# **NORTH-EAST ASIA**

# CHINA (PEOPLE'S REPUBLIC OF)

### **Mount Taishan**

### **II.1 Introduction**

Year of Inscription 1987

### Organisation Responsible for the Report

 Administrative Committee of Mount Tai Scenic Spot, No. 45 Hongmen Road, Tai'an Shandong Province PRC

### **II.2 Statement of Significance**

Inscription Criteria C i, ii, iii, iv, v, vi N iii

### Statement of Significance

Proposed as follows:

"Mount Tai is the spiritual home of the Chinese Nation... the ancient Chinese believed that the world is safe if the Mount Tai is safe. It has centripetal force, the Chinese idiom 'fallen leaves return to the roots' means every ghost will return to Mount Tai after death."

According to Guo Moruo, a famous Chinese scholar,

"China

Mount Tai is a "partial miniature of Chinese culture."

In cultural terms, it is the "most venerated Mountain in China"; is "one of the birthplaces of the Chinese civilization, [with] evidence of human activity dating back 400,000 years" to the Palaeolithic period; is a "natural museum of stone sculpture arts" and calligraphy; and has been a source of inspiration for generations of Chinese

artists and scholars such as Confucius, Libai and Dufu.

The natural value of the mountain also includes exceptional geological features which have shaped (international) stratigraphic classification types since the nineteenth century; 81% coverage by forests which contain 113 families of medicinal plants; and scenery which perfectly epitomises "magnificence, seclusion and elegance".



### Status of Site Boundaries

- The Government of China is considering resubmission of Natural Criteria (i) & (ii) for the property.
- The State Party is also considering a revision of the property boundaries according to a revised General Plan produced by Qinghua University in 1999.
- In the new plan, the boundary is extended as far as the Taifo-Taili road on the eastern boundary, and to the Matao-Huatan road on the western boundary. Further, the Yaoxiang Forest Farm in the north-east, the Fairy Rock Temple, the Great Wall of Qi, and the Cambrian sections in Zhangxia are also included.
- The buffer zone will also be enlarged by about 40 km2, the west corner of which is 1,000m away from the core zone, while the east & north-east corners are 1,000m from 'Way Around Mountain'.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

considerina

submission of natural criteria (i)

and (ii) for the property, as well

as a revision of the property

boundaries according to a

revised General plan produced

by Qinghua University in 1999."

- The WH value is considered to have been maintained.
- From 2001-2002, a comprehensive "rectification" of the property was carried out by law, "and the original scenery was renovated."
- According to the new General Plan, numerous buildings and shops not "in harmony" with the scenery

have been pulled down. Additional renovation work will also be carried out on historical buildings.

### II.4 Management

### Administrative and Management Arrangements

- Management is considered to be legal, contractual, and traditional. The authorities point out that "since Mount Tai has a high position in China, especially in Tai'an, there has been a tradition to protect the mountain which can never be neglected."
- The main regional units in charge of the property are: (i) the Tai'an Cultural Relics Bureau; (ii) the Administrative Committee of Mount Tai Scenic Spot; and (iii) the Taishan Forest Centre.
- In 1985, the three units mentioned above were first combined to create a centralized management matrix. In 2001, the Committee was further upgraded into a law-enforcement agency.
- The General Plan of Mount Tai (1987) was revised in 1999 and is awaiting final confirmation from the State Council.
- The Shandong People's Congress also issued special Regulations to protect Mount Tai in 1991.

### **Present State of Conservation**

 As follow-up action to recommendations made by the WH Committee in 1998, the Government of China has: (i) pulled down inns scattered under the Jade Emperor Peak; (ii) removed the 'Pavilion Watching Sunrise' on Watching Sunrise Peak; and (iii) removed 9,000 m2 of shabby houses around the 'Scenic Spot to Heaven' in 1994, thus revealing 200 ancient trees and stone inscriptions that were formerly enclosed in house yards.

### **Staffing and Training Needs**

- 2,020 staff (280 managerial, 1,276 technical) are employed. Staffing level is considered adequate.
- Training needs "to improve sustainable development" are identified by inviting foreign expert advice.

### **Financial Situation**

- Funds come from 'special financial allocations' and the profit of entrance tickets. No figures are supplied.
- Funding is considered adequate, and can maintain the regular protection of the site.
- \* International Assistance from WHF as follows: (i) 1988, US\$17,000 Training for Management of property; (ii) 1990, US\$20,000 Training on mural painting.

### Access to IT

- 40 PCs with internet access.
- There is a GIS system with MapInfo software.

### **Visitor Management**

 Between 1996-2001, the total number of visitors stayed relatively stable at 2.1 million people per annum (with some 18,000 foreign tourists).

- A public use plan (2002-2010) has been prepared with the help of the World Tourism Organisation. According to the plan, "residents living in Mount Tai should move out gradually".
- In 2002, "Certifications for Operation" were issued to control the number & quality of tourism installations.
- Several new walking routes have been opened around the Heavenly Candle Peak and the Rear Rock Basin.
- Taishan has also been labelled a 'National Patriotism Education Base' by the Chinese Government.

### II.5 Factors Affecting the Property

### **Threats and Risks**

- Tourist pressure,
- · Offensive illegal buildings,
- Fire risks from prolonged dry weather,
- Forest diseases & insect pests.

### **Counteractive Plans**

- Emergency plans exist for Fireproofing (including liaison with surrounding villages), Flood Prevention, and Quarantine Regulations.
- The General Plan aims to disperse tourists across the surrounding area and in the slack season. It is also proposed to regularly close important scenic spots to mitigate.
- 50 million Yuan (US\$ 6 million) have been invested in renovating ancient buildings, and 102 million Yuan (US\$ 12.34 million) on quantitative research on forest fires, geology, pine diseases, and forest rejuvenation.

