

Mt Aspiring from snowcave on Mt French.
Photo: Ewan Paterson

# MOUNT ASPIRING NATIONAL PARK

## Dart forests, Rees Valley and environs

The challenge is to keep Mount Aspiring the least-modified national park in New Zealand for as long as we can. ...Most park problems stem from not realising how little is needed for national park enjoyment.

Ray Cleland, Chief Ranger 1969¹

## 1. Introduction

Unlike most of the recreational settings described elsewhere in this volume, Mount Aspiring National Park is well known and fairly well documented. Therefore little further purpose would be served by duplicating the mass of published material describing the Park's environment, tramping routes, tracks ecetera. For those readers wishing to read further on the Park an extended bibliography is provided at the end of this chapter.

The primary emphasis of this chapter is to overview the formation of the park, its history of recreational management, recreational zoning, and what is needed to maintain a diversity of recreational opportunities. This overview is not confined within the Park's boundaries however; it is expanded within the context of the broader high country of the Otago region.

Another function of this chapter is to assess two proposed eastern extensions to the Park, and the nearby Mt Alfred. Other proposals, for westward Park additions, are discussed in FMC's Outdoor Recreation On The West Coast.<sup>2</sup>

## 2. An Otago National Park

The first suggestion that Otago's mountainous main divide warranted management as a national park came from the New Zealand Alpine Club (NZAC) in 1936. The NZAC had earlier declared its long-term objective of seeing a chain of national parks established along the length of the Southern Alps.<sup>3</sup> As a consequence, land tenure information was presented in map form for Western Otago and South Westland and by 1939 possible boundaries for a park were identified. These included existing (Routeburn) and proposed (Haast Pass-Wilkin) scenic reserves, UCL, and state forests. Excluded from consideration at this time were lands subject to pastoral run licences.

As far as the Department of Lands and Survey was concerned the 133,500 ha proposal was "worthy of favourable consideration," but with strong reservations over the prospect of the creation of another park board. FMC supported national park status by advocating to Government a national park between Fox Glacier and the Ailsa Mountains. However, other than further investigative work being done, no direct actions to establish a park occurred during the next 20 years.

By 1953 the objective of establishing a chain of national parks along the Southern Alps was officially adopted as Lands and Survey policy. Before cancelling pastoral run licences and renewing them as pastoral leases, all South Island Commissioners of Crown Lands were told to eliminate from licences land that was useless for grazing.<sup>7</sup> This was to prepare these lands for incorporation in a national park.

Throughout the 1950s FMC continued to press for action. A comprehensive official report was prepared in 1957 for a mountains-to-sea northwards extension to Fiordland National Park plus an Otago park. Despite the country concerned being "eminently suitable for a national park," and the realisation of the need for control over the area on completion of the Haast highway (scheduled for 1961), this proposal was allowed to lapse. <sup>8</sup>

In 1959 the first definite proposal was put before the National Parks Authority. This was for a 164,146 ha national park, "purely of an alpine nature" along 160 km of the main divide. The Authority decided there was no justification to proceed at that time as there was no evidence of public interest and enthusiasm for a national park. There was also a shortage of finance for administration.

A resurgence of interest in an Otago national park occurred in 1963 as a result of the efforts of a Dunedin based subcommittee of FMC which planned an alpine or 'above bushline' park. Widespread support from a broad spectrum of interests was obtained, and demonstrated at a well attended public meeting held in Dunedin in March 1964. A resolution seeking establishment of a park was unanimously supported, despite a preceding unsuccessful amendment to exclude from the park boundaries any substantial areas of land that could be stocked.<sup>10</sup> The realistic

Photo: Ewan Paterson



approach adopted by the main affected runholders also eased acceptance of the proposals.<sup>11</sup> The realities of development pressures arising from the newly completed road link to Haast also spurred efforts towards establishing national park controls.

In March 1964 a renewed proposal of approximately 161,800 ha was recommended to Government by the National Parks Authority and approved by the Minister of Lands as "...the time had now come to create, at least, a nucleus area as National Park." The intention of a much larger entity, with an ultimate area in the vicinity of 243,000 ha, was also stated by the Minister. "Once this nucleus area is established, negotiations may be commenced with a view to obtaining suitable areas of state forest land and also those parts of pastoral runs unsuitable for grazing, eg mountaintops, for inclusion in the Park." 12 In response to continuing opposition from runholders to the possible loss of grazing, the Minister of Lands assured the House of Representatives in June 1964 that "there will be no question of the park's establishment [italics ours] taking land out of production " as "...the new national park will be made out of vacant Crown land and existing scenic reserves." 13 The Minister apparently gave Parliament no such assurances over additions [italics ours] to the park once it was established. However in response to continuing runholder pressure the new Park Board later gave an undertaking that no "traditional grazing land" would be affected.14

Government did not allow lingering opposition from the Lakes County and Queenstown Borough Councils to hinder park establishment. On 9 December 1964 the Governor-General declared 199,227 ha as the Mount Aspiring National Park.<sup>15</sup>

(An extended account of the park's formation is available from the author.)

## 3. Wilderness Area Proposals

Following an amendment to the Reserves and Domains Act 1953 allowing for the declaration of wilderness areas on public reserves not included in existing national parks, the NZAC became interested in the Olivine-Arawata region as a potential wilderness candidate. 16 In 1957 the NZAC proposed a 87,000 ha 'Wildemess Area,' all being west of the main divide, using bushline as the lower boundary. Despite support from the Lands and Survey Department, this proposal ultimately failed due to Mines Department objections. FMC became involved and established a subcommittee which concluded in 1960 that the wilderness envisaged in the statutes, both National Parks Act 1952 and Reserves and Domains Amendment Act 1956, were for plants rather than for people.<sup>17</sup> Despite this shortcoming the Federation had already decided that 'mountaineers' wilderness' were required and in 1959 supported the Olivines and Landsborough as first priorities from six roughly defined areas throughout New Zealand. In view of the possibility of the Olivine proposal being curtailed because of mineral values the Federation proposed an alternative area in central Westland.18

No definitive actions were taken on an Olivine Wilderness Area until the main divide section of the newly proclaimed Mount Aspiring National Park, between the Olivine Ice Plateau and the Te Naihi River, was zoned wilderness in the park's first management plan of 1977.<sup>19</sup>

The need for an enlarged Olivine wilderness, involving a westward extension of the national park to the Red Hills, was stressed by FMC in its 1976 submissions to Government's South Westland land use study team.<sup>20</sup> This was promoted through the N.Z. Alpine Journal.<sup>21</sup> The prospects for an expanded wilderness

area were further canvassed in 1979 by the publication of *Out-door Recreation On The West Coast*. <sup>22</sup> The Federation put its proposal to the 1981 National Wilderness Conference which endorsed the boundaries for a 55,000 ha wilderness in this area.<sup>23</sup>

In 1983 Government's Wilderness Advisory Group reported to the Minister of Lands on the Wilderness Conference proposal and concluded that while the area admirably meets the Government's wilderness policy, the ultramafic belt in the upper Pyke, Little Red Hills and Barrier Valley be excluded as a concession to mineral interests. If this were adopted this would result in an Olivine Wilderness Area of 50,000 ha.

## 4. Grazing Licences

As already noted, due to runholder concerns during park establishment, undertakings were made by the first Board that no "traditional grazing land" would be affected. Successive park boards have generally honoured this undertaking despite the grazing being incompatible with the primary purpose of national parks. The Board policy position set no limitations on the type (ie. sheep verses cattle) or intensity of grazing.<sup>24</sup> Despite the Board's grazing policy, grazable but destocked lands have been included in the park through management necessity.

Much of the current grazing activity within the park is detrimental to natural values and to the public's use and enjoyment. In most instances stocking is not, or cannot be, effectively contained by fencing, with considerable stock trespass into forest margins.

There are currently 8 grazing licences covering 1390 ha, with another lease (Section 67 Land Act 1948) for 790 ha in the Waiatoto Valley destined for addition to the park. At park formation there were just 2 licences. The overall increase in grazing area since inception of the park raises the question of just what is 'traditional grazing' and what are actual grazing entitlements if the Board's 'traditional grazing' policy is to continue. Boards have not been consistent in the implementation of their policy and have on occasions been influenced by the necessity of protecting natural values. For instance, in 1975 an application to graze the Bonar Flats at the head of the Waiatoto Valley was declined on the grounds of "high national park values." This was despite a history of grazing back to at least 1912. The main areas covered by grazing licences include valley flats in the Young, Siberia, Wilkin, and Dart. Both sheep and cattle grazing is currently permitted within the park.

While many areas of the park have at various times in the past been grazed, it is hard to be categoric on a historical basis that highly intermittent and variable levels of stocking constitutes a 'tradition.' Official records and reports indicate greatly fluctuating stock numbers, dependent both on seasonal weather extremes and individual licensees' demand for pasturage. Stocking rates in some areas have actually increased since park establishment, in the case of Cattle Flat in the upper Dart Valley resulting in a doubling in the number of cattle (to 400 over winter months),<sup>25</sup> rather than being held at 'traditional' levels. The arguments for grazing of open flats within the park include reducing the fire risk through control of rank growth, and keeping a 'tidy' appearance. However the necessity of these measures is not supported by any greater incidence of fires in ungrazed grasslands within the park, or by surveys of visitor preference.

Official concern about the detrimental impacts of grazing has seen a call for the establishment of permanent monitoring transects. Unfortunately this has not been implemented. Numerous field reports throughout the 1970s and early 1980s 27 record major changes in species composition, localised pugging of wet areas, the introduction and spread of weeds, browse lines along bush edges, and total lack of forest understories within 100 m of open flats —the intended grazing areas. Overstocking has been reported 28 along with excessive damage to walking tracks resulting from droving large numbers of cattle up or down valley. Field reports recommending reductions in grazing pressure have not been heeded. A major breach of lease conditions involving trespass by not removing stock (for up to 6 months) has also been officially reported.

In addition to impacts on natural values, the presence of stock is having a major detrimental impact on the quality of walkers' experience, particularly as all the grazing occurs in popular tramping valleys. It is very difficult to equate the presence of cattle, their dung, water pollution, heavily browsed trees and shrubs, and pugged-up mires which double as walking tracks with a national park experience.

A matter of public interest in relation to the issuing of grazing leases and licences over national park land is to what extent public use rights are restricted. Leases and licences, as opposed to permits, convey legal rights of occupation of the land as well as rights of use for grazing. A condition in each lease or licence attempts, to a limited degree, to protect public rights by the licensee being required to "grant the public free right to cross and recross any portion of the said land and to picnic upon it provided stock are not unduly disturbed." If lessees/licensees, as legal occupiers holding trespass rights, exercised these rights a serious derogation of the publics' freedom of entry and access to national parks would occur. These rights are specified as a guiding principle for national parks (Section 4 National Parks Act 1980). If grazing is to continue within the park, non-occupier types of authorisations should be used rather than licences or leases. The National Park Act currently only provides for leases and licences for grazing; an amendment is desirable to only grant permits to graze, where this is compatible with the protection of park values.

