IUCN Conservation Outlook Assessment 2014 **(archived)**
Finalised on 10 June 2014

Please note: this is an archived Conservation Outlook Assessment for Xinjiang Tianshan. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Xinjiang Tianshan

SITE INFORMATION

Country:
China
Inscribed in: 2013
Criteria:
(vii) (ix)

Site description:

Xinjiang Tianshan comprises four components—Tomur, Kalajun-Kuerdening, Bayinbukuke and Bogda— that total 606,833 hectares. They are part of the Tianshan mountain system of Central Asia, one of the largest mountain ranges in the world. Xinjiang Tianshan presents unique physical geographic features and scenically beautiful areas including spectacular snow and snowy mountains glacier-capped peaks, undisturbed forests and meadows, clear rivers and lakes and red bed canyons. These landscapes contrast with the vast adjacent desert landscapes, creating a striking visual contrast between hot and cold environments, dry and wet, desolate and luxuriant. The landforms and ecosystems of the site have been preserved since the Pliocene epoch and present an outstanding example of ongoing biological and ecological evolutionary processes. The site also extends into the Taklimakan Desert, one of the world’s largest and highest deserts, known for its large dune forms and great dust storms. Xinjiang Tianshan is moreover an important habitat for endemic and relic flora species, some rare and endangered.
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SUMMARY

2014 Conservation Outlook

Good with some concerns

The outstanding natural values and attributes of the site are unchanged from the time of inscription. There are no serious pressures or threats at present, but the anticipated steady increase in visitor numbers could bring new levels of demand for infrastructure development and possibly minor environmental damage unless precautionary management action is undertaken. Although the property has strong legal protection, there is a need to improve the management system and to prepare an overall management plan in order to provide a consistent management regime throughout the four component parts of the serial property. Future priorities include obtaining more effective engagement of the local population in protecting and managing the property, and considering the options for expanding the property to include a better representation of the regional physiography and biogeography.

Current state and trend of VALUES

Good
Trend: Stable

The current state of the values and attributes of the site is good and the condition is stable. The property was inscribed on the World Heritage List in 2013 and no changes in the values have been reported since then. Nor are any significant changes foreseen in the near future under the existing protection and management regime.

Overall THREATS

Low Threat

Currently, the site is free from serious threats to its natural values and attributes. The role of livestock grazing in determining the balance between the natural character of the grassland and an unhealthy modified state is an equivocal

matter. Pressure to ban livestock grazing and relocate herders to residential areas beyond the property is causing some concern about future livelihoods and changes in traditional lifestyles. There is a marginal potential environmental threat from growth in tourist numbers in the near future and associated pressure for infrastructure development.

Overall PROTECTION and MANAGEMENT

Mostly Effective

The site appears to be well protected in law, but here are some concerns relating to management. Individual parts of the serial property have a management plan, but the overall management framework is insufficient. There is a lack of a coordinated management system that provides for unified management throughout the property. The integrity of the site is secure but its area could be expanded to include a greater representation of the regional physiography and biogeography. Staffing and financing are adequate for current needs but may need augmenting if the predicted increase in tourism occurs. Community engagement needs improvement with more effort made to employ local herders in management operations.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **An outstanding scenic area comprising part of the largest mountain chain in the world's temperate arid region**
  Criterion:(vii)

  The Xinjiang portion of the Tianshan runs east-west for 1,760km and is a mountain range of outstanding natural beauty. The Xinjiang Tianshan is anchored in the west by the highest peak in the Tianshan, Tomur Peak at 7,443 meters, and in the east by Bogda Peak at 5,445 meters. The range lies between two Central Asian deserts, Junggar Desert in the north and the Tarim Desert in the south. The beauty of the Xinjiang Tianshan lies not only in its spectacular snow-capped mountains and glacier-capped peaks, beautiful forests and meadows, wetlands, clear rivers and lakes and red bed canyons, but also in the combination and contrast between the mountain elements and the vast deserts. (SoOUV, 2013; IUCN, 2013).