### **II.6 Monitoring**

### **Monitoring Arrangements**

- Since 1987, 8 reactive monitoring exercises have been carried out (cultural relics, famous trees, forest diseases, wild plants, animals, micro organisms, forest resources and heritage).
- In September 2001, a WH Administrative Office was created in Taishan to co-ordinate regular monitoring and a 'Heritage Data Base'. The objective is to "turn discontinuous to continuous monitoring".
- A Sino-Canadian project has been strengthening the "sustainable development of the site".

### **Monitoring Indicators**

 Primary indicators include: (i) air and waste gas analysis; (ii) water quality; (iii) plant diseases & insect pests; and (iv) the state of famous trees.

# II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- The State Party observed that the natural criteria in the original nomination were "incomprehensive" owing to a lack of experience in 1987. As a consequence, the Government is proposing the resubmission of additional criteria N(i) & (ii) for the site.
- Possibilities are being explored for the re-use of funds from entrance tickets for better heritage management.
- Support from the WHF may be required regarding forest diseases and pests ("turning medical control to biological control"), equipment & technology for systematic monitoring.

### \* State of Conservation Reports

1998 Ext Bureau WHC-CONF.202/4 The Bureau was informed that an IUCN-WH Centre mission which visited the site in September 1998 was concerned by the management's stated desire to open up three new scenic spots in Heavenly Candle, Rear Rock Basin and Jade Spring scenic spots. The number of vendor stalls along the walking route may also have to be considerably reduced. The Bureau invited the State Party to take steps to determine the tourism carrying capacity of this WH site, and elaborate a visitor management and tourism development plan for the site. Furthermore, the Bureau urged the site management to place greater emphasis on educating visitors on the natural and cultural heritage value of WH significance.

1998 Committee WHC-CONF.203/8rev The Committee recommended that the report of the IUCN WH Centre mission to Mt. Taishan be transmitted to the relevant Chinese authorities, and for review by ICOMOS.

"An ever-increasing pressure is

expected from domestic and

foreign tourists."

# CHINA (PEOPLE'S REPUBLIC OF)

## **Mount Huangshan**

### **II.1 Introduction**

Year of Inscription 1990

### Organisation Responsible for the Report

 The Administrative Committee of Mount Huangshan Scenic Beauty & Historic Interest Site, Shandong Province, 242 709 PRC

### **II.2 Statement of Significance**

Inscription Criteria C ii N iii, iv

### Statement of Significance

Huangshan is described as a "natural calligraphy museum" with inscriptions on precipices and tablets by poets from many different ages, and is considered an "inexhaustible source of material" for Chinese landscape painting.

 The natural value of the mountain includes spectacular granite peaks, hot springs, and a scenic 'sea of cloud'.

### **Status of Site Boundaries**

- The borders and buffer zone of the property are considered adequate.
- A conservation zone for the Huangshan Macaque has been established.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- An ever-increasing pressure is expected from domestic and foreign tourists.

### II.4 Management

### **Administrative and Management** Arrangements

• The property is managed under six relevant legal instruments which (presented table format) include: (i) the Constitution; (ii) criminal law; (iii) the 'law of land use'; (iv) environmental protection law; (v) forestry law; and (vi) the (newly revised) 'Regulations on the Management of Mt. Huangshan Scenic Beauty and Historic Interest Site'.

- Article 2 of the 'Law on Land Use' states that the site is subject to "ownership by the whole people".
- Provincial and municipal governments co-ordinate all relations with neighbouring areas.
- The management plan was enacted in July 1987 and covers the protection of the land form, the scenic environment, native species, cultural heritage and controls new constructions.



### **Present State of Conservation**

- "Over recent years, a total of 7,500 sq m of different types of temporary constructions have been torn down and recovery measures of the ecological environment have been undertaken."
- New garbage, sewerage, and energy-saving measures have been implemented.

### **Staffing and Training Needs**

- 2,700 staff (281 managerial, 318 technical, 601 permanent & 1,500 temporary) are employed.
- Staffing level is considered adequate.
- Training needs are identified in such areas as resource protection, safety and art. There is also a stated desire to "invite professors from prestigious universities to give academic lectures or special seminars".

### **Financial Situation**

- Income generated from tickets is the main source of funding. No figures are supplied.
- Funding is considered sufficient for regular expenses.
- A "special annual fund" has been set up for the protection and management of the property.
- Bilateral assistance for technical research on water resources from Finland is acknowledged.
- \* International Assistance from WHF as follows: (i) 1991, US\$13,412 Emergency Assistance; US\$5,000 Technical Co-operation for workshop; (ii) 1993, US\$20,000 Training workshop; (iii) 1998, US\$5,000 Promotional Assistance.

### Access to IT

- Some 100 PCs with Internet access.
- No GIS capacity.

### **Visitor Management**

- Between 1996-2001, the total number of visitors increased from 847,000 to 1.34 million people per annum (with some 50-70,000 foreign tourists).
- Facilities include hotels and guesthouses, museums, transportation, garbage and sewerage infrastructure.
- There is an identified need for a 'network information centre' with additional auxiliary equipment.
- A visitor management plan is being developed based on the tourism plan for neighbouring areas.

### II.5 Factors Affecting the Property

### Threats and Risks

- Pine wood nematode pests,
- Storm damage to trees, landslides, and dams,
- Negligent acts by tourists (i.e. smoking, littering),
- Water shortages which increase fire hazards.

### **Counteractive Plans**

- A 'Pine Wood Nematode Control' programme has invested about US\$ 150,000 for preventive measures, involving 100 people.
- US\$300,000 have been invested annually in a fire control system involving 300 persons.
- Both the "space-time distribution of tourists" and the construction of hotels is now strictly controlled.

### **II.6 Monitoring**

### **Monitoring Arrangements**

- Air monitoring of Mt. Huangshan is carried out on a weekly basis beside the hot springs. Environmental quality of surface water is monitored for 4 sites during high, normal, and low periods.
- 9 state technical standards & regulations are listed.
- In 1993, the site management built an 'Environmental Monitoring Station' with an investment of over 1 million Yuan (US\$ 121,000). There is a desire to move from manual to automatic monitoring.