In the case of the Mount Aspiring National Park the more immediate issue is whether an ill-defined 'tradition' should be permitted to continue for ever-and-a-day to the detriment of natural and recreational values. In 1977 the National Parks Authority raised with the Board the necessity of considering phasing out grazing leases from the park. Later that year the Minister of Lands stated that "the Board hopes that, except in some cases where grazing is a necessary park management tool to control growth on certain areas, it can eventually be phased out with the co-operation of the lessees concerned." The Minister also stated that the Board's 'traditional grazing' policy "does not mean that any damage will be permitted." <sup>29</sup>

Twenty five years have now elapsed since establishment of the park. Sheep and cattle have replaced deer as the major grazing animal over the majority of those areas leased. Runholder dependence on grazing within the park has increased in the major leased areas, due to development and increased stocking on the balance of their holdings outside the park. This is despite having no assurance of permanent grazing rights within. Over the same period park visitation has dramatically increased, with an inverse acceptability of grazing impacts. As well, the purposes of national parks have broadened considerably from the historic emphasis on scenery preservation, to embrace ecological sys-

tems and natural features. This is for their own intrinsic worth or scientific value, in addition to their value for direct public appreciation. In the view of the author, the Board's 1960s-conceived grazing policy is no longer tenable. The forthcoming review of the park's management plan provides a long-overdue opportunity to provide a framework to phase out grazing. Re-adjustment periods and compensation for lessees and licensees should be granted where natural justice dictates.

## Recreational Opportunities in the Mount Aspiring National Park

## 5.1 The Setting

The Park is primarily alpine with well over half the area either snow tussock grassland, fellfield or permanent ice and snow.<sup>31</sup>

Deeply glaciated valleys are clothed in a mix of beechpodocarp or broad-leaved forest often with grassy 'frost-pocket' flats along valley floors. Forests can vary from open beech to impenetrable jungle. Rivers can be deeply gorged torrents or follow braided, meandering courses. It is a region of extremes of gradient and weather, as might be expected within the greater southern alps region.

The challenging terrain of the park provide opportunities for a relatively narrow range of physically demanding recreational activities, and this constitutes the major focus for such footorientated activities within the Otago region. There is nowhere else in the province where wilderness and natural experiences are obtainable to the same degree in mountainous alpine and forest environments. Alternative alpine areas for mountaineering and extended tramping are only to be found outside Otago, in Fiordland or Canterbury.

## 5.2 Visitor History, Use and Trends

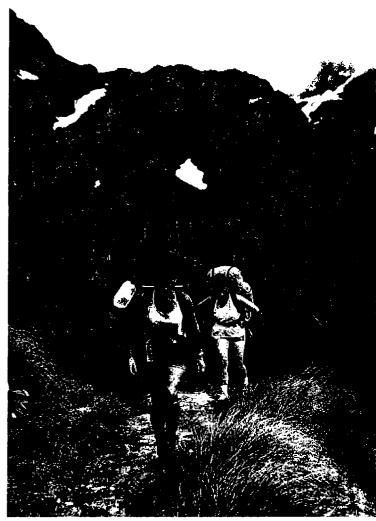
Pioneering exploration by a succession of prospectors, geologists and surveyors commenced in the mid 1860s and continued throughout the western areas through the 1880s and 1890s. The last significant chapter of exploration was during the 1930s in the Olivine country, when the last major 'blanks' on the maps were filled in. However much detailed topography within the park was not unravelled until the 1960s with the advent of aerial photography and the production of the first contoured maps.

Tramping and mountaineering have been long-standing activities, which considerably predate the formal reservation of the region as a national park.

## 5.2.1 Routeburn Track

Since the 1880s at least, parts of the present park have attracted recreational use, when the first guided trips from Kinloch to the Routeburn Valley were undertaken. By the turn of the century the Government Tourist Department had built huts in the valley and upgraded the track as far as Harris Saddle. By the start of World War I the track had been pushed through to Lake Howden, with the exception of a 1 km 'missing link' near Lake Mackenzie. This construction was undertaken as a public works scheme. By 1930 the track connection was complete, allowing both guided parties and independent trampers through-access.

Usage of the Routeburn Track steadily increased through to the 1950s, with convenient access to the start of the track provided by lake steamer and bus service from Kinloch. At this time the Greenstone Valley was a very popular return route. Larger huts and more general knowledge of the track's existence were responsible for the steadily increasing popularity.



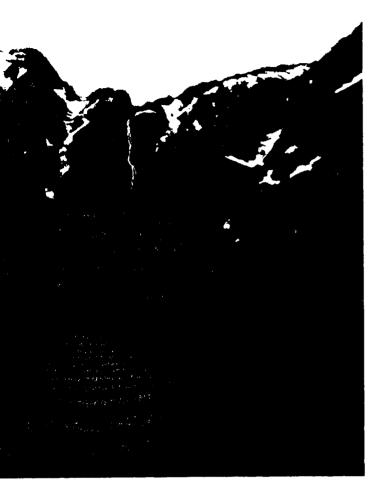
Routeburn walkers above Lake Harris.

The formation of the Mount Aspiring National Park in 1964 (west of Harris Saddle was already within the Fiordland National Park) saw the beginning of a development phase. With vigour the new Park Board, in conjunction with the Fiordland Park, refurbished existing huts, built a new hut at Routeburn Falls, and a shelter on the Harris Saddle. Then a commercial concession was granted and the company built its own huts. By 1968-69 approximately 600 walkers per year were using the track.

Greatly increased awareness of the track and its facilities resulted in regular annual increases of usage. Completion of a road bridge across the Dart River in 1974 allowed direct vehicle access from Queenstown for the first time. This event has been attributed with generating in one year a 25 percent leap in track patronage to a total of 3000 visitors.<sup>22</sup>

Further expansion of hut capacity, track upgrading, improvements to the Queenstown-Glenorchy Road (first road link in 1962), and the introduction of daily bus services to either end of the track has subsequently generated an annual increase in track usage of around 10 percent. Approximately 8-9,000 known walkers used the track during the 1988-89 season. Peak usage is both growing, and broadening over a span of 5-6 summer-autumn months per year, rather than 1-2 months back in the 1970s.<sup>33</sup>

The Routeburn is now very much in the international trekking circuit with 75 percent of walkers being visitors from overseas. Their use of the Routeburn is increasingly in conjunction with visits to other parts of the Aspiring park, and to the Milford and Kepler tracks in Fiordland.



#### 5.2.2 Rees and Dart Valleys

The lesser known and less developed Rees-Dart track appears to be in the initial stages of a 'Routeburn' pattern of burgeoning use. From hundreds per year throughout the 1960s and 70s, by 1980 a thousand walkers had checked in at Board huts. Lurrently approximately 1500 walkers visit these valleys annually, 50 percent of whom are overseas visitors. There is less dependence on huts than in the Routeburn with half of users choosing to camp. A 4-5 month pattern of use, very similar to that of the Routeburn, has emerged over the last three years. Increases in usage are attributed to promotion by tourist operators (especially provision of bus services to track ends), word-of-mouth promotion, and a desire to get away from crowded, regulated tracks. Lesser to be used to be used

There is considerable year-round climbing interest in the Earnslaw massif, in particular Mt Earnslaw. Climbing activity goes back to the 1880s with guiding services on offer to visitors to the head of Lake Wakatipu. The first ascent of the East Peak of Earnslaw was in 1890. The more difficult West Peak was not climbed until 1914."

#### 5.2.3 Matukituki Valley

This has been the traditional centre of interest for generations of Otago trampers and climbers. The first exploratory climbs and pass crossings were in 1862-63. Mt Aspiring was first climbed in 1910.<sup>38</sup>

Since the NZAC commenced a hut building programme in 1932 domestic trampers and climbers have consistently patronised this sector of the present park. This has particularly been the case since completion of the large 'Aspiring Hut' in 1949 and of 3 high huts.

Excluding an indeterminate number of day-visitors, probably in the order of 1-2,000 people now visit the valley annually. Additionally several thousand bed-nights are spent in the valley by students at two school lodges. Improved road access is resulting in a pattern of increased day-walking, rather than dramatic increases in longer duration trips, as has been experienced in the Routeburn-Rees.

#### 5.2.4 West of the main divide

No reliable figures exist for visitation to the relatively inaccessible western half of the park, however local knowledge indicates that it remains lightly visited. The Olivine-Red Hills-west of Dart country provides opportunities for extended, trans-alpine tramping that is highly valued, particularly by New Zealanders, for self-sufficient, once-a-year wilderness-type expeditions. Inter-party contact is infrequent except for during the Christmas holiday period when localised congestion can occur at foci such as the Olivine Ice Plateau. Visitation to the Arawata-Joe catchment requires considerable personal commitment and experience as does the glaciated Volta country to the north of Mt Aspiring. These areas provide 'high-point' experiences for the more adventurous mountaineer.

The Bonar-Aspiring area is relatively accessible and receives the greatest visitation of any alpine area in the park. It is receiving increasing attention for winter climbing and for ski mountaineering.

#### 5.2.5 The north-east sector

Away from the Haast Road, use tends to be more diffuse, with an array of valley systems offering a variety of tramping trips. Due to ease of access, this area receives moderate to high use, particularly from Otago-Southland trampers. A variety of multiday pass crossings and through-trips can be made, with and without the assistance of tracks or huts. The alpine experience or personal commitment necessary to visit the Olivine or Volta country is not required. Localised intensive use occurs within the



NE sector generally associated with commercial concessionaire activities. Aircraft intrusion by concessionaires into the Wilkin-Siberia-Young valleys is an on-going cause for dissatisfaction among independent trampers and anglers.

#### 5.2.6 Hunting

In contrast to greatly increasing foot recreation, recreational hunting has dramatically declined since reductions in deer numbers through helicopter venison recovery peaked in the early 1970s. Only a small number of deer hunting permits are now issued annually. Possums have become the main target species, but from commercial operators rather than recreational hunters.<sup>40</sup>

#### 5.2.7 Fishing

Two rivers, only the uppermost reaches of which lie within the park, have been assessed to be regionally and highly important angling rivers. The Matukituki and Makarora-Wilkin rivers were so categorised primarily for their high scenic values, relative ease of access, large areas of fishable water, and feelings of peace and solitude. The Matukituki is considered to offer an above average fishing experience. The scenic and 'wilderness' qualities of the Wilkin and Young are highly valued, with the Makarora catchment in general having exceptional overall importance. The activities of aerial fishing concessionaires within the park greatly discourages amateur anglers.

