

to walkway development and promotion. In reaction to the intensely commercial nature of Queenstown, a survey of the majority of visitors to Macetown²⁹ showed their preference for banning commercial tours. Such a view should be taken into account by the administering authorities when considering applications for commercial concessions which impinge on walkway users.

The more energetic day-walks include Ben Lomond, Queenstown Hill, Macetown via the Arrow Gorge or by Big Hill, Invincible Mine and Roys Peak (unofficial walkway) near Wanaka. Walkway status is warranted from Arthurs Point to Moke Creek and the Bowen Saddle, providing a longer day-circuit from Queenstown. Similarly, a track from Arthurs Point to Lake Johnson and Frankton would link with a low-level circuit and connection onto the existing Frankton Arm walkway.

The original pack track to Skippers, dating from 1863, provides an excellent opportunity for foot access to the Mt Aurum reserve. As an easy but higher route than the Skippers Road, excellent views of the Shotover Canyon are obtained. This could be promoted as an easy overnight walk or long day trip each way.

Successful operation of walkways over private and leasehold lands in this district indicates that recreational walking can be easily integrated with farming. Further expansion of walkways in this region should be a high priority. Defined rights for the public, and legal protection for land occupiers, are the basis for their success.

4.5.2 Tramping. The Richardson Mountains provide an almost unbroken obstacle for access to the west, with most tramping activity tending to be confined to the Shotover and Arrow catchments. The main extended through routes are from the Moonlight to Lake Luna and Mt Creighton Station, Rees Valley via Sixteen Mile Creek-Duncans Flat-Cashes Flat-Twelve Mile Creek, the West Matukituki via the Shotover or 'Tummel' Burn Saddles, and Glendhu Bay via Roses Saddle and Motatapu Valley. The upper Shotover in particular provides considerable potential for interesting tramping, with spectacular alpine scenery at the head of many tributaries. Present usage is light due to the attraction of more accessible alpine country in the adjacent national park.

Commercially guided parties have tramped from Mt Creighton Station to Arthurs Point via Lake Luna, taking 2-3 days for the trip. There are no concessionaires operating regular tramping trips in the region, although operating rights have been held over the Mt Aurum reserve and guided services advertised for such destinations as Bullendale and Lochnagar. It appears that with the option of free tramping in relatively easy terrain, there is little demand for these commercial services.

As part of a proposed north-south link of a national walkway, the Walkways Commission approved a 'route' category walkway between Arrowtown and Glendhu Bay, but has deferred establishment. The route selected follows a four-wheel drive track the length of the Motatapu Valley and Golspie Burn, over the 880 m Billy Saddle and down Soho (or Billy) Creek to join the Macetown Road. Although the easiest route available, the saddle crossing and Golspie Burn provides relatively uninspiring walking with an absence of diverse terrain, or historic features. An alternative, using an old pack track over the 1280 m Roses Saddle is of equal length, but has the considerable attraction of Macetown on route plus a historic pack track to follow over the saddle. With adequate marking this should present few problems for

walkers. A direct link between the holiday resorts of Wanaka and Arrowtown could prove to be popular, provided it is of sufficient interest. As already noted there is also considerable potential for shorter walkways in the lower Shotover and Arrow catchments, following historical mining tracks and routes.

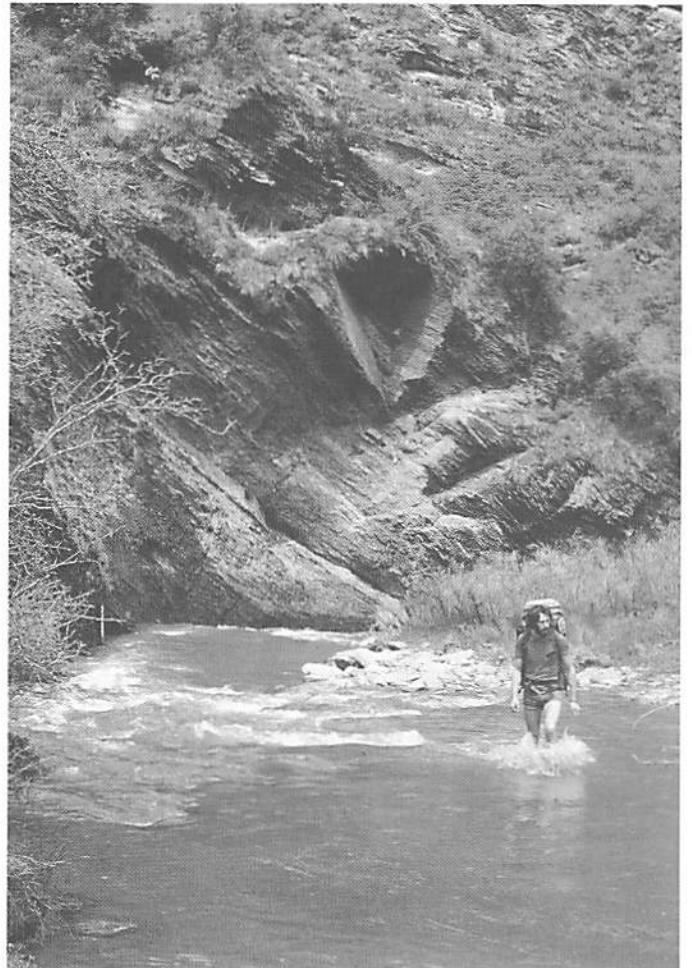
4.5.3 Climbing. The peaks in the northern Richardsons and along the Matukituki-Shotover divide receive attention from climbers, with access almost entirely obtained from the Rees or Matukituki Valleys. The Centaur Peaks, Cleft Peak, Tyndall, Sharks Tooth and Black Peak are the more usual objectives. In summer, most peaks provide broken rock and slab climbing, usually encountering only small snow fields on route. Tyndall is predominantly a snow climb.³⁰ Mt Aurum and Advance Peak are lower altitude scrambles from Skippers and Macetown respectively.

4.5.4 Horse Riding. The historic Moonlight Track has been used for commercial horse treks since 1962. During summer, daily excursions venture from stables at Arthurs Point, above the lower Shotover Canyon, and into the lower Moke Creek Settlement, now known as 'Seffer Town.' A more ambitious venture, involving an overnight stay in a lodge built specifically for the purpose, ceased several years ago.

More recently the Macetown Road has been used for conducted horse rides, despite heavy use by vehicles and walkers. The Motatapu Valley is used for guided tours between Glendhu Bay and Arrowtown.

Fording Skippers Creek.

Photo: Ewan Paterson



Throughout the easier country of the Shotover, Arrow and Motatapu, there is considerable potential for recreational horse riding, because of the presence of many pack tracks dating from the goldmining era, and the open and easily traversable country. However, riding for recreation has been sporadic and largely limited to occasional visits by clubs.

4.5.5 Competitive Events

During the last 9 years the region has hosted several 'Iron Man' endurance events. For 3 years competitions were held on End Peak and the lower Motatapu River, involving skiing, mountain running and kayaking. Since 1987 Mt Aurum has been the starting point for skiing, running to Skippers, and 20 km of gruelling kayaking down the Shotover Canyon, to finish with mountain biking via the Moonlight Track and Moke Lake to Queenstown. Helicopter support is essential for such events.

Moke Lake has also been the venue for two triathlons, involving swimming, running and mountain biking over challenging terrain. The latter activity is rapidly gaining in popularity in the Queenstown district. Due to the relative speed of these machines this activity creates a potential conflict with walkers on popular tracks.

4.5.6 Off-Road Vehicles

During summer holiday periods off-road vehicle pressure is intense around Queenstown and Arrowtown, causing considerable stress and conflict with residents, picnickers and other recreationalists. Noise from trail bikes in the lower Arrow river bed is such that some Arrowtown residents leave town during holiday periods. In marked contrast, the Richardson Mountains and other more rugged areas are not suitable for wheeled vehicles; here the only engine noise to be regularly heard is from aircraft.

Away from road formations the scope for 4WD use is limited. However, the upper reaches of some river valleys can provide suitable terrain. The main obstacle to their use above Branches Flat in the Shotover are numerous major river crossings. Shifting gravel and floods take a regular toll of four-wheel drive vehicles. By arrangement with pastoral lessees, a through trip over Billy Saddle is possible.

Trail bikes are much more free-ranging, but due to gorges and steep, broken terrain, they tend to be confined to the vicinity of roads or four-wheel drive tracks. River fords on the Macetown Road take a heavy toll of machines, particularly in the hands of inexperienced riders.

Several 4WD and trail bike rental firms operate in the region, hiring out large numbers of vehicles. In addition to considerable private ownership, the rentals have placed a major load on the relatively few areas legally available for their use. Runholders have responded by erecting locked gates or chains at key locations on their holdings, for reasons of security and privacy, and in one case to avoid conflict with horse trekking. However a number of runholders will give consent for vehicle use.

It is only in the more remote and robust environments such as the upper Shotover river bed that few conflicts arise. Major problems do occur at popular sites such as Skippers and Macetown with conflicting activity between bikers and walkers, sight-seers, or picnickers. Extensive physical damage occurs to historic sites, terrace escarpments and walking tracks. A survey at Macetown in 1976 determined that 94 percent of all visitors, including vehicle users, considered that some form of vehicle control was necessary.³¹

Vehicle barriers appear to have only a filtering effect on trail bikes, with the most determined riders either by-passing or negotiating these barriers. Four-wheel drive tours operate mainly on legal roads, or by arrangement with runholders. The Moonlight gold workings, 'Seffer Town,' Macetown, and the upper Shotover are areas that have been visited by such operators.

Recreational vehicle use is a major and legitimate activity in the region, being intimately related to family, group or individual participation. The problems that have occurred are largely related to physical restraints and a shortage of acceptable venues.

The district scheme³² identifies three areas as being suitable for trail bike riding in the vicinity of Queenstown and Arrowtown. Local government initiative in designating areas specifically for this activity is welcome. However, without active promotion of these areas, and discouragement from sensitive areas, the objective of reducing impacts on residents and other visitors is unlikely to be achieved. The variety of terrain in the designated areas, ranging from river bed to steep hills, will certainly provide adequate scope for local riders to gain riding skills. However, the more prevalent desire for unconfined access to a wide variety of hill country³³ cannot be satisfied by a few designated areas.

It is apparent from experience elsewhere that conflicts between recreational vehicles and other forms of recreation are usually resolved by the imposition of restrictions on the vehicles. This course will most probably be mirrored in this region as indiscriminate vehicle use becomes less socially acceptable.

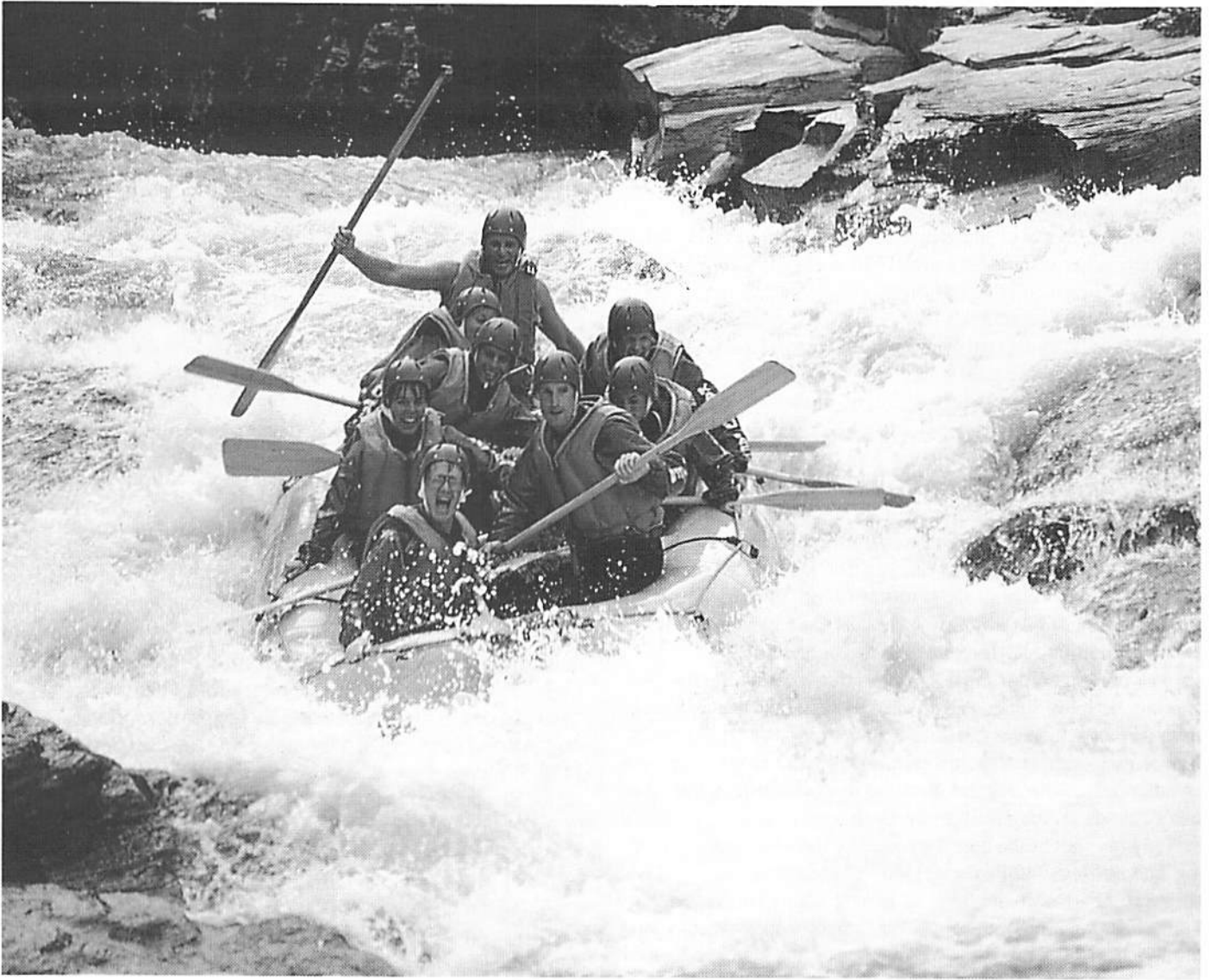
4.5.7 Hunting. Localised pockets of goats in the lower Arrow and Shotover are an attraction for many, particularly youthful shooters. The population at any one time can vary greatly, depending on the control pressure by DOC. Rabbits are present in sufficient numbers to provide scope for casual shooters. The relatively small deer population attracts only local attention. Access with firearms onto run country is a frequent concern of runholders, and is often used as the basis for refusing access.

4.6 Canoeing, Rafting, Jet Boating

The region has the distinction of containing the best white-water river in Otago—the Shotover. It is one of the most popular rivers for canoeing and rafting, and has gained national prominence as one of only six rivers in New Zealand to have been ranked in 'Category A' for its "exceptional recreational and scenic values."³⁴

The unsuccessful Maori Point suction dredge (1926-27), Shotover River.





Rafting out of the Oxenbridge Tunnel, Shotover River.

The 20 km section from Branches Flat to Deep Creek is considered to be excellent for learner and experienced canoeist alike,³⁵ with the increasingly incised canyon providing superb scenery. This section receives considerable attention from canoeists and rafters. Relics from the goldmining era abound along the banks, including the 90 m high Skippers suspension bridge, and the steel pontoon and gantry of the Maori Point suction dredge.

In 1986 an application was made for commercial jet boating over this section of river. This brought with it an accompanying barrage of opinion against lifting the 5 km per hour restriction on the upper section of the river.³⁶ Primarily for safety reasons the restriction stayed. River recreation remains confined to drift boats.

