

UNITED STATES OF AMERICA-Redwood National Park

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NAME Redwood National Park

MANAGEMENT CATEGORY II (National Park)  
X (World Heritage Site; Criteria ii, iii)

BIOGEOGRAPHICAL PROVINCE 1.02.02 (Oregonian)

GEOGRAPHICAL LOCATION Humboldt and Del Norte counties, North California. Three California state parks are within the boundaries: Jedediah Smith, Del Norte Coast and Prairie Creek Redwoods. 41°04'-41°49'N and 123°53'-124°10'W

DATE AND HISTORY OF ESTABLISHMENT 2 October 1968, under Public Law 90-545, when three existing state parks were fused with the addition of about 11,340ha of privately owned land with 19,440ha added 27 March 1978. Inscribed on the World Heritage list in 1980. Comprises part of California Coastal Ranges Biosphere Reserve.

AREA 42,400ha

LAND TENURE 11,000ha state government ownership, 31,412ha federal ownership. Eventual transfer of state lands to national park is provided for by an enabling act.

ALTITUDE Sea level to 930m

PHYSICAL FEATURES The area transcends two distinctive physiographic environments: the coastline, and mountains of the Coast Range. The park's 55km coastline consists of steep, rocky cliffs broken by rolling slopes and broad sandy beaches. The adjacent coastal mountains encompass portions of major streams and ridges which trend north-west. Gently rounded summits contrast with steep slopes and deeply incised streams. Bedrock is primarily highly deformed Cretaceous deep water marine sandstones, siltstones and shales of the Franciscan assemblage. Lesser amounts of chert, volcanic greenstones and metamorphic rocks occur as blocks in belts of melange within the Franciscan sedimentary rocks. In a few areas the Franciscan rocks are overlain by a thin veneer of young Plio-Pleistocene shallow marine to fluvial sandstones, mudstones and conglomerates. Grogan Fault, along which flows much of the main channel of Redwood Creek, is a major structural feature within the park, separating well foliated meta-sedimentary schists and meta-basalts on the south-west of Redwood Creek from the unmetamorphosed sedimentary rocks of the Franciscan to the north-east. South Fork Fault cuts across the north-east corner of the park in the Little Bald Hills area east of Crescent City. The park boundary extends 0.4km seaward along the Pacific Ocean.

CLIMATE Annual precipitation is 2540mm, mainly occurring during winter,

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with coastal fog frequent during summer months.

**VEGETATION** The predominant vegetation type is coastal redwood forest with Sequoia sempervirens. There are 15,800ha of old growth redwood, 20,800ha are cut over and the balance (5,800ha) comprises other vegetation types. The redwoods are surviving remnants of the group of trees which were once found throughout many of the moist temperate regions of the world, but are now confined to the wet regions on the west coast of North America. The park contains the tallest known tree in the world at 112.1m. Trees in the regrowth forest range in age from 10 to 50 years and are the primary focus of the watershed rehabilitation programme. Other noteworthy species include: Douglas

fir Pseudotsuga menziesii, western hemlock Tsuga heterophylla, tan oak Lithocarpus densiflorus, grand fir Abies grandis, Sitka spruce Picea sitchensis, madrone Arbutus menziesii, big leaf maple, California laurel and bay Umbellularia californica, the best groves of which occur on the alluvial flats and shelves along larger streams. As the slope and dryness increase, the forest is superceded by grassy knolls and prairie vegetation. Minor associated plant communities include Jeffrey pine stands, chaparral, Oregon white oak forest, natural meadows and elements of the north coastal scrub ecosystem. The area also includes shrub, spruce forests and strand with intermixed freshwater marshes. Intertidal and marine plant communities occur off sandy and rocky beaches. Major influences on vegetation include long-term stand dynamics, exotic species, threats from upstream logging, fire, air pollution, forest diseases and visitor uses. Much of the vegetation is in various stages of succession and decades will pass before much of the vegetation will return to a pristine appearance.

**FAUNA** 75 species of mammals include Roosevelt elk Cervus elaphus roosevelti, now restricted to limited population centres, black-tailed deer Odocoileus hemionus, bobcat Lynx rufus, grey fox Urocyon cinereoargenteus, black bear Ursus americanus, river otter Lutra canadensis, beaver Castor canadensis, skunk, harbour seals Phoca vitulina, sea lion Zalophus californianus, and puma Felis concolor. Rich intertidal, marine and freshwater stream faunas are present. Freshwater marshes, ponds, and streams provide valuable nesting and feeding areas for several species of migratory waterfowl. Several offshore rocks in the area are important nesting sites for seabirds, including common murre Uria aalge, western gull Larus occidentalis and three species of cormorant Phalacrocorax spp. Threatened birds include the endangered (as listed by the USDI and State of California) brown pelican Pelecanus occidentalis, southern bald eagle Haliaeetus leucocephalus (E) and American peregrin falcon Falco peregrinus (V). The avifauna of the redwood region exceeds 200 recorded species. Fish include two sturgeon species, cut-throat trout, suckers, rainbow trout, steelhead, two salmon species, candlefish and sea lamprey. The intertidal zone contains 168 species of invertebrate. 15 of western North America's 22 salamander species are found in the area.