### **Monitoring Indicators**

- Air quality is monitored for SO2, NOx and Total Suspended Particles (TSP). Water quality is tested for PH, dissolved oxygen, nitrates, and other pollutants.
- Sewerage indicators cover: (i) suspended substances; (ii) 5-day biological oxygen demand; (iii) chemical oxygen demand; and (iv) ammonia nitrogen levels.

# II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- By "upholding the principle of 'conservation first", Huangshan considers that it has "become a model of heritage property protection and management in China and in Asia."
- Priorities for 2002-2010 include: (i) tourism control measures; (ii) construction planning; (iii) automatic monitoring using remote sensing technology.
- Support from the WHF may be required for control techniques for pine wood nematode; biological control for plant diseases; treatment of sewerage; and "automatic resource monitoring technology".

### \* State of Conservation Reports

1996 Ext Bureau WHC-CONF.203/3 The Bureau recalled the fact that in co-operation with UNEP's Bureau for Industry & Environment, and the Chinese Ministry of Environment, UNESCO had convened an international seminar in Mt. Huangshan in 1991. It was recognised that the seminar had alerted the Chinese authorities to the growing negative impacts of unregulated tourism development in the WH property. A training workshop for Chinese protected area managers was later held in Mt. Huangshan in November 1993 with assistance from the WHF. The workshop recommended: (i) the construction of a visitor centre; (ii) improvement in the disposal of waste generated by tourists; and (iii) introduction of ecological safeguards in the construction of visitor facilities. During a site visit in September 1996, DIR/WHC noted that the Chinese authorities had serious consideration the given to The management of recommendations. disposal had visibly improved, and the site's natural & aesthetic values had been maintained in an exemplary way. The site management authorities were also in the process of examining plans for a visitor centre, as well as limits on the construction of visitor facilities within the WH property.

1996 Committee WHC-CONF.201/7b The Committee commended the Chinese authorities for the positive steps undertaken in improving tourism management in Mt. Huangshan, and encouraged them to proceed with additional measures, such as the construction of a visitor centre, to effectively manage the large numbers of tourists visiting the WH property.

(continued on page 248)

# \* State of Conservation Reports (continued)

1998 Ext Bureau WHC-CONF.202/4 A September 1998 IUCN/WH Centre site mission found Mt. Huangshan's management of visitors and tourism development to be exemplary. However, the Bureau invited all concerned authorities of the State Party to: (a) establish a "one-way" walking route for visitors moving across and around peaks in order to further minimize congestion; (b) not permit the development of new hotels in the vicinity of popular scenic spots, including the Nine Dragon Peaks; (c) promote research on biodiversity of the site and communicate the findings to the visitors; and (d) take all necessary measures to combat the pine-wilt disease infesting the legendary Huangshan pines.

1998 Committee WHC-CONF.203/8rev The Committee commended the State Party for its effective management of visitors in Mt. Huangshan and invited all concerned authorities to give due consideration to the recommendations of the September 1998 IUCN/WH Centre field mission.

# CHINA (PEOPLE'S REPUBLIC OF)

## Jiuzhaigou Valley

### **II.1 Introduction**

Year of Inscription 1992

### Organisation Responsible for the Report

 The Administrative Bureau of Jiuzhaigou Scenic & Historic Interest Area,

Aba Tibet & Qiang Autonomous Prefecture, Jiuzhaigou County 623 402 Sichuan Province PRC

### **II.2 Statement of Significance**

Inscription Criteria N iii

### Statement of Significance

- Proposed as follows:
  - "Jiuzhaigou was inscribed on the WH List for its natural beauty, and is located in the south part of the Min Shan mountain range of Aba Tibetan & Qiang Autonomous Prefecture, Sichuan province".
- It covers 720 km2 area with 63.5% forest cover, 114 lakes, 17 groups of waterfalls, 11 torrents and 5 "calcareous 'tufa' shoals, in strings and clusters, forming a scenic spot unique in China".

### **Status of Site Boundaries**

 The borders and buffer zone of the property are considered adequate.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

• The WH value is considered to have been maintained. No changes are foreseen.

### II.4 Management

### **Administrative and Management Arrangements**

- The 1986 Management Plan for Jiuzhaigou Scenic Spot Area was reviewed in 2001 and will be implemented in 2002-2003.
- The 1995 Management Plan for the National Nature Reserve was approved in 1996.
- A comprehensive list of 32 relevant laws is presented. 'Regulations concerning the World Heritage Sites in Sichuan Province' are planned.



- The responsibilities of the Administration Bureau (under the Aba Prefecture People's Government) are to: (i) publicize laws & regulations; (ii) protect scenic area resources; (iii) coordinate in overall planning; (iv) control the construction of service facilities; and (v) work out rules for tourist security, environmental sanitation, and public security.
- In 1997, Jiuzhaigou was also designated a World Biosphere Reserve.

### **Present State of Conservation**

- In 2002, 47 kilometres of plank trails (40cm above the ground) were laid around the site.
- Since 1999, all land currently under cultivation in the buffer zone has been reforested. "Residents have received a subsidy to compensate for their loss of income from farming." The remaining inhabitants use electricity and gas instead of firewood and coal.

### **Staffing and Training Needs**

- 379 staff are employed in the administration (one has a masters degree and 30 are university graduates) belonging to Han (252), Tibetan (100), Qiang (13), and Hui (9) ethnic groups.
- Staffing level is considered adequate.
- Training is required for overall site management.

