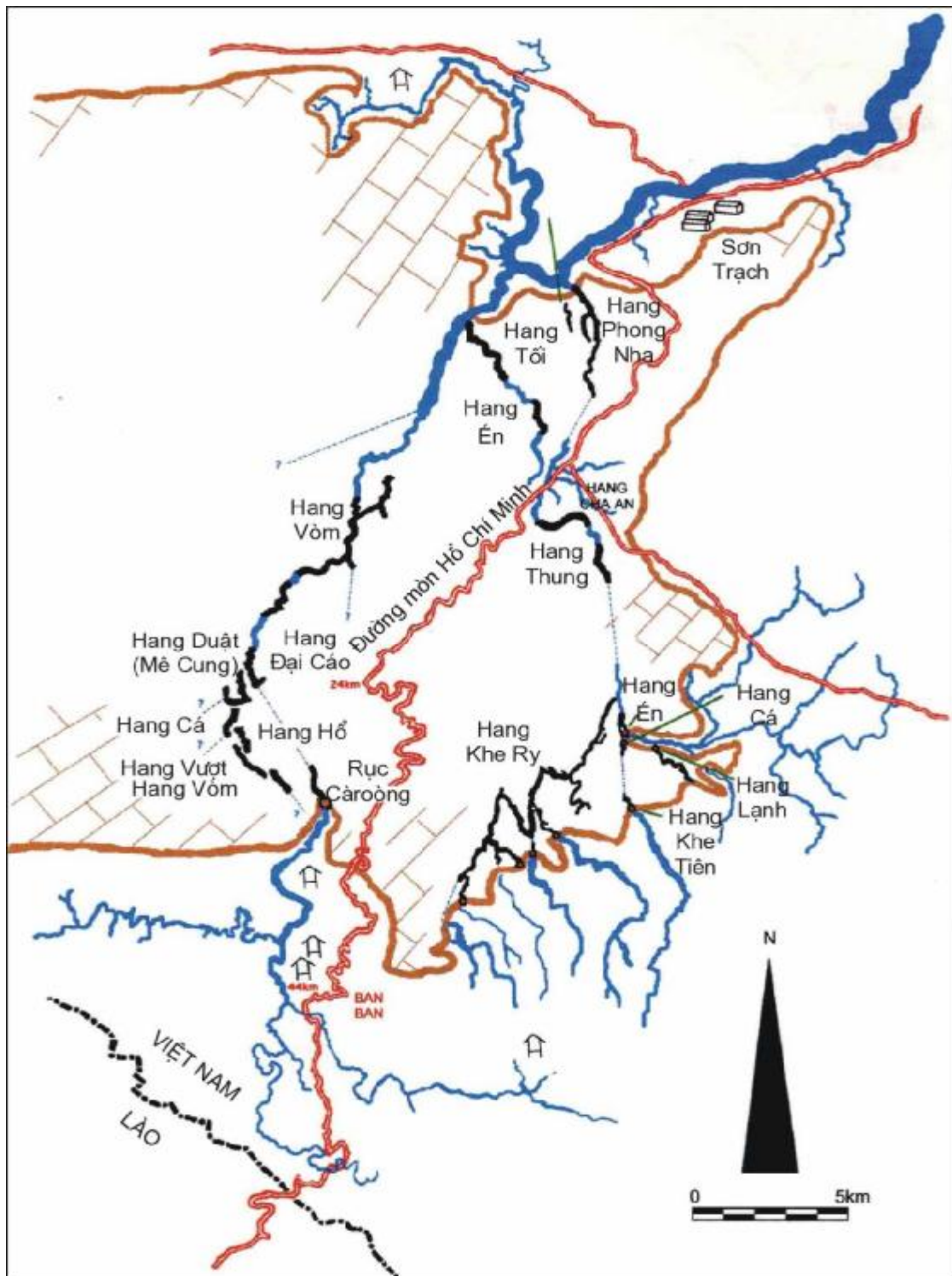


Fig. 1. Phong Nha – Ke Bang cave system.

Departing from Phong Nha, climbing the high steps made from stones, tourists can see cave Kho which has been exploited recently. On the road, if the tourists pay much attention, they can watch the small coral populations aged more than 300 million years clearly marked inside limestone layers. Cave Kho belongs to an ancient cave generation which is older than that of Phong Nha, which is perched up high halfway mountains. Inside the cave, tourists will see many inclined, tottering or even collapsed stalactites on the ground of the cave. That was the indispensable consequence of the elevation process of the earth's crust. However, there are still innumerable intact stalactites of various shapes, forming spectacular figures.

Nevertheless, by choosing this tour route, tourists in fact are just granted to visit the

outside of the spot. In order to examine the wonders of the longest water-cave path of the world tourists must be equipped with plastic boats, safety clothing, strong illuminating devices, and of course enough nourishing food, and essential medicine. Usually, those who are eager to explore the caves are the brave ones. who have the ability to cope with any situation, and must swim well of course. Although they have just entered an inner site of cave Phong Nha - the world of "eternal" darkness, there are so many intriguing things waiting for them. Because, like almost other long karst caves, the caves found in Phong Nha - Ke Bang block are always zigzag, ramified, successively filled with many water and dry caves (Fig. 2).



Fig. 2. An underground water flowing between cliffs inside Phong Nha cave (Photo by H.Limbert) [1].



Fig. 3. A very shallow river whose bottom deposits are pebble stones found inside cave Khe Ry (Photo by H.Limbert) [1].

