WORLD HERITAGE NOMINATION - IUCN SUMMARY

SOUTH WEST NEW ZEALAND WORLD HERITAGE AREA (TE WAHIPOUNAMU)

1. LOCATION

Comprises a nearly contiguous network of reserved land covering much of the south-west of the South Island, including four national parks (Fiordland, Mount Aspiring, Mount Cook and Westland), two nature reserves, three scientific reserves, 13 scenic reserves, four wildlife management reserves, five ecological areas, a number of conservation areas and one private reserve.

2. JURIDICAL DATA

Owned by the Crown, apart from a a small block of land at Martins Bay, owned by the Royal Forest and Bird Protection Society, and a number of private enclaves. Virtually all the land is currently the subject of a claim by the Ngai Tahu Maori Trust Board before the Waitangi tribunal. The outcome will not jeopardize future protection as Ngai Tahu are committed to maintaining the protected status of the lands involved. The four national parks collectively cover 1,725,437ha out of a total nomination area of 2,600,000ha. The remaining areas comprises land managed by the Department of Conservation.

Westland/Mount Cook national parks and Fiordland National Park were inscribed on the World Heritage List in 1986. With the formation of the Department of Conservation in 1987 the opportunity was provided for the coordinated management of all the natural Crown lands in the area, and the nomination of one fully-representative World Heritage site.

3. IDENTIFICATION

Comprises the least disturbed tenth of New Zealand's land mass, with nearly two million hectares of temperate rainforest, 450km of alpine communities, and a distinctive fauna.

The overwhelming mountainous character of the area results from tectonic movement between the Pacific plate and the Indo-Australian plate over the last five million years. High local relief is the result of deep glacial excavation. Glaciers are an important feature of the nominated area, especially in the vicinity of Westland and Mount Cook national parks.

There have also been substantial post-glacial changes, especially marked in South Westland and the Southern Alps. Erosion is rapid, especially west of the Main Divide. Intense gullying, serrated ridges, and major and minor rockfalls are characteristic of this zone. However, glacial landforms are almost entirely intact in Fiordland.

Natural vegetation is distributed along a number of pronounced environmental gradients including altitudinal sequences, rainfall/temperature gradients, a north-south gradient covering three degrees of latitude, pronounced ecotones between open wetlands, grasslands, shrublands and forest communities, and distinct sequences of vegetation and soils developed on landforms of different age. The vegetation is notable both in national and international terms for its diversity and essentially pristine condition.

A floristically rich alpine vegetation of shrubs, tussocks and herbs extends around the summits of the mountains, from about 1,000m to the permanent snowline. At warmer lower altitudes, the rainforest is dominated by dense stands of tall podocarps. The wetter, milder west is characterised by luxuriant rain forest and wetlands; the drier, more continental east has more open forest, shrublands and tussock grasslands. The most extensive and least modified natural freshwater wetlands in New Zealand are found in the nominated area. Sizeable open wetlands, including high fertility swamps and low fertility peat bogs, are a particular feature of the South Westland coastal plain.

The best-known vegetation chronosequences are those on glacial landforms where the ages of outwash, terrace and higher piedmont surfaces are known. The most impressive landform chronosequence is the flights of marine terraces in southern Fiordland.

As the least modified region on mainland New Zealand, the South-West is the core habitat for many indigenous animals, including a number of primitive taxa, and contains the largest and most significant populations of forest birds in the country, most of which are endemic to New Zealand. A few mountain valleys in Fiordland harbour the total wild population (about 170 birds) of the takahe Notornis mantelli, a large flightless rail believed extinct until "rediscovered" in 1948 and which is recognised by IUCN as endangered. Most of New Zealand's fur seals Arctocephalus forsteri are found along the South-West coast. Virtually wiped out by sealing in the early 1800s, they currently number about 50,000.

A Maori association with the area falls into three broad categories: mythological, traditional history and ethnological. All of these values are contained within the tradition of the Ngai Tahu tribe, whose ancestral territories cover all except the extreme northern parts of the South Island.