### **Financial Situation**

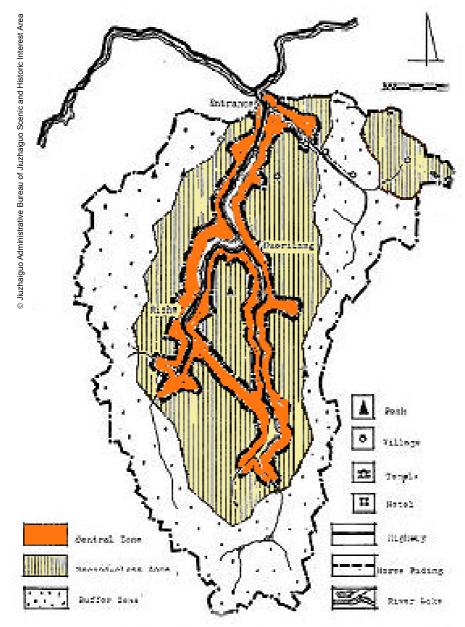
- The Government has invested 400,000 Yuan (US\$ 48,380) into mudslide prevention.
- Admission ticket sales are is the main source of funding. In 2001, cumulative spending on scientific research reached some 26.3 million Yuan (US\$ 3.2 million). No further figures are supplied.
- Funding is considered adequate.
- \* International Assistance from WHF: none.

### Access to IT

- 80 PCs with internet access.
- There is a GIS system with MapGIS and ARCinfo software used for tourist information and the baseline survey due in 2003.

### **Visitor Management**

- In 2001, I.2 million people visited Jiuzhaigou.
- In March 1999, 227 low pollution 'Green Buses' featuring trained World Heritage guides were initiated.



Map of Jiuzhaigou Valley showing Core (orange), Protective (yellow) and Buffer (white) zones

- The 'Nuorilang Fast Food Restaurant' with a capacity of 3,000-4,000 persons will be completed in late 2002. An improved visitor and administrative centre have also been built in 2001.
- An on-line ticket booking system for the site was put into operation in mid-2002.
- Since 2001, all sewerage from 32 refurbished toilets is "packed and moved to the sewerage farm outside the site every day."
- There is an additional need for on-site tourist information and resting chairs along the trails.

# II.5 Factors Affecting the Property

### **Threats and Risks**

- Increasing visitor/tourism pressure (67% increase per year since 1997),
- Global warming,
- Forest pests & diseases,
- Natural disasters (fires and mudflows).

### **Counteractive Plans**

- A comprehensive emergency plan covers forest fires, mudflows, tourists' rescue, and the unsafe use of liquid petroleum gas.
- Since 1996, 10 million Yuan (US\$ 1.2 million) have been spent on scientific research into forest diseases, pests, and an 'Automatic Monitoring Station'.
- In 2001, a policy of capping visitor numbers at 12,000 per day was put into operation. All business will also be moved outside the site.

### **II.6 Monitoring**

### **Monitoring Arrangements**

- There is a proposal to establish a joint 'Jiuzhaigou-Huanglong Tourism Development Research Centre' with Sichuan University.
- As a result of the 2002 China WH Workshop, the

administration has decided to establish a formal monitoring system.

### **Monitoring Indicators**

Indicators identified for the system include: (i) ecological indicators on noise, water and air quality;
 (ii) visitors; (iii) fires; (iv) community development.

# II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- Following the recommendations of the WH Committee (1992), the Management Plans for the 'Natural Protection Area' and 'Scenic Area' were reviewed in 2000 and 2001 respectively. The baseline survey is planned to finish in 2003.
- The authorities state their intention to "renew the three Tibetan villages within the site and maintain the local culture".
- Support from the WHF may be required for scientific research and staff training.

### \* State of Conservation Reports

1998 Ext Bureau WHC-CONF.202/4 The Bureau was informed of the findings of a WH Centre/IUCN mission undertaken in September 1998. The mission found that the site management authorities had been effective in restricting new hotel construction to areas outside of the WH property. The State Council of China has also issued a directive to completely halt illegal logging in the site. The mission also found that the management authorities had entered into an effective partnership with the local Tibetan villagers, whereby visitors were able to stay in the homes of residents, thus improving the material conditions of local people, as well as reducing their dependence on natural resources. Despite these positive features, however, the mission team found the site to be congested with tourists, vehicles able to drive through the core area, and a mushrooming of several new hotels immediately outside the boundaries of the WH property.

1998 Committee WHC-CONF.203/8rev The Committee commended the Chinese authorities for their effective management of the Jiuzhaigou Valley and encouraged them to: (i) establish a "park-and-drive" system; and (ii) limit travel within the site to smaller, environment-friendly vehicles. The Committee recommended that the WH Centre/IUCN mission report be transmitted to the relevant Chinese authorities and drew attention to the need to improve staff training to monitor and mitigate the impacts of tourism, as well as for visitors to be accompanied by trained guides able to interpret the natural value of the WH property.

# CHINA (PEOPLE'S REPUBLIC OF)

## **Huanglong Valley**

### **II.1 Introduction**

Year of Inscription 1992

### Organisation Responsible for the Report

 Huanglong Administration, Seercuozhai, Songpan County 623 300 Sichuan Province PRC

### **II.2 Statement of Significance**

Inscription Criteria N iii

### **Statement of Significance**

Proposed as follows: "Huanglong valley comprises one of the biggest travertine formations in the world. These sinter deposits with various forms and great scenic value are situated in a high lying valley, surrounded by mountains over 5000m altitude."

1

World

Organization has developed the

'Sichuan Province 2000-2010

which covers Huanglong in its

infrastructure, hotel standards

and 'recommended souvenirs'."

Development

of

"The

Tourist

examination

 Huanglong has also been a borderland between Han and Tibetans cultures for many centuries.

### **Status of Site Boundaries**

- The State Party is considering the re-nomination of Huanglong according to natural criterion iv following a biodiversity survey completed in 2001.
- Borders and buffer zone of the property are considered adequate.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

 The WH value is considered to have been maintained. No changes are foreseen.



### **II.4 Management**

**Tourism** 

transport

### **Administrative and Management Arrangements**

- The property is managed under both legal as well as traditional arrangements, and, is preparing to implement ISO 9001 & 14001 standards to improve administrative performance.
- At the national level, 'National Scenic Spot' legal regulations cover the protection of "scenery, fauna and flora", while, at the Sichuan provincial level, a specific World Heritage regulation is being finalised.
  - The General Plan for the Huanglong Scenic District (approved by the State Council in 1987 and revised in 1991) states that all construction in the scenic area must be for preservation purposes only.
  - The site management has the status of a 'county administration' of the Aba Autonomous Region and is in charge of both the nature

reserve and the local communities in the area, including for police matters.