Apart from Phong Nha cave mentioned, there are also systems of Vom (Fig. 4), Khe Ry (Fig. 3) and Me Cung caves found inside the Phong Nha-Ke Bang cave system, which is suitable for us to open cave-exploring tours. The systems of Vom cave and Khe Ry cave are also big in size. The river Ruc Ca Rong, which

is 30km long in total, with its narrow and deep valleys sometimes flows over land, other times hides itself inside the beautiful caves of the Vom cave system. Me Cung cave in particular has such a complex ramification as a labyrinth, which will surely bring surprises to the brave explorers.



Fig. 4. Several calcium accumulation types inside a room of cave Vom (Photo by H.Limbert) [1].

3. Adventurous journeys

It can be said that Phong Nha - Ke Bang is an idealistic place to expand adventurous tours. If we watch only the outside areas of the mountain block, few people can think that Phong Nha - Ke Bang is recognized to be the biggest limestone desert of the world [2]. While the outer mountains of the Phong Nha - Ke Bang block are occupied with vast and verdantly green forest, the inner mountains are mostly "bold" limestone mountains, almost without any vegetational cover. Inside the dry caves are vestiges of broken baked clays, giving evidence that men once sojourned here. And right within the center of the "desert" there are oasis with cool water, trees, and birds. The strange sceneries will let the tourists be amazed with various surprises.

Phong Nha - Ke Bang is a place of a high level of biological diversity. If we enter the Ke Bang block by water, upstream river Son and turn to river Chay, the charming scenery a magnificent area will come in sight of the tourists. At the gate of Hang cave, a huge stone upon which many coral stalactites lay will appear like white beautiful flowers on the black limestone ground. Those corals tell us of a time long ago, when the lime mud layers were at a standstill at the sea bottom, when these corals lived in populations. After that, the lime mud, undergoing many changing circumstances have turned into limestone and the sea bottom was uplifted to become mountains. The corals now have imperturbably become fossils - the vestiges of the abundant life under the sea at the end of the Devon age, 370 million years ago



Fig. 5a. *Dendrobiumochraceum* De Wild (photo by Nguyen Manh Ha).



Fig. 5b. *Ficus callosa* (photo by Le Huy Cuong).



Fig. 5c. Being rescued *Felis temminckii* in Phong Nha _ Ke Bang National Park (Photo by VNT-CRES).



Fig. 5d. *Trachypithecus francoisi hatinhensis* (Photo by Tilo Nadler).

Upstream the Chay river, entering the forest zone of Tro Mong, the tourists will reach the beautiful Chai cascade, dozens of meters high. This place possesses many spots that characterize themselves to the surrounding sceneries, such as Ran Bo (a place where gayals used to gather to breed), Da Nam (a huge stone barring the flowing cascade), Nuoc troi (a water column rising from the ground since time unknown), etc. The tourists can see the poliocephalus individuals hanging on the trees calling each other so loudly, and they also can see the yellow monkeys hunting for food together as they get close to the water edges to seek for fish.

Departing from Eo Gio, a mountain alley full of wind, tourists will see in front of their eyes proteozoic forests as far as their eyes can see. There are beds of crown flowers and raven-beak flowers along the two banks of river Chay. However only after reaching Co Khu will

tourists see the typical proteozoic forests of Ke Bang. In this place on the flat forest base there is no bush or liana, there are only the big trees rising up high to the sky, some trees require 5-7 people to uphold around (Fig. 5a). This place is also an excellent dwelling place for deers, stags, tigers and gayals.

Taking another path, tourists can pay a visit to Thung Tre - a vast forest zone of about 20 ha full of alang grass, neohouzeauas and bamboos. This forest foundation used to be an ancient sea bottom. Nowadays, there still remains several underground rivers and springs, somewhere they can be seen upon ground. The birds happily gather here. The scenery here is picturesque.

We can draft out so many adventurous eco-tours. However in order to bring about new routes, we need big investments to empathize the place thoroughly, especially we must train

6. Ecological adventurous tours

Eco-tourism is fun with the tourists. The heritage zone of Phong Nha - Ke Bang is a high mountain and vast forest, proteozoic zone,

owning a rich biological diversity that can be exploited in orchestrating many adventurous eco-tours, exploring through the vast forest constituted from various terrains of soil and limestone mountains (Fig. 8a).



Fig 8a. Evergreen forests convenient for eco-tourism development within Mu Gia mountain pass zone.



Fig 8b. Picture of a limestone mountain with a biological diversity convenient for eco-tourism development within Mu Gia mountain pass zone.

The national forest of Phong Nha - Ke Bang is surrounded by dense and green forest of about 96.2% in regards to square, the biggest rate compared to any other proteozoic forest in Vietnam [2].

Recently this heritage zone is inviting investment projects to establish the “multi - fauna and multi flora” forest that will possess a natural, specific ecosystem protected by iron nets. These are good and original ideas, making adventurous eco-tours more diversified.

Conclusion and Proposals

1) Up to now Phong Nha - Ke Bang, thanks to the exploitation by the tourism industry, has fascinated tourists near and far. Nevertheless, tourism potentials in this place are limitless. Apart from serving the tourists who take advantage of their time to enjoy natural beauties, the process of opening new tour routes, such as cave exploring, adventurous tours in addition to eco-tours, mountain climbing tours and cable-riding tours is a necessary task to deploy in order to satisfy different types of tourists, expanding tourism capacity and creating train the tour guides, the competent supervisors, well-equipped for work so that they can satisfy the requirements of all

tourists. It can be said that, taking advantage of all tourism strength is to take the best of all that nature has given to this place. That only will bring Quang binh step by step to be a prosperous province.

2) The adventurous tour types must be run in accordance with the projects, step by step, however they must be synchronically carried out within the overall tourism projection system of the province.

Acknowledgements

The article is completed with a kindly donation from Project QGTD 04-03 and the Council of Sciences of the Earth which belongs to Basic Science Research Program, Ministry of Science and Technology.

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