

World Heritage Sites

The Convention concerning the Protection of World Cultural and Natural Heritage was adopted by the Conference of UNESCO in Paris in 1972. Nepal ratified the Convention on 20 June 1978. In the spring of 1979, the government requested UNESCO to assist the Department of Archaeology in preparing the nomination of Kathmandu Valley to the World Heritage List. The nomination proposed was for a single World Heritage Site incorporating seven monument-zones identified as: the Durbar Squares of Kathmandu, Patan, Bhaktapur; the two Buddhist sanctuaries of Swayambhu and Boudhanath; the Hindu pilgrimage sites of Pashupati, and the hilltop Hindu sanctuary of Changunarayan.

Lumbini, the birth place of Lord Buddha

Background

WHS number 666 and
WDPA Site code 900334

Location

22 km west of Siddharthanagar (Bhairahawa) in Rupandehi district (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 28' 08"	83° 16' 34"	86

Area: Under the 1978 Master Plan for the development of the Lumbini area, the Government of Nepal acquired an area of 7.7 km² to restore and develop Lumbini Garden as a core area, along with a 64.5 km² additional adjoining area. The

Lumbini World Heritage site is spatially limited within a 130 by 150m area around the chief archaeological remains that testify the location of the birthplace of Lord Buddha.

The Lumbini Development Area (LDA) includes Tilaurakot (ancient Kapilvastu), Gotihawa, Niglihawa, Sagarhawa, Sisiniyakot, Araurakot, Kudan (Kapilvastu), Devadaha (Rupandehi), Ramgrarn (Nawalparasi), and Lumbini, which are directly or indirectly related to the life and birth of Lord Buddha. LDA is authorised to include other areas as specified by the Government of Nepal by a notification in the *Nepal Gazette*, a government publication.

Description

This property was inscribed as the 666th World Heritage site by the World Heritage Committee's (WHC) 21st session on 6 December 1997 on the basis of criteria (iii)⁹ and (vi)¹⁰.

Siddhartha Gautama, the Lord Buddha, was born in 623 BC in the famous gardens of Lumbini, which soon became a place of pilgrimage. Among the pilgrims was the Indian emperor Ashoka, who erected one of his commemorative pillars there. The site is now being developed as a Buddhist pilgrimage centre, where the archaeological remains associated with the birth of the Lord Buddha form a central feature.

The catchment area of Harhawa River is 21 km². Peak flood discharge is estimated at 160 m³/s; the master plan estimation of the maximum rainfall in 24 hours is assumed to be 360 mm.

⁹ bearing a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

¹⁰ be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance (the Committee considers that this criterion should justify inclusion in the List only in exceptional circumstances and in conjunction with other criteria cultural or natural);

Box 6 World Heritage Selection Criteria

Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the adoption of the revised **Operational Guidelines for the Implementation of the World Heritage Convention**, only one set of ten criteria exists.

	Cultural criteria						Natural criteria			
Operational Guidelines 2002	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(i)	(ii)	(iii)	(iv)
Operational Guidelines 2005	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)

Selection criteria

- i. To represent a masterpiece of human creative genius;
- ii. To exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. To bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. To be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. To be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- vi. To be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- vii. To contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- viii. To be outstanding examples representing major stages of earth’s history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- ix. To be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- x. To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Source: <http://whc.unesco.org/en/criteria/> December 22, 2006



R N Suwal

Blue bull antelope (*Boselaphus tragacamelus*), Lumbini

The river basin is flooded several times each year, and each flooding lasts four to five days. The river develops a typical floodplain 100 to 120m in width, 1 to 2m below the surrounding grounds along the course of the River.

The Telar River flows from east of the sacred gardens. Telar is derived from 'tel' (oil) as water from the River is thought to be oily. The River is a landmark referred to by Chinese travelers as flowing close to the birthplace of Lord Buddha. In addition to the two major streams, Harhawa and Telar rivers, a number of open water bodies are in the surrounding lowland plains.

The type of soil is clayish, permeability is very low, sodium level is high and available phosphorus is very low. The soil is firm and alkalinity level is high.

Significance

The WHC's 21st session held in Naples, Italy from 1-6 December 1997 noted the following:

"The Committee decided to inscribe this site on the basis of criteria (iii) and (vi). As the birthplace of the Lord Buddha, the sacred area of Lumbini is one of the holiest places of one of the world's great religions, and its remains contain important evidence about the nature of Buddhist pilgrimage centers from a very early period.

A Delegate of Thailand declared that apart from Lumbini, there are two other sites closely associated with Buddha which are in the process of preparation to be presented as serial nominations and that he hoped that the Committee would consider them in this context."