### 5.2.8 Walking

Easy, short distance walks are now available near road-ends such as the Routeburn and in particular along the Haast highway which bisects the north-eastern sector of the park. Recreational motoring on this major South Island tourist link provides the only park experience for the majority of visitors. Most do not venture off the road, making only cursory contact with the park environment at road side facilities or visitor centres.

As a national parks' centennial project a high standard track has been constructed into the Rob Roy Stream in the West Matukiktuki valley.

#### 5.2.9 Overall Park Visitation

No reliable statistics are available for all categories of user, however local information indicates a strong trend of increasing visitation.

Only one survey has attempted to document the range of park visitor activities. This was a partly completed road-side survey by Aitken conducted at several high use locations during 1979. Eighty percent of respondents took part in an active form of recreation. This was in a descending order of walking, fishing, and tramping. Of passive forms of recreation, scenery appreciation and picnicking ranked highest. Use of mechanical aids such as boats and planes figured very lowly both as a preference or as an actual use.

#### 5.3 Visitor Preferences

Only three surveys of visitors' needs and satisfactions have been undertaken since park establishment. Two were of Routeburn walkers, by Beamish (1977) and Harris (1983), and the road side survey by Aitken (1979) throughout the eastern margin of the park.

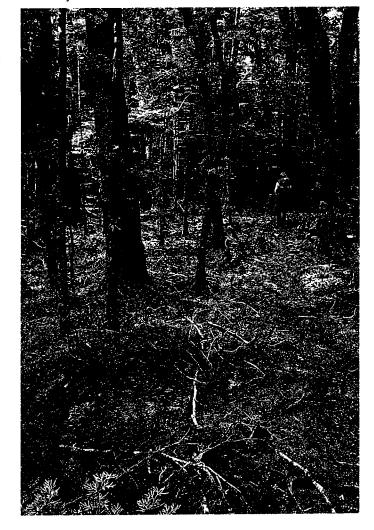
As part of a wider assessment of the impacts of high usage on the Routeburn's physical and social environments, Beamish 45 surveyed user perceptions of their walk, and of track and human activities. At a level of approximately 5000 walkers per year users were found to be overwhelmingly satisfied with their walk experience, but having strong dissatisfactions with track and hut conditions. User behaviour problems (eg littering and picking flowers) were also a major concern of users. Harris sounded a note of caution in regard to these results due to a possible bias arising from the non-random sampling technique used by Beamish.<sup>46</sup>

After substantial improvements to the track and huts, Harris <sup>47</sup> found a greater satisfaction with facilities, but recorded social-physiological impacts from crowding of huts to be high. This was at an annual usage of approximately 6,500. The primary motivation among walkers was found to be 'self actualisation,' meaning aesthetic and 'exit civilisation' reasons. Harris concluded that users were generally only in favour of low levels of development and that future development of the track and facilities should be largely confined to the maintenance of the status quo.

Aitken's survey found that on balance, fewer rather than more facilities were preferred by road side visitors, with a preference for basic facilities, with strong dissapproval of sophisticated facilities or mechanised intrusions such as jet boats and aircraft. Overall, strong support was found for keeping the park 'as is,' with minimal provision of facilities, and without being commercialised.

Dart Valley track.

Photo: Geoff Spearpoint



## 5.4 Concessionaire Activity

Currently there are approximately 12 tourist concessions within the park embracing the activities of mountaineering training, fixed-wing and helicopter access for walking, hunting, fishing and rafting, and transalpine guiding. Aircraft landings are confined, as a matter of management plan policy, within the northeastern (Makarora) sector of the park. Concession activity is restricted by the management plan to 'Environment B' zones. Current Board policy is to not permit concession activity in the vicinity of the Dart and Rees Valley track, to maintain this popular area commercial-free in view of adequate provision for commercial round trips in the Routeburn and Greenstone Valleys.<sup>48</sup> Other concession activities that do not impinge on the walk are regarded as appropriate.<sup>49</sup> Further overnight concessions have not been permitted on the Routeburn Track.

In very recent years there has been a marked surge of interest in concession activity throughout the park, in particular applications for helicopter access to many areas, including many localities that are otherwise readily accessible by foot. The Board is concerned with the growing emphasis by concession applicants on aircraft use 50 and has been attempting to grapple with the thorny issue of aircraft and jet boat noise impacts on other park visitors. There is also considerable overflight in some sectors, in particular over Mt Aspiring, this being beyond the legal jurisdiction of the park authorities.

Due to lack of jurisdiction over adjacent mountain lands, including DOC estate, the Board has been unable to consider park concession applications in terms of maintaining a regional balance of recreational opportunities between competing and conflicting interests. A new Conservation Board, with regional jurisdiction over all DOC lands, should be able to address this need.

With the exception of the high capital investment of the Routeburn guided walk concession until recently most concessions, with the exception of regular aircraft landings in the Siberia Valley, have been largely low-key and widely dispersed operations. No other substantial investments exist within the park, a fairly unique situation for an established New Zealand national park.

# 5.5 Management Implications of Visitor Use and Preferences

It is clear that the park is now facing recreational/commercial pressures on a general basis. One or two isolated 'hot' spots that have long demanded attention from the park's administrators appear to be indicators of considerably more widespread pressures in the making. These pressures fall into two main categories:

- rapidly increasing foot recreation throughout the eastern 'front country';
- aircraft use for commercial recreation.

#### 5.5.1 Foot Recreation

The well established tracks like the Routeburn have annual usage figures climbing, with a broadening of the period of use. As well, increasing numbers of walkers are choosing to use non-regulated tracks, with the prospect that further 'Routeburns' are in the making. The question arises: how many high-use tracks should be allowed to develop within the park?

The traditional park management response in New Zealand to burgeoning use has been to build more facilities to the point



Mts Wahine and Maori, head of Dart Glacier.

Photo: Geoff Spearpoint

where the physical and social carrying capacities are exceeded, then attempt to divert further pressures to other areas.

The classic response to booming back country numbers was expressed in 1977 by Beamish as "to effect an even dispersal of use a number of alternative routes must be available, each unequivocal in terms of track condition and hut facilities." Subsequent attempts at 'dispersal' have proven otherwise, with growth in numbers on *all* tracks including those most under pressure.

Visitor preference surveys indicate a strong desire for minimal development. Current international recreational planning thinking stresses the need for a diversity of opportunities, not the 'sameness' of high use facilities that would logically result from pursuit of a 'spread use' ideology. Such a course would also result in DOC diverting all its resources into providing facilities, at the expense of park protection and interpretation. However this should not be seen as an opening for private enterprise to build, manage, or charge for the use of publicly available huts or tracks. Direct public control must be maintained over public facilities within the park to ensure public access and satisfaction, and protection of the park environment. A hands-off licensing authority would prove ineffectual in protecting the public interest in the face of well established commercial interests. The most likely result would be that the primary motivation for a public agency would become revenue generation rather than for the purposes for which the park was created. The same result would arise from

DOC summer party, East Matukituki beech forest.

Photo: Stuart Thorne



DOC attempting to generate revenue for its wider responsibilities through the provision of additional facilities in the park.

There is a need to 'reserve' a large slice of the easier 'front country' for informal, non-mechanical, minimal facility public recreation. Pushing back the wilderness frontier, besides reducing wilderness opportunities, would not satisfy popular needs due to the rugged, alpine nature of this country.

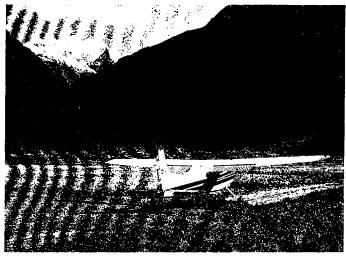
The day walker is now relatively well catered for in the park, and further opportunities can be easily provided.

#### 5.5.2 Aircraft.

There are rapidly increasing pressures for aircraft access throughout the park. This is one of the most contentious issues that park managers are yet to face up to.

In considering applications for aircraft-based concessions, decision makers must remain mindful not only of the balance of recreational opportunities within the park, but also in relation to the adjacent Otago high country, and the Fiordland and Mt Cook-Westland National Parks. Most of the Mt Cook alpine region is now open to aircraft landings and subject to continual noise intrusion from over-flight. The Milford, and increasingly the Kepler Tracks in Fiordland, are subject to noise from overflight and landings. This leaves few popular areas where "the intrinsic worth" (Section 4 National Parks Act 1980) of a national park can be fully appreciated.

Visitor preference surveys conducted to date consistently indicate a heavy leaning against such mechanical intrusions into the Mount Aspiring National Park environment.



Aircraft landing in Siberia Valley. Mt Awful rear.

Photo: Paul McGahan

## 6. Recreational Management Planning

The first management plan for the park was prepared in terms of the National Parks Act 1952 and the former National Parks Authority's General Policy of 1978. Two of the four zoning classifications provided for in the policy were recreational in character, with 'special' and 'facilities' areas being other management categories. The Mount Aspiring National Park has the unique distinction among well established New Zealand national parks of not having facility areas within (or very close to) its boundaries and therefore is the least commercially developed alpine national park in New Zealand.

The former Mount Aspiring National Park Board made full use of policy flexibility over tracking, hutting and bridging in 'natural environment' areas. The Board subdivided natural environment into 'A' (tracks, but no huts or concessions), and 'B' (tracks and huts permissible, concessions discretionary). In effect, three recreational management zones: 'Wilderness,' 'Environment A' and 'Environment B' were utilised by the Board.

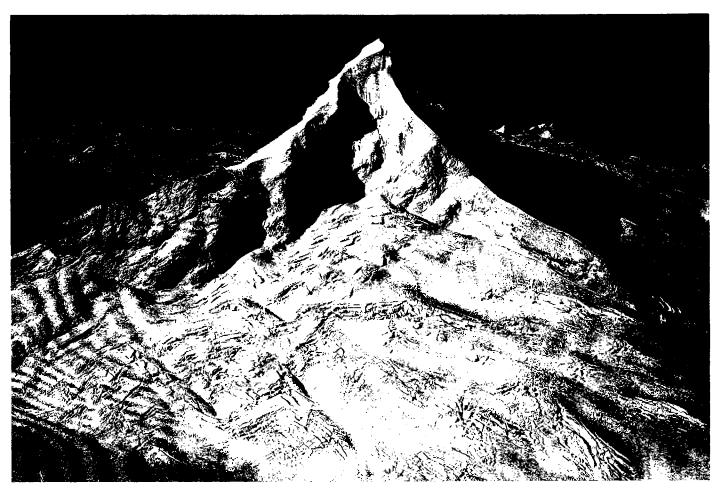
In 1981 the first major review of the management plan was completed in terms of the former Act and policy. Earlier prescriptions and zonations survived the review with 24 percent of the park zoned as 'Wilderness Area'; 42 percent as 'Environment A'; 33 percent as 'Environment B'; and 0.6 percent as 'Special Area.'