The most impressive part of the canyon is entered at Deep Creek and extends 13 km down to Arthurs Point. Absence of road or easy foot access along this section provides an element of commitment and wildness. There are narrow, bouldery rapids with sharp corners, some of which are blind. At the Moonlight confluence the 'Mother Rapid' is encountered, consisting of confused white water in three drops over a km distance. This is the most difficult rapid on the Shotover, being graded by the N.Z. Canoeing Association as '4,' while the rest of the river has 'Grade

2-3' rapids.³⁷ In low water conditions in late summer, rafters can have difficulty negotiating some narrow, bouldery rapids.

The final part of the trip downstream to Arthurs Point used to consist of "Grade 2' and '3' rapids, but late in 1977 a jet boat company blasted boulders in these rapids, making them considerably less interesting for canoeists and rafters. This must rank as one of the most wilful acts of destruction of a recreational resource to have occurred in New Zealand. After an extended public outcry this unauthorised blasting was stopped. The Oxenbridge Tunnel just above Arthurs Point is negotiable in high water conditions by raft or canoe, with a spectacular exit down a 2 m drop.

Commercial rafting in the Shotover Canyon and on the Kawarau River has boomed in recent years. From just 3 operators in 1984, this increased to 7 in 1985. Up to 30 rafts can be on-river at one time.³⁸ Rafting is now a major year-round attraction, with thousands of visitors experiencing the thrills and spectacular scenery of the Shotover Canyon. Unfortunately the rapid growth in popularity was accompanied by a large number of mishaps, including fatalities. Through self-regulation and better operating standards the industry has settled down to respectability. The Canyon now disgorges large numbers of rafters, twice daily, most of the year round.

Commercial jet boat operations on the lower Shotover date from 1965, with one operator now carrying over 60,000 passengers per year. It is now regarded as one of the prime tourist attractions for Queenstown. However this has been at the price of commercial monopolisation of this reach of river and by the displacement of other recreational users. The level of commercial intrusion on waterways in the district is such that no section of the Kawarau or lower Shotover are free of commercial use and power boats. Many of these operations are also in conjunction with helicopter use, adding greatly to noise intrusion. Despite local calls for a readily accessible section of river being set aside for public "non-commercial" use,³⁹ and some official sympathy for such, until coordinated planning and control is instigated little progress towards this goal is likely to be achieved.

These conflicts between differing modes of white-water recreation are classic instances where the recreational opportunity spectrum approach should be adopted to equitably accommodate all interests. For canoeists and rafters the Shotover ranks very high nationally, but in its natural state the same cannot be said for power boating. It is clear that further 'easing' of rapids by blasting could open up the Canyon for jet boats, but would destroy the high value of the resource for unpowered recreation and make conditions unsafe for the latter — a clear case of one interest promoting itself at the expense of another.

The present compromise of separation of incompatible recreations between upper and lower rivers, to the reaches most suitable for each activity, is a workable arrangement. The exclusion of other craft from the lower reaches does not cause great loss of potential as this section presents few challenges for most canoeists and rafters. Conversely, the Shotover Canyon provides the only (as well as the best) opportunity for white-water canoeing and rafting within the region, whereas the whole upper Kawarau and lower Shotover is most suitable for jet boating. Further degradation of the Shotover Canyon white water and the introduction of jet boating would constitute a major loss in recreational opportunity.

Due to low flows and water abstraction for irrigation, the Arrow River is unusable for boating; however, it receives intensive use for bathing during summer. The lower Motatapu is popular for canoeing by commercial operators. Use of this river is confined to a 6 km section between narrow gorges, and by seasonal low flows, and willows.

4.7 Bungee Jumping

The Queenstown thrill scene has gone to new heights with the introduction of commercial bungee jumping. Thousands have flung themselves off the 43 m high Kawarau suspension bridge, restrained only by an elastic rope around their ankles. The even more scary 90 m leap off the Skippers bridge is now in vogue.

4.8 Skilng

4.8.1 Coronet Peak⁴⁰⁻⁴⁵

The first skiing to be actively promoted in the region was on the Crown Range in 1939. The Mount Cook Company located a shelter hut beside the road for use during winter excursions by its patrons who were transported by car from Queenstown. The following year attention shifted to Coronet Peak. The Company erected a hut not far above Skippers Saddle (at 900 m) but found that at that altitude there was insufficient snow. This required climbing on foot for an hour to find suitable slopes.



Skiing at Treble Cone.

Photo: Gregor Ronald

In 1947 the Company installed the first rope tow, providing 106 m of vertical lift from its lower terminal at 1067 m. A determining influence on its siting was walking time, as at that stage there was no road access off the Skippers Road. It was soon realised that the tow did not service the best slopes available. Higher snow-lines prompted the relocation of the tow in 1948. In 1949 two new tows were installed along a similar alignment to the existing double chairlift, providing a vertical lift of 450 m from 1190 m elevation. A road was constructed in 1949 and over a period of years the Company, then Government, upgraded this to the two lane sealed road of today.

Coronet Peak began to attract national and international visitors in 1962 with the introduction of daily air services from Christchurch and later, in 1964, by the installation of a double chairlift. Today it has two chair lifts, two poma lifts and one T bar, with a maximum uphill capacity of 4400 skiers per hour. Several ski clubs have substantial lodges on the mountain.

Since its inception as a skifield, Coronet Peak has been notable for its highly variable snowcover, with approximately one in five winters experiencing an interrupted ski season due to inadequate snow.⁴⁶ Records establish that this is not a recent phenomenon. As the lowest altitude skifield in New Zealand, with the winter snowline very close to the base of the field, it has to be expected that any variation in snowline and depth could have a major effect on skifield operation. As a region with relatively light precipitation there is little latitude for below average conditions. The only reason that Coronet Peak can be used for skiing is due to its favourable aspect, with its south-facing slopes having a low angle of incidence to winter radiation, permitting snow to accumulate. For obvious reasons the north faces of the mountain are not skied.

Unreliability of snow cover has, in recent times, provided the major justification advanced for new high-altitude skifield development in the Queenstown district, notably in the Rastus Burn of the Remarkables. However various proponents of this site have failed to acknowledge that higher altitude alone does not necessarily mean more snow; there has to be favourable slope aspect as well, preferably southerly.

There are no more suitable areas available for a new skifield within a similar road distance to that of Coronet Peak from Queenstown. Therefore the variability of conditions on Coronet Peak have to be accepted as long as it is required for skifield

operation. What is certain about Coronet Peak is that, with its usually adequate snow cover, its expansive and variable terrain provides some of the best downhill skiing in New Zealand for intermediate skiers.

Modern snow-making techniques could lead to practical solutions to periodic shortages of snowcover. The Mount Cook Group has continued with snow making trials and has begun investigations for a multi-million dollar snow making scheme for the mountain.

While predictions are being made that global warming will "wipe out" many existing ski fields by the year 2030⁴⁷ there is no certainty what regional and local consequences will result. Large localised variations from the norm in both temperature and precipitation could be expected. Existing seasonal fluctuations are masking any obvious trends in snowline.⁴⁸ Season-to-season variation will likely continue to be the major factor influencing ski field operation.

It is notable that the Mount Cook Group has accepted the feasibility of greater utilisation of Coronet Peak, as was advocated by opponents to its Remarkables scheme. In a major reversal of investment policy, during the last few years the company has increased lift capacity, enlarged the beginners' area and made major improvements to base facilities. The company now acknowledges that "it would have been cheaper to put snow making machinery into Coronet Peak" rather than invest \$14 million in the Remarkables.⁴⁹ There is little reason why Coronet Peak, within existing climatic limitations, cannot retain its national prominence as a ski field normally offering excellent skiing terrain and full supporting services. New lift developments on both existing lift-serviced and unserviced slopes, snow making, upgrading of existing facilities, and progressive management would help the field compete with newer ski fields elsewhere.

Year-round sightseeing has been a feature since the double chairlift was installed. Tourists travel to the summit for a panoramic 'million dollar' view, but this requires the lift to be run at half speed for loading of foot passengers. This now discontinued practice during the ski season had been a major contributor in the past to increased queuing time for skiers. Extensive bulldozing has greatly disfigured the slopes, which are snow-free for nine months of the year. Scarring is visible from throughout the Arrow basin.

In a move to increase summer trade, in 1983 the company installed a 600 m 'Cresta' slide as an additional, and very popular attraction. Sightseeing during the 9 month long non-ski season is a long standing major use. It is highly desirable that the non ski season impact of further development should be taken into account in the design and restoration of earthworks. Considerable emphasis is placed on award-winning architecture for base facilities, but little regard is apparently given to the aesthetics of the rest of the ski field.

The carpark at Coronet Peak is a regular take off point for hang gliding championships and informal use, with landings usually beside the Queenstown-Arrowtown Road.

The Mount Cook Group Ltd have a lease over 312 ha of recreation reserve, which is administered by the Department of Conservation.

4.8.2 Treble Cone

After several years of investigatory operation, in 1975 a new commercial ski field opened on Treble Cone overlooking the lower Matukituki Valley. Initially access was by 4WD and foot,

or by helicopter. A two-way road was later constructed through difficult terrain and resulted in an adverse impact on the landscape of the lower valley. Slope instability is resulting in major slip and road maintenance problems.

Treble Cone (Wanaka) Ski Fields Limited have a special lease over 770 ha of Crown land surrendered from pastoral lease. It includes the upper eastern face of Treble Cone and the headwater faces of the north branch of the Motatapu. The area developed to date consists of hummocky east-north-east slopes with an impressive outlook over Lake Wanaka. The gradients are predominantly suited for intermediate and advanced-intermediate skiers, with limited terrain for novices and beginners. Major earthworks have been undertaken to improve suitability for the latter. Two T-bars plus a double chairlift installed in 1983 have raised uphill capacity to approximately 3600 skiers per hour. The south-east Motatapu faces below the summit (2070 m) provide potential for longer ski seasons than are currently available in the region. A rope tow has serviced a small segment of these slopes. There is considerable potential for major increases in lift capacities on new as well as existing lift serviced slopes. An existing T-bar was relocated during 1989 to make use of upper slopes creating approximately 660 vertical m of serviced skiing.

4.8.3 Mount Cardrona⁵¹

In 1980 a new commercial ski field commenced operation in a south-east facing basin on Mt Cardrona (1933 m). The field is within an approximate altitudinal range of 1585 to 1830 m. The base area terrain consists of a gently undulating basin floor predominantly suited for novice and low intermediate skiers. Initial development consisted of a beginners' tow, and a main rope tow providing limited vertical lift. In 1983 the rope tow was replaced by a double chairlift to service the main learner terrain. Within 2 years, two additional chair lifts were added, opening up intermediate and advanced slopes. Cardrona now provides the largest lift capacity in the Southern Lakes region, able to handle 5,600 skiers per hour.

It appears that in comparison to Coronet Peak, this field receives substantially more snow and has a longer season. Both fields have similar aspects and snowlines and are generally dependent on the same cold fronts for their precipitation. However, due to a 'snow wedge' effect of increasing snow accumulation with increasing altitude⁵² the higher Cardrona field appears to have a more usable snow cover than Coronet.

Cardrona's extensive novice and low intermediate terrain provides much needed easier terrain which is in short supply on both Treble Cone and Coronet Peak. A full range of skier requirements can now be met in the region, with a strong guarantee of snow when it is needed.

The field is located on freehold land.

The development of Treble Cone and Cardrona ski fields have transformed Wanaka into a year-round resort.

4.8.4 Heli-skiing and Ski Touring

The Harris Mountains provide ideal terrain for heli-skiing. Two separate operations, based from Treble Cone and Coronet Peak respectively, have utilised these mountains since the late 1970s. In the northern Harris Mountains the headwaters of the North Motatapu, Polnoon and Blue Creek catchments are mainly used. The northern operation has extended to glacier skiing on Headlong Peak and the Tyndall Glacier since 1982, on the boundary of the national park. The number of heli-skiers in this one



Treble Cone (centre right) from Mt Motatapu, Harris Mountains.

Photo: Ian Turnbull

operation represent nearly half of New Zealand's heli-skiing market, making it the largest heli-skiing operation outside of Canada. (See also Mount Aspiring National Park 7.3).

Dependant on weather and snow conditions heli-skiing is run on a daily and half daily basis, with the major economic restraint being helicopter flying time from road side bases.⁵³

Black Peak (2283 m) is the venue for an annual 'Powder Eights' contest, involving the execution of perfect paired turns in deep snow. Vanguard Peak (1768 m), at the southern end of the Harris Mountains, provides the main venue for the Coronet Peak based heli-ski operation.

There is considerable scope for ski mountaineering and alpine ski touring within the Harris Mountains. However difficulty of winter access beyond the outer fringes of these mountains results in light visitation by ski tourers. The main Harris dividing ridge has been used for up to week-long traverses between Treble Cone and Coronet Peak, despite two low-level valley crossings being necessary. One guided alpine touring venture operated from Treble Cone for a short period. Due to their more dissected nature, the Richardsons and the 'Mt Cardrona' range provide more localised and limited scope for alpine touring.

There is very limited potential for cross country (nordic) skiing with the exception of the southern Harris Mountains above

Macetown. Ridge crests and gentler faces and basins on Advance and Vanguard Peaks are negotiable on nordic skis. Unlike most of the Harris Mountains this locality is open to foot access during winter. The more confined but accessible Crown Range is also suitable for short tours.

4.8.5 Potential Skifields

In terms of suitable snow covered terrain, the northern Harris Mountains in particular provide a large potential resource for future skifield development. The district scheme identifies two areas which may have potential for skifield development.⁵⁴ These are on Knuckle Peak and Mt Motatapu, although local expert knowledge favours the Motatapu slopes on End Peak and the Soho Creek basins on Mt Cardrona.⁵⁵ With the exception of End Peak, all potential new fields are distant from existing roads, and their high development cost is difficult to justify when established skifields are under utilised. Existing or expanded heli-skiing operations (with their inherent flexibility for daily conditions), provide the most appropriate commercial ski use of these slopes.

As previously noted, there is no scope within the immediate environs of Queenstown for a new skifield with more reliable snow conditions than Coronet Peak or the Rastus Burn (see also Remarkables-Hector Mountains 4.4.4). Consideration of further

developments within the medium term should be confined to established skifields and their immediate environs. Collectively these have the physical attributes to fully meet regional demands for many years. With the current uncertainty as to long term climatic trends it would be prudent to first enhance existing skifields rather than embark on new and very expensive developments.

4.9 Recreational Roads

The region is fortunate in possessing a number of historic roads through mountainous country. Their narrow and often tortuous routes provides unique motoring. As carriageways designed more for horse power rather than motor vehicle, they are distinctive for their general absence of steep grades. Modern use depends more on driving skills and nerve, rather than power.

4.9.1 Skippers Road

Thousands of private motorists, rafting clients, and bus passengers traverse the Skippers Road annually. This provides the high-point for many visitors' stay in the Wakatipu district. For non-rafters Skippers is the usual destination, with only a small number of vehicles venturing further on the single lane Branches Road.

4WD bus operators provide daily services which stop short of Skippers, due to weight restrictions on the Skippers bridge. Many private motorists find commercial users' vehicles intimidating and dangerous due to their size, speed, and an apparent lack of consideration for other motorists. As a narrow carriageway with an almost total absence of 'straights' there is, at times, little opportunity for approaching vehicles to use the limited number of passing bays that do exist.

The road has a limited capacity for increases in traffic density much above the peak loads currently experienced. Any attempt to increase the capacity by widening and straightening should be strongly resisted. 'Upgrading' would be self-defeating as it would effectively increase traffic densities and speed, and decrease the uniqueness of the motoring experience as well as the road's historical worth.