The biological significance of Lumbini gardens has been enhanced with the recreation of the wetlands.

Flora

- Habitat inside Lumbini Gardens is mainly grasslands 58.8% (400 ha), forest plantation 40% (270 ha), and open water bodies 1.5% (10 ha)
- The dominant grass species include the *Imperata cylindrica*,

Saccharum bengalensis, *Phragmites karka*, and *Vetivera zizanoides*

- Major wetland plants include the *Vallisneria*, *Hydrilla*, *Potamogeton* (submerged), *Nymphaea*, *Trapa*, *Eichhornia* (floating species), and *Scirpus*, *Eleocharis*, *Zizania*, *Typha*, *Polygonum*, *Leersia*, *Ipomea*, and *Oryza rufipogon* as emergent species; *Eichhornia* is a problem species in the wetlands of Lumbini
- The remaining tree species in the area include groves of mango (*Mangifera indica*), tamarind (*Pithecellobium dulce*), kapok (*Bombax ceiba*), bel (*Aegle marmelos*), Areca nut (*Areca catechu*), and Sissoo.
- About 370,000 saplings of over 65 species were planted in the area, chiefly Sissoo (*Dalbergia sissoo*); patches of Sal trees (*Shorea robusta*) remain in the east and west monastic complex, presenting a fine example of planted Sal trees and avenues of Kadam (*Anthocephalus cadamba*) and bottle brush (*Callistemon* species) trees along the central canal (Suwal, RN 1999)
- Seventy-two vascular plants have been listed from the available records: 62 dicots, and 10 monocots (**Annex 1.9.20**)

Fauna

- There are four nesting sites of the Sarus crane in Lumbini Gardens: swamp areas adjacent to the Vietnam and Tara monasteries; north of the World Peace stupa (Lumbini Crane Sanctuary); east of the World Peace stupa (Lumbini Crane Sanctuary); and the circular pond in between Hokke Hotel and Sri Lankan Pilgrims' House
- Monitoring of the Sarus crane was initiated in



White-rumped vulture (*Gyps bengalensis*) wings, Lumbini

1988; there are about 100 birds in and around 10 km radius of the Gardens; a high count of 88 individual cranes were recorded during the non-breeding season, along with 25 nesting pairs in 2005

- Lumbini Gardens has become a shelter for the Blue bull antelopes (*Boselaphus tragocamelus*) which graze the surrounding fields

The Blue bulls started colonising Lumbini Gardens in the 1990s. By 1995, their numbers had risen to around 200. Local farmers affected by crop depredation are thought to have poisoned some of these animals between 1996 and 1998 and up to 70 dead antelopes were recorded from the Garden between November and December 1997. The 1997 cold wave that hit the Terai was also contributory to the high death toll among cranes. Five antelopes were translocated to Kusum forest area in Banke district in 1998 with the support of the National Trust for Nature Conservation. Recent records in 2005 indicate the presence of around 50 of these animals in the area.

- Bird species symbolic of the area are the Sarus crane, Large grey-babbler, Rufous-tailed lark, Slender-billed vulture, and Red-headed vulture
- Current checklists include 26 mammal, 207 bird, 39 herpeto and 44 fish species (**Annex 2.30**)

Achievements

- The Lumbini Crane Conservation Centre (LCCC) is a leading environmental organisation involved in the Lumbini development area (LDA). Under a lease agreement between Lumbini Development Trust and the International Crane Foundation in December 1994, LCCC is managing the Lumbini Sarus Crane Sanctuary in a 100 ha land leased for 50 years in the northern block of LDA
- The major activities of LCCC are as follows:
 - Annual counting of Sarus cranes using the roadside survey method since 1988; capacity building of local youths in conservation issues
 - Seasonal survey of vultures and storks using roadside bird survey and sample area survey since 1994; capacity building of local youths in conservation issues
 - Establishment of wetlands in five plots of six ha each; construction of an artesian well, introduction of wild rice broadcast sowing (60 kg of seeds, 12 ha), creation of fenced tree plantation of 3,000 saplings of 22 species in a four ha by 2005
 - Construction of an 8m high watch tower of reinforced cement concrete, 3m by 3m in an area on the south-east corner of the Peace stupa
 - Formation of six users groups with an average of 11 members per group; A total of 70 members represent six settlements in Lumbini, Khudabagar, and Tenuhawa VDCs (Sources: Suwal and Joshi 2003, and Hari Sharan Nepali 'Kazi' September 2005)
- A major environmental undertaking of Lumbini Development Trust and its predecessor, Lumbini Development Committee, is the massive reforestation of the area in the 1970s
- At present, over 100 nursery staff maintain the flowerbeds, gardens, tree nursery, and plantation area; sweepers and cleaners clean the office premises
- The other two major organisations involved in the environmental management of LDA are the Tourism for Rural Poverty Alleviation Project (TRPAP), and the IUCN - the World Conservation Union
- The four major activities promoted by TRPAP are school tree plantation, garbage management, biogas promotion, and district-level participatory tourism development and management planning
- During the five years from 1995 to 1999, IUCN launched a series of conservation activities including the following:
 - Construction of a 1m high and 30m long earthen dike along the Harahawa River; this was later replaced by a 1.5m high brick stone and concrete dam 40m in length, 2m in breadth
 - A tree nursery at Parsa for plantation in wetland and grassland areas
 - Plantation of *Sachharum bengalensis* and over 1,200 saplings of native trees
 - Creation of nature trails and resting places
 - Successful tissue culture of the symbolic Maya Devi Temple Peepal tree (*Ficus religiosa*)