Todd Hut building party 1960. Shipowner Ridge, Aspiring. Photo: Peter Child

The National Parks Act 1980 evolved from a major Government review of the legislation and administrative structure under which national parks and reserves were administered. A new general policy for National Parks was completed in 1983 54 which narrowed management classifications to only three categories; those with statutory authority: i.e. 'Specially Protected Areas,' 'Wilderness Areas,' and 'Amenities Areas.' The policy stipulated that "no more detailed level of formal classification should be undertaken, as this would create confusion with the statutory provisions for special management categories. ...Park areas not in the special categories will be subject to management in accordance with the general policies of the management plan."

If this policy were made to apply to the Mount Aspiring National Park, without other provisions in the plan, over 75 percent could end up with no specific recreational management. The only directly relevant general policy on foot access makes no provision for buffering of wilderness areas or for consciously maintaining diversity of recreational opportunity by prescriptions on standards of track and hut development. A very real danger arises that the Mount Aspiring National Park will, in the absence of a recreational opportunity spectrum management philosophy, lose its status as the least developed alpine national park in New Zealand and follow the course of longer established parks. This would be to respond to real or perceived pressures over the greater bulk of its area with development on an ad hoc basis. The present broad balance of recreational opportunities (spanning from unmodified wilderness, through semi tracked to



Above: Mt Aspiring and Bonar Glacier.

NW Ridge(left), SW Ridge (centre), Popes Nose (right). Photo: Bill Hislop

Right:

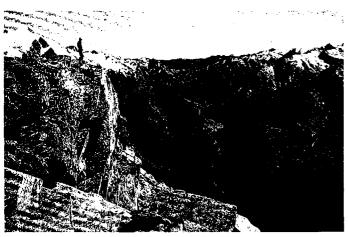
Climbing to The Quarterdeck (top centre) for access to the Bonar. Ewan Paterson

well tracked and hutted) could be lost. Failing alteration to the existing policy, much hinges on how, or if, future management plans can prescribe varying levels of development.

An apparent change in official thinking, as expressed in the 1988 draft review of the Fiordland National Park management plan,55 is cause for hope. This provides for recreation management areas (zones) as an overlay of natural attributes —the protection of the latter predominating in park management. This zoning system only applies to recreation and tourism in the park, with no suggestion that some parts of that park are of greater or lesser natural quality than others. A range of recreation and tourism opportunities are offered by allocating different parts of the park to different activities. The zones are defined by a mix of natural attributes, existing uses and long-term potential. Each zone offers a different overall recreation setting defined by its management prescription. The zones are intended to provide a spectrum of recreational opportunities. At one end of the spectrum is wilderness, at the other end is the popular, intensive use sector of the park. Three wilderness, two remote zones, and one large 'popular' zone are proposed in Fiordland.

The Fiordland approach reinforces the legitimacy of the present recreational strategy for the Mount Aspiring National Park. The Recreational Opportunity Spectrum (ROS) approach to management planning should be a guiding consideration in the forthcoming review of the Aspiring management plan.





Beansburn Valley from Mt Chaos.

Photo: Ian Turnbull

## 7. Proposals for Park Additions

The former Mount Aspiring National Park Board proposed almost continuous extensions along the park's western boundary. FMC's views on the necessity of westward extensions in the upper Pyke, Cascade and the western side of the Arawata are documented in Outdoor Recreation On the West Coast. 56 In 1988 the National Parks and Reserves Authority recommended to the Minister of Conservation that the long-studied Red Hills, as far west as the Pyke River, be added to the park. The Clutha-Central Otago United Council has objected to the proposed addition. No decision has yet been made by Government. The Authority also decided on a Haast Range addition, down to a 'toe of the hill' contour in the Arawata Valley. This has been approved in principle by the former Minister of Lands and awaits survey.

Two adjustments to park boundaries in the Wilkin and Young Range are discussed in the West Wanaka-Hunter chapter. The Dart State Forest-Mt Earnslaw Station, and upper Rees Valley-Snowy Creek additions are examined here.

#### 7.1 **Dart State Forest**

Since the mid 1960s it has been frequently suggested that this 8700 ha state forest should be administered as an integral part of the national park, rather than retain a separate and possibly

incompatible administration. Fortunately the, at times, open hostility between the former Forest Service and Lands and Survey Department has now ended with the establishment of a Department of Conservation and the allocation of this forest to DOC. Two thousand and seventy ha of forest extends from near Slip Stream on the true right bank of the Dart to Lake Sylvan. The remaining area, on the true left bank, is down valley to above Diamond Lake, and up the Earnslaw Burn. Two outliers on Mt Alfred are approximately 600 ha.

In the 1966 review of national park boundaries the Dart state forests were identified as a logical and highly desirable addition. The then Chief Ranger was of the view that "nowhere in New Zealand do farms, forests and rivers combine to form such an attractive foreground to spectacular mountain scenery as they do in the Dart Valley...this unique landscape should be preserved ... " He further observed that "in an area such as this with so many national park features, what benefits the eye will benefit the economy of the area and I venture to suggest that in the future the area will benefit more from the scene as near as possible as it is today rather than from royalties on red beech. The quality of the scenery is so high that in spite of royalty values, indiscriminate cutting of red beech can only be considered as an uneconomic competing interest." 57

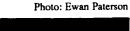
An alternative to either national park or state forest options for the forest was raised by the Forest Service in a discussion paper in 1978. \* This was for a State Forest Park, but the proposal was subsequently dropped through lack of support by all other interested parties. The Service's analysis of submissions on the discussion paper 59 reached the not unexpected conclusion that the primary issue at stake was future flexibility of land use decisionmaking. This was in relation to three identified resources, minerals, timber, and wild animals:

- Low-grade nephrite is present, having much higher archaeological value than for any economic use.
- Timber: since 1949 the Service greatly reduced extraction in recognition of the forest's high scenic values. Extraction in recent years has been limited to small-scale local uses. It has also been available for mining timbers if required.
- Whitetail deer: this has been regarded in the past as a high quality trophy resource. The herd extends over national park and forests within pastoral lease. Studies of population trends have recorded major reductions in animal numbers. Since

Whitbourn camp.



The Snowdrift Range from above Whitbourn Saddle. Westwards towards Olivine country







Junction Flat camp, East Matukituki.

1981, to prevent possible local extinction, no hunting permits have been issued within former state forest lands, in the hope that good trophy heads will become available again. This approach appears to have persisted under DOC's local administration, by a proposal of opening up the herd again to hunting, for a maximum of 10 trophy bucks per year, with management aimed at maximum trophy potential. This requires maintenance of readily food sources through maintenance of low whitetail populations and reduction or elimination of competing red deer and goats.<sup>60</sup>

Between 1968 and 1978 the Forest Service delegated the administration of recreational development within the state forest to the national park board. However, although it was intended that the agreement be renewed for a further 10 years, of the Service allowed this to lapse.

In 1979 the Mount Aspiring National Park Board recommended to Government that the whole of the former state forest (the residual on the true left bank now being stewardship area) be added to the park. This recommendation was not accepted by Government.

After a series of rather unsatisfactory public meetings the Forest Service prepared an analysis document on the public submissions to their proposals <sup>62</sup> in which six major recommendations were made to the Minister of Forests:

- that the true right bank and true left up valley from Chinamans Bluff be transferred to the national park;
- that the isolated area of national park at Diamond Lake go into the state forest;
- that the remaining state forest (mainly in the Earnslaw Burn) stay state forest;
- that forests in pastoral lease be considered for inclusion in the state forest or a whitetail deer management area;
- that a wild animal control plan be prepared;
- that proposals for large scale silverculture work or mining be subject to public submissions.

After approval in principle by the Minister, these recommendations were referred to the Clutha-Central Otago United Council which, for somewhat spurious reasons, opposed any true left bank forests going into the national park. In consequence a new

Minister altered the original approval and only the smaller area of true right bank forests were added to the park in 1983.

The high (non-hunting) recreational value of the forest was acknowledged by the Forest Service which recorded 1000 recreational users passing through the forest in transit to the national park in 1978.<sup>55</sup> In fact the high scenic values and arbitrary boundaries with the national park, bearing little relationship to topography, lead most visitors to assume all forest areas in the lower Dart to be national park, particularly as these forests provide the natural entrance to the rest of the Dart Valley.<sup>66</sup>

No recent consideration has been given to adding the true left forests to the national park.

FMC has long considered that the former Dart State Forest forms an inseparable part of the Dart Valley sector of the Mount Aspiring National Park. The area has the same high scenic-recreational value as the rest of the Dart Valley, and is the last extensive low altitude beech forest left from a long history of milling in the upper Wakatipu district. It should logically receive the full protective status of national park.

#### 7.2 Mt Earnslaw Station

#### 7.2.1 Pastoral History

The first run at the head of Lake Wakatipu was granted by the Crown in 1861 and included Mt Alfred (1386 m) and the flat, fertile country between the lower Rees and Dart Rivers. In 1874 this, and other large leases in the district, were subdivided and offered for sale. Run No. 19 (Mt Earnslaw) was grazed in

East Matukituki-Volta country from Fog Peak.

Photo: John Cocks



Picklehaube Peak and windscoop. Upper Volta Glacier.

conjunction with two other leases (Rees Valley and Temple Peak) and carried over 40,000 sheep. Low wool prices and a rabbit plague caused abandonment of these runs in 1887.

Mt Earnslaw was reoccupied by new tenants in 1889, and has been continuously occupied since 1908 <sup>65</sup> when a pastoral run licence was issued over 13,557 ha including most of the glaciated Forbes Mountains and Mt Earnslaw. The current pastoral lease commenced in 1952 over the whole area despite the Department of Lands and Survey's intention that the mountaintops be excluded from any new lease "with the idea that one day they be made into a National Park." <sup>66</sup>

The resumption of over 9,000 ha of Mt Earnslaw and the Forbes Mountains in 1973 drastically reduced the area of the lease but, as this area was not utilised, it had no effect on farming viability. The existing lease covers 5,253 ha in two distinct and separate blocks of high country. This comprises the Earnslaw Burn and western-mid Rees Valley faces, and much of the Mt Alfred roche moutonneé rising as an 'island' above the alluvial lower Dart and Rees flats. These flats were subdivided from the Run into small farms during the 1870-80s.

## 7.2.2 Land Use and Capability

In keeping with its undertaking not to include "traditional grazing lands," the Park Board carefully excluded any areas that had stock access on to them at the time of the 1973 resumption. This appears to have been the prevailing consideration in fixing the present national park-pastoral lease boundary as it bears little relationship to either land use capability, scenic or biological features. Mt Alfred has never been seriously considered as a candidate for national park status.

