

World Heritage Sites

Protected Areas and World Heritage



MOUNT TAISHAN CHINA

Taishan (the Great Mountain) is the most venerated mountain in China, the sacred object of an imperial cult and pilgrimage for over 2,000 years. Its dramatic landscapes and artistic masterpieces, built and carved, exist in a harmony which has long inspired artists and scholars and embody a nationally treasured symbol of Chinese civilization and beliefs.

COUNTRY

China

NAME

Mount Taishan

MIXED NATURAL & CULTURAL WORLD HERITAGE SITE

1987: Inscribed on the World Heritage List under Cultural Criteria i, ii, iii, iv, v & iv + Natural Criterion vii.

STATEMENT OF OUTSTANDING UNIVERSAL VALUE [pending]

IUCN MANAGEMENT CATEGORY

III Natural Monument

BIOGEOGRAPHICAL PROVINCE

Oriental Deciduous Forest (2.15.05)

GEOGRAPHICAL LOCATION

Mount Taishan is located in central Shandong Province, immediately north of the town of Tai'an, about 40 km south of Jinan city and 355 km south of Beijing. Its highest point is at 36° 16'N by 117° 06'E. The whole area lies between 36° 11'N to 36° 31'N and 116° 50'E to 117° 12'E.

DATES AND HISTORY OF ESTABLISHMENT

This symbolic mountain has been protected and venerated even by emperors for millennia.

1982: Taishan was established as a Zone of Scenic Beauty & Historic Interest; it is also a Forest Park;

2006: Part of the area designated a Global Geopark by UNESCO (15,863 ha.)

LAND TENURE

State-owned. Managed by the Tai'an Administration Committee of the Taishan Scenic Spot (ACTSS).

AREA

25,000 ha. The base of Taishan covers an area of 42,600 ha.

ALTITUDE

From about 150m to 1,545m (Jade Emperor Peak).

PHYSICAL FEATURES

The Taishan massif rises abruptly some 1,400m above the eastern edge of the vast north China plain. Its mountain landscapes of jagged peaks, cliffs and valleys, numerous springs, streams, waterfalls and pools are scenically impressive. Geologically, it is an uplifted northward-dipping monoclinical fault-block mountain, tilted higher to the south, which is the steeper side. It is the oldest and most important example of mid to late PreCambrian palaeometamorphic geology in eastern China, known as the Taishan Group Complex and its geologic structure is very complicated. The emergent rock of the region is the basement rock of all of northern China. It is 95% composed of ultrabasic magmatized granite-gneiss with diorite intrusions (batholiths and sills) derived from a mantle plume and the Earth's crust during the preCambrian Archean period some 2700-2500 million years ago. Globally rare komatiite, a high-magnesium mafic volcanic lava, is present in an Archean greenstone belt. During the late Proterozoic pre-Cambrian to Ordovician periods, 600-200mya, the region sank undersea and was capped by a >2000m-thick layer of limestones and shales. This was raised in a mid-Ordovician Caledonian orogeny to hills which were, about 100mya, faulted and eroded, then finally uplifted along major faults to near the mountain's present form during westward subduction of the Pacific plate 70-30 mya. The uplift is still gently occurring.

The mountain's rocks are rich in minerals and the Cambrian strata exposed in the north are rich in fossils. Six short fast rivers radiate from the summit in deep cut valleys with many waterfalls. The more than 60 springs are renowned for their relatively high oxygen content (6.4 mg/l), slight acidity (pH = 6.3) and extremely low mineral content. The predominantly brown soils are fertile, being rich in organic matter. A detailed description of the geology and geomorphology is given in *Mount Taishan Global Geopark* by the Administrative Commission of Taishan Global Geopark (ACTGG, 2010).