In 2006, the World Heritage Committee

- Endorsed the recommendations of the reactive monitoring mission jointly undertaken by the International Council on Monuments and Sites (ICOMOS) and the World Heritage Centre in November 2005
- Commended the State Party (signatory government, the Government of Nepal) for thorough and action-oriented response to the mission recommendations as well as for the consultative measures undertaken
- Requested the State Party to implement the recommendations of the reactive monitoring mission, and particularly to:
 - Develop an effective management plan
 - Refrain from beginning new activities in Lumbini Gardens prior to completion of the management plan
 - Implement corrective measures on the Maya Devi Temple as indicated in the mission report
 - Survey and monitor ground water levels and movements under and adjacent to the Maya Devi Temple as well as the marker stone maintained *in situ* under the temple to ensure the long-term protection of archaeological remains of such significance
 - Develop non-destructive archaeological strategies to ensure long-term conservation of the vast excavated and unexcavated areas of archaeological significance in and around the property through adequate documentation and monitoring
 - Invite the international community to provide technical and financial support to assist the Government of Nepal in these activities

Chitwan National Park

Background

WHS Number 284 and

WDPA site code: 10905

Location

Located in the Rapti Dun Valley, central Nepal, and spread over the districts of Nawalparasi, Chitwan, and Makawanpur; boundaries extend 78 km eastward from the Daune Hills on the west bank of the Narayani River to the Hasta and Dhoram rivers; the Park shares natural boundaries with the Narayani and Rapti rivers to the

north and the Panchnad and Reu rivers and a forest road to the south (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 20' 32" to 27° 41' 23"	83° 52' 40" to 84° 44' 34"	110 to 850

Area

The area of Chitwan National Park was initially only 544 km² in 1973; it was later extended to 932 km² in 1977; Recent data indicate that the CNP area encompasses 1,182 km², which is larger by 250 km² than the 932 km² stated in previous calculations of the area.

Description

Chitwan National Park was inscribed as the 284th World Heritage Site by the WHC's 8th session on 2 November 1984 on the basis of criteria (vii), (ix) and (x). The decision of the 8th Session highlights a potential challenge to the Park, and a related precondition thereof:

"The Committee noted that there was only a remote possibility that the proposed pulp mills will be constructed on the Narayani River but requested that the Nepalese authorities keep it informed of any developments in this respect which could affect the Park."

Significance

The committee noted:

"At the foot of the Himalayas, Chitwan is one of the few undisturbed areas of the Terai region which formerly extended over the foothills of India and Nepal, with its very rich flora and fauna. One of the last populations of single-horned Asiatic rhinoceros live in the Park, which is also among the last refuges for the Bengal tiger."

The following observations were made at the time of nomination in 1984:

- Chitwan is the largest and least disturbed examples of natural Sal hill forests and associated communities of the Terai
- The Park is managed to a high standard with professional staff and armed guards
- Collection of thatch in the reserve is controlled and not seen as having a negative impact
- The National Park office addresses the issue of crop damage by wildlife through education and awareness programmes

- Tourism provides a significant economic justification for the Park and facilities developed
- The only major threat to the ecosystem is from the proposed paper/pulp mill upstream along the Narayani River
- The Park's western border is recommended to be extended

Achievements

- DNPWC and NTNC, with the cooperation of UNESCO, IUCN, and the Wildlife Institute of India, conducted a planning workshop titled, 'Enhancing Our Heritage for Monitoring and Managing the Success in World Natural Heritage Sites' on 27-29 November 2001
- DNPWC, with the cooperation of IUCN Nepal, submitted a periodic report as required by Article 29 of the World Heritage Convention in December 2002
- Following the decision of WHC's 26th session, and the invitation of the the Government of Nepal, IUCN carried out a monitoring mission to the site on 16-20 December 2002
- In line with the decisions of the WHC's 26th session held in Suzhou in 2004, DNPWC that year devised a system of controls on the use of the Kasara Bridge, and the system of associated roads to minimise the negative impacts
- Nepal Nature dot Com in cooperation with DNPWC, IUCN, and WWF, carried out a series of observations in CNP and its buffer zone to explore practical solutions to control invasive plants in 2004-2006

