Convention concerning the Protection of the World Cultural and Natural Heritage

NOMINATION TO THE WORLD HERITAGE LIST

Name: YOSEMITE NATIONAL PARK

Identification No.: 308  Date received by W. Secretariat: 30.12.83

Contracting State Party having submitted the nomination of the property in accordance with the Convention: USA

Summary prepared by IUCN (March 1984) based on the original nomination submitted by USA. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION: State of California, USA.

2. JURIDICAL DATA:

Publicly owned land administered by the USNPS under the Department of the Interior. The legislative summary includes 16 Acts, Proclamations and Resolutions made on the Park. Yosemite Valley and the Mariposa Grove of giant sequoias have the distinction of being the first scenic natural area to have been set aside for public benefit and enjoyment (1864). Formal national park status was given in 1890.

3. IDENTIFICATION:

Yosemite National Park lies on the west slope of the central Sierra Nevada Mountains in the Sierra Cascade Biogeographical Province of North America. Total size is 3079 sq km. The area was previously heavily glaciated and although no glaciers are still existent in the park the marks of their passing are everywhere. Glacial action combined with the granitic bedrock has resulted in unique and pronounced landform features. These include distinctive polished dome structures as well as the related glacial features of hanging valleys, tarns, moraines, and U-shaped valleys. Monolithic granitic blocks such as Half Dome and the perpendicular wall of El Capitan are classic distinctive reflections of the geological history of the area. Elevations vary from 579 m to 3998 m. The park is known for its many waterfalls including the Yosemite Falls and Ribbon Falls, the third highest free-leaping fall in the world (491 m). There are two major rivers which begin in the park and 300 lakes.

There is considerable climatic variation with mean temperatures varying some 20° between valleys and mountains. Precipitation also varies from 1270-2653 mm. In Yosemite are found 5 of the 7 recognized life zones of the US. The variety of flora is reflected in the existence of 6 distinct vegetation zones which are governed by altitudinal variation. Notable are 3 groves of the giant sequoia tree and extensive alpine meadows. There are 1200 species of flowering plants along with various other ferns, bryophytes, and lichens. There is one endemic, 8 threatened or endangered species of plants (US Federal Register).
The park has 67 mammalian species of which 32 are rodents. There are 221 bird species, 18 reptiles, 10 amphibians, and 11 fish species of which 6 are endemic. One bird species (bald eagle) is endangered and one bird species (peregrine falcon) is listed as vulnerable in the IUCN/ICBP Red Data Book.

In late prehistoric and historic times Yosemite was occupied by two main tribes of north American Indians. There are 569 designated archeological sites within the park.

Four national forests surround the park and provide a buffer zone. A major highway bisects the park and allows easy access for visitation from major urban centres. The park received 2.7 million visitors in 1981. Intensive facility developments for tourism are located in the central Yosemite Valley portion of the park.

4. STATE OF PRESERVATION/CONSERVATION:

Much change has however occurred in the Yosemite landscape. Three species of animals are no longer found in the park (grey wolf, grizzly bear, and California Bighorn sheep). A few non-native species have been accidentally introduced (beaver, white-tailed ptarmigan). Suppression of natural fires and heavy stock and sheep grazing in the past has also altered the original vegetation. Construction of two dams in the park and development of facilities have also acted to modify the park ecosystems. Within park boundaries exist 727 ha of private inholdings.

Although portions of the park receive recreational use at peak periods that approach urban densities, 90% of the park is classified as wilderness zone where no development is permitted and access is provided by 1245 km of walking trails.

Yosemite has a comprehensive management plan completed in 1980 that addresses the above problems. The plan aims to significantly reduce visitor vehicle impacts by providing alternate transportation modes. Altered landscapes and vegetation are being restored through controls of grazing, exotic plant eradication and prescribed burning. The 1981 budget allotment was US$ 14.5 million.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The Yosemite National Park nomination as presented by the Government of the United States provides the following justification for designation as a World Heritage property:

a) Cultural property -- not applicable

b) Natural property

(i) Earth's evolutionary history. The park gives vivid reflection of the glacial period on the Pacific slope of the continent. The effects of the Ice Age on the granitic bedrock structure are striking and uniquely portrayed in the Yosemite area.