Inadequate maintenance is a more immediate, as well as longer term problem, with the limited capital spent by the Lake County Council going more towards corrective works such as road reopening, rather than regular preventative maintenance. The Council has attempted user-pay levies from mining and rafting companies without much success. The long term stability of much of the road, particularly where there are built-up rock formations, is questionable. Heavy loadings from buses and mining machinery is of concern. The road is regularly closed due to slips, snow or ice, with severe rutting at times due to heavy use by commercial vehicles in wet conditions. In recognition of its historical importance the Lake County has funded repairs to many of the distinctive stone wall barriers along the outer road edge.

4.9.2 Macetown Road

Although not negotiable by two wheel drive vehicle, the Macetown Road receives intense 4WD and trail bike use during holiday periods. The challenge created by a large number of river fords on route to Macetown appears to be a major element of the appeal. Due to the intensity, noise and excessive speed of many vehicles, use of the road either by vehicle, horse or on foot can be an unpleasant and hazardous experience.

Beyond the irrigation dam in the Arrow Gorge, there has been

little public road maintenance. Without regular attention to water tables and culverts, complete sections of road are liable to collapse due to water saturation. The cost of replacement in steep rock terrain would probably inhibit reopening the road for vehicular traffic.

4.9.3 Motatapu Road Link versus Crown Range

For several years the Lake County Council have advocated a new 'direct road link' between Wanaka and Queenstown, as part of a wider objective of expanding the roading network in the Lakes district. The District Scheme states that a road link through the Motatapu Valley is needed, and expresses the intention of investigating the feasibility of its construction.³⁴

There are two existing road links between the two centres; State Highway 6 via the Kawarau and Upper Clutha Valleys and State Highway 89 via the Crown Range and Cardrona Valley. During summer State Highway 89 provides a considerably shorter link over a 1120 m saddle on the Crown Range. In winter, snow, ice and thaw conditions on the southern side of the saddle have caused difficulties for motorists, particularly for those unprepared for the conditions. In 1980 the County erected locked gates either side of the range and issued keys only to Cardrona residents and service operators. During the 1982 winter a brief trial opening for public traffic was conducted, dependent on daily road conditions. The simmering debate on this issue ceased in 1983 when the MWD ruled that road closure, for general safety reasons, was illegal. Agreement was quickly reached to keep the road open using additional maintenance funds, and to gradually upgrade it for all-weather traffic. Since then the road has been kept open year-round, with considerable improvements effected. The Cardrona skifield is dependent on the road being kept open. In the interests of regional skiing opportunity it is highly desirable that it be so. The Cardrona Valley section will soon be completely sealed. In view of these developments, there can be no justification for a Motatapu road link.

5. Zoning

5.1 Natural Experience

The eastern half of the Richardson Mountains and most of the Harris Mountains are zoned 'natural experience.'

The zone extends from the shores of Lake Wakatipu in the south, through the upper western tributaries of the Shotover up to the crest of the Richardsons, and as far north as the Shotover-Matukituki divide.

The Harris Mountains segment extends southwards to Advance Peak, to include the Arrow headwaters. The Polnoon, Blue Creek and Shiel Burn catchments are included in this zone.

Extensive beech forests in the upper Rees Valley, the western face of Twenty Five Mile Spur, and the Snowy Creek tributary of the Dart are zoned 'natural experience.' These areas are currently held in pastoral lease or are DOC stewardship area, but would more logically form part of the Mount Aspiring National Park. (see Mount Aspiring National Park 7.3).

Within the 'natural experience' zone, natural landscapes should be free of obvious developments or sophisticated facilities. To this end no vehicle track construction should be permitted, although air access for recreational purposes should be permitted.

Seasonal grazing may continue within the lower areas of the zone with controls to prevent stocking of Class 8 land. It is of

paramount importance that within the zone all exclusive rights of pastoral occupation be withdrawn to allow free-ranging public use. All commercial recreational activities must however continue to be controlled by permit systems due to potential impacts on the environment and on other recreational users.

5.2 Open Space

The western face of the Richardsons, the mid to lower Shotover catchment, Motatapu-Cardrona country, and the Matukituki faces of the Harris Mountains are zoned 'open space.' Within such a large and topographically diverse zone there are locality-specific management requirements to meet recreational needs.

5.2.1 Western Richardson Mountains.

This sunny face has been extensively modified by pastoral farming and scheelite mining, with roading and farm tracks extending well up many faces. Other than the higher peaks, Lake Luna, and the upper Rees Valley tributaries (eg 25 Mile Creek and tributaries), there are limited destinations of recreational interest within this area, but it provides numerous access routes to the main Richardsons and for through trips to the Shotover and Moonlight catchments.

Higher areas should become Crown land available for recreation, as retirement from grazing progresses through all the affected leases, with public foot access provided to these areas.

5.2.2 Shotover Canyon-Skippers Road-Queenstown environs-Lower Arrow.

This is THE area of prime recreational use within the region. Natural, cultural, primary production, and recreational values are interwoven within these areas, requiring integration by site specific land use controls and recreational management. It is here that the bulk of people and activity-pressure occur, and will increasingly occur as Queenstown develops as a tourist centre.

The degree of planning, consultation, and recreational management necessary to achieve integration, plus the area's national importance, indicates the desirability of a multi-agency approach.

5.2.3 Upper Shotover Valley.

Recreational use will continue to be relatively light with access confined to the main valley. Rights of public access to the head of the valley and the encircling natural experience zone is the major requirement.

5.2.4 Motatapu, 'Cardrona' and Crown Ranges.

Generally low intensity recreational use, with seasonal potential for skiing (cross country, touring, helicopter, and skifields), and for through tramping trips.

As higher elevations are retired from grazing these areas should become available for public recreation. More frequently used routes should become legally available. There is potential for new skifield developments which may be required in the future, depending on regional skier demands and climatic trends.

5.2.5 Matukituki Faces.

These steep, sunny faces have been considerably modified by a long history of fires and grazing.

The higher peaks of the Harris Mountains are of interest for climbing, and should become legally available for public use as the higher areas are retired from grazing. Legal access routes from the Matukituki Road are required.

5.3 Cultural Experience.

The established skifields and two historic goldfields are zoned 'cultural experience,' in recognition of their heavy emphasis on facility use or historic values.

5.3.1 Skifields.

Lift and service facility developments, slope modification, and groomed snow to suit high density skier traffic has resulted in greatly modified alpine settings.

Accepting that these slopes are under utilised and downhill skier needs are best met by new and upgraded facilities, further skifield development for the foreseeable future should be confined to the environs of the three existing fields.

5.3.2 Mt Aurum-Skippers and Macetown.

The two most concentrated groups of historic goldfields sites require management and presentation for public appreciation. The significance of both areas has in part been recognised by District Scheme 'Rural H' zoning and by reserves acquisitions, but requires greater effort in relic restoration and public interpretation.

6. Recommendations

Many detailed recommendations arise from the proceeding discussion and zonings and can be inferred from such. The major recommendations to be drawn from this chapter are:

6.1 The unique diversity in recreational opportunities within the region be maintained by retention of the range of settings (natural/open space/cultural) that are currently available. Expansion of recreational activities should be encouraged within these settings, where possible without adding to inter-activity conflict or narrowing the range of recreational opportunities available.

6.2 The recreational resources of the Shotover, Arrow and Queenstown environs be recognised by all authorities with jurisdiction as being of national importance. To achieve this a co-ordinated planning and management strategy needs to be developed involving detailed assessment primarily of the Crown land/leasehold bank by means of:

- the provision of additional public access ways;
- covenants over private land uses;
- reservations;
- public prospecting rights;
- district scheme planning controls.

6.3 Either the Mt Aurum Reserve be reclassified 'Scenic,' or be designated a higher status of 'Conservation Park' in the future.

6.4 The length of the Shotover Canyon, both river and environs, be protected as a nationally important wild and scenic river:

- the protection should be from damming, obstruction by mining operations, and alteration of natural channels through removal of bedrock or boulders;
- a national water conservation order be sought, despite legislative deficiencies, as the best means currently available to provide a measure of river protection;
- the setting for the river be protected by reserves or covenant agreements as appropriate, with tight controls

on roading or access tracking. This is particularly necessary for the vista from the river or Skippers and Branches Roads. Such measures could provide a broader level of landscape protection to that provided by the 'Rural H' (Historical) zone which is limited to the siting and design of non farming structures.

6.5 All exotic plant establishment trials in Skippers Creek and the upper Shotover be removed.

6.6 No further consents for new skifields should be granted while considerable potential remains for further development of the three existing skifields.

- the long term potential for new skifields should be noted for future consideration, when and if sufficient skier demand exists and climatic change dictates.

6.7 Further expansion of the region's roading network is not warranted at this stage, and should not proceed.

- State Highway 89 (Crown Range section) should be further upgraded and maintained for year-round use;
- regular maintenance programmes should be instigated for the Skippers and Macetown Roads.

6.8 The Rees Valley and Snowy Creek headwater catchments be incorporated into the Mount Aspiring National Park. (See Mount Aspiring National Park 7.3).

6.9 A Protected Natural Areas assessment be undertaken to determine representative ecosystems for reservation, as an adjunct to broader landscape protection and provision of public recreation opportunities.

Centaur Peak and glacier from head of Sixteen Mile Creek, Northern Richardson Mountains. Photo: Bob Entwistle



References and Selected Bibliography

Geology, Geomorphology

- BROWN, D.A. 1956. *Report on the Geology of Upper Shotover*. In, Shotover River Survey (Upper Catchment). Otago Catchment Board Bulletin No.1: pp. 8-15.
- HENDERSON, J. 1937. *Glenorchy District*. 31st Annual Report N.Z. Geological Survey: pp. 16-22.
- McKERRROW, J. 1870. 'On the physical geography of the Lakes District of Otago.' *Trans. and Proceedings of N.Z. Institute* 3: 254-263.
- MUTCH, A.R. 1969. *The scheelite resources of the Glenorchy district, West Otago*. N.Z. Geological Survey Report No. 40. DSIR.
- OTAGO CATCHMENT BOARD. 1966. *Physiography and Geology*. In, 'Shotover River Survey (Lower Catchment)'. OCB Bulletin No. 2: 4-8.
- PARK, J. 1909. *Geology of the Queenstown Subdivision, Western Otago Division*. N.Z. Geological Survey Bulletin 7.
- SUGGATE, R.P. 1952. 'The Moonlight Fault.' *N.Z. Journal Science and Technology* 34(B): 21-25.
- TURNBULL, I. M. 1981. *The Geology of Reserves in the Upper Lake Wakatipu Area*. Unpublished report. N.Z. Geological Survey, DSIR, Dunedin.
- TURNBULL, I.M., BARRY, J.M., CARTER, R.M., NORRIS, R.J. 1975. 'The Bobs Cove beds and their relationship to the Moonlight Fault Zone.' *Journal of Royal Society of New Zealand Vol 5*: 355-94.
- TURNBULL, I.M. and FORSYTH, P.J. 1988. *Queenstown. A Geological Guide*. Geological Society of New Zealand, Guidebook No 9.
- WILLETT, R.W. 1939(a). 'A Glacial Valley, Mt Aurum, Skippers Creek Survey District.' *N.Z. Journal Science and Technology* 1940 21(B): 105-112.
- _____ 1939(b). *Glenorchy Subdivision*. 33rd Annual Report, N.Z. Geological Survey: 7-9.
- _____ 1940. 'The Invincible Quartz Lode.' *N.Z. Journal Science and Technology* 21: 273-280.
- WILLIAMS, G.J. 1974. *Gold-Scheelite Mineralisation*. In, 'Economic Geology of New Zealand.' The Australasian Institute of Mining and Metallurgy, Victoria, Australia. Scheelite Mines: pp.46-51; Invincible Mine: p.50; Skippers Reefs: p.51; Macetown Reefs: p.51; Arrow Reefs: p.52.
- WOOD, B.L. 1962. *Wakatipu, Sheet 22*. Geological Map of N.Z. 1:250,000. DSIR.
- _____ 1967. 'The copper deposits of Moke Creek, West Otago.' *N.Z. Journal of Geology and Geophysics Vol 10*: 855-69.

History

- CHANDLER, P.M. 1955. *Topographic Map of Rees Valley, Richardson Range, Shotover and Arrow Rivers*. Plan No. 12400, Department. of Survey & Land Information, Dn.
- 11 _____ 1963. *Upper Shotover Goldfield, Otago, N.Z.* Plan No. 13555. Ibid. (contains historical information).
- _____ 1983. Personal communication.
- _____ 1984. *Head of Lake Wakatipu; Schools Centennial 1884-1984*. Glenorchy School Centennial Committee.
- _____ and HALL, RON C. 1986. *Let There Be Light...A history of Bullendale and the generation of electric power in Central Otago*. Otago Central Electric Power Board, Alexandra.
- DEPARTMENT OF LANDS and SURVEY. 1980. *The Invincible Mine*. Otago Goldfields Park (pamphlet).
- _____ (1981). *Macetown and the Arrow Gorge*. Otago Goldfields Park (historical guide).
- DUNCAN, A.H. 1888. *The Wakatipians or Early Days in N.Z.* Lakes District Centennial Museum Inc., Arrowtown.(1964).
- GRIFFITHS, G.J. 1971. *King Wakatipu*. (W.G. Rees). John McIndoe, Dunedin.
- MacNICOL, T. 1965. *Beyond the Skippers Road*. A.H. & A.W. Reed, Wellington.
- _____ 1967. *Echoes from Skippers Canyon*. Ibid.
- McKENZIE, F. 1948. *The Sparkling Waters of Whakatipua*. A.H. & A.W. Reed, Wellington.