Kathmandu Valley Background

WHS Number 121 and
WDPA site code 900068

Location

The central region of Nepal, Kathmandu Valley is the political and administrative capital of the country; the valley is divided into the three districts: Bhaktapur, Kathmandu, and Lalitpur (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 32' 13" - 27° 49' 10"	85° 11' 31" - 85° 31' 38"	1330-1350

Description

The Kathmandu Valley was inscribed as the 121st World Heritage Site in 1979 by the WHC's 3rd session based on criteria (iii), (iv) and (vi) for World Heritage sites. At the crossroads of the great civilisations of Asia, Kathmandu Valley has seven groups of Hindu and Buddhist monuments as well as three residential and palace areas of the historical cities of Kathmandu, Patan, and Bhaktapur, and illustrates Nepali art in its prime.

The exceptional architectural design of Kathmandu, Patan, and Bhaktapur is gradually disappearing, giving way to uncontrolled urban development. In 2003, upon examination of the World Heritage Centre and Advisory Bodies mission report and assessment of the loss of World Heritage values in the Kathmandu Valley, the WHC at its 28th session in 2004 reflected whether or not to delete the property from the World Heritage list.

Kathmandu Valley is bowl shaped, with rivers flowing towards the centre and merging with the Bagmati River, which drains out through the Chobar Gorge located to the southwest. It is an oval shaped, flat-bottomed 1350m long basin with inadequate ventilation. Valley cross-section is about 20 km from north to south, and 30 km from east to west. The highest hills surrounding the Valley is Phulchoki (2785m) in the southeast, Shivapuri (2713m) in the north, Chandragiri (2250m) in the southwest, and Nagarjun (2100m) in the western corner. The surrounding hills are covered with shrubs at higher altitudes, with slightly to moderately dense forests in some places.

According to the Tree Improvement and Silvicultural Improvement Project map (2001), the Valley and its surroundings contain six major types of forests. The hilltops are covered with Oak and Blue-pine forests; the lower hills and valley bottom are covered with Chir pine, *Schima*, *Castanopsis*, and other broadleaved forests as follows:

- 4131 - Temperate Mountain Oak forest
- 4221 - Mixed Blue Pine-Oak forest
- 4231 - Lower Temperate Oak forest
- 4235 - East Himalayan Oak-Laurel forest
- 5021 - Chir Pine and Broadleaved forest
- 5033 - *Schima*- *Castanopsis* forest

Kathmandu Valley is known for floral and faunal explorations initiated as early as 1793

(Boxes 6 and 7). A total of 9,512 species of birds have been recorded in the Valley including specimens documented by Brian Houghton Hodgson. This is one of the largest single collections of birds in Asia, and consists of 672 species, of which over 124 were previously unknown to science at the time of classification. Most of the specimens were collected from Kathmandu Valley and the encircling hills, since Hodgson's movement was restricted to the 518 km² of the Valley. His collections also included 903 specimens of mammals from 124 species, of which 87 were resident in Nepal and the remaining 37 from Tibet and India; and 84 reptiles, amphibians and fish, of which the great majority were from Nepal (Cocker, M and Inskipp, C. 1988).

Significance

Cultural heritage is illustrated by seven groups of monuments and buildings which display the full range of historic and artistic achievements for which Kathmandu Valley is

Box 7. History of Floral Explorations in Reference to the Kathmandu Valley

Francis Buchanan, later Hamilton (1802-03), and Nathaniel Wallich (1820-21), conducted scientific floral explorations in the valley. They discovered several species here that were then new to science. Similarly, Captain Lal Dhoj, and Khadananda Sharma carried out a botanical survey of east Nepal in the 1930s.

Institutional efforts in floral survey in Nepal were launched in 1960 by establishing the Department of Medicinal Plants under the Ministry of Forests and Soil Conservation. The adjoining areas of Shivapuri were covered in the Langtang-Birgunj cross-sectional vegetation survey conducted with the support of the Department in 1971 (Kanai, Shakya and Shrestha in Ohashi, H. ed. 1975).