(ii) Exceptional natural beauty. The concentration of distinctive landscape features in the Yosemite valley offers scenery that attracts millions of visitors per year. The park contains 5 of the world's highest waterfalls, outstanding examples of granitic domes, deeply incised valleys, and groves of the giant sequoias as possibly the oldest (c. 2700 years) and largest living things on earth.
1. DOCUMENTATION

(i) Nomination form, maps, park publications
(ii) IUCN Data sheets
(iii) Consultations: Dr. J.A. Kennedy

2. COMPARISON WITH OTHER AREAS

It is difficult to find a comparable area to Yosemite in the Nearctic Realm. Many North American parks have remnant glaciers and post-glacial landscapes but almost all of these have volcanic, sedimentary, or metamorphic substrates where glacial features are quickly lost to erosion or buried under the present ice pack. No other area portrays the effects of the ice age on the underlying granitic domes as does Yosemite.

The two areas that come closest for comparison purposes are Kings Canyon and Sequoia National Parks, two contiguous parks 110 km south of Yosemite. All 3 parks are roughly comparable in alpine glacial terrain, elevation range, habitat and species diversity. Sequoia has the most superlative giant sequoias of the three and Kings Canyon has the highest canyon wall (2550 m) in North America. Neither park, however, can rival the scenic beauty of Yosemite with its unique concentration of cliffs, waterfalls, lakes, domes, and meadows.

3. INTEGRITY

Yosemite has clear and physically explicit boundaries. The upper reaches of the park follow the crest of the Sierra Nevada drainage divide, and the park encompasses the upper watersheds of two major rivers. The west boundary cuts across the terrain on arbitrary but manageable section lines.

The entire park is surrounded by four national forests, adjacent portions of which are designated wilderness areas, thereby providing important buffer functions.

The guiding document is a general management plan which consists of three sub-plans: natural resources; cultural resources; and visitor use, operations and development. The third sub-plan identifies the major threats and outlines measures to address them. The threats include excessive vehicle traffic, overcrowding, uneven distribution of use, inappropriate development and commercial services. Resolution of these issues is based on the Park Service receiving adequate funding and then modifying certain policies and laws. An estimated US$85 million budgetary support is needed to implement the plan.
There are also two threats to Yosemite from proposed dam developments in the Tuolumne Valley within the park (water supply for San Francisco) and for the Merced River outside the park that would affect park fisheries. World Heritage status would help to deflect or at least offer more mitigative measures for these proposals.

4. ADDITIONAL COMMENTS

It is difficult to discuss the values of Yosemite without reference to John Muir, the early naturalist who is considered the "father" of Yosemite and who wrote eloquently about the park. His various books on Yosemite represent classic statements in the development of the national parks concept and are still often quoted today.

Although it is generally accepted that Yellowstone was the first national park ever established, Yosemite was the first concrete implementation of the national park concept when, 8 years prior to Yellowstone's establishment, Yosemite Valley and the Mariposa Grove were collectively the first area ever set aside by a government "for public use, resort, and recreation" in perpetuity. Yosemite's natural beauty was the impetus, then, for the first implementation of the national park concept as we know it today.

Adding to Yosemite's cultural importance are the archeological features found in the area. The 569 sites designated to date including stratified 2000 year-old middens, provide a significant resource for the study of paleo-cultural ecology and environmental change in western North America.

5. EVALUATION

Yosemite National Park qualifies for World Heritage designation on criteria (i) and (ii). The Park provides a vivid reflection of the glacial period on the Pacific slope of the continent where the effects of the Ice Age on the granitic bedrock structure are unique in the world. Yosemite also qualifies under "exceptional natural beauty" with its combination of domes, granite walls, waterfalls, hanging valleys, giant sequoias, meadows, lakes, diversity of life zones and variety of species (criteria iii).

As suggested under point 4 above, the Park also may qualify as a cultural site under criteria 6 and should be evaluated by ICOMOS in this light.

6. RECOMMENDATIONS

Yosemite National Park should be inscribed on the World Heritage List. The National Park Service authorities should be encouraged by the Committee in their efforts to implement a series of conservation measures which would enhance the integrity of the site.