**CULTURAL HERITAGE** Archaeological surveys, test excavations, research and consultations conducted over the past twenty years have resulted in the recording of 50 prehistoric archaeological sites, 19 historic sites and at least 21 places of significance to local Indian communities (Eidsness,

1988). Of these, cultural resources listed or eligible for listing on the National Register of Historic Places include: three coastal archaeological sites, 26 inland archaeological sites listed as the Bald Hills Archaeological District, and three historic resources (a World War II radar site, the Redwood Highway and the Lyons homestead). The archaeological sites span 4,500 years and represent changing settlement and subsistence systems. Historic resources include examples of early trails, homestead and ranching, fishing, dairy, mining and logging industries, and military structure. Places of importance to contemporary Native Americans with traditional ties to park lands consist of villages, cemeteries, sacred/ceremonial sites and certain natural resources use areas (W.E. Ehorn, pers. comm., 1989) and the park authorities consult Native American Advisory Committees on the use of cultural and natural resources.

VISITORS AND VISITOR FACILITIES Nearly 700,000 people visit the park annually and enjoy campgrounds, nature, hiking, horseback and bicycle trails, picnic grounds, information centres and scenic drives (W.E. Ehorn, pers. comm., 1989). In addition to US nationals, Canadians account for 4-5% of visits and overseas visitors for 0.3-0.9%.

SCIENTIFIC RESEARCH AND FACILITIES Park and area research is being carried out by a park interdisciplinary team, supplemented by other federal and state agencies and several universities, notably Humboldt State University. The June 1989 bibliography of Redwood National Park publications (Anon., 1989) includes approximately 170 document titles, under the headings of technical reports, watershed rehabilitation and resources management, conference papers, geology, management reports and cultural resources. There are no facilities.

CONSERVATION MANAGEMENT The park's primary significance is the coastal redwood forest, which forms a unique and diverse resource. The redwood forests represent some 42% of the remaining old growth redwood stands, a small fragment of once extensive cover. Legal protection is total, but sport fishing is allowed. There is a 12,150ha buffer zone provided under Public Law No. 95-250. The principal National Park Service zoning classification comprises natural (31,400ha), historic and park development enclaves. The three state parks are zoned as Special Use (11,000ha) (W.E. Ehorn, pers. comm., 1989). Management objectives may be summarised as to: restore the natural ecosystems of the park; minimise human impacts; preserve historic and prehistoric features; eliminate non-conforming uses; provide reasonable and safe public access; provide visitors with an appreciation and understanding of park values; restrict visitor uses as necessary to fulfil resource protection objectives; maintain natural quality of visibility; and to protect visual resources and air quality related values of the park from impairment by pollution. A watershed rehabilitation programme has been implemented to return the downstream portion of Redwood Creek drainage basin within the park to a reasonable facsimile of its natural state. A 15-year land rehabilitation scheme has been set up to protect the tallest known trees in the world by restoring cut-over parklands. A general management plan, a resource management plan, environmental assessments and the watershed rehabilitation plan are published and commented upon by the public. These plans are updated when

needed and are basic documents for managing the park. However, a General Management Plan was required by US Congress in 1980. National Park Service administrative control over the three state parks, and other lands controlled by other government agencies or private interests, is either lacking, or qualified. Despite similar aims, management by both NPS and the California Department of Parks and Recreation leads to duplication of effort, dissimilar sign-posting, regulations, user fees and publicity which causes confusion amongst visitors (RNP, 1987).

MANAGEMENT PROBLEMS Much of the park has been logged, including almost all watershed upstream from the park and all remnant old growth stands outside the park will be cut during the next decade. Second growth harvests have begun on lands outside the park. Regional logging has been carried out on some of the world's most erodible soils. Other developments such as upstream logging, proposed offshore oil and gas development, proposed mining and subdivisions threaten park resources. Major storms in the Redwood Basin pose an unpredictable threat to this geomorphically unstable watershed (W.E. Ehorn, pers. comm., 1989). Exotic species are found throughout the park and in some instances may displace native and other non-native species. Some of these may be naturally eliminated as second growth stands mature (RNP, 1987).

STAFF 70 permanent and 80 seasonal employees, assigned as follows: 6 management, 15 administration, 33 maintenance, 16 protection, 27 interpretation, 29 resources management and 24 technical services

BUDGET US\$ 4,600,000 budgeted for fiscal year 1990

LOCAL PARK OR RESERVE ADMINISTRATION Superintendent, Redwood National Park, 1111 Second Street, Crescent City, California 95531

REFERENCES No single comprehensive publication has been prepared. The most complete compendium of park information exists in park planning documents and environmental compliance documents. Many technical and non-technical publications deal with specific resources of park-related issues. The park's legislative history has been well documented. New resource information is regularly published.

Agee, J.K. (1980). Issues and Impacts of Redwood National Park Expansion. Environmental Management 4(5): 407-23.

Anon. (1989). Bibliography of Redwood National Park publications. Unpublished. 23 pp.

Eidsness, J.P. (1988). A summary of cultural resources projects, Redwood National Park. Redwood National Park. Crescent City, California, USA.

Leydet, F. (1963). The last redwoods.

Rasp, R. (1989). Redwood National Park: the story behind the scenery. KC Publications. Las Vegas, Nevada, USA.

Redwood National Park (1987). Statement for management: revised February 1987. 62 pp.

Schrepfer, S.R. (1983). The fight to save the redwoods. The University of Wisconsin Press. Madison, Wisconsin, USA.

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