### **Present State of Conservation**

- The waste management has been improved with the opening of a new waste treatment facility in 2002.
- Illegal timber felling has been fully stopped, and hunting has declined a great deal.
- A new plank walk-way has been constructed from "long-lasting steel covered by concrete with a woodlike finish" and planks purchased from outside the reserve.

### **Staffing and Training Needs**

- 200 staff are employed (30 have a university/college education, including 7 scientists, and 170 are hired from local villages during the tourist season).
- Staffing level is considered inadequate.
- Training needs are identified in quality management and foreign languages.

### **Financial Situation**

- The main source of funding comes from entrance fees which are used for "maintenance and development". In 2001, this amounted to 70 million Yuan (US\$ 8.5 million).
- Funding is considered adequate.
- A bilateral co-operation agreement exists with the Frankfurt-based 'Centre for International Migration' to provide 2 German experts (an ecologist and a linguist).
- \* International Assistance from WHF: none.

### Access to IT

 At least 1 PC with internet access for each of the 9 administrative departments. No GIS capacity.

### **Visitor Management**

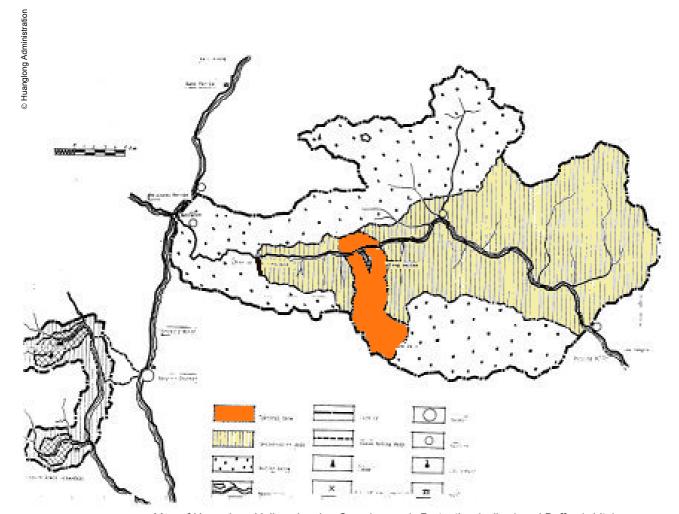
- Visitor numbers increased threefold from 260,000 in 1998 to 823,354 in 2001. The tourist season runs from April to November.
- Facilities include a reception area, information centre, 2 hotels, parking lots for buses and an 8km round trail.

- There is an identified need for a ropeway/cable car on a parallel slope from 3100-3650m to allow tourists to descend on a "one-way trail"; a bigger visitor centre; and an enlarged parking lot.
- The World Tourism Organisation has developed the 'Sichuan Province 2000-2010 Tourist Development Plan' which covers Huanglong in its examination of transport infrastructure, hotel standards and "recommended souvenirs".
- There is a proposal to consider the experience of a WWF-GTZ eco-tourism project in the neighbouring Wanglang Reserve in Pingwu County.

### **II.5 Factors Affecting the Property**

### **Threats and Risks**

- 'Underdevelopment' of local inhabitants due to remoteness,
- Landslides in zones with low vegetation cover,
- Earthquakes,
- The number of tourist is expected to reach 1 million (estimated to be the maximum carrying capacity),
- Over-harvesting of wild medicinal plants.



Map of Huanglong Valley showing Core (orange), Protective (yellow) and Buffer (white) zones

### **Counteractive Plans**

- No emergency plan has been developed.
- Qinghua and Beijing University have been commissioned to review infrastructure plans.
- A fund has been released by the Central Government to tackle the risk of landslides in the Danyun Gorge.
- The authorities will install a "computer-based video camera observation system" to increase security.
- A nursery was set up with local farmers to propagate local varieties of medicinal and ornamental plants for domestic and international markets.

### **II.6 Monitoring**

### **Monitoring Arrangements**

- Scientific studies have been carried out on (i) travertine formations (Karst Research Institute, Guilin & University of Newcastle, Australia); (ii) natural resources (Forest Research Institute, Sichuan); and (iii) landslides (Chinese Mountain research Institute, Academy of Science, Chengdu).
- The wildlife population and forest coverage evaluation is planned for 4 weeks every ten years.

### **Monitoring Indicators**

- Regular monitoring indicators include (i) weather data (temperature, moisture, precipitation, wind); and (ii) water volume & quality.
- Other water measurements are also planned for pH, conductivity, selected nutrients, algae and bacteria.

## II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- A biodiversity survey was carried out in 2001, along with an improvement in the basic infrastructure, including a new waste treatment facility.
- The "development of a monitoring system for the human impact on the property" is planned.
- Support from the WHF may be required for a "sophisticated water-analysis system".

### \* State of Conservation Reports

1998 The Bureau was informed that a Centre/IUCN mission to this site in September 1998 was favourably impressed with the tourism management. The site is located within the same Minshan Mountain range as the Jiuzhaigou WH area. Tourist accommodation facilities in Huanglong are limited and future development of facilities is being confined to the town of Chuan Zhu Si, in Songpan County, 40 km from the Huanglong WH area.

The mission team urged the Chinese authorities to implement the recommendation of the Committee. made at the time of inscription of this site and Jiuzhaigou in 1992, to link the two sites into a single Minshan Mountain WH Area. The Bureau learned that the Chinese authorities had pointed out the need for undertaking scientific studies to link the two sites into a single WH area nomination and the difficulties in coordination between two different administrations. The mission also urged the Chinese authorities to explore possibilities for linking the Jiuzhaigou-Huanglong cluster with a selected number of reserves set aside for the protection of the giant panda in Sichuan.