4. STATE OF PRESERVATION/CONSERVATION

The principal uses of the nomination area are nature conservation, natural-resource based recreation and tourism and sustainable small-scale natural resource utilisation. With few exceptions, the areas retains a wilderness character. Population increases of red deer in the 1940s and 1950s threatened the integrity of the forest and alpine ecosystems. Other browsing mammals, such as wapiti, fallow deer, goat, chamois and thar, have restricted distributions but have caused severe damage in places. Numbers of all the above species have fallen sharply since the advent of commercial hunting, with a corresponding recovery of the vegetation, particularly in open alpine areas. Australian brush-tailed possum has caused severe mortality in montane rata/kamahi forests in the north. Rabbit populations affect some grasslands on the eastern side of the nomination area. Introduced mustelids and rodents have had a devastating impact on indigenous bird life. Several species have become extinct and most bird populations have been greatly reduced. Exotic weeds are a minor problem and are mainly confined to disturbed sites.

National parks policy aims for the extermination of introduced animals. In other protected areas their populations are kept at low levels to minimise their impact on native flora and fauna. The Department of Conservation has initiated control programmes in fauna sanctuaries and is developing and implementing recovery plans for threatened species.

Provisions within the National Parks Act 1980, Reserves Act 1977 and Conservation Act 1987 are the principal means of ensuring legal protection for the nominated area. It is intended that all national parks, reserves and conservation areas will be covered by regional management strategies prepared by the Department of Conservation. The dates of approval of the current plans are: Mount Cook (December 1988), Westland (May 1988), Mount Aspiring (February 1981, under review) and Fiordland (March 1981, under review). There are no approved reserve management plans for the reserves in the nomination area although a draft management plan has been prepared for Waitangiroto Nature Reserve, and a management plan for the Hooker-Landsborough Conservation Area has been prepared under the provisions of the 1948 Land Act.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

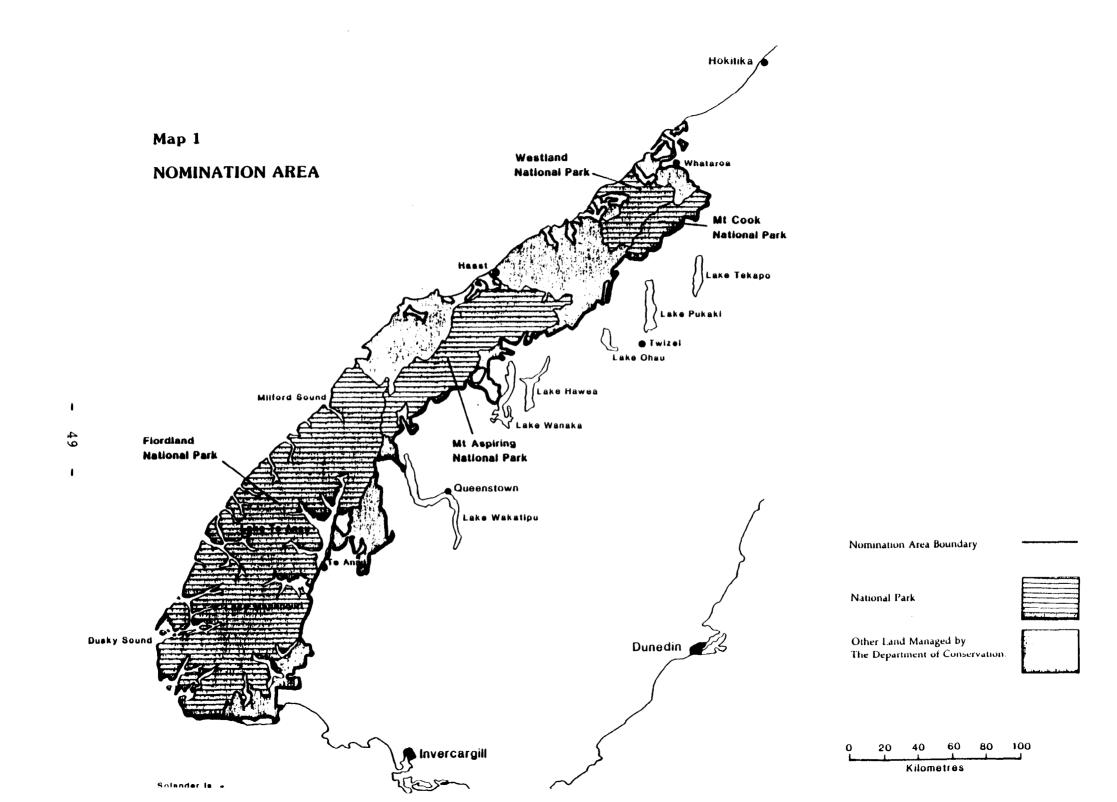
Natural property

The South West New Zealand nomination, as presented by the Government of New Zealand, provides the following justification for designation as a World Heritage property:

