

## THE PATTERN OF LAND USE IN THE UNOCCUPIED MOUNTAIN LANDS OF WESTLAND NATIONAL PARK

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*Westland National Park*

For the purposes of this paper, a definition of "mountain land" is necessary. It may be taken to be all that land in Westland National Park which lies east of the Alpine Fault (roughly all that lies east of the main highway) including the Fox and the Franz Josef Glacier valleys. All is unoccupied as far as permanent settlement is concerned.

Westland National Park was established in 1960, and gathered together large areas of Scenic Reserve and Crown land. These form the nucleus of the area of 210,257 acres comprising the Park today. The National Parks Act 1952, requires parks to be ". . . preserved as far as possible in their natural state, . . . the natural flora and fauna shall as far as possible be preserved and the introduced flora and fauna shall as far as possible be exterminated . . . their value as soil, water and forest conservation areas shall be maintained."

Before looking at land use, let us see what the 1960 decision means. The creation of Westland National Park has assured the following:

1. All forest areas are protected from logging.
2. Rivers are protected from pollution by industrial waste and from interference by hydro-electric works.
3. Lake levels will not be altered by such works. (In the light of the Manapouri struggle, this statement must be regarded as suspect.)
4. Invasion of easily-accessible forest areas by residential development is prevented. (The Waitakere Range near Auckland is a good example of the results of this practice.)
5. Domestic pets, especially cats, are prohibited. (This is obviously linked with (4) above.)
6. Mining operations, although possible, are not encouraged and are subject to rigorous control. The past year has seen a

great upsurge in the number of applications for prospecting in National Parks. However, as far as I know, no mining operations have so far been approved.

### USE OF THE LAND

*Pre-European land-use:* The Maori population of South Westland was never high, and there is no evidence that their activities had any effect on the mountain areas that we are considering.

*European land-use:* At Greymouth, on 21 May 1860, James McKay, acting for the Queen, purchased from the Ngai Tahu tribe for £300 the 7,500,000 acres lying between Kahurangi Point in the north, Milford in the south and the crest of the dividing range in the east. This area included the whole of what is now Westland National Park. Thus, in the early stages of development, all the land we are considering was crown land.

What, in effect, had he bought as far as the future Westland National Park mountain land was concerned?

Perpetual snow, glaciers and bare rock	112,640 acres (64%)
Alpine vegetation	21,760 acres (10%)
Forest	40,600 acres (26%)
TOTAL	175,000 acres

Situated as this land is, in an isolated part of the South Island, and being composed of extremely rugged and inhospitable terrain, it is not surprising to find that little modification of the environment occurred during the early years of Crown tenure. Apart from the scenic value of the mountain country, only two exploitable commodities appeared present—timber and gold—and of these, the latter was the one which created the most impact.

In the latter half of the 19th century the mountain lands were subjected to the first phase of exploitation, as the terraces and riverbeds of the

Waiho, Callery, Waikukupa, Cook, Balfour and other rivers were searched and then sluiced for gold. Some logging, to provide essential timber, accompanied these endeavours, which were generally shortlived. Dense pole stands of kamahi (*Weinmannia racemosa*) and rata (*Metrosideros umbellata*) on the Waiho and Callery terraces are a legacy of this early disturbance.

At an early stage in the development of Westland, it was realised that the mountain lands were (a) useless for farming, (b) remote for timber production, (c) scenically second to none; and a glance at the changes in land status which affected these areas from the early 20th century until the present will show the results of this realisation.

Areas gazetted Scenic Reserve (acres):

Year	1914	1928	1930	1938	since 1938
Acreeage	6,148	54,648	193,768	206,111	210,257

(cumulative figures)

It is sometimes thought that this, and other similar acquisitions of large areas of land for scenic reserve or National Park, was effectively getting rid of land that nobody wanted. Whatever the motives behind these early reserves, we are gaining the full benefit today as the true value of the land (intangible, rather than economic) becomes realised.

The early 20th century saw the effective "cold storage" of the mountain lands, development persisting only in the valley of the Fox and Franz Josef Glaciers and, to a lesser extent, in the Copland Valley. The rest of the area was left alone, apart from some climbing and tramping in the more popular locations. Though interference with the environment by development remained at a low level, a new and large-scale effect began to make itself felt as red deer (*Cervus elaphus*), tahr (*Hemitragus jemlahicus*) and chamois (*Rupicapra rupicapra*) spread into the area and began modifying all the plant communities. Concentrations of animals in favoured valleys, such as the Douglas, resulted in browsing on such a scale that the original composition of the vegetation was completely altered; and, as far as is known, no part of the Park had escaped modification to some degree. Throughout the Park, a new use had been found for the land — grazing.

#### LAND USE UNDER THE NATIONAL PARK REGIME

In planning the development of the Park, certain categories of land use have been devised for incorporation within the Master Plan, which is

the key to the future progress of the area. At the time of writing this paper (July 1969) these categories had not yet been incorporated in the Master Plan and must be regarded as tentative. They are as follows:

1. *Wilderness Area*: Development is restricted to essential tracks only. Temporary huts may be approved (e.g. for those involved in control of problem animals) but no permanent huts are permitted. Westland National Park has one such area embracing the country at the head of the Callery River.
2. *Natural Environment Area*: Normal tracks and hut services will be developed but no roads except where approved by the National Parks Authority. The majority of Westland National Park is in this category.
3. *Development Areas*: These are available for development of various facilities. Such development will be controlled by the Park Board and kept as much in harmony with the surroundings as possible. Two major development areas are the Fox and Franz Josef valleys.
4. *Areas of Unique Scientific Interest*: These may be selected from any of the above three categories. Depending on the particular nature of the scientific interest, special conditions may be imposed on the area's development (e.g. to ensure minimum disturbance or alteration, entry may be restricted, as in the *takahe* area in Fiordland National Park).