There were notable works that resulted in compilation of local floras relevant to this location. They are:

- 1968 Notes on the Flora of Raj Nikunj (Gokarna forest)
- 1969 Flora of Phulchoki and Godawari
- 1974 Flora of Nagarjun
- 1984 Flora of Kathmandu valley

Source: Shakya, PR (compiler) *Flowering Plant Checklist: Shivapuri National Park*. Kathmandu: Nepal Nature dot Com 2005

Box 8. History of Ornithology in Reference to Kathmandu Valley

The history of ornithology in Nepal was initiated by WJ Kirkpatrick in 1793. Documentation of particular significance was first carried out by Brian Houghton Hodgson during his stay in Kathmandu between 1820 and 1843. Nepali artist Raj Man Singh is credited for the paintings of birds and animals for the scientific works of Hodgson. John Scully first described the specific status of birds in the Kathmandu valley in 1876-1877. These works were continued by Frank Bailey during 1935-38, and Dillon Ripley during 1947-49. Biswomany Biswas and Walter Koelz collected bird specimens in the Kathmandu valley in 1947. Desiree Proud published papers on birds from Gandak-Koshi, and the Kathmandu valley including from 1948-1961. HS Nepali 'Kazi' has been continuing focused study of birds since 1945 till today. Both Robert Flemings Senior, and and Robert Flemings Junior continued the research, and first published the Nepali bird book in 1976.

Source: Nepali, HS and Suwal, Rajendra (Compilers) *Bird Checklist: Shivapuri National Park 2005*

renown worldwide. The seven groups include the Durbar Squares of Hanuman Dhoka (Kathmandu), Patan and Bhaktapur; the Buddhist stupas of Swayambhu and Baudhanath; and the Hindu temples of Pashupati and Changunarayan.

Of the seven monumental zones, Swayambhu, Pashupati, and Changunarayan are located in natural settings with immense biodiversity. Other areas of natural significance in the Valley are Gokarna, Bajrabarahi, Ranibari, Sallaghari, Bansbari on the valley floor, and Suryavinayak, Nagarkot, Telkot, Shivapuri, Kakani, Nagarjun, Chandaragiri, Hatiban, Godavari and Phulchoki along the valley rim.

An estimated 550 species of birds are found inside Kathmandu Valley. Phulchoki, 20 km southeast of the Valley, alone is the home of 265 species; Godavari, at the bottom of Phulchoki hill, has a total of 100 species. Other sites inside the Valley are Nagarjun, Shivapuri and the wetlands along the banks of Bishnumati, Hanumante, Manohara, and Bagmati rivers, as well as lakes and ponds like Taudaha and Nagdaha.

Major wildlife species found in the forests and marginal lands of the Valley include the common leopard (*Panthera pardus*), wild boar (*Sus scrofa*), Himalayan black bear (*Ursus thibetanus*), pangolin (*Manis* species), Barking deer (*Muntiacus muntjak*), Ghoral (*Naemorhedus goral*), Chittal (*Axis axis*), Rhesus monkey (*Macaca mulatto*), Asamese monkey (*Macaca assamensis*), and Langur (*Semnopithecus entellus*).

Some significant bird species found in the Valley are the Slender-billed scimitar babbler (*Xiphirhynchus superciliosus*), White-gorgetted flycatcher (*Ficedula monileger*), Barred cuckoo-dove (*Macropygia unchall*), Oriental turtle dove (*Streptopelia orientalis*), Spotted dove (*Streptopelia chinensis*), Golden-throated barbet (*Megalaima fraklinii*), Peregrine falcon (*Falco peregrinus*), Dark kites (*Milvus migrans*), Dark-throated thrush (*Turdus ruficollis*), Scaly thrush (*Zoothera dauma*), Nepal kalij pheasant (*Lophura leucomelanos*), Golden oriole (*Oriolus oriolus*), Wedge-tailed green pigeon (*Treron sphenura*), Steppe eagle (*Aquila nipalensis*), Long-legged buzzard (*Buteo rufinus*), Speckled wood pigeon (*Columba hodgsonii*), Long-tailed broad billed (*Psarisomus dalhousiae*), Black tailed godwit (*Limosa limosa*), and dunlin (*Calidris alpina*).

Achievements

- The Department of Archeology gazetted the latest amendments to the monument zone boundaries in November 1998 (UNESCO 2004)
- The Pashupati Area Development Trust was established by an Act of Parliament with absolute authority towards the Pashupati Monument Zone. Community-level committees have been set up in most of the monument zones: the Federation of Swayambhu Management and Conservation, Bhouda Area Development and Conservation Committee, 'Bhouda 'Ghyang Guthi' (Trust), and Changunarayan Community Development Committee (UNESCO 2004)
- In 2006, the World Heritage Committee (WHC) approved the proposed modification to the boundaries of the seven monument zones in Kathmandu Valley as a minor modification in consideration that this reflects the remaining outstanding universal values justified for criteria (iii), (iv) and (vi) from the time of its inscription (UNESCO 2006)