- (i) South West New Zealand contains the best modern representation of the ancient flora and fauna of Gondwanaland. These include some 14 species of podocarp, genera of beech, flightless kiwis, 'bush' moas and carnivorous Powelliphanta land snails. There is also abundant evidence of the pleistocene glacial and inter-glacial periods in the landforms, distribution of flora and fauna and the marine terraces in the south.
- (ii) The Alpine Fault boundary between the Pacific and Indo-Australian plates is one of only three of the world's major plate boundaries on land. There are incipient volcanic effects of the plate boundary but the tectonic effects are dominant. The uplift caused by the Pacific plate rising over the Inod-Autralian plate results in the spectacular ocean coast of Fiordland and the abrupt edge of the Southern Alps along the Alpine Fault. The area includes the largest mid-temperate glacier and some of the fastest-flowing glaciers in the world. Fresh-water, temperate rainforest and alpine ecosystems are all outstandingly well represented, usually in close association, over an extensive array of landforms and across wide climatic and altitudinal gradients.

Notable examples of on-going biological processes include large expanses of temperate rainforest, plant succession after glacial retreat, chronosequences on beach ridges, plant succession on alluvial plains, vegetation development in glacial lakes, ecotypic differentiation on ultramafic soils, extensive and little modified freshwater habitats, a diversity of alpine ecosytems, some generic alpine plant endemism, and on-going evolutionary processes such as the differentiation between the isolated kiwi populations.

- (iii) The area contains New Zealand's highest mountains, longest glaciers, tallest forests, wildest rivers and gorges, most ruggesd coastline and deepest fiords and lakes. The temperate rainforest and alpine plant communities are outstanding examples of these important ecosystems.
- (iv) The region contains viable populations of threatened animal species, including the endangered takahe.



WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

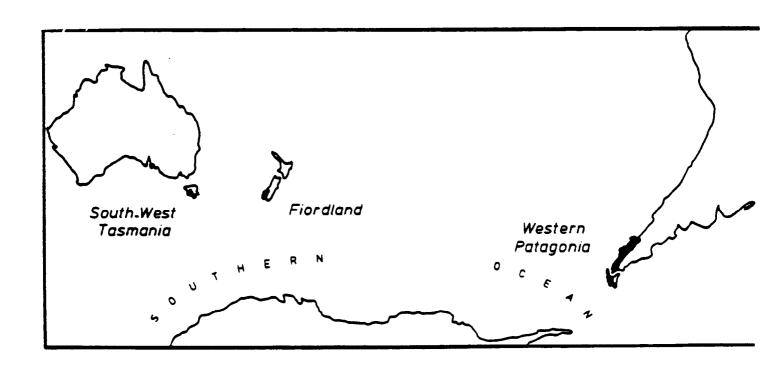
551 SOUTH-WEST NEW ZEALAND (TE WAHIPOUNAMU) (NEW ZEALAND)

1. <u>DOCUMENTATION</u>:

- i) IUCN Data Sheets.
- ii) Consultations: New Zealand Government Authorities, J. Marsh, C. Burns, R. Cahn, W. Neilson, D. Given, K. O'Connor.
- iii) Literature consulted: Forests, Fiords and Glaciers: New Zealand's World Heritage, 1987.
- iv) Site visits: January 1986, March 1990 (J. Thorsell)

2. COMPARISON WITH OTHER AREAS

On a global scale, South West New Zealand can be best compared with the two other areas of temperate wildlands that occur between the 40th and 50th parallels in the Southern Ocean. These are the Tasmanian Wilderness which was inscribed in 1989 and Los Glaciares in Argentina to which the adjacent contiguous parks in Chile may eventually be added. All three of these areas are rugged glaciated mountainous regions situated in the path of strong westerly, moisture-laden winds. All three have national parks on the World Heritage list whose areal extent are being enlarged. affinities between these widely-separated sites are reflected in the strong floristic links which originated with the existence of the southern super-continent of Gondwanaland. Before the continents began to drift apart, a number of plants had begun their evolution and a striking example of a genus common to these now widely separated areas is the southern beech, Nothofagus. South-West New Zealand can be thus viewed as one part of a "trilogy" of three large natural World Heritage sites, each unique in many ways, but united in evolutionary history by the genus Nothofagus.