The 3880 ha Earnslaw block extends down valley from the top of Black Peak (2230 m) and Turret Head (2340 m), utilising the Earnslaw Glacier as an upper boundary. The entire Earnslaw Burn, excluding the former state forest in the lower half of the valley, is included along with the Rees Valley faces south of Lennox Falls. Over 900 ha of beech forest on these faces is included in the lease. Sixty eight percent of the block is beech forest and Class 8 and includes a 1,400 m sheer cirque wall. A further 17 percent is Class 7, being confined to the lower Leap Spur ridge above the Earnslaw Burn and Rees Valley bushlines. An isolated pocket of Class 7 occurs on the Lennox Pass face above the Rees bushline, surrounded by Class 8. Only 15 percent of the block is capable of sustained pastoral use.

The Otago Catchment Board has recommended that all areas

above bushline be primarily managed for watershed protection, with grazing only allowable on better more stable areas. There are currently no block limitations or fencing to prevent or control stocking of these alpine areas. However most areas have not seen stock for many years.

Relatively small areas of montane valley floor are included in the lease. Approximately 250 ha of river terrace between Arthur Creek and Hunter Stream in the Rees Valley are Class 4, having limited potential for cultivation and only being used for grazing. Another 40 ha on the Diamond Lake-Rees flats is Class 3, being capable of moderate cultivation.<sup>68</sup>

Mt Alfred is a mix of former state forest, pastoral lease, recreation reserve and private land. The 1,370 ha of leasehold covers approximately two thirds of the mountain. Up to 910 m is generally Class 6, above which is Class 7. Most of the mountain was forested in historic times but burning has reduced its extent to about a third. Approximately 150 ha of beech forest is included in the pastoral lease and another 100 ha in the two partly forested recreation reserves.

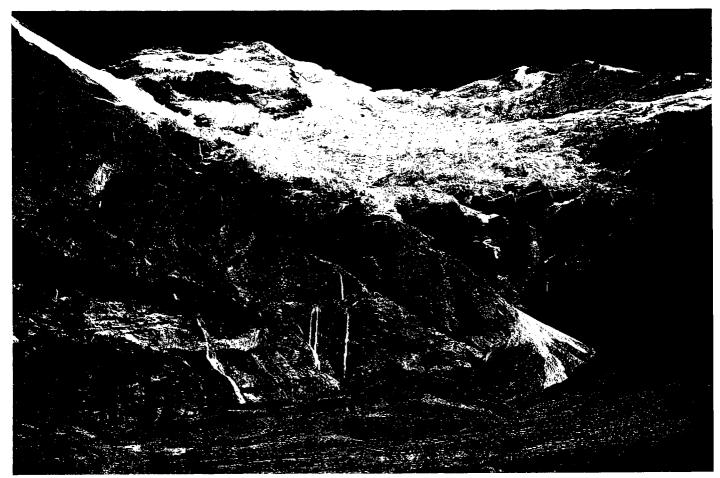
Open slopes are extensively grazed, with the lower eastern face oversown and topdressed. Farm tracks zig-zag up the eastern face above Paradise and Diamond Lake. At the time of the late 1970s debate over the future of the Dart forests the lessee expressed a wish to include state forest lands on Mt Alfred in his lease for the purpose of deer farming. The Forest Service was opposed to such a situation which would deny public access and recreation and pose a serious threat to the health of the forests.

The freedom to fell Crown forest in pastoral leases at the convenience of lessees is an aspect that requires review. Section 100 of the Land Act 1948 states that the Department of Land's consent is not necessary where such timber is required by lessees for any agricultural, pastoral, household, roadmaking, or building purpose. The Department's consent is however required for selling or removal of timber.

## 7.2.3 District Scheme Zoning 69

The Lake County Council has zoned the non national park and former state forest areas of the Earnslaw block 'Rural MA' (Mining), being areas of "existing mining activity," despite there being apparently no previous mining history, as distinct from prospecting, in this particular area. Council anticipates "that physically sensitive areas will be protected through the lease provisions determined by the land administering agency." The zone permits small scale underground mining, plus processing, on a 1-2 person basis, as a predominant use. Roading requires Council consent and native bush is to be undisturbed. Farming of any kind, dwellings and buildings accessory to any predominant use are predominant uses. Rural industries, hut sites and associated vehicle tracks, commercial forestry (and mining involving more than two persons and excavating machinery) are conditional uses.

The eastern face of Mt Alfred is also 'Rural MA.' Other than former state forest areas the balance of the mountain is zoned 'Rural B' which is intended mainly for extensive pastoral farming with some forestry. Predominant uses are farming of any kind, dwellings, and buildings accessory to any predominant use. Conditional uses include rural industries, but sites and associated vehicle tracks, and commercial forestry. The Council records a preferred classification of 'scenic' over the two recreation reserves, and designates all existing national park and former state forest lands as requested by the Crown.



Earnslaw, West Peak (left) and East Peak (rt), from head of Earnslaw Burn.

## 7.2.4 Recreational Opportunities

In addition to hunting of whitetail and red deer in pastoral lease forests (with lessees' consent), there are substantial opportunities for tramping. The Earnslaw Burn has long been a recognised route for climbing access to the south face of Mt Earnslaw, Turret Head and Black Peak. It is more particularly used for tramping trips usually of two days' duration for crossings into the Rees via Lennox Pass, or to Paradise and Dans Paddock via the ridge south of Turret Head. This southern approach provides the most spectacular aspect of Mt Earnslaw, with the east and west peaks towering fully 1800 m above the narrowly confined valley floor of the upper Earnslaw Burn. A more dramatic alpine setting with relatively straight forward tramping access would be hard to find anywhere.





Current recreational use of Mt Alfred is predominently hunting. The major problems faced in this activity are the poor definition of legal boundaries and legal access routes. As a massif isolated from the surrounding mountains, Mt Alfred provides an excellent viewpoint of the lower Dart, Humboldt Range, Mt Earnslaw and Lake Wakatipu. There is potential for a well defined track or walkway traversing the leading ridge and summit.

## 7.3 Rees Valley and Snowy Creek

A glaring omission from the eastern margin of the park is the upper Snowy Creek catchment of the Dart and the head of the Rees Valley. The former is now stewardship land, being expired and ungrazed pastoral occupation licence (POL). The latter is within the Rees Valley pastoral lease and includes the upper valley beech forests on the true left bank.

The popular Rees-Dart track traverses through the central part of the area, to descend Snowy Creek. Most track users are probably unaware that they are outside the national park for a distance of approximately 5 km.

An impressive amphitheatre of alpine peaks surrounds the strongly glaciated upper Snowy Creek. Glaciers tumble down the southern faces of Mts Headlong (2468 m) and Tyndall (2457 m). A high unbroken ridge provides a dividing barrier from the upper Shotover and Lochnagar catchments.

In addition to the 1,500 walkers per year who currently walk over the Rees Saddle during summer, the upper Snowy provides one of very few routes to Lochnagar. This involves a high-level



Mt Tyndall and Glacier

traverse through the bluffed upper Pine Creek faces and a descent to the loch outlet, this being the only practical route between the Snowy and the head of the Shotover. A crevassed alpine crossing is possible via the Tyndall and Isobel Glaciers to Cascade Saddie.

Since 1981 the Tyndall Glacier has been used for heliskiing, under a recreation permit, as part of the Harris Mountains operation (refer to 4.8.4 Richardsons chapter). On average only a few visits per winter are made, use tending to be sporadic. The main limitation to greater use appears to be weather conditions.

The Snowy Creek and upper Rees, with the exception of the slopes above bushline in the Rees, are proposed additions to the park. 'Natural Environment B' zoning is intended for this area. The Park Board's official objective for this addition is to include within the park the Rees-Dart track and to replace present arbitrary straight-line boundaries.<sup>71</sup>

In 1987 the Central Otago Land Settlement Committee, in its consideration of the expired Branches Station POL, recommended that the Snowy Creek catchment be investigated for addition to the park.

During 1988 the matter of renewal of the recreation permit, and possible inclusion of the area in the park, was considered by DOC and the Otago National Parks and Reserves Board. In view of a desire to see heliskiing continue the Board resolved not to add the area to the park, at least until the time of the pending review of the park's management plan. The Board was influenced by the present management plan only allowing aircraft landing

licences in the north east 'Environment B' sector of the park. Therefore to allow a regular aircraft concession in the Snowy would be contrary to the management plan if this area was within the park. However the Board, by its 1988 decision, appears to have lost sight of its management plan objectives for this area.

FMC is of the view that the Snowy Creek and upper Rees admirably meets national park criteria and that the highest level of legal protection should be sought. The Federation is not convinced that the public benefit arising from heliskiing in one small part of the area is sufficient justification for denying national park protection over the whole. In view of the vast opportunities for heliskiing throughout the high country adjacent to the park, FMC considers that the loss of one lightly used heliski area is justified by the level of protection from mining or inappropriate development that national park status would bring for the environs of the Rees-Dart track.<sup>73</sup>

Rather than use a bushline boundary in the upper Rees, as proposed in the park management plan, Twenty Five Mile Spur would be more appropriate as the south east boundary. A ridgeline boundary would be consistent with the 1983 General Policy for National Parks which provides for complete landscape units being added to parks and for boundaries to follow ridgelines rather than vegetation boundaries. The area above bushline is predominantly Class 7 tussock grassland. Although this has a history of grazing, in the absence of burning and grazing, it is capable of regeneration to a vigorous natural cover.

## 8. Proposed World Heritage Listing

In 1987, as part of a strategy to obtain protection from logging of indigenous forests in South Westland and western Southland, national conservation organisations proposed world heritage listing for all national parks and Crown owned forests in the south-west South Island.

World Heritage listing would provide world recognition of the unique values of New Zealand's south-west and for world wide promotion as a tourism resource. "The intention of the World Heritage Area proposal is to open up and market the area for recreation and tourism" and to "spread tourist pressure" within the region. American experience of phenomenal growth in tourist numbers (6 to 30 percent increase in total proportion of all [national park] visitors in 4 years), being the direct result of world heritage listing for the Mesa Verde National Park in the USA, is cited by heritage proponents as an indicator of the likely increase in visitation to a New Zealand world heritage site.

The South-West proposal was conceived at a time when an immediate threat existed to the survival of many lowland forests adjacent to and between the Westland and Fiordland National Parks. This threat has now been removed with Government's decision to permanently protect the threatened forests. It was an attractive strategy to pursue compared to the protracted 'trench warfare' between conservation and logging lobbies that has dogged resolution of forest issues on the West Coast for over a

decade. A politically attractive solution was required —tourism jobs instead of one-off logs.