- **Outstanding example of biological evolution in an arid continental climate, with relict, rare, endangered and endemic species**
  Criterion:(ix)

  Large range of vegetation types reflecting altitudinal zonation and marked differences between north and south facing areas and slope gradients. Forest vegetation includes: evergreen and deciduous coniferous forest; evergreen and deciduous fruticose forest and deciduous broad-leaved forest. The original warm, wet flora has gradually been replaced by xeric Mediterranean flora. Rich biodiversity comprising: 2,622 spp. vascular plants; 550 spp.

vertebrate animals; 94 relict plants from before the Quaternary glaciations; 110 spp. rare and endangered plants; 367 spp. rare and endangered animals; 118 spp. endemic plants; and 22 spp. endemic animals. The property is an outstanding example for the study of biological community succession in mountain ecosystems in an arid zone undergoing global climate change. Xinjiang Tianshan is also an outstanding representative of biological and ecological evolution in the Pamir-Tian Shan Highlands. (SoOUV, 2013; IUCN, 2013).

Assessment information

Threats

Current Threats

Low Threat

Impacts on the natural grassland ecosystem from limited livestock grazing by nomadic herders, and social change due to relocation of people to surrounding areas are the only current threats to the property.

▶ **Livestock Farming / Grazing**

Low Threat
Inside site
Outside site

The site is subject to a limited amount of livestock grazing by nomadic people. There is some view that grazing should be banned but the State Party wants to establish sustainable traditional grassland uses in the long term (China, 2012; IUCN, 2013).

▶ **Changes in traditional ways of life and knowledge systems**

Low Threat
Inside site

There is some pressure on the local nomadic people to relocate from the

property to reside in villages in surrounding areas (China, 2012; IUCN, 2013).

Potential Threats

Low Threat

A predicted steady growth in tourist numbers and associated demand for infrastructure development has the potential to cause undesirable environmental impact.

► Tourism/ Recreation Areas

Low Threat
Inside site

The current tourist pressure is low (1.5 million visitors per year) but the predicted growth rate in the near future is 6-11% per annum, with a maximum visitor carrying capacity estimated at 9.5 million per year (China, 2012; IUCN, 2013). According to Xinhua News, the number of tourist visited Heritage Site at the end of July 2013 has reached 15,000 person / day (at Bayinburuke Swan Lake site); right after the Tianshan was inscribed (http://news.xinhuanet.com)

Protection and management

Assessing Protection and Management

► Management effectiveness

Mostly Effective

Apart from a lack of an overall management plan for the whole World Heritage property, it appears that management intervention is generally effective in the individual component parts of the property (IUCN, 2013).

► Education and interpretation programs

Mostly Effective

Education programmes are not reported but some good quality interpretation is conducted (IUCN, 2013).

► Management system

Mostly Effective

Concern is expressed that there is no overall management framework for coordinating action in the four component parts of this serial property, thereby providing for uniform management throughout the property (IUCN, 2013). However, at the level of component protected areas the management is highly effective.

► Relationships with local people

Some Concern

Consultation with local people about heritage conservation appears to have begun only with the World Heritage nomination. There is some disquiet among the nomadic pastoralist population about the pressure to cease livestock grazing and relocate out of the site. There appears to be little employment of the local people in management activities (IUCN, 2013).

► Legal framework and enforcement

Highly Effective

The site is subject to comprehensive national and local laws and regulations providing for the protection of land (including official protected areas) and wildlife, and for the management of grassland and water resources (IUCN, 2013).

► Integration into regional and national planning systems

Data Deficient

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► Implementation of Committee decisions and recommendations

Data Deficient

At the time of inscription (2013) the World Heritage Committee requested the State Party to address certain issues, including completion of an integrated management plan for the whole area, collaboration with neighbouring countries and consideration of the potential of integrating local communities and in particular traditional herdsmen into management of the

property (Decision 37COM 8B.10). However, it is too early to consider the progress made in addressing these issues.

► Boundaries

Mostly Effective

The boundaries of all four components of the site are appropriate and adequate and the buffer zone boundaries are complete. It is noted that the boundaries are drawn to avoid areas of mining and potential transport corridors. It has been recommended that consideration be given to adding further areas to the property (IUCN, 2013).