In Westland National Park we have the apparently anomalous situation where the Fox and Franz Josef valleys are classified both as (3) and (4) above. This has arisen through the glaciers' easy access and subsequent early development. The evolution of these areas for visitors calls for careful planning to ensure that the Development Area programme does not interfere with their scientific value.

As detailed investigation of the Park proceeds and the Park's inherent features become better known, re-classification of Natural Environment areas may occur.

These are the fields in which the Park will develop. What is the pattern of human activity that is superimposed on them?

1. *Recreation.* This is an intangible but definite land use — it creates no alteration, leaves no mark (except rubbish). Just looking at Mount Tasman is “using” it in one sense. Recreation, in all its facets, is the primary land use of Westland National Park.
2. *Scientific Use:* This is another intangible. Research on the features of the Park is carried out by a variety of workers, ranging from primary schoolchildren to trained scientists.
3. *Protection:* The need for forested upland to control run-off toward agricultural lowland has long been recognised. It is perhaps fortunate that the steeper, higher forested slopes contain rata and kamahi in abundance, plus many other unmerchandiseable species. One supposes that no jealous eye will ever be cast on these as a source of wood.
4. *Hunting:* In terms of area of ground covered, the hunters of deer, chamois and tahr use far more of the Park than anybody else. Many of the more remote valleys, e.g. the Douglas, Regina, Troyte, upper Cook, Balfour and upper Karangarua are frequented solely by hunting parties.

The problem of the noxious animal and his obligate parasite the hunter is an interesting one. Hunting pressure is applied in one of two ways:

- (a) The mass shooting practised by commercial meat-hunters and some private hunters.
- (b) The selective “trophy shoot” which may ignore the majority of animals seen in the search for one or two individuals. From my dealings with hunters the latter method appears to be the more favoured, especially with the better-equipped, more experienced men, who express distaste for the other method. The aim of the average hunter is not the extermination of the animals he hunts, rather their good health and prosperity until he can get back next year. Bitter criticism of helicopter hunting operations comes from many private hunters.

It should, therefore, be realised that the major land use over much of the Park’s area is grazing of animals with associated hunting; the latter

being made up of short bursts of mass killing alternating with long periods of selective hunting aimed at perpetuating the game. This is something that we have to live with. One hunter put his point of view as follows — “We (hunters) are the only people who use these valleys. The Park was created for all people to enjoy. We enjoy hunting, and are using these faraway bits of the Park — nobody else does. Why don’t you keep the helicopters out of these areas and leave the game alone?” One can well understand his point of view.

Now look at the point of view of the Park authorities, whose aim is to protect the Park from modification and retain as far as possible the marvellous indigenous plant and animal communities that exist there. True, few people visit the Douglas Valley today, but how about in 1975 or 1985? In 1969 hunters formed less than half of one percent of the total number of visitors to the Park. Since current National Parks Authority policy calls for the extermination as far as possible of exotic animals, and since the helicopter is such an efficient agent in achieving this the protests of the private hunter must be weighed against current policy.

#### EFFORTS TO CONTROL THE DETERIORATION OF INDIGENOUS COMMUNITIES

There is only one sure way to reduce the numbers of animals grazing in the Park — and that is by stepping — up the tempo of hunting. In order to get more private hunters into the less accessible areas, two things are needed:

1. *Access tracks and huts:* These, of course, are a necessity for visitors as well; but for the present, these facilities would serve to increase the number of hunting parties entering the areas.
2. *Publicity:* Efforts must be made to encourage hunting in the worst affected blocks. This is currently being practised in the Cook River block where morainal vegetation near the La Perouse Glacier is suffering badly from browsing by chamois.

Helicopter hunting, as currently undertaken, provides an excellent method of reducing the population of the subalpine and alpine zones, and is recognised as the best control that we have;

and good liaison between the Park and the meat companies must be maintained. The following figures indicate the effectiveness of helicopter operations:

Year ended	Animals shot from helicopter	Animals shot by private hunters	Total
31.3.69	909	680	1,589

The helicopter total was obtained in a few weeks' shooting.

It is obviously wishful thinking to imagine the complete eradication of game animals. In response to a dwindling animal population, hunting pressure will slacken as word soon gets around the hunting fraternity that an area, previously well known for its game, is beginning to produce poor results for proficient hunters. What the animal response to helicopter hunting will be, and how long this method will continue to be profitable, are matters for conjecture as far as Westland National Park is concerned. The best we can hope for is a lowering of the population to a level at which the natural vegetation is able to maintain itself successfully and hunters will still consider attractive.

We have lost the original structure of our sub-alpine and alpine communities in valleys such as the Douglas. We must reduce animal pressure to a level at which a modified community is able

to thrive. To achieve this, hunting must remain an essential land use.

As long as the terms of the National Parks Act of 1952 remain essentially unchanged, I foresee little change in the basic *intended* land use pattern in the Park. I can see definite changes in the approach to the noxious animals problem. The pressure is on — the farming of deer is now legal — venison exports continue to rise faster and overseas earnings pour in.

Whatever the changes in the approach towards our mammals, I feel that the present simple land use of "intangible exploitation" will persist for a long time to come. Westland National Park presents land use in a state of suspended animation, creating with the other Parks of New Zealand a reserve of five million acres of basically unused land, subject to no drastic man-made modification whatsoever (introduced animals excepted). The fact that we are not using our land in any way that will bring about change will be of great importance in the future.

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