

United Nations Environment Programme World Conservation Monitoring Centre



World Heritage Sites

Protected Areas and World Heritage





GÖREME NATIONAL PARK AND THE ROCK SITES OF CAPPODOCIA TURKEY

In a spectacular landscape of pillars of tuff sculpted by erosion, Göreme valley and its surroundings contain troglodyte villages, sanctuaries and caves carved from the rock that have been lived in for millennia. The chapels provide unique and relatively well-preserved examples of post-lconoclastic Byzantine sacred art.

COUNTRY

Turkey

NAME

Göreme National Park and the Rock Sites of Cappodocia

MIXED NATURAL & CULTURAL SERIAL WORLD HERITAGE SITE

1985: Inscribed on the World Heritage List under Natural criterion vii and Cultural criteria i, ii and v.

STATEMENT OF OUTSTANDING UNIVERSAL VALUE [pending]

IUCN MANAGEMENT CATEGORY

V Protected landscape

BIOGEOGRAPHICAL PROVINCE

Anatolian-Iranian Desert (2.20.08)

GEOGRAPHICAL LOCATION

In central Anatolia, between Nevsehir city and the towns of Avanos and Urgüp 60 km west of Kayseri, centred at 38°40'N by 34°51'E.

DATES AND HISTORY OF ESTABLISHMENT

- 1968: Proposals and draft management plans drawn up by the General Directorate of Forestry and National Parks;
- 1976: Göreme Valley and surroundings protected by Decree A-69 of the High Council of Monuments and Historic Sites under the Cappadocia General Conservation Plan which required the preparation of detailed development plans;
- 1983: The protection of the site further assured under the Cultural and Natural Assets Act 2863;
- 1986: Established as a Historical National Park under National Parks Law 2873.

LAND TENURE

Most of the core of the park is in federal ownership, the rest is privately owned. The Park is managed by the General Directorate of Cultural Heritage and Museums of the Ministry of Culture and Tourism.

AREA

9,576 ha

ALTITUDE

~1,000m to 1,325m (Akdag)

PHYSICAL FEATURES

The valley of pinnacles at Göreme is carved from a broad 1,000m-high plateau of lava-covered tuff, a fine grained rock of consolidated volcanic ash, which has been deeply eroded into a surreal landscape of hundreds of cones and lava-capped pillars. It lies 50 km from the snow-covered volcanic peak of Erciyas Dag which erupted two million years ago but is now almost dormant although occasional earthquakes create cracks in the easily eroded tuff. Eruptions in the late Miocene to Pliocene of the Erciyas Dag (3,917m), Hasan Dag (3.268m) and Akdag (1,325m) volcanoes covered an area of about 11,000 sq. km with layers of 400m-thick pyroclastic ignimbrite, which solidified into a grey, buff-yellow and pinkish andesitic tuff. These layers were later covered by layers of dark-toned andesitic and basaltic lavas in the late Pliocene and early Pleistocene 2 to 1 million years ago. This deep soft homogenous underlying layer of tuff was weathered by wind, water and temperature change into a spectacular landscape of smooth cones capped by a layer of lava. Typical shapes are pinnacles, pillars, columns and towers, mushrooms and cones, obelisks and needles, sometimes 40m high, each under its protective topknot of basalt (G. Drucker, pers. obs., 1985). These fantastic sculptures have been further pockmarked and honeycombed by warrens of man-made caves, living quarters and underground churches of which there are hundreds in central Cappadocia. The valley floors between the steep eroded slopes and badlands are fertile farmland.

CLIMATE

This is a continental Anatolian climate with hot dry summers and cold winters with severe frosts and prolonged snow cover. The average annual temperatures range from 0.5°C in January to 23°C in July. Rainfall is low, averaging 360mm per year. There are intermittent snowfalls in January and February averaging 25mm per year (Göreme Milli Park Mudürlügü (GMPM), pers. comm., 1995).

VEGETATION

The surrounding landscape is largely agricultural, dominated by arable farming, vineyards and orchards in the valley floors. Species found in the Park include *Thesium scabriflorum, Ferula halophila, Acantholimon saxifragiforme, Onobrychis elata, Phryna ortegioides, Reseda armena*, and *Silene splendens*. In addition, some 110 endemic species such as *Acanthus hirsutus, Alkanna orientalis, Leontodon oxylepis*, and *Dianthus zederbauriana* occur in the Park (Vural & Kol, 1992).