- McKERRROW J. 1864. 'Reconnaissance survey of the Lakes District of Otago and Southland.' *N.Z. Royal Geographical Society of London Journal* 34.
- 8 McLINTOCK, A.H. 1949. *History of Otago*. Otago Centennial Historical Publications.
- 7 RITCHIE, N.A. 1979. *Shotover Valley Archaeological Site Survey*. Unpublished report. Ministry of Works and Development.
- _____ 1983. *Archaeology and Prehistory of the Upper Wakatipu Region, Bobs Cove-Twelve Mile Creek Archaeological and Historic Sites Survey*. Department of Lands and Survey, Dunedin.
- ### Vegetation
- 3 BIOLOGICAL RESOURCES CENTRE. 1983. *Ecological Regions and Districts of N.Z. Sheet 4*. 2nd Edition. DSIR.
- JOHNSON, P.N. 1981. *Lake Wakatipu - Report on Vegetation of Reserves*. Unpublished report. Botany Division, DSIR, Dunedin.
- MATURIN, SUE. 1984. *Biological and Cultural Values of the Wanaka Ecological District*. Unpublished report. Department of Lands and Survey, Dunedin.
- WARDLE, P. 1956. 'Botanical Survey of Upper Shotover Catchment.' In, Shotover River Survey. *OCB Bulletin No. 1*: 24-37.
- 1 WARDLE P. 1966. 'Botanical Survey.' In, Shotover River Survey. *OCB Bulletin No. 2*: 25-38.
- ### Wildlife
- 4 HALL, A.G. 1978. *Wildlife: Shotover Catchment*. In, Shotover-Mt Aurum Crown Land Management Area. Department of Lands and Survey, Dunedin. (1982) pp. 45-48.
- MARQUAND, R.C. 1982. *The Importance of Lake Wakatipu reserves with regard to wildlife*. Unpublished report. Wildlife Service, Department of Internal Affairs, Queenstown.
- ### Land Use
- 2 ANDERSON, G.A. 1986. *Workshop on Wilding Trees*. Otago Catchment Board Report 86/387.
- CLARK, NICK. 1988. 'Beware the dreaded pine!' *The Mirror*. 2 March.
- CLAYTON, NEIL. 1984. 'Lovely lake islands revert to reserve.' *Otago Daily Times*. 30 August.
- 10,17,18,23 DEPARTMENT of LANDS and SURVEY. 1982. *Shotover-Mt Aurum Crown Land Management Area, Management Plan*.
- 24 _____ 1985(a). *Mount Aurum Reserve Draft Management Plan*. Department of Lands and Survey, Dunedin.
- 12 _____ 1985(b). *Upper Lake Wakatipu Reserves Management Plan Draft*. Ibid.
- 45,52 FITZHARRIS, B.B. 1976. 'Spatial variations in snow accumulation on Central Otago mountains.' *Proceedings N.Z. Hydrological Society Annual Symposium*, Rotorua. pp. 167-177.
- HENSON, D.A. 1986. '12 Mile Creek - A Positive Retirement.' *FMC Bulletin No. 85*.
- 26,32,54-6 JOHNSTON HATFIELD and PARTNERS. 1983. *Lakes-Queenstown Wakatipu Combined District Scheme*.
- 10,20-2 MINISTRY of WORKS and DEVELOPMENT 1977. 'Report on Sediment Sources Survey 1975 and Feasibility of Control-Shotover River Catchment.' *Water & Soil Technical Publication No. 4*.
- OTAGO CATCHMENT BOARD. 1956. 'Shotover River Survey (Upper Catchment).' *OCB Bulletin No. 1*.
- 9 _____ 1966. 'Shotover River Survey (Lower Catchment)' *OCB Bulletin No. 2*.
- 13,16,19,21 _____ 1980. *Clutha Catchment Water Allocation Plan*.
- 39 THE SOUTHLAND TIMES. 1987. *Waterways Use Discussed*. 26 February.
- 42,47-8 _____ 1988. *Ski fields to be wiped out; Greenhouse effect to boost hydro output*. 27 August.
- WILSON, N.D. 1984. *Management Planning: a case history of the Lake Wakatipu scenic and recreation reserves from Queenstown to Glenorchy and from Kinloch to the Greenstone River*. Thesis for Diploma in Regional and Resource Planning, University of Otago.
- ### Recreation and tourism
- ADAM, R.S. 1972. *Coronet Peak Skifield: Planning Report*. Department of Lands and Survey.
- 33 AUKERMAN, R., DAVISON, J. 1980. *The Mountain Land Recreationalist in New Zealand*. Tussock Grasslands & Mountain Lands Institute, Lincoln College.
- CLARK, R.N., STANKEY, G.H. 1979. *The Recreational Opportunity Spectrum: A Framework for Planning, Management and Research*. U.S. Department of Agriculture Forest Service, General Technical Report P.N.W. 98.
- CLAYTON, NEIL. 1988(a). 'Bringing the tourists from there to here.' *The Southland Times*. 14 May, p. 11.
- _____ 1988(b). 'Queenstown's Tourism - Where Did It All Begin?' *The Southland Times*. 7 May, p. 17.
- CLUTTERBUCK, D., and SISSONS, D. 1976. *Coronet Peak Skifield. A preliminary study of landscape and other associated problems*. A report to the Department of Lands and Survey.
- 25 DEPARTMENT of LANDS and SURVEY. (1981). *Macetown and the Arrow Gorge*. Otago Goldfields Park (historical guide).
- 35 DUNEDIN CANOE CLUB. 1978. *Preliminary River Report, Shotover River*. In, Mason 1978(b).
- 37 EGARR, G.D. and J.H. 1978. *Otago Southland Canoeists' Guide*. The N.Z. Canoeing Association.
- 34 _____ 1981. 'N.Z. Recreational River Survey: Part III-South Island Rivers.' *Water and Soil Miscellaneous Publication. No. 15*. National Water and Soil Conservation Organisation, Wellington.
- GOSNEY, J.J. 1981. *Survey of recreational spots in the Lake Wakatipu area*. Lakes District Waterways Authority, Queenstown.
- 5,6 HARRIS, L.H. 1974. *A Hunting Guide to Introduced Wild Animals of N.Z.* N.Z. Forest Service, Government Printer, Wellington.
- HUTCHINSON, R.D. 1982. *Angling Opportunities: Lake Wakatipu and recreational fisheries Dart and Rees catchments*. Unpublished report. Wildlife Service, Department of Internal Affairs, Queenstown.
- LAWRENCE, BARRY. 1980. *Beaten Trails. A Guide to some of the historic walks and trails around Queenstown*. Mountain Scene Limited, Queenstown.
- 28,29,31 MASON, B.J. 1977(a). *Macetown Historic Reserve. Report on 1976-77 Ranger Activities and Future Management*. Unpublished report. Department of Lands & Survey, Dunedin.
- 27 _____ 1977(b). *Mt Aurum Station. Recreational and Historical Opportunities*. Ibid.
- _____ 1978(a). *Branches Station. Recreational and Historical Opportunities*. Ibid.
- _____ 1978(b). *Shotover Canyon. Recreational and Historical Opportunities*. Ibid.
- _____ 1978(c). *Moonlight and Moke Creek Catchments. Recreational and Historical Opportunities*. Ibid.
- 44,46,51 _____ 1982. *Skifield Potential in the Wakatipu District* (Rastus Burn, Coronet Peak, Mt Cardrona). Parks and Recreation Dissertation, Lincoln College.
- MAY, SALLY. 1983. *An historical analysis of aspects of leisure in and around the Queenstown area, from the period 1869 - 1900*. Unpublished research paper. School of Physical Education, University of Otago.
- McGLONE, V.P. 1965. *Report on Coronet Peak Skifield*, by Chairman Tongariro National Park Board.
- N.Z. ALPINE CLUB. 1933. *N.Z. Alpine Journal Vol. 5, No. 20*. (Richardson Mountains).
- 30 _____ 1969. *Rees-Dart Region Guide*. (Richardsons: p.42).
- _____ 1977. *Moir's Guide Book. Northern Section*: pp. 2-6, 9-15, 40-41.
- 40 N.Z. SKI ASSOCIATION. *N.Z. Ski Year Books*. 1936-77.
- 38 OTAGO DAILY TIMES. 1985. *Rafting mishaps prompt inquiry*. 9 January.
- 26 _____ 1986. *Jetboating poser for authority*. 24 February.
- PERKINS, H.C. *Skiers and their satisfaction with their recreational experience at Coronet Peak skifield*. M.A. Thesis (Geography), University of Otago.
- 53,55 SCAIFE PAUL. 1983. Personal communication.
- 43,50 THE SOUTHLAND TIMES. 1988. *Call for ungrading of N.Z.'s skifields*. 22 July.
- 41 WIGLEY, HARRY. 1979. *The Mount Cook Way*. Collins, Auckland.



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 etcetera. 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*.²

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.³ 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,"⁴ but with strong reservations over the prospect of the creation of another park board.⁵ FMC supported national park status by advocating to Government a national park between Fox Glacier and the Ailsa Mountains.⁶ 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 re-

newing them as pastoral leases, all South Island Commissioners of Crown Lands were told to eliminate from licences land that was useless for grazing.⁷ 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.⁸

In 1959 the first definite proposal was put before the National Parks Authority.⁹ 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.¹⁰ The realistic

approach adopted by the main affected runholders also eased acceptance of the proposals.¹¹ 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.¹⁵

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

Photo: Ewan Paterson



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 'Wilderness 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.¹⁷ 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 1977.¹⁹

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.²⁰ This was promoted through the *N.Z. Alpine Journal*.²¹ The prospects for an expanded wilderness

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

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 versus cattle) or intensity of grazing.²⁴ 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 Waitoto 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 Waitoto 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 categorical 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),²⁵ 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.²⁶ Unfortunately this has not been implemented. Numerous field reports throughout the 1970s and early 1980s²⁷ 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 reported²⁸ 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 public's 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."²⁹

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.³⁰ 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.

5. 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.³¹

Deeply glaciated valleys are clothed in a mix of beech-podocarp 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 foot-orientated 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.



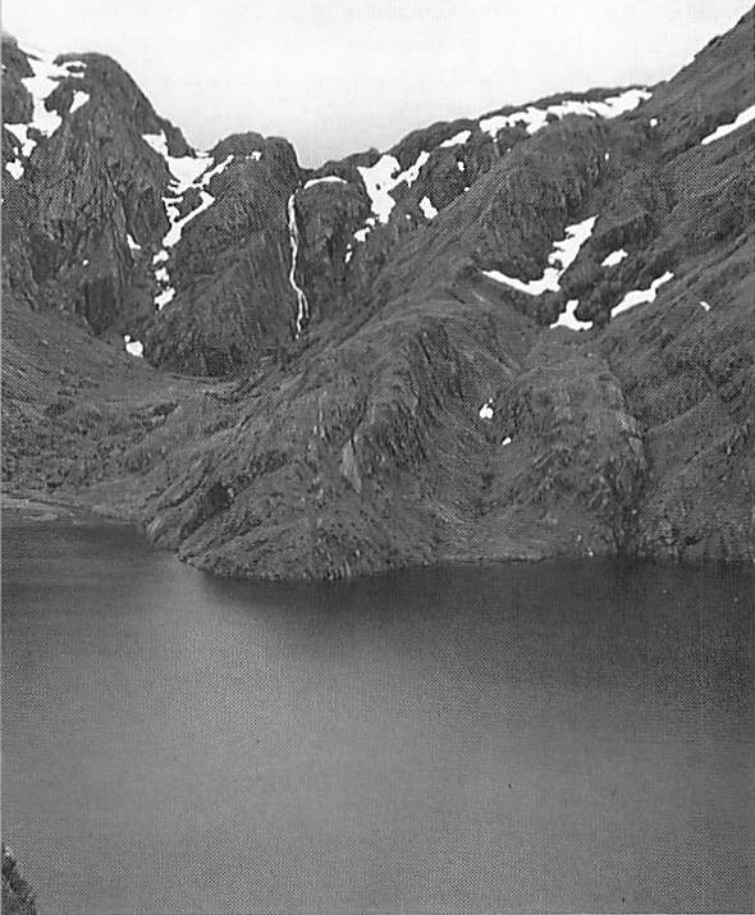
Routeburn walkers above Lake Harris.

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.³²

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.³³

The Routeburn is now very much in the international trekking circuit with 75 percent of walkers being visitors from overseas.³⁴ 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.³⁵ Currently 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.³⁶

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 1914.³⁷

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 1910.³⁸

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.⁵⁰ 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 multi-day 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

Winter at Lake Harris

Photo: Mark Hanger



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.⁴⁰

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.⁴¹ 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.⁴² The activities of aerial fishing concessionaires within the park greatly discourages amateur anglers.⁴³

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 motor-ing 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 Matukituki 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 1979.⁴⁴ 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, Beamish⁴⁵ surveyed user perceptions of their walk, and of track and human

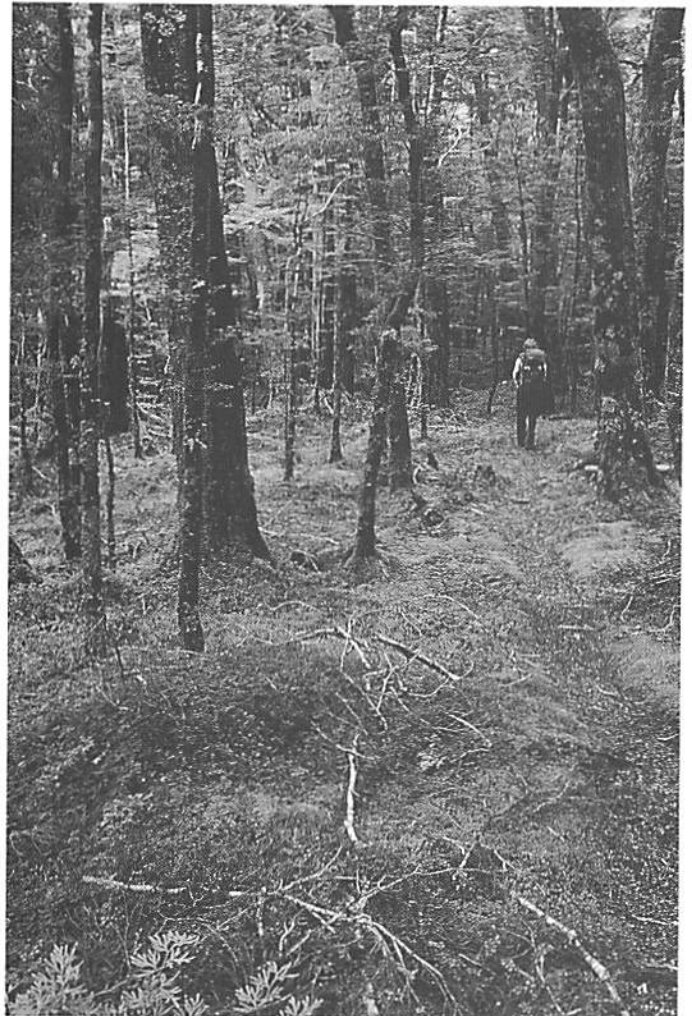
activities. At a level of approximately 5000 walkers per year users were found to be overwhelmingly satisfied with their walk experience, but having strong dissatisfactions with track and hut conditions. User behaviour problems (eg littering and picking flowers) were also a major concern of users. Harris 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.⁴⁶

After substantial improvements to the track and huts, Harris⁴⁷ 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 disapproval 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 north-eastern (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.⁴⁸ Other concession activities that do not impinge on the walk are regarded as appropriate.⁴⁹ 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 use⁵⁰ 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 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.⁵¹ 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 1978.⁵² 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.⁵³ 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 1983⁵⁴ 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 1978.⁵⁸ 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 paper⁵⁹ reached the not unexpected conclusion that the primary issue at stake was future flexibility of land use decision-making. 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.

Photo: Bob Entwistle



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

Photo: Ewan Paterson





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.⁶⁰

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,⁶¹ 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 proposals⁶² 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 silviculture 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 1978.⁶³ 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.⁶⁴

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.

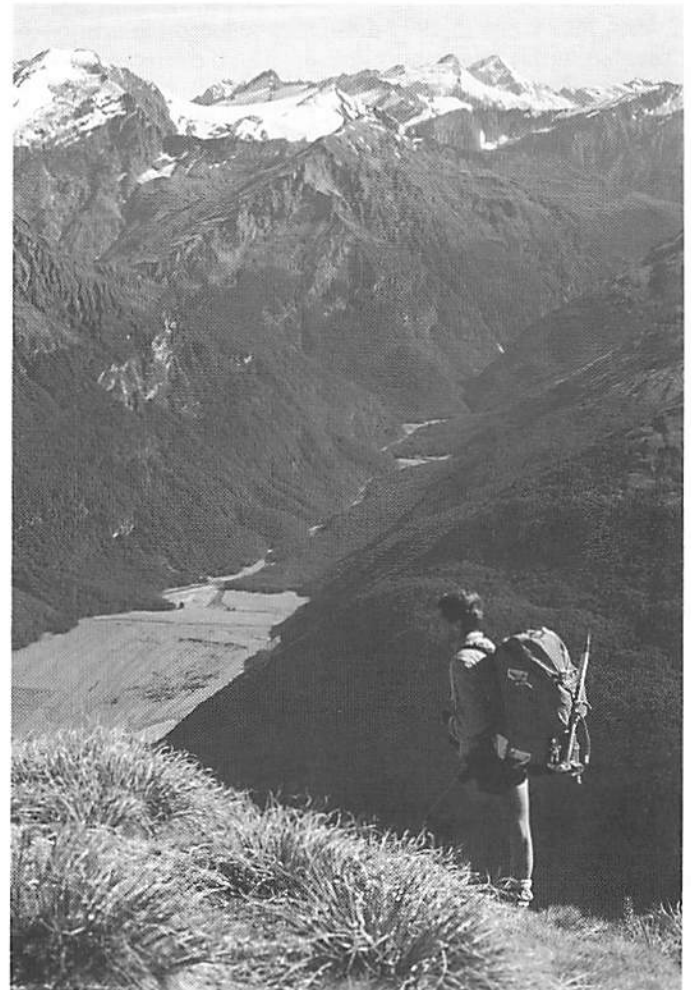
7.2 Mt Earnslaw Station

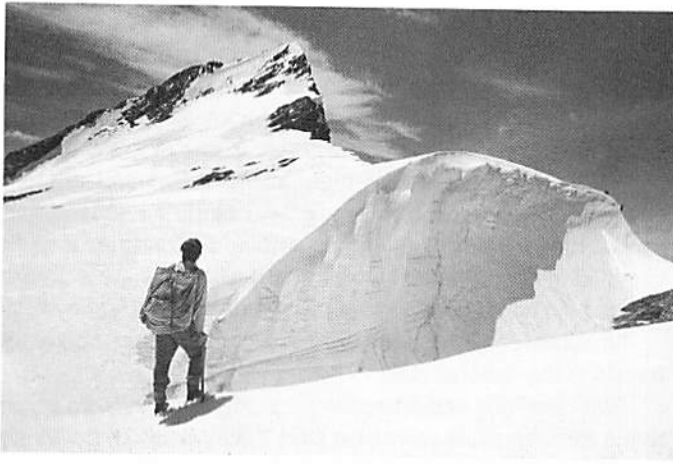
7.2.1 Pastoral History

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 1908⁶⁵ 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."⁶⁶

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 moutonné* 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.⁶⁷ 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.⁶⁸

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.⁶² 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.⁶²

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 Zoning⁶⁹

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, hut 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.⁷⁰ 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.