1998 Committee WHC-CONF.203/8 rev The Committee commended the State Party for effectively managing tourism in Huanglong, and requested the WH Centre and IUCN to co-operate with the State Party to undertake necessary studies for preparing a Minshan Mountain Range WH area nomination linking Jiuzhaigou and Huanglong WH sites and other giant panda reserves as appropriate.

# CHINA (PEOPLE'S REPUBLIC OF)

## Wulingyuan

### **II.1 Introduction**

Year of Inscription 1992

### Organisation Responsible for the Report

 Wulingyuan Scenic Resort Administrative Bureau, Zhangjiajie City, 427 400 Hunan Province PRC

### **II.2 Statement of Significance**

Inscription Criteria N iii

### Statement of Significance

 Proposed as follows: "Wulingyuan is located in the subtropical evergreen broadleaf belt. Of the 3,000 plants found in the site, 35 species are listed in the inventory of China's Rare Plants. The area is also a "hotbed for fungi"".

Class I & II protected species of animals include leopards, red & yellow-belly pheasants, pangolins, otters, black bears, civets and giant salamanders.

### **Status of Site Boundaries**

- The State Party wishes to re-nominate the area according to natural biodiversity criterion iv.
- The borders are considered inadequate because "the division between Zhanggjiajie Forest Park and the neighbouring Xinglong and Shati townships in Yongding is unreasonable. On one side of the mountain is the core area of world heritage; on the other are the two townships engaged in agricultural production."
- An extended buffer & peripheral zone have been implemented.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- It is proposed to further include the Wuling Mountain in the protection zone to improve management effectiveness. However, this "problem should be solved at a higher level of government."

### II.4 Management

### **Administrative and Management Arrangements**

- The property is managed under a range of national laws and the local Wulingyuan WH regulations.
- The 1992 General Plan for the Wulingyuan Scenic Resort was revised in July 2001.
- A 'peripheral area' has been enlarged to protect the ecological



- Furthermore, the core area has been subdivided into: (i) special protection areas; (ii) first-class protection; and (iii) second-class protection.
- In 2001, Wulingyuan also became a 'Geological Park of the State'.

### **Present State of Conservation**

- Three separate cable cars have been built to "offer convenience to tourists". Holes had to be drilled into the rocks to do this
- In 2001, with the help of the security dept., 446 guns were confiscated in the area which has "effectively stopped hunting".

# "China wishes to renominate the property according to natural biodiversity criterion (iv)."

### **Staffing and Training Needs**

- 4,500 staff (500 managerial, 4,000 workers).
- Training needs are

identified in management techniques, computers, and language training.

### **Financial Situation**

- "Revenue from admission tickets and tax can maintain the routine work." No figures are supplied.
- Funding is considered "almost" adequate.
- Loans from the Japanese Government amounting to US\$ 6 million were received for 2 large-scale sewerage disposal plants.
- 5 million Yuan (US\$ 605,000) have been invested in specialised research in digital scenery, geological and topographical research.
- \* International Assistance from WHF as follows: (i) 1999, US\$60,000 Emergency Assistance for rehabilitation of Wulingyuan and Flood damage control.



### Access to IT

- 500 PCs with internet access.
- There is an ARCInfo GIS system used for township surveying, vegetation coverage mapping, relief analysis, surface water analysis, and 'residents expansion analysis'.

### **Visitor Management**

- Visitor numbers increased from 980,000 in 1996 to 4.46 million in 2001 (16,000 foreign to 132,000).
- Facilities include accommodation, sewerage, transport infrastructure. There is a need for a tourist centre and museum, monitoring system, and 'highclass' hotels.
- According to the management plan, the authorities are "going to pull down all residential facilities in the core scenic area", control the number of tourists, and build a "World Heritage Museum".

### **II.5 Factors Affecting the Property**

### Threats and Risks

- Increasing commercialisation and "unbalanced development of the economy",
- "Confusion" in tourist facilities,
- Township functions not clearly defined,
- · Geological disasters, floods & forest fires.

### **Counteractive Plans**

- Emergency plans have been developed for geological & climatic disasters, forest fires, and forest pests.
- Sand dredging and quarrying is forbidden.
- The authorities wish to further strengthen law enforcement, scientific research, and spread the tourists out over a wider area.

### **II.6 Monitoring**

### **Monitoring Arrangements**

 Monitoring regulations include the 'Measurement Law of the PRC' and various regulations and manuals issued by the Environment Protection Bureau for water, air & sewerage quality.

### **Monitoring Indicators**

 Wulingyuan uses the "general monitoring indices of the state" which cover: (i) water; (ii) air; (iii) biological indicators; (iv) hydrographs; and (v) geological & geographical monitoring.

# II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- The quartzite sandstone and Karst topographical features are in good condition. The authorities also hope to re-submit the site for natural criterion iv.
- On account of the many different levels of zoning, the management "involves the division of the administrative area [which] is very complicated [and] is subject to further research and proof."
- The number of foreign tourists and tourism pressure has been increasing sharply since 2000.
- Support from the WHF may be required for the construction of a Wullingyan Natural World Heritage museum, to establish specialised monitoring systems for air, water, fauna, flora, electromagnetic radiations, etc. to set up a tourist centre, to increase training and to carry out research concerning biological diversity.

### \* State of Conservation Reports

1998 Ext Bureau WHC-CONF.202/4 The Bureau was informed of the findings of a September 1998 WH Centre/IUCN mission to the site which found the site to be overrun with tourist facilities, this causing a considerable impact on the aesthetic qualities of the property. The Chinese authorities had not taken any steps to implement the recommendation of the Committee, made at the time of the site's inscription in 1992, to prepare a species status conservation report in order to determine whether the site would qualify for inscription under natural heritage criterion (iv). The mission also found that several buildings and roads had been damaged by the recent floods in China, and that the site required enhanced support from the Central and Provincial Governments owing to its relatively remote location with a poorly developed economy.