- In 2006, WHC resolved to maintain the Kathmandu Valley on the List of World Heritage in Danger upon examination of the state of conservation reports of properties inscribed on the List of World Heritage in Danger (UNESCO 2006)

Swayambhu Monument Zone Background

WHS Number 121 and WDPA

Site code 900068

Location

The western fringe of the capital city of Kathmandu Valley (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 42' 42" – 27° 43' 04"	85° 17' 03" – 85° 17' 43"	86

Description

The monument zone, as gazette notified in 1978, delineates the entire hill sanctuary including the circumambulatory path as protected areas. This hill automatically became the type locality for 27 flowering species introduced to plant science by Francis Buchanan-Hamilton as early on as 1802. The monument zone, as defined in the nomination documents, repeats the delineation of the gazette notified monument zone.

Following earlier discussions about the identification of a buffer zone around the hill sanctuary, the Swayambhu Conservation Master Plan proposes to incorporate the square of Bhuinkhel into the monument zone. This will delineate a buffer zone extending 150m toward the north, and identify a special review zone with special height restrictions and design guidelines for new constructions (Sangachhe, SB 1997).

Significance

- The Swayambhu area is a type locality for 27 flowering plants discovered by Francis Buchanan-Hamilton in 1802-03. Of these species, most have disappeared from the type locality due to forest depletion, reforestation, and regeneration (Shrestha, TB 1992).
- The dominating tree species of the Swayambhu forests are primarily pine (*Pinus roxburghii*), and chilaune (*Schima wallichii*) *Pyrus pashia* (Indian wild pear) forests are also being identified.

- Records of 109 vascular plants: six gymnosperms, 98 dicots, and five monocots (**Annex 1.9.21**)
- Bird species symbolic of the Swayambhu hillock are the Peregrine falcon (*Falco peregrinus*), Dark kites (*Milvus migrans*), Dark-throated thrush (*Turdus ruficollis*), and Spotted dove (*Streptopelia chinensis*)
- Of the total 64 species of birds reported from this area, 49 are resident birds, three migrants, ten visitors (eight summer visitors, and two winter visitors), and one is resident and winter visitor, the (common kestrel, (*Falco tinnunculus*)
- Three species of birds that are under NRDB Susceptible category are the Slaty-headed parakeet (*Psittacula himalayana*), Rose-ring parakeet (*Psittacula krameri*), and Spotted owl (*Athene brama*); the Slaty-headed parakeet (*Psittacula himalayana*) is included in CITES category II, and the Cattle egret (*Bubulcus ibis*) in CITES category III
- Swayambhu Hill is popularly known as 'Monkey Hill' among tourists for the presence of around 300 Rhesus macaques (*Macaca mulatta*) (Johnson et al. 1988). The macaques sampled from Swayambhu area are seropositive for antibodies to the measles virus (Johnes-Engel et al. 2004).
- Current checklists include species of six mammals and 64 birds (**Annex 2.31**). Of them, the Indian palm-squirrel (*Funambulus palmarum*) was introduced in 1990.

Achievements

- The most significant achievement of the area is the establishment of the Natural History Museum of Nepal in 1975.
- Mr Hari Sharan Nepal Kazi presented nearly 900 specimens of over 650 species of birds in Nepal, and a unique specimen of a two-headed rat snake for the establishment of the museum (Nepali HS 'Kazi' 2006). Later, Fleming, RL Jr. and others also presented bird specimens to the museum .
- The Museum houses an estimated 55,000 biological specimens: over 40,000 zoological specimens (invertebrates and vertebrates), over 9,000 botanical specimens (flowering and nonflowering plants), 100 skeletons, some skins, fossils, rocks, and minerals, plastic and clay models, and wildlife trophies (Shah, KB 2005)
- The Museum is linked with Tribhuvan University's Institute of Science and

Technology; it serves as the CITES scientific authority for fauna in Nepal.

- A Swayambhu Environment Garden (1 ha) has been established under the aegis of the Natural History Museum. The garden consists of 31 species of medicinal plants from various parts of Nepal (**Annex**) (CENEED 2005).
- Monoculture plantation of pine was initiated in 1959 on the southwestern slope of the hill, and later also on the south and southeast slopes.
- Soil conservation activities were also initiated in 1977 to safeguard the slopes from landslides.
- Cleaning-up activities have been launched over the past several years by NGOs and volunteers.
- Recent attractions added to the area include recreation facilities

Pashupati Monument Zone Background

WHS Number 121 and
WDPA site code 900068

Location

Eastern fringe of the capital city of Kathmandu Valley beside the international airport (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 42' 15" – 27° 42' 55"	85° 20' 46" – 85° 22' 30"	1300-1337