DOC party on Mt Alfred. Routeburn (left) and Dart Valley. Geoff Spearpoint



Current recreational use of Mt Alfred is predominantly 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 Saddle.

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.⁷¹

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.⁷² 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.⁷³

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.⁷⁴ 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"⁷⁵ and to "spread tourist pressure" within the region.⁷⁶ 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. 77

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 78 and Government's Wilderness Advisory Group 79 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,⁸⁰ 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 mountaineers. 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.

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.

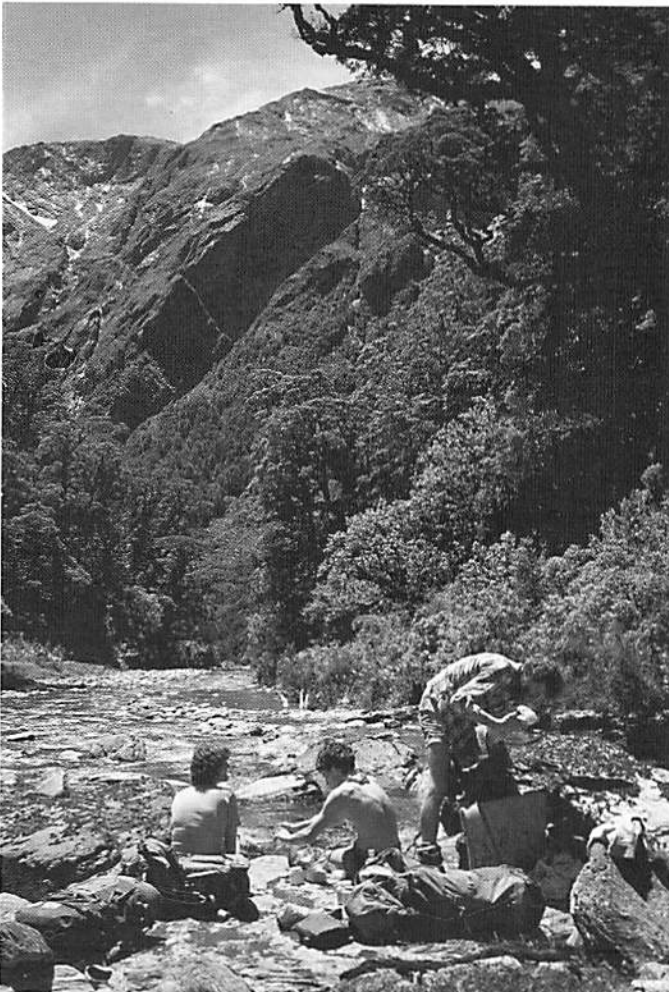
10.15 That protection be arranged for freehold forest either by means of covenanting or incorporation into conservation areas. This is particularly important for the protection of high cultural-natural landscape values in the environs of Paradise.

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.

Lunch break in the upper Okuru Valley.

Photo: Michelle Metherall



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:

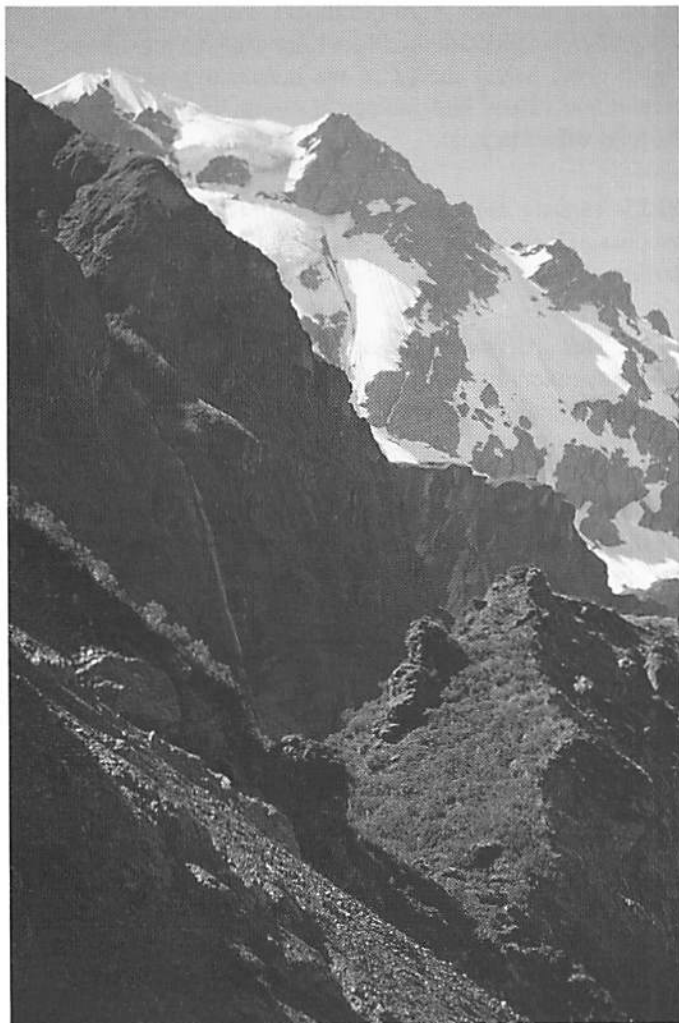
- complete boundary fencing with adjacent conservation areas and reserve;
- exclusion of the Class 7 summit area from long-term occupation;
- protection from stock damage of important fisheries-wildlife values in Diamond Lake and Creek.

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 Aranian 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. N.Z. Institute* 46: 22-29.
- 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, Clarendon, 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.
- BRAILS福德, B. 1984. *Greenstone Trails-In Search of Pounamu*. A H & A.W. Reed, Wellington.


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

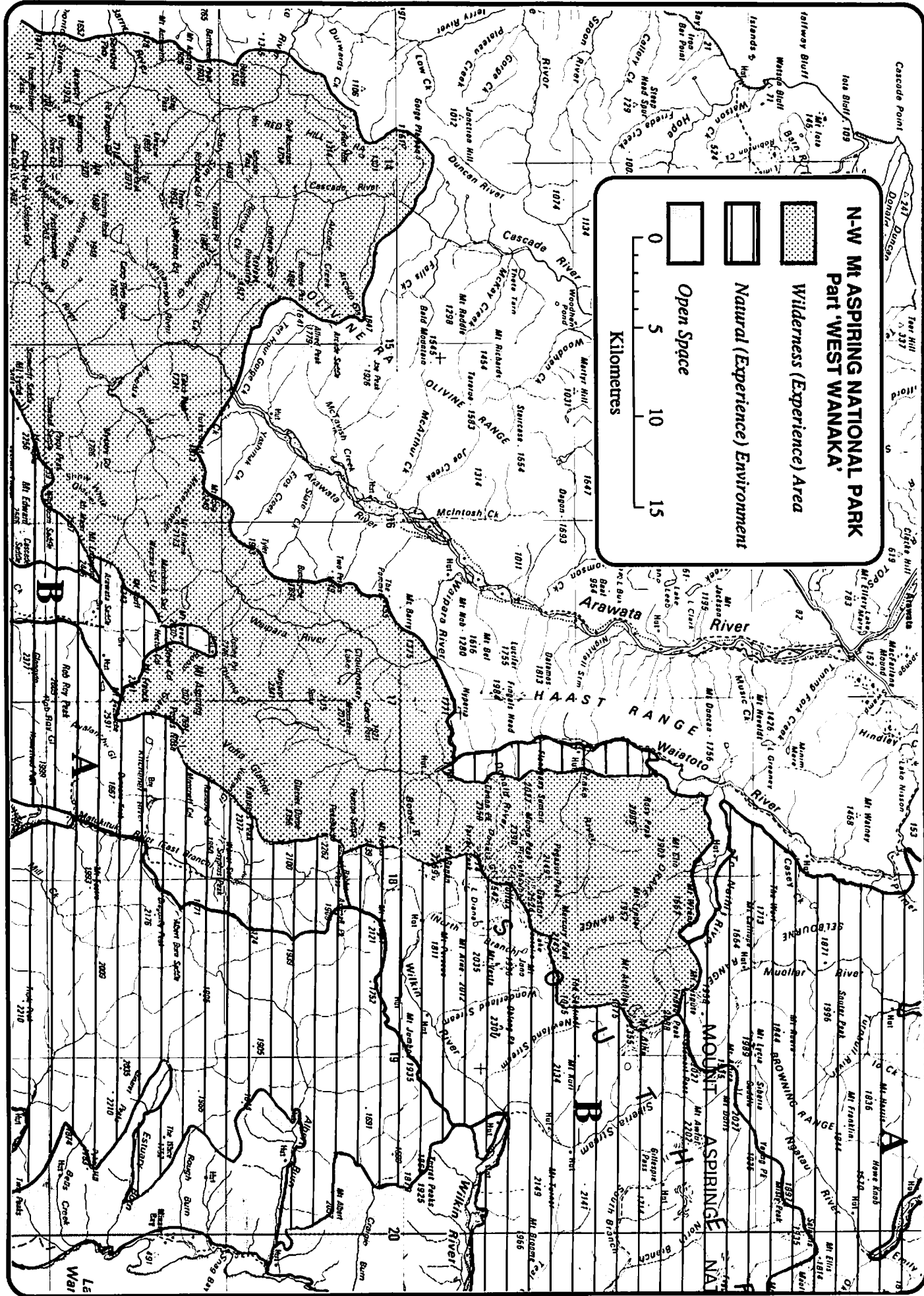
- 68 MINISTRY of WORKS and DEVELOPMENT. *New Zealand Land Resource Inventory Worksheets*. Government Printer, Wellington.
- MOLLOY, L.F. (Ed.). 1983. *Wilderness Recreation in New Zealand. Proceedings of the FMC 50th Jubilee Conference on Wilderness*. FMC, Wellington.
- 21 MOLLOY, L.F. 1976. 'Wilderness diminishing.' *N.Z. Alpine Journal* Vol. 29: 67-75.
- 20 _____ 1976. *Recreational Resources of South Westland*. Unpublished submissions to joint Lands and Survey-NZFS land use study team: 22 pp. Federated Mountain Clubs, Wellington.
- _____ 1977. 'Red Mountain—national park or asbestos mine?' *Supplement to Forest and Bird* No. 205.
- _____ *Outdoor Recreation on the West Coast, A Conservation Plan*: pp. 25-29. FMC, Wellington.
- 24 MOUNT ASPIRING NATIONAL PARK BOARD. 1977. *Management Plan*. Department of Lands and Survey, Dunedin.
- _____ 1981. *Management Plan*. Department of Lands and Survey, Dunedin.
- 54,74 NATIONAL PARKS and RESERVES AUTHORITY. 1983. *General Policy for National Parks*. Department of Lands and Survey, Wellington.
- 52 NATIONAL PARKS AUTHORITY. 1978. *General Policy*. Department of Lands and Survey, Wellington.
- 67 OTAGO REGIONAL WATER BOARD. 1980. *Clutha Catchment Water Allocation Plan, Vol. 2*.
- ROYAL FOREST and BIRD PROTECTION SOCIETY, FMC. 1985. *Pastoral Lease Report on Conservation and Recreation Values, P 47 Earnslaw Station*. Submission to Commissioner of Crown Lands, Dunedin. (April).
- 75 SALMON, G. 1967. In, *Forests, Fiords & Glaciers. New Zealand's World Heritage. The Case for a South-West New Zealand World Heritage Site*. Royal Forest and Bird Protection Society, Wellington.
- WILDERNESS ADVISORY GROUP. 1985. *Wilderness Policy*. Department of Lands and Survey, N.Z. Forest Service, Wellington.
- Dart State Forest**
- ARMSTRONG, M.R. 1984. *Wild Animal Trends in the Dart State Forest*. N.Z. Forest Service, Invercargill.
- BATHGATE, J.L. 1976. *Wakatipu Whitetail, A Population Census*. N.Z. Forest Service, Invercargill.
- 58,62-63 CUDDIHY, M.J. 1978. *The Dart State Forest, Future Management Options: A Paper For Public Discussion*. N.Z. Forest Service, Invercargill.
- _____ 1983. *Mountain Forest Regional Management Plan, A Preview*. N.Z. Forest Service, Invercargill.
- 59,62 _____ and GUILD, D.W. 1978. *The Dart State Forest, Future Management Options: An analysis of submissions*. N.Z. Forest Service, Invercargill.
- FEDERATED MOUNTAIN CLUBS. 1978. 'Dart State Forest.' *FMC Bulletin* No. 57. (December). 8-9.
- 64 _____ 1978. *Submission to NZFS on the Dart State Forest, Future Management Options: A Paper For Public Discussion*.
- _____ 1979. Letter to Director General of Forests, 7 March.
- HOLLIS, M. 1978. 'Dart State Forest.' *FMC Bulletin* No. 57. (December). pp. 7-9. December 1978.
- 60 MARTIN, ROLLY. 1988. *An Interim Management Plan for the Wakatipu Whitetail Herd*. DOC, Queenstown.
- Recreation**
- 44 AITKEN, ROBERT. 1979. *Mount Aspiring National Park Recreation Survey 1979. First Interim Report* (to Mount Aspiring National Park Board).
- 32,45 BEAMISH, S.F. 1977. *The Routeburn Track: an application of environmental impact analysis*. A report prepared for the Mt Aspiring National Park Board. University of Otago, Dunedin.
- BISHOP, D.G. 1974. *The Mount Aspiring Region*. N.Z. Alpine Club, Wellington.
- 17 BURRELL, R. 1983. *Fifty years of Mountain Federation 1931-81*: pp. 99-106. FMC, Wellington.
- CANTERBURY MOUNTAINEERING CLUB. *The Canterbury Mountaineer*.
- DEPARTMENT of LANDS and SURVEY. (Undated). *Double Barrel Forest Walk (Routeburn)*. Pamphlet. Department of Lands and Survey, Dunedin
- _____ 1985. *Routeburn. Infomap 316, 1:75,000*. First Edition.
- _____ 1985. *The Head of Lake Wakatipu*. (Pamphlet.) Department of Lands and Survey.
- _____ *Double Barrel Forest Walk*. Ibid.
- _____ *Haast Pass*. Ibid.
- _____ *Lake Sylvan Walk*. Ibid.
- _____ *Makarora Bush Nature Walk and the Mt Shrimpton Track*. Ibid.
- _____ *Makarora*. Ibid.
- _____ *Matukituki River*. Ibid.
- _____ *Routeburn Track*. Ibid.
- _____ *The Bridle Track, and other short walks in the Makarora Valley*. Ibid.
- _____ *The Rees-Dart Valleys*. Ibid.
- _____ *Track Guide to the Wilkin Valley*. Ibid.
- _____ *Young River to Wilkin River via Gillespie Pass*. Ibid.
- DEPARTMENT of SURVEY and LAND INFORMATION. 1987. *Parkmap. Mount Aspiring National Park. Infomap 27312, 1:150,000*. Third edition.
- DUNEDIN EVENING STAR. 1976. *Routeburn Valley Popularity Grows*. 15 July, p.3.
- FEA, SUE. 1989. 'Backpackers will "walk over glass" to get a good deal.' *Southland Times*. 28 January.
- FEDERATED MOUNTAIN CLUBS. 1965. 'N.Z. Alpine Club Huts-Dart/Matukituki.' *FMC Bulletin* No. 22. July: p. 5.
- _____ 1969. 'Routeburn Guided Walk.' *FMC Bulletin* No. 34. (October). p. 7.
- 73 _____ 1989. *Harris Mountains Heliski Limited. Application for Recreation Permit*. Submission to Property Manager, Landcorp, Alexandra. 19 February.
- 46-47 HARRIS, C.M. 1983. *Recreation on the Routeburn Track: image and experience*. B.A. (Hons.) Thesis. University of Otago, Dunedin.
- 70 KENNEDY, L.D. (Ed.). 1977. *Moir's Guide Book; Northern Section: Fifth Edition*. N.Z. Alpine Club, Wellington.
- 23,78 MOLLOY, L.F. (Ed.). 1983. *Wilderness Recreation In New Zealand. Proceedings of the FMC 50th Jubilee Conference on Wilderness*. FMC, Wellington.
- 22,56 _____ 1979. *Outdoor Recreation On The West Coast, A Conservation Plan*. pp. 25-29. FMC, Wellington.
- N.Z. ALPINE CLUB. *N.Z. Alpine Journals*. For access to a large number of accounts of exploratory climbs, history, and climbing in general consult: Collins, C.E. 1975. *New Zealand Alpine Journal Index Volumes 1 to 27, 1892-1974*. N.Z. Alpine Club, Christchurch.
- OTAGO DAILY TIMES. 1976. *Routeburn Overcrowding Worries Park Boards*. 20 December, p.7.
- _____ 1977. *Better Routeburn Track Operation This Year*. 8 March, p.14.
- POWELL, PAUL. 1967. *Men Aspiring*. A.H. & A.W. Reed, Wellington.
- _____ 1970. *Just Where Do You Think You've Been?* Ibid.
- 42 RICHARDSON, J., TEIRNEY, L.D., UNWIN, M.J. 1986. *The relative value of Southern Lakes Wildlife Conservancy rivers to New Zealand anglers*. Fisheries Environmental Report No. 72. Fisheries Research Division, MAF, Wellington.
- SOUTHLAND TIMES. 1976. *Heavy Use of Park Huts*. 2 March, p.10.
- _____ 1988. *Tourists Ill-equipped For Track Walks*. 23 April.
- 41 TEIRNEY, LAUREL. 1988. 'Facts, figures, and perceptions about river angling in New Zealand.' *Freshwater Catch: 36*.
- TEMPLE, P. (Ed.). 1969. *New Zealand Alpine Club Guide. 1: The Rees-Dart Region*. N.Z. Alpine Club, Christchurch.
- TEMPLE, P. 1971. *Mantle of the Skies, The Southern Alps of New Zealand*. Whitcombe & Tombs, Christchurch.
- _____ 1976. 'Walking the well-worn track.' *N.Z. Listener*. 21 February. p.11.
- TURNER SAMUAL. 1922. *Conquest of the New Zealand Alps*.
- TURNER, B. (Ed.) 1983. *The Guide to Trout Fishing in Otago*. Otago Acclimatisation Society, Dunedin.
- TURNER, BRIAN. 1989. Personal communication.
- 43 WILDERNESS ADVISORY GROUP. 1985. *Wilderness Policy*. Department of Lands and Survey, N.Z. Forest Service, Wn