CLIMATE

The area falls on the edge of the warm temperate monsoonal zone of hot wet summers with south-westerly winds and 5-month-long cold dry winters with northerly winds and an average of 29 days of snow. The weather in spring and autumn is variable. Mean temperatures on the mountain range from -1°C in January to 28°C in July. On the summit the average annual temperature ranges between -27.5°C to 28.6°C with temperatures 7.5°C lower at the base. Most of the annual rainfall falls between June and August with a minimum of 554mm and a maximum of 1,848mm falling on the summit. The relative annual relative humidity is 63% (ACTGG, 2008).

VEGETATION

Vegetation covers over 80% of the site, most of which is warm-temperate deciduous broadleaf forest with oriental arborvitae *Platycladus orientalis* dominant below about 700m along with sawtooth and Chinese cork oaks *Quercus acutissima* and *Q. variabilis*, and Chinese red pine *Pinus tabulaeformis* above 700m. However, the mountain also lies between the humid oceanic climate to the east and drier conditions inland so that the flora is diverse, comprising 1,858 species in 645 genera (though this includes 322 cultivated exotics). 10 species are said to be endemic and 22, nationally protected (ACTGG, 2009). The mountain is nationally renowned for its medicinal plants which total 462 species in 113 families. They include multiflower knotweed *Polygonum multiflorum*, Taishan ginseng *Panax ginseng*, Chinese gromwell *Lithospermum erythrorhizon*, Asian puccoon *Sanguinaria* sp., bonnet bellflower *Codonopsis lanceolata* and sealwort *Polygonatum odoratum*. Some 1,821 trees over 300 years old are recorded. Many are very old and famous, notably the Han Dynasty Cypress planted 2,100 years ago by Emperor Wu Di of the Han Dynasty, the Tang Chinese Scholar-tree *Sophora japonica* planted 1,300 years ago, the Welcoming Guest Pine, 500 years old and the Fifth-rank Pine named by Emperor Qin Shihuang of the Qin Dynasty, replanted some 250 years ago.

FAUNA

The diverse fauna is typical of the region's hills and reflects its many habitats. Nearly 250 species of animals are recorded: 25 mammals including the Asiatic wild dog *Cuon alpinus* (EN), 154 birds, 12 reptiles, 6 amphibians and 45 fish, along with over 900 species of insect (ACTGG, 2009). Its avifauna may be influenced by its position adjoining the coastal migratory flyway. The near-threatened large-scaled fish *Varicorhinus macrolepis* is found in running water at 300-800m. It is a historical delicacy and one of the five most famous edible fishes of China.

CONSERVATION VALUE

The mountain is pre-eminent as a site of cultural significance and for majestic scenery. It is also geologically important and has a diverse flora and fauna. It has been the object of an imperial pilgrimage for nearly two thousand years, and the artistic masterpieces on the mountain are in perfect harmony with the natural landscape. It has long been a source of inspiration to Chinese artists and scholars, and is a potent symbol of ancient Chinese civilisation and beliefs.

CULTURAL HERITAGE

Mount Taishan has an extremely rich cultural heritage and is one of the birthplaces of Chinese civilisation. In the words of a modern scholar Guo Moruo, it is "a partial miniature of Chinese culture". Evidence of human activity in the area dates back 400,000 years to Palaeolithic Yiyuan Man. By Neolithic times, 5,000-6,000 years ago, it had become a significant cultural centre for two flourishing cultures, the Dawenkou to the north and the Longshan to the south of the mountain. The first recorded flowering of cultural creativity occurred in the Spring and Autumn Period (770-476 B.C.) of the Zhou Dynasty with the emergence of two rival states, Qi to the north and Lu to the south of the mountain. During the period of the Warring States (475-221 B.C.), the state of Qi built a 500 km long wall as protection from possible invasion by the state of Chu. The ruins of this earliest of great walls in Chinese history are still evident.