However, in the case of the Mount Aspiring National Park it appears that world heritage status has been proposed, not for the sake of providing greater protection or more apt management, but as an appendage to a settlement of West Coast forest issues. There is no prospect of logging within the park, and other threats to areas that have been long proposed for park additions are minimal (and reducing). The main threats to the sanctity of the park are currently grazing and (potentially) mining although the latter is not likely. However tourism pressures are rapidly expanding, at a greater rate than at any time previously. The latter has only been held in check by a park management plan which is itself subject to strong pressures for 'liberalisation' from the tourism industry and laissez-faire planners. That is, the removal of zoning constraints to development and vesting discretionary power with officials rather than citizen boards.

Extensive tourism, recreational development, and unrestrained promotion of backcountry recreational use (even without attendant development) poses the greater potential threat to the non-commercial character of the park. Unified management and the spreading and promotion of tourism throughout the South-West region, is, without explicit constraints, likely to seriously erode the unique character of the park. On a national scale the differences of the Mount Aspiring National Park, in relation to other parks, are worth preserving.

Cross country skiers returning from Mt Brewster and Glacier.



The Otago National Parks and Reserves Board recorded in its 1988 annual report the view that:

All parks and reserves are not alike. Some like Tongariro, Mount Cook and Fiordland National Parks are the base for substantial tourist industries. These industries may have a place but in the process parts of these parks are losing (if they have not already lost) some if not all of the qualities for which they were created. ... Instead of trying to create the same spectrum of opportunity in each park, there should be a range of dissimilar opportunity suited to each environment.

The challenge and insight offered by Chief Ranger Ray Cleland 20 years ago is particularly potent today. There is the risk of committing the travesty of actively encouraging the loss of irreplaceable recreational opportunities within New Zealand's least developed alpine national park under a guise of 'protection.' In the view of the writer a commitment must be forthcoming from Government, before nomination of this area for world heritage listing, that the special 'wilderness' qualities of the park will be maintained in the future.

## 9. Zoning

FMC largely supports the retention of existing, and proposed eastern addition zonings, within the park management plan. The zoning prescriptions are closely comparable to FMC's recreational planning zones, except that 'natural environment' is subdivided into 'A' and 'B.' This is a necessary division for such a large tract of land and ensures a diversity of recreational experiences within, and to a greater extent between, 'front' and 'back country.' (Refer to Section 6 for descriptions of park zoning).

One significant change to the prescriptions for 'Environment A' and 'Wilderness' is desirable. This is to remove the prohibition of all concessions within these zones. The 1981 Wilderness Conference and Government's Wilderness Advisory Group supported licensed or permitted commercial recreational activities in 'Wilderness Areas,' at levels compatible with the maintenance of wilderness values. This is to allow guided activities on the same basis as other users. That, is without huts, tracks, bridges, signs, or mechanical access. It is the impacts of commercial use on other wilderness users and on the environment that needs to be controlled, rather than commercialism per se. The same consideration should also apply to 'Environment A' zones within the park.

It is highly desirable that the existing balance between 'Environment A' and 'Environment B' be maintained, in particular the West-of-Dart 'Environment A' zone which provides limited track access and buffering for the Olivine wilderness zone. The East Matukituki 'Environment A' zone provides a readily accessible but largely undeveloped contrast to the heavily used and hutted West Matukituki. The East Matukituki provides an excellent area for bushcraft/outdoors skills training/introductory tramping and is highly valued by club and school groups for these purposes. The more alpine nature of the West Branch makes this area less suitable for non mountaineers.

FMC's proposals for a Olivines Wilderness Area were endorsed by the 1981 wilderness conference. This is for a formally gazetted Wilderness Area, under Section 14 National Parks Act 1980, rather than rely solely on park management zoning. The proposal extends westward to include the unique Red Hills to the west. FMC continues to believe that it is of

national importance that this wilderness has a statutory assurance that it will remain a rugged, undeveloped challenge for present and future generations.

The Mt Aspiring-Bonar Glacier area is currently zoned wilderness, with one anomaly which needs review. This is a 'dog leg' of 'Environment B' from Bevan Col across the lower Bonar to include Colin Todd Hut at the foot of Mt Aspiring. With the presence of a large, modern hut on French Ridge, there is now less dependence on Todd Hut as a base for high climbing than previously. There is no doubt that Todd Hut will continue to be used as long as it remains, however its absence it is unlikely to greatly disadvantage climbers. A major concern among Otago climbers is that the solitude value of this high alpine area be paramount. If hut removal is necessary to maintain the greater area aircraft-free then this should be seriously considered. There is no other relatively accessible major high alpine region in the Southern Alps that is free of aircraft landings. By comparison most of the Mt Cook-Westland National Parks are available for aircraft landings, so and along with overflight, has significantly reduced the aesthetic rewards of high climbing. In short, most Otago climbers don't wish to be 'blitzed' by helicopters and ski planes in the Aspiring area.

There is increasing interest in ski touring on the Bonar during winter, as this area is usually accessible on foot and ski via French Ridge. The solitude value of winter recreation in such a dramatic alpine setting is the ultimate experience for ski mountaincers. There are no shortage of opportunities for glacier landings within the Mt Cook and Westland National Parks for those who so desire.

## 10. Recommendations

Mount Aspiring National Park

10.1 That in the forthcoming review of the Mount Aspiring National Park Management Plan, the existing boundaries and prescriptions for management zones (including for proposed eastward park extensions) be largely retained. This is to ensure a range of wildland recreational opportunities. However the following changes should be considered:

- allowing commercial recreation in 'Wilderness' and 'Environment A' zones on the same terms as other recreational visitors;
- deleting provision for foot tracks from wilderness areas and zones;
- removing Todd Hut and zoning all the Bonar Glacier catchment as wilderness;
  - adding the objective of maintaining 'Environment A' zones as buffers for adjacent wilderness.

    Note: This is particularly important in the 'West-of-Dart' country to discourage high use on the main southern approaches to the Olivines.
- 10.2 That before nomination for world heritage listing, government give a public undertaking that the express objective of maintaining the undeveloped and non mechanical character of the Mount Aspiring National Park will be a requirement in any future management plans for the park.

- 10.3 That the National Parks and Reserves Authority amend its general policy on national parks to provide management plan zoning for recreational usage and development, consistent with the recreational opportunity spectrum (ROS) concept.
- 10.4 That concessions be confined to activities of low impact on the environment and on the peace, tranquillity, and enjoyment of other park visitors. In this regard recreational aircraft landings should be discouraged within the park.

*Note*: The vast majority of adjacent mountain country to the east and west is available for recreational aircraft use. This should fairly provide for this interest.

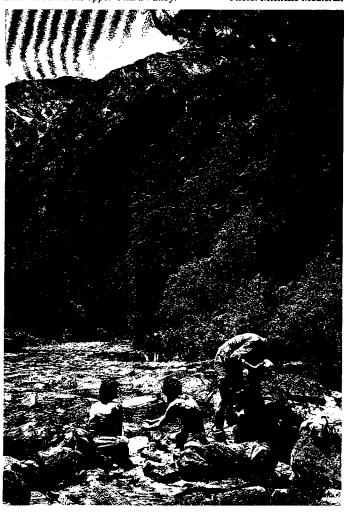
- 10.5 That the National Parks Act be amended to remove legal occupier status from the granting of grazing rights over park lands.
- 10.6 That all grazing within the national park be phased out within a 5 year period.

## Olivine Wilderness Area

10.7 That the outstanding wilderness qualities of the Olivines be gazetted a Wilderness Area (as defined by the Wilderness Conference) and managed in terms of Government's Wilderness Policy.

Lunch break in the upper Okuru Valley.

Photo: Michelle Metherall



Dart State Forest

10.8 That the whole of the former state forest on the true left bank of the Dart River (exclusive of Mt Alfred) be incorporated into the Mount Aspiring National Park.

#### Mt Earnslaw Station

10.9 That all Class 8 and 7 lands on the Earnslaw block and the upper Earnslaw Burn valley floor be excluded from pastoral lease.

Note: These areas are either unsuitable for pastoralism or should not have exclusive, long term occupation rights. They include substantial areas of forest which are not adequately protected while under pastoral lease tenure.

- 10.10 That long term pastoral occupation be confined to the Rees Valley floor and the Class 6 land on the toe of Leap Spur. *Note:* A special lease (Section 67(2) Land Act 1948) would provide a more appropriate mechanism for integrating primary production with landscape protection and public recreation than the existing pastoral lease tenure.
- 10.11 That as a requirement for continuation of pastoral use on favourable areas under lease, adequate boundary fencing be erected and maintained to prevent stock penetration into forests and alpine grasslands.
- 10.12 The Earnslaw Burn catchment, exclusive of the toe of Leap Spur, be added to the Mount Aspiring National Park. *Note:* This would recognise the outstanding landscape and recreational values, high biological values, with nil to negligible pastoral values present.
- 10.13 That the substantially fire-modified Rees Valley faces become a Conservation Area managed primarily for the regeneration of forest cover.
- 10.14 That a Crown land (now conservation area)-state forest boundary rationalisation be undertaken on Mt Alfred to achieve exclusion of all forest from the pastoral lease and inclusion in conservation areas.
- 10.15 That protection be arranged for freehold forest either by means of covenanting or incorporation into conservation areas. This is particularly important for the protection of high cultural-natural landscape values in the environs of Paradise.
- 10.16 That the boundary of 'Recreation Reserve C,' on the eastern face of Mt Alfred overlooking Diamond Lake, be rationalised with the pastoral lease as necessary to provide a fencible boundary and stock exclusion for the regenerating forest. The reserve should be reclassified 'Scenic' in recognition of its backdrop value for the Diamond Lake Wildlife Reserve.
- 10.17 That 'Recreation Reserve D' on the south-western face of Mt Alfred be revoked. The greater area be incorporated into the former state forest (conservation area), with the balance added to the pastoral lease.

10.18 Failing 10.17 above, heavy stocking of the reserve be reviewed and all grazing terminated if adequate boundary fencing with the former state forest is not provided.

10.19 That non-freeholdable pastoral leasehold continue over the balance of open country with restrictions on:

- · burning to prevent damage to adjacent forest;
- further bulldozing to protect this prominent backdrop to the Paradise basin;

## And provision for:

- complete boundary fencing with adjacent conservation areas and reserve;
- exclusion of the Class 7 summit area from long-term occupation;
- protection from stock damage of important fisherieswildlife values in Diamond Lake and Creek.

10.20 That a walking track be provided from Paradise to the summit of Mt Alfred, to then connect with the existing foot access from the Glenorchy-Routeburn Road.

## Snowy Creek-Rees Valley

10.21 That the whole of the Snowy Creek catchment, and upper Rees Valley (to Twenty Five Mile Spur), be incorporated into the Mount Aspiring National Park.

Mt Lydia - Snowdrift Range from Whitbourn Valley. Photo: Bob Entwistle



## References and Selected Bibliography

#### Geology

BARRINGER, J.R.F. 1980. The Aspiring Hut Slip. Thesis B.Sc. (Hons), University of Otago, Dunedin.