FAUNA

Mammal species include grey wolf *Canis lupus*, red fox *Vulpes vulpes*, European otter *Lutra lutra*, Eurasian badger *Meles meles*, beech martin *Martes foina* and brown hare *Lepus europeus*. Avifauna recorded in the park includes rough-legged buzzard *Buteo lagopus*, rock partridge *Alectoris graeca*, common quail *Coturnix coturnix*, rock dove *Columba livia* and western rock nuthatch *Sitta neumayer*.

CONSERVATION VALUE

The Göreme Valley and its surroundings is an area of spectacular landscape entirely sculpted by erosion. The sanctuaries cut into the rock contain irreplaceable evidence of Byzantine art from the post-iconoclastic period. Cave houses, troglodyte villages and underground towns are a unique ancient tradition of the area. The Park lies in a Conservation International-designated Conservation Hotspot, a WWF Global 200 Freshwater Eco-region and a WWF/IUCN Centre of Plant Diversity.

CULTURAL HERITAGE

This area has been inhabited since Hittite times when the first caves were excavated and both then, and under Assyrian and Roman rule the nearby town now called Kayseri was an important provincial centre (Caesaria Mazaca). Being on the boundary between the ancient Greek and Persian empires, and later between the Byzantine Greeks and their Persian, Ummayad, Abbasid, Seljuk and Ottoman adversaries, hidden sanctuaries were often needed which the rugged landscape and easily carved rock of central Cappadocia provided underground. The area was initially a sanctuary for Christian anchorites fleeing Roman persecution which became a monastic community in the 4th century. For the next nine centuries, an urbanised landscape developed which from the cliffs and spectacular pillars or 'fairy chimneys' - of tuff, carved living quarters, stables, storerooms and places of worship. At nearby Kaykmakli and Derinkuyu a network of deep caves and tunnels in the rock was excavated to form underground refuges for hundreds of people which were expanded during the first hostile invasions in the 7th century, to entire multi-storey underground communities. The fresco painting in the

chapels which began in the 7th century by monks too remote to be much affected by Iconoclasm are colorful rare testimony to the civilization of a province of the Byzantine Empire which persisted even into Ottoman times but, except for these remnants, has since disappeared. Excellent examples of post-Iconoclastic sacred art have been preserved by the dark and dry conditions underground, and several have been carefully restored. There are many other similar classified monuments in the valley outside the Park (G.Drucker, pers. obs., 1985) and in the surrounding countryside.

LOCAL HUMAN POPULATION

The Park and surrounding area includes various towns, villages and hamlets. The two villages of Avcilar (Göreme) and Çavusin and approximately 20,000 people live within the Park but are not permitted to live in the core zone, and some 65,000 live in the surrounding community. The population is traditionally dependent upon agriculture, pottery and weaving of rugs and carpets. In the 1980s tourism became one of the dominant economies of the region (GMPM, pers. comm., 1995).

VISITORS AND VISITOR FACILITIES

The Park received 593,000 visitors in 1994. Of these, 14% were local people and the remainder foreign visitors, whose average length of stay was two days (GMPM pers. comm., 1995). The main centre for visiting the National Park is at the town of Göreme where there are many facilities including interpretative trails, hotels and camping grounds, information services, restaurants, shops and transport. There are also three visitor centres outside the Park. A few kilometres from Göreme is the Open Air Museum of 30 rock-cut 9th-11th century Byzantine churches and chapels. There are also several sites of similar character to Göreme beyond the Park around the local towns of Nevsehir, Avanos and Urgüp which also have many facilities for tourists. Central Cappadocia is the centre for hundreds of such churches and dozens of underground settlements.

SCIENTIFIC RESEARCH AND FACILITIES

The carved churches of Cappadocia were first systematically studied by G. de Jerphanion between 1907 and 1912, but it was only in 1925 that they became well known through the publication of the first volume of his monumental four-volume work on them which he completed in 1942. Since 1973 a series of studies of the subject has been carried out in collaboration between ICCROM (the International Centre for the Study of the Preservation and Restoration of Cultural Properties), UNESCO and UNDP. Architectural photogrammetric studies have been made by the Middle East University (METU) in Ankara and a series of geological and hydrogeological studies by consultants for UNESCO / ICCROM and UNDP. Work on the restoration of the remarkable murals of the Tokali Church was completed with the help of specialists from ICCROM. The work at Tokali was completed in 1980 and work begun on the well-preserved frescos of the Karanlik church in 1981. Two other major projects were the 30 rock-cut chapels and churches of the Open Air Museum and the restoration of the Kayakapi chapel. This conservation has been carried out by METU with UNESCO/ICCROM and UNDP consultants. A number of the unit's staff have received training at ICCROM in Rome. Studies have also been made locally on earth-sheltered housing, traditional water management and modern tourism.