According to traditional doctrine, the east signifies birth and spring. Standing at the eastern edge of the North China plain, Taishan has therefore always been considered pre-eminent among China's five sacred mountains. For more than 2,000 years, 12 Chinese emperors of many dynasties are said to have made pilgrimages to Taishan for sacrificial and ceremonial purposes, activities which then acquired political significance. Intricately carved memorial inscriptions, stelae, stone tablets and temple complexes bear testimony to these visits, forming an open museum of inscriptions. A monk named Lang was said to have been the first to build on the mountain, in 351 BC, creating the original Lang and Divine Rock temples, and it was first recognised officially during the reign of Emperor Wu Di of the Han Dynasty (206 BC- AD 220). The mountain is covered with archaeological and architectural sites of outstanding importance: 22 temples and 97 ruins, palaces and pavilions, arches and bridges, stairways and sculptures, 819 stone tablets, and nearly 1,700 cliffside and stone inscriptions. In one valley the entire Buddhist Diamond Sutra has been carved on a rock face. Renowned scholars, including Confucius whose home town, Qufu, is only 70 km away, also left poetry and prose in their calligraphy on the mountain.

The way in which these cultural monuments are integrated with the scenery is a treasured legacy. The mountain's religious significance started with Taoist worship, but it later acquired Buddhist and other temples. Long after the Lang and Divine Rock temples of 351 BC, the Temple to the Heavenly Queen Mother, was built just before the period of the Three Kingdoms (220-280 A.D.). During the Northern and Southern Dynasties (420-589 A.D.), Jade Spring Temple, God's Treasure Temple and Pervading Light Temple were built. Prime Minister Li Jiefu of the Tang Dynasty regarded the Divine Rock Temple as first among China's four temple wonders. Taoist temples included the Temple to the Heavenly Queen Mother, the Palace of Goddess Doumu, Azure Cloud Temple, Rear Rock Basin Temple and Supreme Lord of Heaven Temple. Of these the Azure Cloud Temple near the top of the mountain has been the most influential, its influence extending over more than half of China. Architecturally, most of the temples were restored in the rococo style of the Qianlong period (1736-95). Taishan Temple, built at the foot of the mountain is a major palatial complex.

LOCAL HUMAN POPULATION

The surrounding valleys are well populated and the approach up the mountain begins on the edge of Tai'an town to the south. The mountain's temples are staffed and there used to be a strongly evident commercial presence even near the summit, with many unsightly billboards and barbecue shacks. These, and houses on the mountain, have now been removed although commercial structures remain.

VISITORS AND VISITOR FACILITIES

Historically the mountain has been one of the most revered places of cultural pilgrimage in the country. Even during the Ming Dynasty (1368-1644), the Azure Cloud Temple is said to have received several hundred thousand worshippers a year. The mountain is heavily visited: between 1996 and 2001 annual visitors totalled 2.1 million, including 18,000 foreigners (ACTSS, 2003). On one holiday in 2001 60,000 people visited the top of the mountain (Wei, 2004). In 2010 there were 3.96 million visitors, an increase of 11.7% on 2009 (ACTGG, 2010). Crowds may be expected. However, during the past decade much money and care has been spent on improving the infrastructure and level of visitor services. There are now five visitor centres on and around the mountain and a museum of geology. There are also several hotels and hostels in the summit area. Access is well signposted. The easiest ascent is by bus to a cable-car half way up. The old path is by foot up two long stairways west and east, one being the famous Eighteen Bends route of 1,633 steps from the Red Gate to the South Heaven Gate which may take 6 hours to walk. There is an annual climbing contest and festival. A large investment has recently been made in the production of nightly performances to entertain visitors. The nearby town of Tai'an has ample accommodation and a tourist information centre. Jinan international airport is 80 km away.