Description

The monument zone, as defined in the World Heritage nomination documents, encloses an area which includes the ancient Newar settlement of Pashupati/Deopatan, and Mrigasthali forest, with the sanctuaries of Guhyeswari, Visvarupa, and Gorakhnath. The northern boundary is formed by the Bagmati River towards the west, including the temple of Rajajesvari but excluding the ritual forest of Bhandarkhal. This monument zone has been gazette notified in accordance with the Pashupati Area Development Trust Act. The boundary lines of the Pashupati development area have been redefined and cover the area of the World Heritage nomination document of 1979 (Sangachhe, SB 1997).

Significance

- Stretching across both banks of the Bagmati River, the area consists of 50.27 ha of forests distributed in three main plots, namely, Shleshmantak (Candy fruit *Coerespondias axilaris*) in the eastern part, Bhandarkhal in the western part, and Umakund and Bankali in the central part. These forests are also type locality for early botanical explorations in Nepal.
- Seventy-four vascular plants have been listed from available records: three gymnosperms, 35 dicots, and 36 monocots (**Annex 1.9.22**)
- The area is well known for a sizeable population (200) of Rhesus macaque (*Macaca mulatta*).
- Bird species symbolic of the area are the Steppe eagle, Long-legged buzzard, Speckled wood pigeon, Oriental turtle dove, and Scaly thrush.
- Current checklists include nine mammals and 63 birds (**Annex 2.32**).

Achievements

- Following the memorandum of understanding signed between Nepal Trust for Nature Conservation (NTNC) and the Pashupati Area Development Trust (PADT) in August 2004, 32 ungulate species have been translocated from NTNC Central Zoo to the newly developed Mrigabatika within the Pashupati Development Area. Of the total numbers, 23 are female and nine are male. Translocated species consist of the Barking deer, Spotted deer, and blackbuck. NTNC Central Zoo provided technical assistance for the animal translocation, while the financial cost of the translocation was borne by PADT. Prior to the translocation, a two-week animal care training programme was organised at the Central Zoo for four PADT staff assigned to look after the translocated animals (KMTNC 2005).
- The Guheshwori wastewater treatment plant (5ha) located at the banks of the Bagmati River on the northeastern part of the Pashupati area consists mainly of grit chambers for screening, an aeration tank with activated sludge, and a settling tank. It treats the wastewater generated by households, industries, and other institutions in Gokarna, Chabahil, Bhoudda, and Jorpati (KMC 2002).

Changunarayan Monument Zone

Background

WHS Number 121 and
WDPA site code 900068

Location

The northeastern part of Kathmandu Valley, about 10 km north of Bhaktapur City, and towering over the international airport (**Annex 3**)

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 42' 30''- 27° 43' 10''	85° 25' 14''- 85° 25' 50''	86

Description

One of the oldest temples in Kathmandu Valley, Changunarayan Temple is located near Changu village. The temple is believed to have been constructed in the 3rd century. Changunarayan is the name of the Hindu diety, Lord Vishnu. A stone slab discovered in the vicinity of the temple dates to the 5th century, and is the oldest such stone inscription discovered in Nepal.

The monument zone, as defined in the World Heritage nomination documents of 1979, delineates an area that covers the entire hilltop of the sanctuary. The monument zone, as gazette-notified in 1984, is smaller. Recently the Kathmandu Valley Religious and Cultural Sites Development Project identified a boundary which is smaller than the area defined in the World Heritage nomination documents.

This hill sanctuary is of momentous historic and artistic significance and merits particular care and attention. The temple precinct and the adjoining village are still largely untouched by major changes and encroachments, but recent work to improve the approach through repair and maintenance has included plans for a larger parking lot with shopping facilities near the temple vicinity. Drainage remains another major challenge, and measures need to be taken to prevent contamination of the pond at the entrance of the village. Additions to the temple infrastructure have been controlled by conditions that any additional paving in the temple precinct itself must comply with and continue the original design (Sangachhe, SB 1997).

Significance

- Changunarayan hillock is renowned for the native Champ tree (*Michelia champaca*), from which the local name 'Changu' is derived. Some Champ trees found in the area date back to 100 years old.
- The natural forests are composed of *Schima wallichii*, *Engelhardia spicata*, *Castanopsis tribuloides*, *Alnus nepalensis*, *Rhododendron arboretum*, and *Michelia champaca*. The reforested forest is dominated by pine.
- Records of 21 vascular plants: of which one is gymnosperms, 16 are dicots, and four are monocots (**Annex 1.9.23**)
- Bird species symbolic of the area include the Nepal kalij pheasant, Peregrine falcon, Golden oriole, and Wedge-tailed green pigeon.
- Current checklists include seven mammals and 51 birds (**Annex 2.33**).