► Sustainable finance

Mostly Effective

Funding is reported to be in the order of USD 100 million over the next five years (IUCN, 2013).

► Staff training and development

Mostly Effective

There is a staff of about 650 personnel who are reportedly well qualified (IUCN, 2013).

► Sustainable use

Some Concern

Concerns are held among the local nomadic herders about the possible ban on livestock grazing, but the State Party favours establishing a traditional sustainable resource exploitation regime (IUCN, 2013).

► Tourism and interpretation

Mostly Effective

Tourism operations and visitor numbers are not causing concerns at present. However, there is a need for caution in the face of a predicted steady increase in numbers to an estimated carrying capacity of about 9.5 million per year. The management authorities will need to be vigilant to avoid inappropriate types and levels of activities, such as the use of 4WD vehicles that could destroy vegetation cover and cause accelerated rates of soil

erosion (IUCN, 2013).

▶ Monitoring

Mostly Effective

There is a comprehensive environmental monitoring programme (IUCN, 2013).

▶ Research

Mostly Effective

The property has been extensively researched by national and international scientists (IUCN, 2013).

Overall assessment of protection and management

Mostly Effective

The site appears to be well protected in law, but here are some concerns relating to management. Individual parts of the serial property have a management plan, but the overall management framework is insufficient. There is a lack of a coordinated management system that provides for unified management throughout the property. The integrity of the site is secure but its area could be expanded to include a greater representation of the regional physiography and biogeography. Staffing and financing are adequate for current needs but may need augmenting if the predicted increase in tourism occurs. Community engagement needs improvement with more effort made to employ local herders in management operations.

▶ Assessment of the effectiveness of protection and management in addressing threats outside the site

Highly Effective

There are no reported threats from outside the property, though mining operations may be of potential impact.

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **An outstanding scenic area comprising part of the largest mountain chain in the world's temperate arid region**

Good
Trend:Stable

The scenic and aesthetic values of the property are unchanged from the time of inscription one year ago (IUCN, 2013).

▶ **Outstanding example of biological evolution in an arid continental climate, with relict, rare, endangered and endemic species**

Good
Trend:Stable

There has been no change to the biological values and attributes of the site over the past year since its inscription on the World Heritage List (IUCN, 2013).

Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**

Good

Trend: Stable

The current state of the values and attributes of the site is good and the condition is stable. The property was inscribed on the World Heritage List in 2013 and no changes in the values have been reported since then. Nor are any significant changes foreseen in the near future under the existing protection and management regime.

Additional information

Key conservation issues

▶ Overall Management Plan and Management structure

Local

Management plans exist at component level; some coordination between the components exists, but it needs to be improved an overall management framework needs to be developed.

▶ Grazing

Local

The abandoned grazing areas should be carefully monitored (monitoring programme is in preparation)

Benefits

Understanding Benefits

▶ Is the protected area valued for its nature conservation?

The site protects a large tract of mountainous and desert terrain and contributes to prevention of human-induced impacts such as soil erosion, water and air pollution and unsustainable uses of energy and resources.

▶ Access to drinking water

The site allows for the continuation of traditional sustainable uses of grasslands and mountain lands, including access to water supplies and other essential resources.

▶ Outdoor recreation and tourism

The site is a popular tourist attraction for climbing, hiking, sight-seeing and general wilderness recreational pursuits.

Summary of benefits

The site is of great significance in providing for protection of a large tract of mountainous terrain with very important wilderness and biodiversity values. Major water resource for large areas around. It allows for a range of recreational activities such as climbing, hiking and sight-seeing (in one of the components) and it provides for the maintenance of a wide range of environmental services including conservation of soil and water resources.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	.		.

REFERENCES

№	References
1	37COM.8B.10
2	China, 2012. World Heritage nomination of Xinjiang Tianshan, China.
3	IUCN, 2013. Evaluation of the World Heritage nomination of Xinjiang Tianshan, China.