

WORLD HERITAGE NOMINATION - IUCN SUMMARY

640: WULINGYUAN SCENIC AND HISTORIC INTEREST AREA (CHINA)

Summary prepared by WCMC/IUCN (April 1992) based on the original nomination submitted by the Ministry of Construction of the People's Republic of China. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION

Lies in Wulingyuan District of the city of Dayong, Hunan Province, some 270km from the capital of Changsha. The total area is 26,400ha, with a further 12,680ha buffer zone.

2. JURIDICAL DATA

Approved as a scenic and historic interest area by the State Council in 1988, and placed under the authority of Wulingyuan District Government which was created in the same year. Since the founding of People's Republic of China in 1949, the three county governments responsible for the site have taken great care to protect the area. Current protection is covered under a range of national and regional legislation including: the National Constitution, the Environment Protection Law, the Urbanisation Design Law and the Provisional Regulations of Places of Scenic and Historic Interest.

3. IDENTIFICATION

The most notable features dominating the entire site are some 3,100 quartzite sandstone pillars and peaks, many of which are over 200m high. Between the peaks are numerous ravines and gorges, many containing attractive streams, pools and waterfalls. The site also contains a number of karst features, notably some 40 caves. Spectacular calcite deposits are a notable feature within these caves. Huanglong or Yellow Dragon Cave is said to be one of the ten largest caves in China; it is 11km long, and includes a waterfall 50m high. There are two very high natural bridges in the area: Xianrenqias or 'Bridge of the Immortals' is 26m long, 1.5-1.8m wide, 1-2m thick and 100m above the ground below. Tianqiashengkong or the 'Bridge Across the Sky' is much larger, being 40m long, 10m wide and 15m thick. It lies 357m above the valley floor and may be the highest natural bridge in

the world. The vegetation comprises: below 700m, predominantly evergreen broad-leaved forest (below 700m); evergreen and deciduous broad-leaved trees (700m-950m); deciduous broad-leaved trees, bushes and herbs (above 950m).

The flora is diverse with 3,000 higher plants; these are split fairly evenly between tropical/subtropical and temperate species. Many of the species are of value for timber, medicinal or ornamental purposes; a number are globally threatened with extinction, including nine rare and three vulnerable species.

116 species of vertebrates from 50 families have been listed. These include: 12 amphibians, 17 reptiles, 53 birds and 34 mammals. A number of these species are globally threatened with extinction, including Chinese giant salamander (I), dhole (V), Asiatic black bear (V), clouded leopard (V), and Chinese water deer (R).

4. STATE OF PRESERVATION / CONSERVATION

The Wulingyuan Administrative Bureau is responsible for the management of the site. It falls under the authority of the People's Government of the Wulingyuan District and the Construction Committee of the Hunan Province. Restrictions are placed on construction projects, the use of certain domestic fuel (intended to reduce pollution), slash and burn agriculture, water pollution, the treatment of solid wastes and noise pollution. The collection of flowers, herbs or plant or animal specimens may only be undertaken with a licence for scientific or educational purposes. Felling of trees and quarrying of limestone is restricted, while mining is prohibited.

Under the overall plan, the site is subdivided it into 18 scenic sections. There are proposals to establish a system of zonation, with tourist prohibited or given restricted access to some areas. Some hillsides will be closed for further afforestation. Overall tourist numbers may also have to be limited.

Tourism is rapidly increasing, and crowds are becoming so great that in places they are beginning to pose a threat to the site. Other potential problems relating to increased human pressure on the site include poaching, land clearance for agriculture, felling of trees, construction of roads and buildings, fire and pollution of air and water.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

The Wulingyuan nomination, as presented by the Ministry of Construction of the People's Republic of China, provides the following justification for designation as a World Heritage property:

Natural property

- (iii) **Contain unique, rare or superlative natural phenomena, formations or features.** The huge number of precipitous quartzite stone peaks is spectacular and possibly unique in the world.

These, coupled with the other land forms (natural bridges, ravines, and caves), present an aesthetically beautiful landscape, enhanced by the mists and clouds which frequently shroud the site.

- (iv) **Contain the most important and significant habitats for threatened species of plants and animals of outstanding universal value.** Wulingyuan contains a number of plant and animal species which are globally threatened with extinction.

WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

640: WULINGYUAN SCENIC AND HISTORIC INTEREST AREA (CHINA)

1. DOCUMENTATION

- i) IUCN/WCMC Data Sheet (1 reference)
- ii) Additional Literature Consulted: Chen Guodo. A paper on the Causes of Formation of Forested Peaks, Canyons and Caves within Wulingyuan. Translation.n.d.
- iii) Consultations: MoC and Hunan Provincial officials, Z. Shidong, Wang Xianpu
- iv) Field Visit: May 1992, Jim Thorsell and P.H.C. Lucas

2. COMPARISON WITH OTHER AREAS

Similar landscapes of rock pillars exist elsewhere in China and the world. With its clusters of sandstone pillars, Wulingyuan compares scenically with several national parks and monuments in the Western U.S.A. such as Bryce Canyon, Pinnacles, Colorado, Canyonlands and Capital Reef. Another outstanding area of sandstone towers is found in the Bungle Bungles of Western Australia. Due to its lower elevation and sub-tropical location, however, Wulingyuan has dense forests and also abundant water. It also has a great number of peaks (over 3000) and most of them display a much greater vertical relief (over 200 m.) than the US and Australian sites..

The most comparable area is found within China in the Danxia area. Here the pillars consist of red sandstone conglomerate but they are sparsely distributed and do not have the luxuriant vegetation as does Wulingyuan. Comparisons can also be made with other pillar landscapes in China such as the Lunan Stone Forest, the Xian Wuyan (which is volcanic), Gansu in Shaanxi and at "Wind City" in Xingjiang. However, Wulingyuan surpasses all of these in size, numbers, vegetation luxuriance and the presence of abundant fresh water.

The other World Heritage site found in the Oriental Deciduous Forest Biogeographical Province is Huangshan. This site also contains forests of stone pillars but its main feature is the 77 more rounded granite peaks which are quite dissimilar to Wulingyuan. It also does not have the caves such as occur in

Wulingyuan.

3. INTEGRITY

Boundaries encompass the main features of the site and the legal basis provides adequate protection (although as in all "Scenic and Historic Interest Areas", the regulations are still provisional). The main issues dealing with integrity are the presence of local residents in the reserve and the intense pressure from visitors.

There are some 6600 people living in three conservation zones of the park and a much larger number in the buffer zone. Most of these are reserve staff and hotel workers, but a few farmers still reside in the core areas. A number of these have been relocated (with compensation) in the past few years and evidence of their former occupation has been removed. A policy of further out-migration is being pursued and much restoration work is underway at key disturbed sites. Main services are being moved outside the core areas to Wulingyuan village.

The area is intensively used by 350,000 tourists each year who stay an average of three days. The management plan has outlined a number of mitigative measures (e.g. the construction of high quality access foot trails and control over the location and number of facilities). There is, however, limited effort at public education on the need to better respect the natural values of the site. Visitor use is expected to further intensify as a new airport at Dayang is opened in 1994.

The situation at Wulingyuan is thus very similar to that at Huangshan, which, after it was inscribed on the List in 1990, has accelerated its efforts in training and communication to better control the impact of more and more tourists.

4. ADDITIONAL COMMENTS

Wulingyuan is the only area of the five nominated sites reviewed in China that is included as a priority in the Geological Task Force Working Group report of February 1991 (one of the members of this group was a representative from China).

Secondly, a major constraint in the evaluation of this site was the absence of adequate maps. This was addressed during the field inspection and the zoning map is attached to this evaluation.

5. EVALUATION

Wulingyuan is an island of nature within a heavily populated agricultural region. Because of its ruggedness and inaccessibility it has survived relatively intact until

recent years. Some parts of it remain almost totally devoid of human impact while others, particularly in the buffer and agricultural zone, have been largely

transformed by human activity. The natural values exist mainly in the first, second and third conservation zones and the inscription of the site, if approved, should be confined to this core area.

Wulingyuan has undeniable natural beauty with its spectacular jagged stone peaks, luxuriant vegetation cover and clear lakes and streams. These have recently (1988) come under protection and a vigorous effort is being made to ensure they retain their remaining natural values. The site thus meets criterion (iii) for natural areas and satisfies the related conditions of integrity.

The site may also meet criterion (iv) as it harbors a number of threatened plant and animal species (e.g. dhole, Asiatic black bear and Chinese water deer). As yet, however, there is little information available on the status of these species and a decision on its inscription under this criterion cannot be taken.

6. RECOMMENDATIONS

The core zones of Wulingyuan should be inscribed on the World Heritage list on the basis of criterion (iii). The Committee should encourage proper conservation-oriented management of the adjacent buffer zones and encourage the authorities to continue their efforts to maximize the natural atmosphere of the site. As pressures from tourism are likely to further increase, management efforts will have to be accelerated to retain integrity. Finally, the Committee should recommend the preparation of a species conservation status report and leave open the prospect of also inscribing the site on the basis of criterion (iv) when the data becomes available.