MANAGEMENT

The area was established as a historical National Park in order to protect and develop the national and cultural elements of the area for scientific and aesthetic reasons. The General Directorate of Cultural Heritage and Museums of the Ministry of Culture and Tourism and the National Park Department of the Ministry of Agriculture, Forestry and Rural Affairs, are jointly responsible for the site (Karakurum, pers. comm., 1987). But management of Göreme depends greatly on the maintenance by the indigenous population of their traditional agriculture and lifestyles. The present condition of the site is good. The master plan proposes only nominal disturbance of the traditional pattern of life of the present day park inhabitants. The protection of areas identified as important is assured by land-use zoning, by restrictions and regulations on building and by the preservation of traditional values. The strictly protected Zone 1 is the core of the Park and includes within its boundary the principal antiquities and elements requiring protection. Two villages, Avcilar and Çavusin are part of this zone. Zone 2 forms a buffer zone around Zone 1: all land-uses including agriculture are permitted but are regulated within the framework of existing law (Karakurum, pers. comm., 1987).

MANAGEMENT CONSTRAINTS

The chief management problem is the serious damage being caused to the ancient churches and paintings by erosion and staining by water. Wind erosion and earthquakes still seriously damage many

of the chapels. Collapsing walls and rockfalls are not uncommon in the remoter rock dwellings of the Park (Karakurum, pers. comm., 1987). The heavy pressure of mass tourism is also a threat.

STAFF

Staff are provided by the Ministry of Culture and the Governorship of Nevsehir (GMPM, pers. comm., 1995).

BUDGET

US\$10,000 (GMPM, pers. comm., 1995).

LOCAL ADDRESSES

Göreme Milli Parklar Mudürlügü, Hükümet Konagi, 50100 Nevsehir, Turkey

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REFERENCES

The principal source for the above information was the original nomination for World Heritage status.

Aysil, T. & Gul, A. (1998). *Göreme, Cappadocia*. UNESCO Programmes & Publications. UNESCO, Paris 72 pp.

Baggley, G.*et al.* (1968). *A Master Plan for the Preservation and Use of Göreme National Park.* Ankara, Turkey.

Bowen, R., Lizzi, F. & Verite, J. (1983). *Draft Report for the Structural Conservation of Rock-hewn Churches of Göreme in Cappadocia*. ICCROM/ UNESCO/UNDP, Rome.

Brown, R. (1987). Geology and the conservation of antique monuments in Turkey. *Environmental Geology* 9 (2): 71-84.

----- (1990). The future of the past at Göreme in Turkey. *Environmental Geology and Water Science* 16 (1): 35-41.

Burri, E. & Petitti, M. (2005). Run-off drainage, groundwater exploitation and irrigation with underground channels in Cappadocia: Meskender Valley case study. *Journal of Cultural Heritage* 6 (2): 191-197.

General Directorate of National Parks and Wildlife (1980). *National Parks of Turkey*. Ministry of Forestry, General Directorate of National Parks and Wildlife, Ankara.

General Directorate of Antiquities and Museums (1985). *Göreme Historic National Park World Heritage Nomination*. Ministry of Culture and Tourism, Ankara.

Giovanni, Luciano (1971). Arts de Cappadocia. Edition Nagel, Geneva, Switzerland.

de Jerphanion, G. (1925-1942). *Une Nouvelle Province de l'Art Byzantin. Les Eglises Rupestres de Cappadoce*. Paul Geuthner, Paris. Republished Jolivet-Levy, C. (ed.) (2007). 4 volumes. Pindar Press, London and New York. 1,605 pp.

Mora, P. & Mora, L. (n.d.). La Conservation des Peintures Murales. ICCROM, Paris.

Orman Genel Müdürlügü (1987). *Göreme Historical National Park.* Milli Parklar Dairesi, Bakanligi, Ankara.

Schawartzbaum, P. (1978). Conservation of Churches in the Göreme Valley. ICCROM, Paris.

UNESCO (1985). Structural conservation of Göreme; Göreme, land of fairy chimneys. UNESCO 44 pp. [Contains illustrations, maps, plans.]

U.S. Agency for International Development (1968). *Göreme National Park. A Master Plan for Its Preservation and Use.* Report by the US Agency for International Development, US National Park Service Planning Team to Jordan.

Vural, M. & Kol, Ü. (1992). *The Flora of Göreme National Park*. University of Gazi/Ankara.

DATE

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