BISHOP, GRAHAM. 1988. A Guide to the Routeburn Track, New Zealand. (Pamphlet). N.Z. Geological Survey, DSIR, Dunedin.

and FORSYTH, JANE. 1988. Vanishing Ice. An Introduction to Glaciers based on a study of the Dart Glacier. John McIndoe and N.Z. Geological Survey, DSIR, Dunedin.

KAWACHI, Y. 1970. Geology and Metamorphism Near The Head of Lake Wakatipu. University of Otago, Dunedin.

MUTCH, A.R. and McKELLAR, I.C. 1964. Geological Map of New Zealand 1:250,000. Sheet 19, Haast. DSIR, Wellington. WOOD, B.L. 1962. Sheet 22, Wakatipu. Ibid.

#### Climate, Vegetation and Wildlife

ALLEN, R.B. 1983. Impact of Cattle, Weka Flat and Lake Sylvan, Mount Aspiring National Park. Unpublished report. Botany Division, DSIR, Dunedin.

BEAMISH. S.F. 1974. The Late Otiran-Present Rees River: A
Comparative Study of Late Otiran and Aranunian Alpine
Fluvial Environments. B.A. (Hons) Dissertation. University of Otago, Dunedin.

CADENHEAD, L. and DEANS. N. (Undated). Invertebrates of Mount Aspiring National Park. (Pamphlet). Department of Lands and Survey, Dunedin.

CAMPBELL, B. 1976. A Study of the Kea in the Routeburn Falls

Basin. Unpublished Dip. Wildlife dissertation. University
of Otago.

CHILD, P. 1976. 'Birdlife of Mount Aspiring National Park.' National Parks Scientific Series No. 4. National Parks Authority, Wellington.

\_\_\_\_\_Mount Aspiring National Park Bird Habitats. Supplement to the bird survey report 1976.

CUDDIHY, M.J. and ROSS. A.D. 1979. Forests, Grasslands and Animals of Mount Aspiring National Park and Dart State Forest. N.Z. Forest Service, Invercargill.

DEPARTMENT of LANDS and SURVEY. (Undated). Bird Life of
Mount Aspiring National Park. (Pamphlet).

(Undated). Weather in the Mount Aspiring region. (Pamphlet).

JOHNSON, P.N. 1981. Lake Wakatipu-Report on Vegetation of Reserves. Unpublished report. Botany Division, DSIR, Dunedin.

31 MARK, A.F. 1977. 'Vegetation of Mount Aspiring National Park.' National Parks Scientific Series No 2. National Parks Authority, Wellington.

POPPELWELL, D.L. 1913. 'Notes on the botany of the Routeburn Valley and Lake Harris Saddle.' Trans. NZ. Institute 46:

SOMMERVILLE, P. 1978. An Ecological Study of the Chronosequences on the Upper Dart Valley Moraines, Mount Aspiring National Park. B.Sc. (Hons) Project. University of Otago, Dunedin.

WILLEMSE, P. 1985. Mount Aspiring National Park, Wild Animal Trends. N.Z. Forest Service, Invercargill.

## History

32 ADAMSON, IRENE. 1988. 'The Routeburn Is Rich In History.' Southland Times, 9 February.

ANDERSON, A. 1983. When all the moa-ovens grew cold; Nine centuries of changing fortune for the southern Maori.
Otago Heritage Books, Dunedin.

ANGUS, J.H. 1981. Aspiring Settlers. European Settlement in the Hawea and Wanaka Region to 1914. John McIndoe, Dunedin.

BARRINGTON, A.J. 1864. 'Diary of a West Coast Prospecting Party.' In, Taylor, N.M. (Ed.) 1959. Early Travellers in New Zealand. Oxford, Clarenden, UK. pp. 387-419.

BEATTIE. H. 1919. 'The Southern Maori and Greenstone Art.'

Trans. of the Royal Institute XII: 45-52.

1945. Maori Lore of Lake, Alp and Fiord. Otago Daily

Times & Witness Newspapers Co. Ltd., Dunedin. BRAILSFORD, B. 1984. Greenstone Trails-In Search of Pounamu. A H & A.W. Reed, Wellington.

	CHANDLER, P.M. 1984. Head of Lake Wakatipu; Schools		1975. 'Thar in Mt Aspiring National Park.' FMC Bulletin
	Centennial 1884-1984. Glenorchy School Centennial		No. 49. (September): p. 13.
	Committee.	13	GERARD, Hon. R.G. 1964. Parliamentary Debates (Hansard) Vol
	DEPARTMENT of LANDS and SURVEY. (Undated). Exploration		338. p. 267. 24 June. GILKINSON, W.S. (Ed.). 1971. Handbook to the Mount Aspiring
	of the Aspiring Region. (Pamphlet). Department of Lands		National Park. Mount Aspiring National Park Board,
	and Survey, Dunedin. DUNCAN, A.H. 1888. <i>The Wakatipians or Early Days in N.Z</i> .		Dunedin.
	Lakes District Centennial Museum, Arrowtown. (1964).	25	Lease MA 31/3; 5 years from 1.1.83.
	GALLOWAY, D.J. and MOLLOY, L.F. 1971. 'Exploration of the	32 35 39 4	oMount Aspiring National Park annual reports and statistics.
	Northern Olivine Range. NZ. Alpine Journal 24: 140-	12	Minister of Lands approval of 'Proposed National Park In North
	157.		West Otago & South Westland.' 31 March 1964.
	GILKINSON, W.S. (Ed.). 1971. 'The Park and its History.' In.	11	Minutes of Otago National Park organising committee, 5 September
	Handbook to the Mount Aspiring National Park. Mount	••	1963.
	Aspiring National Park Board, Dunedin.	72	Minutes of Otago National Parks and Reserves Board meeting 6
38	1951. Aspiring, New Zealand; the romantic story of the	, 2	May 1988. Item 8.
30	"Matterhorn" of the Southern Alps. Whitcombe and	14	MOUNT ASPIRING NATIONAL PARK BOARD. 1971. Manage-
	Tombs, Christchurch.		ment Plan.
37	GILKINSON, W.S. 1957. Earnslaw; monarch of Wakatipu.	19	1977. Management Plan. Department of Lands and
<i>J.</i>	Whitcombe and Tombs, Christchurch.		Survey, Dunedin.
	HALL-JONES, JOHN. 1971. Mr Surveyor Thomson. A.H. & A.W.	71	1981. Management Plan. Appendix II (1)a.
	Reed, Wellington.	53	1981. Management Plan. Department of Lands and
	1979. The South Explored. Ibid.		Survey, Dunedin.
	McKENZIE, DOREEN. 1973. Road to Routeburn. John McIndoe	15	NZ. GAZETTE . 1964. p. 2305.
	Ltd. Dunedin.	9	NATIONAL PARKS AUTHORITY. 1959. Formation of a New
	PASCOE, J.D. (Ed.).1957. Mr Explorer Douglas. A.H. & A.W.		National Park. Meeting of 22 September. Case No. 680.
	Reed, Wellington.	48-50,77	OTAGO NATIONAL PARKS and RESERVES BOARD. 1986.
	PASCOE, J.D. 1966. The Haast is in South Westland. Ibid.		Annual Report, Year Ended 31 March.
	1971. Exploration New Zealand. Ibid.	10	Otago National Park. Notes on public meeting held in [Dunedin]
	A into a Notional Danie		Council Chambers on Monday 16th March 1964 at 8 pm.
Mount	Aspiring National Park AHERN, B. 1979. A Resource Study for a Visitor Centre at	26-27	PAYTON, D.M.G. 1984. Monitoring of grazing and Its impact In
	Glenorchy. Unpublished dissertation (Diploma in Parks		Mt Aspiring National Park. Interim report of 5 April to
	and Recreation). Lincoln College.		District Field Officer, Department of Lands and Survey,
27	1983. Impact of Cattle, Weka Flat and Lake Sylvan, Mount		Dunedin.
27	Aspiring National Park. Unpublished report. Botany	27	SIMM, J.A. 1978. Renewal of Grazing Leases-Dart Valley-Mt
	Division, DSIR, Dunedin.		Aspiring National Park. Report of 8 May to Commissioner
27	ANDERSON, GRAEME. 1980. Dart Valley Inspection 15/16		of Crown Lands, Dunedin.
21	October 1979. Report of 13 February to Secretary, Mount	27-28	1979. Grazing Lease Mt Aspiring National Park. Report
	Aspiring National Park Board.		of 23 March to Commissioner of Crown Lands, Dunedin.
32-34	Annual track statistics prepared by L & S/DOC staff, Glenorchy.	30	Subsection 4(1) National Parks Act 1980.
36	CAMPBELL, DAVE. 1988. 1987-88 Debrief and Wardens Report.	5,6	UNDER-SECRETARY of LANDS. 1940. Memo of 18 October to
30	Unpublished report. DOC, Glenorchy.		Commissioner of Crown Lands, Dunedin.
57	CLELAND, R.W. 1966. Chief Ranger's Report on Investigation of	29	YOUNG, VENN, Minister of Lands. 1977. Letter to G.I. Lythgoe.
51	Park Boundaries by Messrs A.P. Thomson Assistant.		26 August.
	Director-General of Forests, K.Miers, Supervisor of	Land	Use-Management Planning, Wilderness
	National Parks, M. Kershaw, Board Member and the Chief		ALLEN, R.B. 1983. Impact of Cattle, Weka Flat and Lake Sylvan,
	Ranger, 19-25 April 1966.		Mount Aspiring National Park. Unpublished report.
1	1969. 'Park Aspiring.' Review No. 17: 10-17. Tussock		Botany Division, DSIR, Dunedin.
	Grasslands and Mountain Lands Institute, Lincoln.		BURRELL, R. 1983. Fifty years of Mountain Federation 1931-81.
4	COMMISSIONER of CROWN LANDS, Dunedin. 1940. Memo of		pp. 99-106. Federated Mountain Clubs, Wellington.
	11 December to Under-Secretary of Lands.	65	CHANDLER, P.M. 1984. Head of Lake Wakatipu; Schools
66	1949. Memo to Director-General of Lands of 10 June.		Centennial 1884-1984. Glenorchy School Centennial
8	1957. Memo of 29 November to Director-General of		Committee.
	Lands.		CLUTHA-CENTRAL OTAGO UNITED COUNCIL. 1987.
3	CRAIGIE, A.R. (1965). Introducing Mount Aspiring National Park.		Approved Regional Planning Scheme, Principal Section.
	Pamphlet issued by Department of Lands and Survey,	55	DEPARTMENT of CONSERVATION. 1988. 'Fiordland National
	Dunedin.		Park Management Plan Draft Review.' DOC Southern
	1965. 'The Birth of a National Park.' N.Z. Alpine Journal		Region Management Plan Series #1.
	Vol 21. pp. 125-130.	51,80	1988. Mount Cook National Park Management Plan.
	DEPARTMENT of LANDS and SURVEY. (Undated). General	51,80	1988. Westland National Park Management Plan. FEDERATED MOUNTAIN CLUBS. 1958. 'Wilderness Areas.'
	information. (Pamphlet). Department of Lands and Survey,	16	FMC Bulletin No. 3. (September): pp. 6-7.
	Dunedin.		1960. Ibid. FMC Bulletin No. 8. (May). pp. 5-7.
	1986. 'A Resources Report on the Red Hills, An area	10	1961. 'Wildemess Area Recommendations.' FMC Bulletin
	proposed for addition to Mount Aspiring National Park.'	18	No. 11: (September). pp. 6-7.
_	National Park Series No 35. Ibid.		1975. National Park Policy.
7	DIRECTOR-GENERAL OF LANDS. 1953. Memo of 11 September		1981. 'Olivine Wilderness.' FMC Bulletin No. 68.
	to Commissioners of Crown Lands.		(November). pp. 16.
	FEDERATED MOUNTAIN CLUBS. 1964. 'Proposed Otago		1989. Harris Mountains Heliski Limited Application for
	National Park.' FMC Bulletin No. 18: 1-3. (February). pp.		Recreation Permit. Submission to Property Manager,
	1-3.		Landcorp, Alexandra. 19 February.
	1965. 'Mount Aspiring National Park.' FMC Bulletin No.	40	JOHNSTON, HATFIELD and PARTNERS. 1983. Lakes-Queenst-
	21. (February): p. 5.	69	own Wakatipu Combined District Scheme.
	1965. 'Mount Aspiring Park Board.' FMC Bulletin No. 30.		MASON, BRUCE. 1986. 'Earnslaw Station. A case history.' Forest
	(May): pp. 7-8.		& Bird Vol. 17 (2). (May).
	1974. 'Mt Aspiring National Park.' FMC Bulletin No. 47.	76	McSWEENEY, G. 1987. In, Forests, Fiords & Glaciers. New
	(July): p. 41975. 'Mt Aspiring National Park —Dangerous Routes.'	,,	Zealand's World Heritage. The Case for a South-West New
	FMC Bulletin No. 49. (September): p. 5.		Zealand World Heritage Site. Royal F & B Prot. Soc., Win.
	THE DESCRIPTION TO COOPERIOUS, P. D.		