SCIENTIFIC RESEARCH AND FACILITIES

During journeys between 1868 and 1872, the geologist Baron F.von Richtofen first named the Taishan system. Later that century Japanese scientists studied the preCambrian fossils with their evidence of palaeological conditions and life, and in 1907 the American geologists B. Willis and E. Blackwelder first described the Taishan Complex. Since then, especially after 1949, the mountain's extremely complex geology has been systematically studied by researchers from the Chinese Academies of Science and of Geological Science, Beijing University and College of Geology and Shandong University and Geological Bureau. The mountain is a classic site for the study of mid to late PreCambrian geology, a type locality for the study of the early history of the Earth and for the Archean fracturing of the continental crust in eastern China. The rare komatiite lava, present in a belt of Archean greenstone, proved the magmatic origin of ultrabasic rocks. A geological museum has been established. Archaeological excavations have been carried out at Dawenkou since its discovery in 1959. To date, 133 tombs have been excavated and over 2,100 burial objects discovered. The Ministry of Urban and Rural Construction and Environmental Protection of Beijing University and the Historical Interest Zone Administrative Committee have collectively studied the geology, landforms, animals and cultural relics, also forest fires, pine disease and forest regeneration to provide a scientific basis for managing the area.

MANAGEMENT

The Tai'an Municipal Administrative Committee of the Taishan Scenic and Historic Interest Zone is responsible for both the protection and administration of the area. Legal protection is afforded to both natural and historic heritages under the state's Cultural Relics Protection Law, Forest Protection Law, Interim Regulations Concerning the Administration of Scenic Beauty and Historic Interest Zones and various local regulations and administrative decrees. On the basis of multi-disciplinary scientific studies, the Ministry of Urban and Rural Construction and Environmental Protection, the University of Beijing and the Administrative Committee of the Mt. Taishan Scenic Beauty and Historic Interest Zone jointly revised a Management and Development Plan for the zone from 2002-2010 in accordance with the Interim Regulations issued by the State Council. The administrative structure has been modified, the local government function strengthened, scientific and technical personnel trained, facilities improved and expanded and residents encouraged to move out. According the *People's Daily* of June 11, 2003, 12 stone quarries were closed down in 2000 and 28 structures, some 300 advertisement hoardings, construction rubbish and piles of trash were removed. In 2001 at least 500 barbecue huts and 50 houses were cleared as part of a continuing campaign to rehabilitate and recover the native character of the mountain. Tourist installations are controlled by the issue of Operation Certificates. The main scenic spots are regularly closed to allow them to recover from overuse. There is a regular monitoring program for air and water quality, plant diseases and pests and the condition of famous trees (ACTSS, 2003).

MANAGEMENT CONSTRAINTS

Tourist pressures are very heavy, inundating the area during holidays and festivals, damaging scenic sites and hampering management. Incongruous modern buildings for the tourist industry detract from the scenic quality. In 2001 a larger cablecar was built up the mountain, destroying forest and mountainside and leaving rubble, and souvenir stone mining for sale to visitors flourishes (Wei, 2004). In the dry season the pine forest is very vulnerable to fire. Preservation and management facilities such as fire control have been inadequate in the past. Owing to inadequate water resources and poor management, the endemic red-scaled fish is on the verge of extinction. Certain cultural relics, such as the Diamond Sutra in Sutra Rock Valley, are in urgent need of restoration. Even after the mountain's designation as a World Heritage site, damage to scenic sites and rock quarrying by local farmers continued.

STAFF

The staff of the Park comprises 2020: 280 in management, 1,276 technical and 444 other support (Administrative Committee of Taishan Scenic Spot, 2003).

BUDGET

Funding from entry fees and special allocations is adequate. An initial grant of US\$37,000 was given by WHF. RMB 50 million (US\$6 million) went to restoring ancient buildings and RMB 102 million to research (ACTSS, 2003). In 2009 35 million yuan (US\$4.38 million) was spent on infrastructure (ACTGG, 2010).

LOCAL ADDRESSES

The Secretary, the Administrative Committee of Taishan Scenic Beauty & Historic Interest Zone,

The Director, Administrative Commission of Mount Taishan Global Geopark, 45, Hongmen Road, Tai'an, Shandong, The People's Republic of China.

REFERENCES

The principal source for the above information was the original nomination for World Heritage status. Books about Mt. Taishan are listed in the Chinese World Heritage Site nomination.

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DATE

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