Achievements

- The Changunarayan Community Forest User Group manages the 47 ha forest area, of which natural forests of *Schima wallichii* cover 21.25 ha, and pine plantations 15 ha. The user group has also introduced cash crops such as Amriso (*Thaysanolaena maxima*), and cardamom (*Amomum subulatum*) (Changu CFUG 2002).
- Major conservation achievements include plantation of pine and other tree species such as bamboo (*Dendrocalmus species*), Champ (*Michelia champaca*), candy fruit (*Choerospondias axillaris*), and Alder (*Alnus nepalensis*).
- A series of 11 check dams were constructed in 2000 through the joint efforts of the Nepal Heritage Society, the Department of Soil Conservation and Watershed Management, the District Development Committee of Bhaktapur, local residents, and others, to safeguard the hillock from landslides (NHS 2000). A follow up enrichment plantation was also launched in 2006.
- Cleaning-up campaigns, tree tagging, other environmental activities were undertaken by volunteers and local residents in 2001 (JUSAN 2001, and CMZ Management Plan 2001).

Sagarmatha National Park Background

WHS Number 120 and WDPA

Site code: 2007

Location

Lies in Solukhumbu district in the north-eastern region of Nepal; the Park encompasses the upper catchments of the Dudh Koshi River system, which is fan-shaped and forms a distinct geographical unit enclosed on all sides by high mountain ranges; the northern boundary is defined by the main divide of the Great Himalayan Range, which follows the international border with the Tibetan Autonomous Region of China. In the south, the boundary extends almost as far as Monjo on the Dudh Koshi. The 63 settlements within the park are technically excluded as enclaves (**Annex 3**)

Districts

Solukhumbu District of the Sagarmatha Zone

Coordinates

Latitude (North)	Longitude (East)	Altitude (metre)
27° 46' 19" – 27° 06' 45"	86° 30' 53" – 86° 99' 08"	2,845-8,848

Significance

Criteria (vii)

Description

When Sagarmatha National Park (SNP) was inscribed as the 120th World Heritage site by the 3rd session of the World Heritage Committee on 22-26 October 1979, the following remarks were made:

The Sagarmatha is an exceptional area with dramatic mountains, glaciers, and deep valleys dominated by Mount Everest, the highest peak in the world (8,848m). Several rare species, such as the snow leopard and the lesser panda, are found in the Park. The presence of the Sherpas, with their unique culture, adds further interest to this site.

The following observations were also made at the time of nomination:

- Without question, Sagarmatha National Park fills the requirements of C(10) iii "superlative natural phenomena of exceptional natural beauty"

- The area is under professional management with a master plan.
- There are approximately 2,500 Sherpas living within the Park.
- There are six altitudinal vegetation classes in the Park, from oak forest at lower elevations, to lichens and mosses at highest elevations
- The Himalayan zone provides an effective barrier between the Palearctic realm and the Indomalayan realm
- The primary challenge at hand is excessive deforestation

Achievements

Upon discussion with the Government of Nepal, IUCN carried out a monitoring mission to the Sagarmatha National Park and World Heritage site on 21-26 December 2002. Along with other observations, the mission supported the Government of Nepal's intention to nominate an extension to the World Heritage site to include the adjacent Makalu Barun National Park. IUCN also noted the potential establishment of a transboundary World Heritage site with the Chinese side of Sagarmatha (Mt Everest).

As informed by Ministry of Culture, Tourism and Civil Aviation (MOCTCA) to the IUCN mission in December 2002, the Syangboche airstrip extension plan had been put on hold,

and MOCTCA agreed not proceed with the development of the airstrip without DNPWC approval.

In 2004, the WHC:

- Commended the GoN for taking the necessary action to delay the construction of the Syangboche airstrip project, and to remove the equipment and construction materials brought into the Park for the project;
- Requested the State Party to reinforce cooperation with local stakeholders;

In 2006, the World Heritage Committee:

- noted with concern the findings of the joint fact-finding mission of the Department of National Parks and Wildlife Conservation, IUCN-Nepal and WWF-Nepal in relation to the development of the Kongde View Resort within the World Heritage property: the potential negative impacts of this development on the integrity of the property, and the lack of adequate consultation; and
- requested the GoN to submit, at the latest before February 1, 2007, to the World Heritage Centre a report on the outcomes of the court case and the steps it plans to take in relation to the Kongde View Resort in the Sagarmatha National Park for examination by the Committee at its 31st session in 2007.



Dependra Tandukar

The Peacock (*Pavo cristatus*)