MINISTRY of WORKS and DEVELOPMENT. New Zealand Land DEPARTMENT of LANDS and SURVEY. (Undated). Double Resource Inventory Worksheets. Government Printer, Barrel Forest Walk (Routeburn). Pamphlet. Department of Wellington. Lands and Survey, Dunedin MOLLOY, L.F. (Ed.). 1983. Wilderness Recreation in New Zealand. 1985. Routeburn. Infomap 316, 1:75,000. First Edition. Proceedings of the FMC 50th Jubilee Conference on \_1985. The Head of Lake Wakatipu. (Pamphlet.) Depart-Wilderness. FMC, Wellington. ment of Lands and Survey. MOLLOY, L.F. 1976. 'Wildemess diminishing.' NZ. Alpine 21 \_Double Barrel Forest Walk. Ibid. Journal Vol. 29: 67-75. Haast Pass. Ibid. 20 1976. Recreational Resources of South Westland. Lake Sylvan Walk. Ibid. Unpublished submissions to joint Lands and Survey-NZFS \_Makarora Bush Nature Walk and the Mt Shrimpton Track. land use study team: 22 pp. Federated Mountain Clubs, Ibid. Wellington. Makarora. Ibid. 1977. 'Red Mountain-national park or asbestos mine?' Matukituki River. Ibid. Supplement to Forest and Bird No. 205. Routeburn Track. Ibid. Outdoor Recreation on the West Coast, A Conservation The Bridle Track, and other short walks in the Makarora Plan: pp. 25-29. FMC, Wellington. Valley. Ibid. MOUNT ASPIRING NATIONAL PARK BOARD. 1977. Manage-24 The Rees-Dart Valleys. Ibid. ment Plan. Department of Lands and Survey, Dunedin. Track Guide to the Wilkin Valley. Ibid. 1981. Management Plan. Department of Lands and Young River to Wilkin River via Gillespie Pass. Ibid. Survey, Dunedin. DEPARTMENT of SURVEY and LAND INFORMATION. 1987. 54,74 NATIONAL PARKS and RESERVES AUTHORITY. 1983. Parkmap. Mount Aspiring National Park. Infomap 273/2, General Policy for National Parks. Department of Lands 1:150,000. Third edition. and Survey, Wellington. DUNEDIN EVENING STAR. 1976. Routeburn Valley Popularity NATIONAL PARKS AUTHORITY. 1978. General Policy. 52 Grows. 15 July, p.3. Department of Lands and Survey, Wellington. FEA, SUE. 1989. 'Backpackers will "walk over glass" to get a good OTAGO REGIONAL WATER BOARD. 1980. Clutha Catchment deal.' Southland Times. 28 January. 67 Water Allocation Plan, Vol. 2. FEDERATED MOUNTAIN CLUBS. 1965. 'N.Z. Alpine Club ROYAL FOREST and BIRD PROTECTION SOCIETY, FMC. Huts-Dart/Matukituki.' FMC Bulletin No. 22. July: p. 5. 1985. Pastoral Lease Report on Conservation and 1969. 'Routeburn Guided Walk.' FMC Bulletin No. 34. Recreation Values, P 47 Earnslaw Station. Submission to (October). p. 7. Commissioner of Crown Lands, Dunedin. (April). 73 1989. Harris Mountains Heliski Limited. Application for 75 SALMON, G. 1967. In, Forests, Fiords & Glaciers. New Zealand's Recreation Permit. Submission to Property Manager, World Heritage. The Case for a South-West New Zealand Landcorp, Alexandra. 19 February. World Heritage Site. Royal Forest and Bird Protection HARRIS, C.M. 1983. Recreation on the Routeburn Track: image 46-47 Society, Wellington. and experience. B.A. (Hons.) Thesis. University of Otago, WILDERNESS ADVISORY GROUP. 1985. Wilderness Policy. Dunedin. Department of Lands and Survey, N.Z. Forest Service, KENNEDY, L.D. (Ed.). 1977. Moir's Guide Book; Northern 70 Wellington. Section: Fifth Edition. N.Z. Alpine Club, Wellington. MOLLOY, L.F. (Ed.). 1983. Wilderness Recreation In New 23.78 **Dart State Forest** Zealand. Proceedings of the FMC 50th Jubilee Conference ARMSTRONG, M.R. 1984. Wild Animal Trends in the Dart State on Wilderness. FMC, Wellington. Forest. N.Z. Forest Service, Invercargill. 22,56 \_1979. Outdoor Recreation On The West Coast, A Conser-BATHGATE, J.L. 1976. Wakatipu Whitetail, A Population Census. vation Plan. pp. 25-29. FMC, Wellington. N.Z. Forest Service, Invercargill. N.Z. ALPINE CLUB. NZ. Alpine Journals. For access to a large 58,62-63 CUDDIHY, M.J. 1978. The Dart State Forest, Future Management number of accounts of exploratory climbs, history, and Options: A Paper For Public Discussion. N.Z. Forest climbing in general consult: Collins, C.E. 1975. New Service, Invercargill. Zealand Alpine Journal Index Volumes 1 to 27, 1892-1974. 1983. Mountain Forest Regional Management Plan, A N.Z. Alpine Club, Christchurch. Preview. N.Z. Forest Service, Invercargill. OTAGO DAILY TIMES. 1976. Routeburn Overcrowding Worries and GUILD. D.W. 1978. The Dart State Forest, Future 59,62 Park Boards. 20 December, p.7. Management Options: An analysis of submisions. N.Z. 1977. Better Routeburn Track Operation This Year. 8 Forest Service, Invercargill. March, p.14. FEDERATED MOUNTAIN CLUBS. 1978. 'Dart State Forest.' POWELL, PAUL. 1967. Men Aspiring. A.H. & A.W. Reed, FMC Bulletin No. 57. (December). 8-9. Wellington. 64 1978. Submission to NZFS on the Dart State Forest, 1970. Just Where Do You Think Your've Been? Ibid. Future Management Options: A Paper For Public RICHARDSON, J., TEIRNEY, L.D., UNWIN, M.J. 1986. The 42 Discussion. relative value of Southern Lakes Wildlife Conservancy 1979. Letter to Director General of Forests, 7 March. rivers to New Zealand anglers. Fisheries Environmental HOLLIS, M. 1978. 'Dart State Forest.' FMC Bulletin No. 57. Report No. 72. Fisheries Research Division, MAF, (December). pp. 7-9. December 1978. Wellington. MARTIN, ROLLY. 1988. An Interim Management Plan for the 60 SOUTHLAND TIMES. 1976. Heavy Use of Park Huts. 2 March, Wakatipu Whitetail Herd. DOC, Queenstown. p.10. 1988. Tourists Ill-equipped For Track Walks. 23 April. Recreation TEIRNEY, LAUREL. 1988. 'Facts, figures, and perceptions about 41 AITKEN, ROBERT. 1979. Mount Aspiring National Park Recreariver angling in New Zealand.' Freshwater Catch: 36. tion Survey 1979. First Interim Report (to Mount Aspiring TEMPLE, P. (Ed.). 1969. New Zealand Alpine Club Guide. 1: The National Park Board). Rees-Dart Region. N.Z. Alpine Club, Christchurch. BEAMISH, S.F. 1977. The Routeburn Track: an application of 32,45 TEMPLE, P. 1971. Mantle of the Skies, The Southern Alps of New environmental impact analysis. A report prepared for the Zealand. Whitcombe & Tombs, Christchurch. Mt Aspiring National Park Board. University of Otago, 1976. 'Walking the well-worn track.' NZ. Listener. 21 Dunedin. February. p.11.

43

79

TURNER SAMUAL. 1922. Conquest of the New Zealand Alps.

TURNER, B. (Ed.) 1983. The Guide to Trout Fishing in Otago.

WILDERNESS ADVISORY GROUP. 1985. Wilderness Policy.

Department of Lands and Survey, N.Z. Forest Service, Win

Otago Acclimatisation Society, Dunedin.

TURNER, BRIAN. 1989. Personal communication.

82

17

BISHOP, D.G. 1974. The Mount Aspiring Region. N.Z. Alpine

BURRELL, R. 1983. Fifty years of Mountain Federation 1931-81:

CANTERBURY MOUNTAINEERING CLUB. The Canterbury

Club, Wellington.

Mountaineer.

pp. 99-106. FMC, Wellington.