1998 Committee WHC-CONF.203/8 rev The Committee invited the Provincial and Central Government authorities to augment the resources for the management of the site. Co-operation with the Chinese Academy of Sciences and other such institutions may be needed in order to assess the WH value of the site's biodiversity. The Committee drew the attention of the State Party to manage tourism development in and around the site on a sustainable basis. Furthermore, the Committee urged the State Party to assess the extent of damage caused to the site by the recent floods and prepare a rehabilitation plan for implementation with financial support from Provincial and Central Governments, the WHF and other sources.

# JAPAN Yakushima

### **II.1 Introduction**

Year of Inscription 1993

### Organisation Responsible for the Report

- Ministry of the Environment 1-2-2, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8975 Japan
- Forestry Agency, Ministry of Agriculture, Forestry & Fisheries
   1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8952
   Japan

### **II.2 Statement of Significance**

Inscription Criteria N ii, iii

### **Statement of Significance**

Proposed as follows:

"The Yakushima WH Area contains Yakusugi trees which are thousands of years old and unique in the world... [and] a wide representation of species in vertical distribution"

### **Status of Site Boundaries**

 Any modification of the site boundaries was deemed "premature", but in view of the revision of the Operational Guidelines would be "discussed in future".

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

• The WH value is considered to have been maintained. No changes are foreseen.

### II.4 Management

### **Administrative and Management Arrangements**

- The National and Kagoshima prefectural governments co-ordinate through the Yakushima Heritage Area Liaison Committee established in September 1995.
- The Ministry of the Environment and the Forest Agency collaborate for patrols, monitoring of visitor numbers and scientific research.



- The Agency of Cultural Affairs enforces the Law on the Protection of Cultural Properties, and the designation of Yakusugi forests and bird species as a 'Natural Monument' or 'Special Natural Monument'.
- The unified management plan has been implemented since November 1995.

### **Present State of Conservation**

- A total area of 2,262 ha in surrounding areas were added to the existing national park for intensified World Heritage protection.
- Signposts, viewing platforms, ranger stations, shelter pavilions, lavatories and footpaths were subsequently improved.

### **Staffing and Training Needs**

- Government employees from national, prefectural and municipal levels work together to conserve the WH area. No figures supplied.
- Staffing level is considered inadequate. Volunteers employed work as nature guides and for forest patrols.

### **Financial Situation**

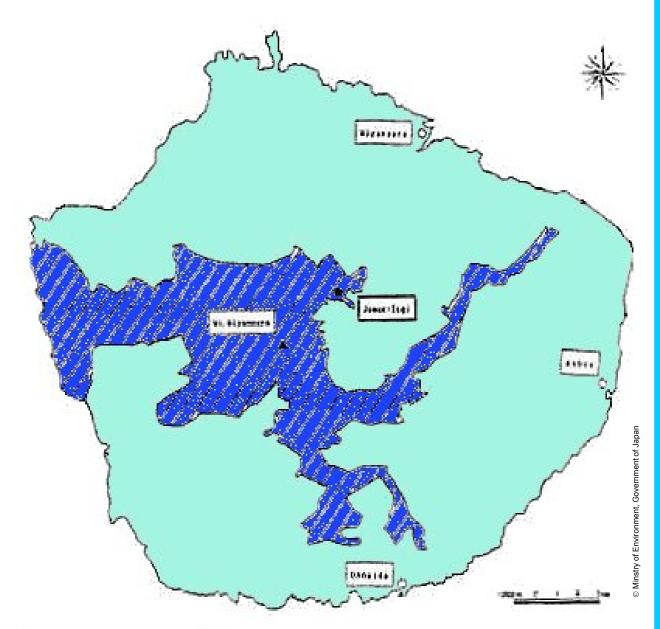
- A new budget allocation was created following inscription on the WH List.
- Funding is considered adequate.
- No figures supplied.
- \* International Assistance from WHF: none.

### Access to IT

- 14 PCs with internet access.
- No GIS capacity.

### **Visitor Management**

- Visitors to the whole island are counted automatically. No statistics supplied.
- Four separate environmental and cultural centres have been created featuring lectures on World Heritage.
- Facilities include upgraded mountain trails, shelters, and public lavatories with sewerage treatment.



Map of Yakushima WH Area showing Core (dark blue) and Buffer (light blue) zones

### **II.5 Factors Affecting the Property**

### Threats and Risks

 Some erosion and deterioration of footpaths has developed because of heavy rain and trampling pressure. The resultant washout flows in Hananoego and Ko-hananoego may have contributed to a drying trend in patches of upland moor vegetation.

### **Counteractive Plans**

 No emergency plan has been developed. When a possible threat is foreseen, counter measures are discussed by the Yakushima WH Liaison Committee (Ministry of the Environment, Forestry Agency, Kagoshima Prefecture, Kamiyaku and Yaku towns).

### **II.6 Monitoring**

### **Monitoring Arrangements**

- A continuous system is in place to monitor trekkers, the quality of mountain streams, rainfall and landscape.
- Additional monitoring requirements include: (i) basic data on wild animals and plants; (ii) sampling methods for rare species; (iii) studies to track shifts in forest structure; and (iv) enhanced networking of on-site academic research.

### **Monitoring Indicators**

 The four indicators are the following: (i) number of mountain climbers; (ii) water quality; (iii) precipitation; and (iv) "state of the landscape".

# **II.7 Conclusions and Recommended Actions**

### **Conclusions and Proposed Actions**

- Yakushima represents a unique remnant of ancient forest extending through an altitudinal sequence from coastal forest, temperate coniferous, through to cold-temperature bamboo grassland at the central peaks, and contains one of the oldest cedars in the world estimated to be some 7,200 years old.
- There is no specific future action plan. "The value of the area is properly maintained by the management plan. The integrity of the area has not changed."
- \* Yakushima Island is pioneering a 'Zero Emission' concept for the site through the promotion of electric vehicles, composting centres, solar panels & smallscale hydro-electric dam facilities.
- Communication with other WH site managers in Japan, East and South-East Asia.