South-West New Zealand is distinct from all other protected areas in that country in terms of size, landscape and species composition. In other parts of the world (Chile, North America and Norway) fiord landscapes are found. Comparable sites which have protected area status are the Alaska Peninsula National Wildlife Range, Glacier Bay National Park, the Kenai Fjords National Park, and the Kodiak National Wildlife Refuge, and the Gros Morne National Park, Auyuituq National Park in Canada and North-East Greenland National Park. All of the above are in the Northern Hemisphere but have equally spectacular physical settings with vertical sea cliffs, waterfalls and remnant glaciers in the headwater regions. In terms of its Gondwana flora and endemic fauna the only comparable site is found in Chile's Bernado O'Higgins and Laguna San Rafael National Parks.

3. **INTEGRITY**

The nomination of South-West New Zealand is a reformulation of two previous sites inscribed on the World Heritage List in 1986. The two sites were Fiordland National Park and Westlands/Mt. Cook National Park which together totalled 1.4 million ha. The new site adds 1.2 million ha. of the intervening land thus joining the two sites and almost doubling the size of the area put on the list in 1986. A major portion of this addition is the Mt. Aspiring National Park (356,000 ha.) with various other categories of reserves making up the remainder (except for 20 ha. of private land). In total, 70% of the area is under national park status while the remainder also enjoys a high level of protection under other categories.

The additional lands complement the existing two sites in four ways: (1) the new site provides some important geological features such as the Red Hills, the tors and marine terraces of Waitutu, and the full 260 km. length of the plate tectonic boundary; (2) the new area includes important floral elements, particularly coastal wetlands and podocarp/Kahikatea forests; (3) a 40% increase in coastline with high scenic values and with important wildlife values (penguins, seals); and (4) a number of exceptional scenic features such as Mt. Aspiring, the Dart Valley, and the Mavora Lakes. All of these natural features are exceptional in their own right and greatly add to the overall universal value, wilderness quality and integrity of the site.

Further to the extensions in size, there have been a number of other advances in management of the site in the past four years. These include up-dated management plans, more effective administrative arrangements under a new Department of Conservation, and new visitor education facilities. Action on the re-development plan for Milford Sound, as recommended by the Committee in 1986, has also proceeded. All of these activities represent positive actions to ensure high standards of management for the area.

In terms of management arrangements, the whole area is the responsibility of one government department but no overall management authority for the site is currently planned. There are a number of separate management plans, advisory bodies and staff from different districts but no unified administrative structure specific to the site.

IUCN's previous technical evaluations of the two sites outlined the various management issues being addressed including tourism impacts at key sites, introduced species and proposals for fresh water export. Measures to address these issues are underway and, given the large size of the area, its long term viability is not under serious threat.

A number of small scale human activities should be mentioned. These include harvesting of sphagnum moss (approx. 200 net tons per year under permit), traditional uses of vegetation by native maori people, fishing for whitebait, recreational hunting and short-term pastoral leases (perpetual pastoral lease areas excluded). All of these activities are closely regulated and do not result in significant impacts on the overall integrity of the site.

The boundaries of the site are closely and realistically aligned with the main features of the area. Approximately 20 small inholdings of private and developed land have been excluded. The fiords themselves are not included. There are seven small outliers, however, in the Te Anau area that do not contribute to the nomination and should be excluded from the site. The features found here (glacial erratic, remnant tussock vegetation and wetlands) are nationally important but are anomalies within the nomination.

4. ADDITIONAL COMMENTS

There are two secondary issues on which the Bureau may wish to comment. One concerns the name of the property which, in English, is geographically descriptive but could be improved. Second, it became apparent during the field inspection that many of the 35,000 local people living in the region are not adequately aware of the meaning of the World Heritage Convention and the implications of its application in South-West New Zealand. Further efforts in public awareness need to be made.

5. EVALUATION

As agreed by the Committee in 1986, South-West New Zealand is one of the world's most outstanding natural areas and merits inscription on the World Heritage List on the basis of all four natural criteria. With the combination of the three previously inscribed parks plus the intervening land, both the natural system has been completed and the integrity enhanced. Although there have been some losses to the diversity of the area through the introduction of exotic species and impacts from hydroelectric and tourism developments, the area is large and still retains its predominant wild character.

6. RECOMMENDATIONS

South-West New Zealand should be inscribed on the World Heritage List incorporating the two former properties inscribed in 1986. The New Zealand Government should be commended on its initiatives to protect all of these spectacular landscape features of this major portion of the South Island. The Bureau has sought clarifications on the following issues:

- the name of the property;
- the suggestion to omit the seven outliers in the Te Anau area; and
- the need for a strengthened public awareness effort for local residents on the meaning and implications of the Convention.