**N-W Mt ASPERING NATIONAL PARK
Part 'WEST WANAKA'**

 Wilderness (Experience) Area

 Natural (Experience) Environment

 Open Space



WEST WANAKA, Young Range, Hunter Valley

1. Landforms

Within the catchments of Lakes Wanaka and Hawea, and outside the boundaries of the Mount Aspiring National Park, is an extensive mountain complex. 'West Wanaka' covers an area considerably larger than the run of the same name, and includes all the country between Lake Wanaka and the national park, bounded by the Wilkin and Matukituki valleys to the north and south respectively. The Young Range is a distinct massif between the Makarora Valley and Lake Hawea, merging northwards into the main divide headwaters of the Hunter Valley. The isolated 'Mt Burke Range' is an extension south of The Neck between the two lakes.

The alpine schists of these mountains have been subjected to the same mountain-building and erosion processes as the adjacent alps. A succession of ice advances during the Pleistocene sculptured the major landforms that are so prevalent today.

The most obvious features are the lakes, filling glaciated depressions. Rock surfaces on steep valley walls are mamillated by ice-scouring, with ice-plucked *roche moutonneés* abruptly rising from valley floors or as islands and promontories above Lake Wanaka. Glacial deposition is less frequent. However, the Hawea glacier terminal moraine on which the Hawea township is built, is one of the more obvious features.

The 'West Wanaka' district is dissected by a series of generally parallel valleys draining the East Matukituki and Wilkin divides towards Lake Wanaka. The Craigie, Albert, Estuary and Minaret Burns have multiple cirque headwaters. The Albert Burn, as the largest of these catchments, has six basin cirques. The lower reaches of these valleys tend to be straight-coursed, breaching a regular ice-graded lake-shore face. This rises 1200-1600 m to the crest of truncated ridges, indicating the maximum ice depth during the Pleistocene. The crest height of these ridges varies between 1900 and 2350 m between their eastern extremities and the Matukituki and Wilkin divides. Mt Alta (2350 m), Minaret Peak (2210 m), Triple Peak (2195 m) and Dragonfly Peak (2175 m) are the highest peaks, all being in the southern part of the district. Mts Aspinall, Lois, Twilight and Jumbo on the Albert Burn-Wilkin divide are all peaks between 1908 and 2136 m. Post glacial mass movement of valley walls, by either slumping or faulting, has produced widespread hummocky surfaces, alternating with exposed bedrock.

The 'Mt Burke Range' has a regular and rounded crest at 1200-1400 m elevation, being more reminiscent of Central Otago block mountains, than the dissected mountains within most of this region. The unrelenting Lake Wanaka face has been ice scoured, with The Peninsula, enclosing Stevensons Arm, being very steep-sided.

The Young Range is a more confused mass, with a large number of catchments, either draining eastward into the Hunter Valley and Lake Hawea, or westward into the Makarora and Lake Wanaka. Steeply dipping and finely foliated schists have resulted in fluted and deeply dissected faces in the east. Mts Sentinel and Gold present particularly jagged appearances, being prominent from State Highway 6.

From The Neck, the steep and dissected terrain rises to 2000 m in the north. Terrace Peak and Mts Constitution, Patriarch and Shrimpton are the highest summits. The McKerrow Range, above the lower Makarora Valley, presents the only regular feature in the district, with an evenly graded and lightly dissected western face 1200-1500 m high. Further to the north, the Young Range divide between the upper Makarora and Hunter joins the main divide at Mt Brewster (2440 m). Northwards along the divide, the mountains become more alpine, with Mts Enderby and Holdsworth having permanent snowfields and small shelf-glaciers.

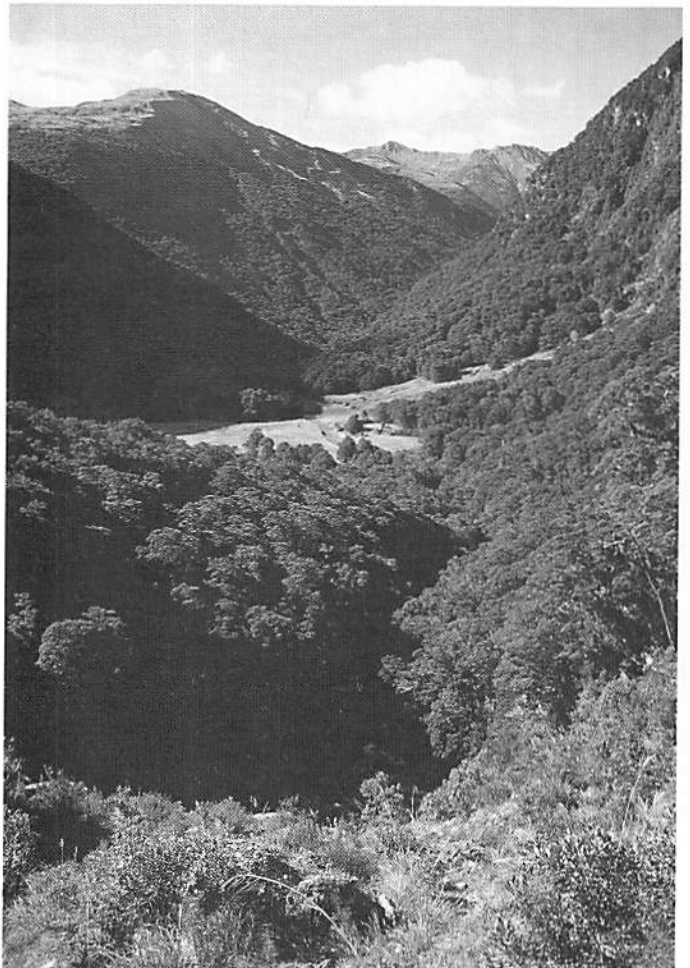
The main divide above the east branch of the Hunter exhibits a truly alpine character, with extensive glaciers on an amphitheatre cirque-wall 2100 m high, peaking at 2320 m on Mt Strauchon. On a clear day, this fine peak is prominent from Hawea township 80 km away, dominating the head of the Hunter Valley.

The Hunter Valley has a broad, almost flat floor, running on a straight course from the head of Lake Hawea for 30 km to the Forks, where there is an abrupt transition from a meandering river on braided flats, to mountain torrents in the short east and west branches.

The western face of the Hunter-Dingle/Ahuriri dividing range rises along an unbroken crest at 1900 m in the south, to 2400 m at Mts Barth and Huxley in the north. Numerous small creeks drain this imposing face, which is unbroken by any major valleys or low passes.

Albert Burn Valley.

Photo: Donald Lousley



2. Vegetation and Wildlife

2.1 Vegetation

...At our feet thousands of feet below, was the Hawea Lake, deep, blue and narrow, surrounded by extensive forests reaching the white gravelly shores. About five miles westward lay the Wanaka Lake, more open but broken with promontories and islets, and having the peculiarity, marked in all Maori sketches, of a long narrow eastern arm. [Stevensons Arm]. Excepting on their southerly shores these lakes were hemmed in by bold and lofty mountains. Those round Hawea being covered by timber to the snow line, but round Wanaka timber is scarcer.

Surveyor J.T. Thomson, 18 December 1857, from Grandview Mountain.¹

The region is botanically interesting for its diversity. This is due to it being in the climatic transition between the wet main divide mountains and the rain-shadow ranges and basins of Central Otago. There are dramatic changes in precipitation relative to distance from the main divide. Rainfall is around 2000 mm per year on the western side of Lake Wanaka and at the head of both lakes, dropping to 600-700 mm on the Upper Clutha Flats only a few km away. Along this sharp rainfall gradient, forest plants drop out one by one as conditions become too dry, and their place is taken by various scrub communities. In turn these become less dense in the east as the shrubs become admixed with grassland and bracken fern.²

Much has changed since European settlement. The forests on the valley floors of the Matukituki and Makarora, and along the shores of Lake Hawea, have disappeared. These were predominantly red and silver beech in the mid-Matukituki and podocarps on alluvial outwash fans in the Makarora Valley. Both valley floors, in their lower reaches, were covered with flax, cabbage tree, and tree ferns 2-3 m high, forming an impenetrable obstacle for travel.³

...To get over the difficulty in our attempt to reach the bush we started a fire at the head of the lake (1860). This soon developed into one unbroken, seething ocean of flame from hillside to hillside and fanned by a southerly wind, it raged for three days and nights, traveling up the valley 20 miles. It was a terrific blaze, that leveled everything in its course. This great fire transferred the appearance of the country, so that in March 1865, when the late explorer William Docherty and I started on our exploring trip by way of Lake Wanaka, the Makarora Valley presented a beautiful carpet of luxuriant grass, over which it was a pleasure to travel.

The Memory Log of G.M. Hassing⁴

On the floor of the Matukituki Valley could be found several species of *olearia* and *coprosma*, and matagouri with stems up to 20 cm in diameter.⁵ In 1862 this scrub was an obstacle to the first surveyors. "...for the first two hundred yards or so we had to creep on our hands and knees from the bank of the (Matukituki) river till we gained the foot of the mountain, through among thick growing, high overtopping scrub." ⁶ Hawea Flat had clumps of matagouri, speargrass and scrubby gullies instead of today's irrigated pastures.⁷

Above 700 m, dependent on aspect, today's predominant vegetation is tall tussock grassland. The narrow-leaved snowgrass is dominant, with the mid-rib snowgrass in the wetter areas close to the main divide. These grasslands are in fair

condition, being only moderately depleted by pastoral activities, except for the 'Mt Burke Range' where it is severely depleted.⁸ In drier areas tall tussock has been succeeded by short fescue tussock, generally as a narrow altitudinal zone above bracken fern belts along the lake faces. Pasture grasses dominate lower slopes, valley floors and where oversowing with grasses and clovers have replaced bracken and tussock.

Ribbons of beech and broad-leaved species in gullies are remnants of once considerably more extensive forests. In 1865 it was recorded that the West Wanaka lake faces were clothed in beech forest with patches of *dacrydium*, *podocarpus*, and *phyllocladus* species.⁹ Today it is predominantly covered by bracken fern. In the west extensive silver beech forests remain, in particular the Albert Burn, East Matukituki, and upper Makarora, with Hall's totara present at higher altitudes. Extensive pockets of pure mountain beech clothe many of the drier Hunter Valley catchments, but the former extent of forest has been severely reduced by burning and localised milling. Kidds Bush, on the shores of Lake Hawea, is the only locality where an unbroken beech canopy extends from shore-line to (fire-modified) upper bushline.

Broad shrub belts above present bushlines, and on shady faces, indicate the former extent of forest. In places impenetrable stands of mingimingi, *hebes*, mountain celery pine and *dracophyllum* species are colonising formerly burnt forest areas. Alluvium in many river valleys supports dense stands of matagouri. In the drier Mts Burke and Gold area, colonisation by manuka is occurring over depleted short tussock grassland.

In the alpine zone, herbfields occur only to a limited extent, with fellfield and screes being more prevalent. In 1865 Buchanan listed the alpine species to be found on Mt Alta, concluding that this locality on West Wanaka demonstrated the richness of Otago's alpine flora. He further described the sub-alpine zone as "characterized by a belt of coarse tussock grasses, *celmisia*, (veronica) and *ranunculus*," but noted the presence of sheep tracks as high as 1830 m.¹⁰ Continuous screes along the Hunter-Ahuriri divide indicate greywacke basement, rather than the schists which predominate throughout the region.