### \* State of Conservation Reports

1997 Committee CONF.208/8Brev IUCN informed the Bureau that it had undertaken a mission to review the state of conservation of the site and found that there were significant improvements with regard to the management since its inscription in 1993. The site now had well conceived management plans, providing opportunities for local communities to be involved in the management of the sites and conducting special programmes for educating the public in WH value of the site.

The Committee congratulated the Japanese authorities for strengthening the management, and encouraged them to consider implementing the suggestions presented in the IUCN report.

# JAPAN Shirakami-Sanchi

### **II.1 Introduction**

Year of Inscription 1993

### **Organisation Responsible for the Report**

Ministry of the Environment
 1-2-2, Kasumigaseki, Chiyoda-ku
 Tokyo, 100-8975
 Forestry Agency, Ministry of Agriculture, Forestry and Fisheries
 1-2-1, Kasumigaseki, Chiyoda-ku
 Tokyo, 100-8952
 Japan

### **II.2 Statement of Significance**

Inscription Criteria N ii

### Statement of Significance

Proposed as follows:
The area is noted for the "high purity, preservation of old growth trees (...) representative of [remnant] beech forest that appeared in East Asia after the Ice Age". The site shape is oval, unfragmented, with a low circumference to area ratio.

"Visitors are counted automatically by infrared sensor at 11 entrance points. The number of entry permits to the core area is issued by the Forestry Agency."

### Status of Site Boundaries

 Borders and buffer zone of the property are considered adequate.

### II.3 Statement of Authenticity/Integrity

### Status of Authenticity/Integrity

• The WH value is considered to have been maintained. No changes are foreseen.

### II.4 Management

### **Administrative and Management Arrangements**

- Different levels of government co-ordinate through the Shirakami-Sanchi World Heritage Area Liaison Committee established in July 1995.
- The Ministry of the Environment and the Forestry Agency designate the 'Nature Conservation Area' & 'Forest Ecosystem Reserve', and conduct patrols by volunteers and official staff.
- Prefectures implement the regulations of the Quasi-National Park. Municipalities maintain parking & public lavatories.



- Agency of Cultural Affairs protects a few species such as the Golden Eagle as 'Natural Monuments'.
- The new management plan incorporates a core and buffer zone and has been implemented since November 1995. A part of the Buffer Zone is designated as a Prefectural Natural Park.

### **Present State of Conservation**

There has been an intensification of on site patrols.

### **Staffing and Training Needs**

- There is an overall co-ordination of staff from different agencies. No figures are supplied.
- Staffing level is considered adequate.
- No new training needs are identified.

### **Financial Situation**

- A new government budget line was created following inscription on the WH List. No figures supplied.
- Funding is considered adequate.
- \* International Assistance from WHF: none.

### Access to IT

- Both PCs and Apple computers with internet access.
- The Fujisato Forest Centre and other organizations provide photos and nature information on its website.
- No GIS capacity.

### **Visitor Management**

- A Shirakami-Sanchi World Heritage Conservation Centre has been constructed in two sites.
- Upgraded signboards, patrol paths and footpaths have been installed.
- Visitors are counted automatically by infrared sensor at 11 entrance points. The number of entry permits to the core area is issued by the Forestry Agency. No visitor statistics supplied.
- As a part of the Junior Park Ranger Programme, environmental education programmes are organised for children of the upper grades of elementary school.

### **II.5 Factors Affecting the Property**

### Threats and Risks

 "There is only walking access to the WH Area and there is no big tourism pressure. Also, there is no development plan in the region and no big threat is foreseen."

### **Counteractive Plans**

- No emergency plan has been developed.
- A total number of 100 nature and guide patrols (including 72 volunteers) are dispatched. The Liaison Committee holds patrol meetings twice a year in both Aomori and Akita.

"\* In the periodic report, the state party referred to the following studies concerning the property: (a) 'Shirakami-Sanchi World Heritage Area Conservation Status Report' (1997) completed by the Shirakami-Sanchi WHA Liaison Committee; and (b) 'Report of the study of the ecological structure of the Shirakami-sanchi Beech Forest' (1998) by the Environment Agency."

### **II.6 Monitoring**

### **Monitoring Arrangements**

- Studies for management harmonization with the utilization of surrounding forests have been carried out by the Ministry of the Environment & Forestry, and Forest Products Research Institute.
- A conservation monitoring manual for the Heritage Area will be drawn up by the Liaison Committee.
- The reports of 'plural patrollers' have been used as indicators for a number of years.
- The following include organizations involved as monitoring partners: Tohoku Ryokka Kankyohozen Company; Wild Bird Society of Japan; Shimpkita Wildlife Research Centre Corp; numerous natural history museums; and universities.

### **Monitoring Indicators**

- Ecological indicators include the following: (i)
  pollutants in the air, leaves of beech and roots of
  seedlings; (ii) forest dynamics in beech forest; (iii)
  status of birds, amphibians, reptiles and mammals.
- Micro topographical changes are being considered.

# II.7 Conclusions and Recommended Actions

### **Conclusions and Proposed Actions**

- The number of tourists over the whole region has increased by 40% (with a 450% localised increase in the Amon waterfall area) following WH inscription owing to strong public interest. However, there is no large tourism pressure, and it does not pose a serious threat to the property.
- The Periodic Report exercise has helped in the coordination of different organisations, including local inhabitants. Formal methods for a monitoring system will be established in 2003.
- 'National Wildlife Protection Areas' are in the process of being established.

### \* State of Conservation Reports

1995 Bureau CONF.201/4 The Centre informed the Bureau that it had received several letters concerning the logging of beech forests outside the WH site and had transmitted them for review to IUCN. It recalled that the site was inscribed in 1993, and the Committee had recommended at the time to review the site after 3 years. The Bureau invited the Centre to organize a mission to review the progress made in the implementation of the management plan.

1997 Committee CONF.208/8Brev IUCN informed the Committee that it had undertaken a mission to review the state of conservation of the site and found that there were significant improvements with regard to the management since its inscription in 1993. The Bureau congratulated the Japanese authorities for strengthening the management, and encouraged them to consider implementing the suggestions presented in the IUCN report.