Most of the area lies within the Wanaka and Huxley Ecological Districts of the Lakes Ecological Region. The wetter margins upvalley from Lake Wanaka are within two districts of the Aspiring Ecological Region.¹¹

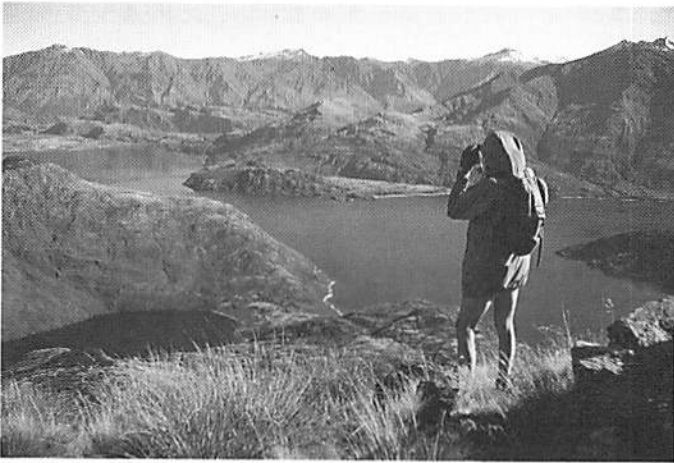
2.2 Wildlife

Fires and introduced predators quickly depleted wildfowl, which, along with eels, provided a reliable food source during Maori occupation, as well as for the first Europeans. In 1861 the Upper Clutha Valley was covered by a luxuriant growth of native grasses and abounded with native quail and the incautiously curious weka.¹² The quail suddenly became extinct shortly after first European settlement. The first runholder at the head of Lake Hawea reported in 1868 that "a year or two before quail were so numerous that the cats would bring in two or three a day, and next year there was not a quail to be seen."¹³

With complete habitat changes at lower altitudes, the remaining birdlife is concentrated on lakes and tarns, bush and bush margins. Valley wetlands and river beds provide habitat for paradise shelduck, scarp, pied oystercatcher, banded dotterel, black-fronted tern, wrybill plover, gulls, Canada geese and spur-winged plover. The pipit and harrier hawk are widely distributed throughout the grasslands, as is the kea throughout alpine zones.

Tomtits, wood pigeon, bellbird, grey warbler and brown creeper are common throughout remaining forest areas, with long-tailed cuckoo and parakeet also present. Birdlife is nowhere as abundant and diverse as previously. In 1860 at the mouth of the Minaret Burn "the bush teemed with plump pigeons and kakas, which in the evenings we knocked down with a long stick, killing as many as we required."¹⁴

Red deer are present in low numbers throughout the region, with more localised distributions of chamois, thar, possum and goat. A cause for concern has been the recent release of wild pigs into isolated areas around Lakes Wanaka and Hawea, well outside their previous range.¹⁵ There are low numbers of wallabies in the Mt Burke area. These are under control by DOC. It is the objective of DOC to restrict the southern feral range of thar (as defined by the presence of females) to north and east of the Makarora-Haast highway.



From near Mt Burke: Photos: Donald Lousley
Above: Harris Mountains (rear) and Lake Wanaka.
Right: West Wanaka country and Harwich Island, Lake Wanaka.

3.2 European Exploration

Nathaniel Chalmers was the first European to visit the region, in 1853, in company with two Maori guides. After reaching Lakes Wanaka and Hawea via the Kawarau and Upper Clutha valleys, Chalmers took ill, abandoning his plans to continue over the Lindis Pass. He departed down the Clutha River on a flax raft.

On his reconnaissance survey of Otago in December 1857, J.T. Thomson obtained the first European view of Mount Aspiring, from Grandview Mountain above Hawea Flat, and produced a sketch map of the Wanaka and Hawea basins. However, it was not until the explorations of James Hector and Julius von Haast in 1863 that the geography of the region was finally unraveled.

3.3 Pastoral History

Pastoral occupation commenced in 1858 when Robert Wilkin established a homestead near the Albertown ford, for a depasturing licence stretching from Lake Wanaka to the Kawarau River.



3. History and Land Use

3.1 Prehistory

Maori occupation of the Wanaka-Hawea basin may have occurred at least 800 years ago, as it is now apparent that the early Maori foraged far and wide through Otago's inland ranges. By the 15th century all species of moa were rare, resulting in a greater dependence on eeling and fowling for seasonal subsistence.¹⁶

The Makarora Valley was a route to the West Coast greenstone, using either Haast Pass or Maori Saddle to cross the main divide.

Tribal conflicts from the early 18th Century onwards strongly influenced late Maori settlement, with only irregular visitation up until the time of European exploration. The Waitaha people abandoned the Wanaka district in approximately 1720, after a bride-searching mission by Te Weka at Parakarehu (Wanaka) turned into a massacre.¹⁷ The last settlement known to exist was until 1836 at The Neck, when a Te Rauparaha raiding party made a surprise attack. Survivors from there and Hawea fled the district.

The lower Matukituki flats and West Wanaka Station were first occupied in 1859. The following year saw occupation of the country between Lakes Wanaka and Hawea and the Makarora Valley.¹⁸ These run boundaries were ill-defined until Surveyor James McKerrow's visit in 1862. Legacies from Government's 1861 'spadeline' boundary between the Otago and Canterbury Provinces remain as the straight boundary between Minaret and Mt Albert Stations, and in the naming of Boundary Creeks in the Makarora and Hunter Valleys.

3.4 Timber and Flax Milling

The lowland forests were soon of interest to the pastoralists as a timber source. The first pit-sawing occurred at the mouth of the Minaret Creek early in 1860, followed by the Makarora Valley. The timber was rafted down Lake Wanaka. Lumber of any description was in great demand after the 1862 Dunstan gold rush, prompting the opening of further small mills at Makarora, Matukituki, Dingle, Timaru River and at Kidds Bush on the shore of Lake Hawea. The first mill with a circular saw was erected at Makarora in 1872.¹⁹ Rafts and whale boats were used in the hazardous transport of the timber down river to Cromwell.

The first large mill to be opened was in 1877 at Mill Creek in the Matukituki, followed by the Makarora and Wilkin Valleys. The main timber trees were red and black beech in the Matukituki, silver beech with some matai, rimu and totara in the Makarora and Wilkin, and a wide variety including kahikatea and

matai around Lake Hawea. By 1905 the timber industry was in decline, with only two major mills operating.²⁰

At Makarora, flax milling replaced timber as the major local industry, continuing with fluctuating fortunes until World War I. The treated fibre was used for rope and twine manufacture in Dunedin.²¹

3.5 Roading

For many years after first European settlement, overland travel remained rather tedious due to the absence of formed tracks. Construction of the first pack track between Hawea and Makarora commenced in 1865. This rough formation was the only alternative to launch travel until 1931, when the first road link was completed after three years of pick and shovel labour. This was the forerunner of today's state highway which linked Makarora to Haast in 1960, and to the rest of Westland in 1965.

3.6 Gold Mining

Although prospectors scoured the ranges looking for payable goldfields, the region was spared the turmoil of the Central Otago gold rushes. The one short-lived exception was in August 1880 when over 300 men rushed to Long Valley in the 'Mt Burke Range.' However by December only 50 men remained, and a year later the gully was deserted. This late episode in Otago's gold rush history was at the time dismissed as a 'new chums' affair.²²

3.7 Land Tenure

The region is predominantly under pastoral lease, with lesser areas of UCL and former state forest (now conservation areas). The only substantial areas of freehold located upvalley from the lakes, are on the Matukituki and Makarora valley floors.

In the 'West Wanaka' district there are four pastoral leases. These butt right up to the Mount Aspiring National Park boundary, including precipitous country in the Corner Burn, as high as Dragonfly Peak (2176 m), and down valley from Kerin Forks in the Wilkin. The balance adjacent to the park is UCL in the upper Albert and Craigie Burns. 11,300 ha of West Wanaka Station has reverted to UCL, and is subject to a Crown land management plan, with areas under grazing permit on the Matukituki faces, the Rumbling and Minaret Burns.²³ Some 12,000 ha in this area has been allocated to the new Department of Conservation (DOC). A recreation permit over 18,000 ha north of the lower Matukituki Valley authorises heliskiing activities.

The beech forests of the lower East Matukituki and the main Matukituki are state forests, as are the substantial Albert Burn and smaller Craigie Burn forests. These were all allocated to DOC. So were 5300 ha of high country in the Albert and Craigie Burn headwaters, to the Mount Aspiring National Park boundary, along the East Matukituki and Wilkin divides.

Two pastoral leases share the Young and McKerrow Ranges. Makarora Station occupies the west and upper Hopwood Burn tributary of the Hunter. The fragmented Hunter Valley Station covers the eastern balance of this broken high country and abuts the national park in upper Camerons Creek and along the northern crest of the Young Range. The upper Makarora-Hunter divide and the main divide headwaters of the Hunter are UCL, as are the upper reaches of the Fast Burn and Terrace Creek. 35,000 ha of UCL north of Lake Creek in the Young Range, to the main divide at the head of the Hunter, have been allocated to DOC.

9000 ha of forest in the upper Hunter is former state forest, as are fragmented fingers of forest in several western catchments of Lake Hawea. These have been allocated to DOC. In the Hopwood and Fast Burns, substantial forest remnants were within pastoral lease until recently. 16,000 ha of retired high country, ex Makarora and Hunter Valley Stations and south of Mt Shrimpton, have been allocated to DOC, with the exception of a 835 ha pastoral occupation licence. The only true high country now left under pastoral lease is a central block between Lake Creek and Mt Shrimpton. This is adjacent to the national park and includes the headwaters of Camerons Creek.

There are three small and one larger lake shore recreation reserves containing mountain beech remnants. They are leased for grazing, with public use permitted at all times. Unfortunately, there is an absence of legal access to the large reserve. A 630 ha scenic reserve has been established on the Lake Wanaka face of the McKerrow Range, between Wharf and Camp Creeks. This is both above and below the state highway, and gives protection for broadleaf forest regenerating through bracken fern. It also provides legal access to the Lake Wanaka shoreline.

The 'Mt Burke Range' and The Peninsula is shared by two pastoral leases, containing small pockets of beech forest and larger extents of manuka shrublands.

The western face of the Hunter-Ahuriri divide, north of Mt Barth has been allocated to DOC. This means that the whole of the upper Hunter catchment is now administered as public land.

3.8 Land Use Capability

Most of the higher mountain country has severe limitations to grazing (Class 7), or no primary production capability (Class 8). Only a small portion of the Class 6 lands, which roughly coincide with the bracken fern belt, have been developed through aerial oversowing and topdressing. The Otago Regional Water Board (catchment board) considers that most of the Class 7 and 8 land should either be retired from pastoral use, or have very restricted uses confined to the better localities.²⁴ No retirement plans have been implemented on the Mt Aspiring, Minaret, or Mt Albert Station segments of 'West Wanaka.' However, retirement fencing on Makarora and Hunter Valley stations has destocked most of their extensive high country, but cattle grazing is permitted on some high valley floors.

In 1978 the former Forest Service considered that none of the state forest areas within the region had any timber production potential.²⁵ However in 1983 the Service advocated timber extraction "by the tree" or on a group selection basis within the Matukituki, McKerrow and Hunter State Forests, but confirmed that there was no commercial production potential in the Makarora State Forest.²⁶

The former Mount Aspiring National Park Board proposed two boundary adjustments in its 1981 Management Plan.²⁷ A small area of forest within pastoral lease, immediately down valley from Kerin Forks in the Wilkin is intended for inclusion in the park (now allocated to DOC), and part of the headwaters of the Camerons Creek tributary of the Makarora is proposed for incorporation. Within this latter catchment, the basins and faces above bushline were formerly heavily burnt and grazed. They are presently destocked but remain in Hunter Valley Station. Vigorous recovery of snowgrass and sub-alpine scrub is occurring. The Young Range face in the north branch of Camerons Creek is excluded from the proposed park addition despite the Board's policy that ridge boundaries are preferable to valley bottoms. The

general policy for national parks²⁸ now stipulates that boundaries should encompass complete landscape units and should follow ridgelines in preference to vegetation boundaries.

3.9 District Scheme Zoning

The Lake and Vincent Country Councils have enacted 'Landscape Protection' zones within their district schemes.^{29,30} These encompass much of the region. The lake faces along both shores of Lake Wanaka, the western Hawea lake face, the 'Mt Burke Range' and the eastern Makarora face up to the national park boundary are included in these zones. (Refer to Section 4.1 for discussion of adverse landscape impacts, and of the adequacy of district scheme provisions).

4. Recreational Opportunities

The Wanaka and Hawea basins have long been a recreational attraction of considerable regional importance. The two lakes, plus the Haast highway connection, are the focus for most activity. The surrounding mountains provide a high-relief setting which is only used, in a passive sense, by a large majority of visitors. Most are content to view from lake, shore, highway, or holiday settlement. The maintenance of an attractive landscape setting, plus opportunities to participate in a diverse range of recreational activities, is probably the major reason for the attractiveness of the region.

The main passive and active recreational activities are:

4.1 Landscape Viewing

This is the primary passive activity. Naturally any discordant elements in the landscape detract from the visitor experience. The more obvious detractors are (insensitively sited and designed) earthworks, usually associated with farming. The majority of these effects are a direct consequence of high country roading/farm tracking. Other impacts have occurred with communications installations such as the Little Mt Maude television repeater and its switch-back road which is highly visible from Hawea Flat.

Fortunately, most Wanaka lake faces remain free from farm track scars, and to a lesser extent, so too are the Hawea faces. A dual approach by the Crown (as landlord) and catchment board over the siting, design and vegetative restoration of farm tracks is required. Alternative methods of high country fence construction need to be seriously considered, to avoid use of the bulldozer.

The West Wanaka Crown Land Management Plan³¹ proposes action to prevent activities that are likely to adversely affect scenic values. Yet previously the Department of Lands and Survey financed access tracking up to 1460 m, along the greater length of the lower Matukituki faces. The plan belatedly acknowledged that "the area is an impressive landscape feature which is visible from many vantage points and localities of periodic high population densities." Natural revegetation has now covered most of the scars, however for several years these were visible to all visitors passing through the lower Matukituki Valley.

The importance of retaining landscapes with an absence of obvious development has been nominally recognised by the two territorial local authorities which share the region. Unfortunately, their 'Landscape Protection' zones do not differentiate high impact farming practices from farming in general. Therefore there is no means of controlling the practices which are

currently causing the greatest visual impacts (farm access roading, benched fence lines). The Lake County Council permits buildings and other structures accessory to any predominant or conditional use, with controls on siting, design and effect on vegetation. Vincent County has only general controls over "detraction from the scenic amenities of the landscape." Forestry is not a permitted use in Lake County, but is a conditional use in Vincent. An assessment of landscape character and of existing and potential land use impacts is required, leading to adequate and compatible code of ordinance provisions between Counties. The Lake County Council has stated its intention of roading half the western shore of Lake Wanaka, as farm access to Minaret Station. Financial allocations for construction were (unsuccessfully) sought, without first addressing the requirements for landscape protection.

4.2 Shoreline and River Activities

Unavailability of access to shorelines, both physical and legal, is a major deterrent to public use.

4.2.1 Lake Hawea and Hunter River. The down valley half of Lake Hawea has road access around its shores but without legal rights of use due to the absence of Section 58 strips. The original strips were obliterated when lake level controls commenced in 1958 and were not reinstated around the new, higher shoreline.

Picnicking and informal camping is provided for at only two localities. Timaru Creek and Kidds Bush are becoming increasingly popular as a contrast to the high density and facility orientated camping grounds in the holiday centres. As already noted, the shoreline recreation reserves at Hunter Valley Station, being the only land reserved for public use around the lake, are legally inaccessible except by boat. This is also the only legal means for fishers, trampers and hunters to reach the Section 58 strips that do exist up either bank of the Hunter River. The availability of the extensive Crown land river bed for public access and use is in jeopardy due to a proposal to issue a Licence to Occupy for grazing purposes, which includes trespass rights for the occupier/runholder.

4.2.2 Lake Wanaka. Most of this natural shoreline is unroaded, excepting the south and north-east shores. Section 58 strips are laid off around its entirety. Localised overland access restrictions or prohibitions apply near Wanaka and Dublin Bay due to the absence of, or ill-defined legal accesses from public roads. This requires urgent resolution due to the seasonally heavy public demand for such access.

4.2.3 Canoeing. Below Kerin Forks, the Wilkin provides conditions much like the lower Matukituki River, but is steeper with slightly harder rapids, not exceeding Grade 2. Absence of convenient access to the headwaters results in infrequent canoeing activity.³²

The Matukituki River from the East Branch confluence to Lake Wanaka, is popular for canoeing and is used regularly by school groups. Rapids on this easy, braided river do not exceed Grade 1+.³³ The lower Makarora River provides similar canoeing conditions with a setting of forested mountain scenery.

The New Zealand Recreational River Survey ranks the recreational values of the Matukituki, Makarora and Wilkin as high, having moderate to exceptional recreational and scenic values. The Hunter River is ranked as of intermediate value.³⁴

4.2.4 Fishing. All major rivers are important recreational fisheries, supporting brown and rainbow trout, and salmon. (The Makarora and Matukituki rivers are commented on in the Mount Aspiring National Park chapter). As a result of a survey the Hunter River has been ranked as nationally important as a 'wilderness' fishery.³⁵ This is due to anglers judging the river as having "outstanding scenic beauty, extensive areas of fishable water, high catch rates, and low levels of use." The fishing experience is considered exceptional. Main concerns for anglers are speeding jet boats and difficulty of access. The river is doubly important as a key spawning and rearing area for the Lake Hawea fishery. This is due to the lake's catchment being cut off from the rest of the Clutha catchment by the Hawea dam.³⁶

4.3 Tramping and Climbing

The whole region is admirably suitable for recreational walking, with a wide range of difficulty and duration. There is a 'diversity of adversity' in both climate and topography. This ranges between the extremes of semi-arid, moderate relief uplands with few topographic barriers to foot travel, to precipitous, alpine and semi-remote terrain with ever present hazards of river and weather. Climatic transition can be dramatic, even within a few km, with increasing severity towards the main divide.

4.3.1 Short Walks. There are only two walks within the region which have been specifically developed for general public use. An interesting 600 m climb through mountain beech leads from Kidds Bush to the open tops above the Sawyer Burn tributary of Lake Hawea. Excellent views of the lake and Dingle Burn country are obtained. An off-shoot track from the Makarora Bush Nature Walk climbs 1300 m through predominantly silver beech forest to alpine grasslands on the slopes of Mt Shrimpton. Both tracks are used for DOC guided interpretative walks.

There is scope to extend public walking opportunities near Wanaka and Hawea, where the demand is greatest. On Lake Wanaka's shoreline there is a need for extension of walking access between Dublin Bay and Stevensons Arm by walkway status if existing legal access is insufficient. Walkway formation to prominent viewpoints could do much to satisfy the requirements of summer holiday visitors. Mt Maude (1315 m) is an obvious viewpoint for Hawea residents. A walkway route from Dublin Bay over Mts Gold and Burke (1400 m) descending via the gold workings in Long Valley, would traverse a variety of interesting terrain, with a centrally placed viewpoint of the whole region on route. There is little point to further shoreline walkways, either due to nearby roading or an absence of obvious destinations.

The remaining high country is better suited for tramping use, with unformed access through the more developed lower flanks. Easements over pastoral leasehold land should be provided as required.

4.3.2 'West Wanaka.' This area is well suited to through tramping trips, of three or more days duration, with a wide variety of routes. The Minaret and Albert Burns provide the main easterly approaches, with a low saddle between them. Several branches of the Albert Burn provide saddle access to the East Matukituki and Wilkin Valleys. Hester Pinney Creek and the Albert Burn Saddle provide the main western approach.

The upper reaches of the easterly draining catchments are particularly attractive for tramping, with the forested Albert Burn

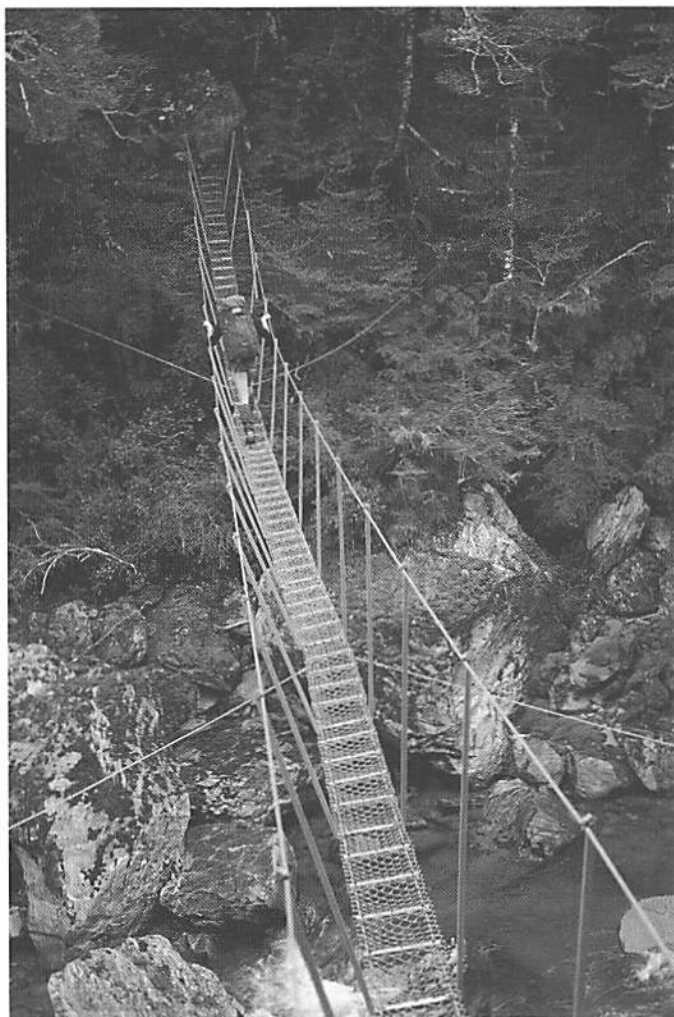
and the smaller Craigie Burn not unlike adjacent valleys within the national park. Access easements up the main valleys from West Wanaka homestead and the Makarora are required.

The precipitous Corner Burn is rarely visited by trampers due to the Matukituki River cutting off access. Most of the smaller valleys, without useful access out of their heads, receive negligible attention. Most upper catchments are now destocked. Lower to middle reaches are generally stocked and contain musterers' huts. Permission to use these should be sought.

Overall there is considerable potential for tramping, concentrating on the main valleys. However, due to shorter and better known access to the adjacent national park with its more alpine scenery, this potential is unlikely to be realised. However these lightly visited valleys provide contrasting solitude to the, at times, populous Matukituki and Wilkin Valleys.

Only the peaks bordering the national park receive regular climbing attention. These are almost exclusively approached from the west. Dragonfly Peak, Mts Aspinall, Lois, Twilight and Jumbo are regularly ascended, being mainly easy snow climbs. The Minaret Peaks, Mt Alta and other peaks centrally located in this district are infrequently climbed. This pattern is unlikely to change.

Suspension bridge, upper Hunter River.





West Hunter Valley below Wilson Pass. Mt Huxley centre.

Photo: Ken Mason

4.3.3 Young and McKerrow Ranges. For similar reasons to those applying to the 'West Wanaka' mountains, with the exception of Makarora tributaries, this area tends to be overlooked in comparison to adjacent portions of the national park. Lack of car access beyond Hunter Valley homestead and uncertainty of obtaining consent for either 4WD or foot access to the eastern approaches to the range, are major factors discouraging public use.

These mountains are ideally suited for energetic weekend crossings, with over ten Lake Hawea and lower Hunter River tributaries providing routes into either Boundary or Camerons Creek, or to the Makarora via the crest of the McKerrow Range.

Most of the partly-forested catchments between the Sawyer Burn and Scrubby Flat Creek have stock tracks to their upper reaches, and contain former Forest Service or musterers' huts. There is generally uncomplicated tramping to the valley heads, often with steep climbs on to passes or ridge crests. A notable exception is a very low pass between Camerons Creek and the High Burn. The latter, and Scrubby Flat Creek Pass, are the usual crossing points into the Makarora catchment.

The northern Young Range is usually approached from Camerons Creek and the upper Makarora. Both these have spectacular gorges traversed by well defined tracks leading to national park huts.

Many first ascents of the area's rocky high-points probably occurred soon after pastoral occupation, but the musterers concerned left few records. Surveyor T.N. Brodrick and party in

1881 were the first to systematically ascend peaks on the McKerrow Range to establish trig stations. This range provides mainly easy rock scrambles, however some aspects like the Camerons Creek and High Burn faces of Mt Shrimpton (1996 m), present some spectacular climbing challenges.

4.3.4 Upper Hunter Valley. The prospect of 50 km of 4WD track and river flat walking between the public road-end and the Hunter Forks, is usually enough to deter most trampers and climbers from using a Hunter Valley approach. However the alpine terrain in the upper valley is particularly attractive for a visit, or as part of main divide crossings into the Wills and Landsborough, or to the Huxley.

The Wills Valley provides the usual access, with Wilson Pass providing a steep snowgrass route into the west branch of the Hunter. This pass was used by gold prospectors as early as 1869. Less direct routes from the Wills are available via Long Flat Saddle or Wills Pass. The Upper and Lower Studholme Passes provide less useful crossings from the lower Landsborough.

The south shoulder and north face of Mt Strauchon provide high-level routes to the east branch of the Hunter via the North Huxley and Brodrick Pass. Other, more difficult alpine crossings have been pioneered between these valleys.

Both branches have track access from the Hunter Forks through beech forest to DOC huts.

Despite the presence of unclimbed main divide peaks, the head of the Hunter was largely ignored by climbers until the

1930s. Although the area had long been familiar to deerstalkers, who may have made many unrecorded ascents, the first concerted alpine exploration did not occur until 1934 in which year most major peaks were first climbed. Mt Strauchon (2315 m) being the most prominent of the Hunter Peaks, received earlier attention, with its first ascent claimed in 1908 via the Landsborough. However the first confirmed ascent was not until 1934, this time from the Hunter. The climbing in this area is characterised by short snow climbs of varying difficulty.

The lack of attention this area receives is in marked contrast to the periodic clutter and congestion common to the adjacent Makarora and Hopkins Valleys. This characteristic should become increasingly valuable, providing a diversity of recreational opportunities within alpine Otago. Relative remoteness should persist while foot access from Hawea remains long and tiresome. Jet boats and 4WD vehicles provide means of reducing access time, however these are not readily available or convenient when through trips are planned. It is surprising that the alternatives of shorter and more interesting access to the Hunter peaks via the Wills and North Huxley valleys are so infrequently used.

4.4 Hunting

Red deer were first liberated in 1871 near Morven Hills in the Lindis Valley, and within thirty years their range had expanded to include the Hunter, Makarora and Haast valleys. It was the Hunter and Makarora that saw the early prominence of the Otago red deer herd, and the first trophy hunting in 1885. Thereafter many wealthy sporting gentlemen were attracted from overseas.

Until 1889 hunting was controlled by consents for individual shoots, and such control procedures resulted in only limited numbers being shot. Rapid increases in deer numbers and declining food supply resulted in a declining standard of trophy head. The Otago Acclimatisation Society attempted to improve the stock by fresh liberations, but to little effect. The Society introduced bounties in 1906, and then its own shooters in 1908 in an attempt to cull out old hinds and malformed stags. Protection for red deer was partially lifted in 1923 when the Society realised that "nothing short of partial extermination will be of any avail."³⁷ To encourage this, in 1926 Government introduced bounties for tails and in 1930 lifted protection for all deer in New Zealand. The Department of Internal Affairs commenced its own culling programme as the value of skins and heads, being the only commercial value of deer at that time, was insufficient incentive for private control.

In 1956, responsibility for Government control measures passed to the Forest Service. The legacy of huts and tracks in the Hunter and Young Range date from this period and continue to be maintained largely to encourage deer control by recreational hunters. However, it was not until the growth of the game meat industry in the 1960s that there was a heavy toll on animal populations. Jet boats, fixed wing aircraft, and then helicopters were used in a lucrative export business, with the result that deer numbers are now moderate to low overall.

Chamois ranged south from liberations at Mt Cook and are present in low numbers. They are also present on the Hunter tops. To prevent their spread southwards into the Mount Aspiring and Fiordland National Parks, extermination was the prime animal control objective for the former Forest Service.³⁸ This policy is being continued by DOC.

Feral goats are present in small numbers on West Wanaka Station.

Up until the present, the main recreational activity in the region has been deerstalking, despite declining populations of game animals. In recent years, a safari operator took shooting parties into the Minaret Burn, but this has ceased. Unless animal numbers reverse their downward trend participation in recreational hunting will continue to decline, relative to other forms of recreation.

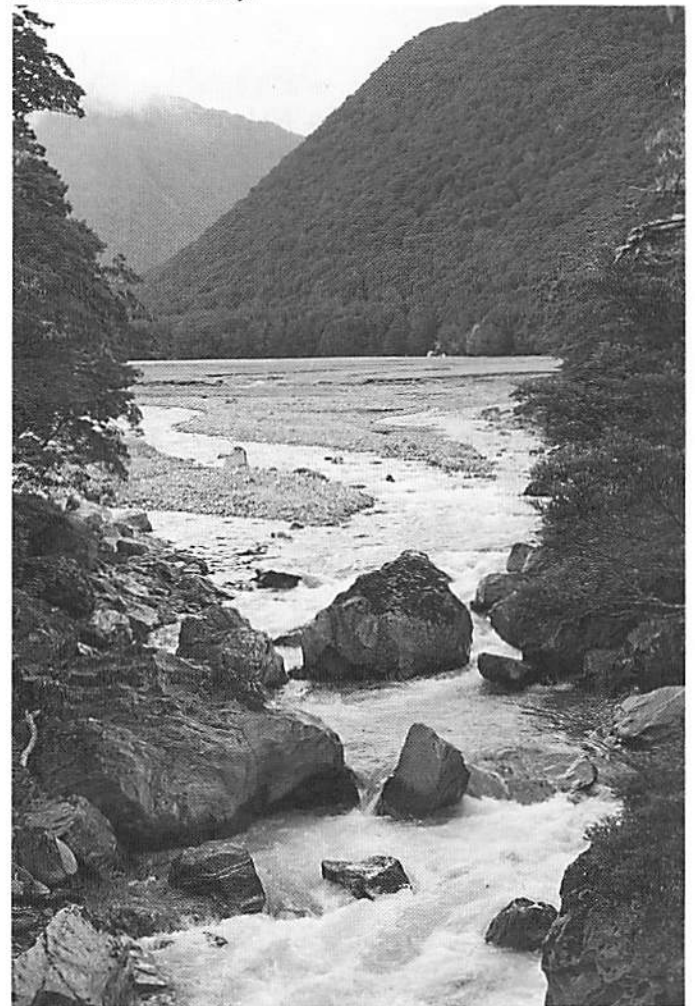
In 1915 the head of Lake Hawea was the site of the first release of Canada geese in Otago.³⁹ Their numbers increased to such an extent that in the 1930s, visiting climbers recorded 'plague' numbers on the Hunter flats.

4.5 Sking

Historically, there has been very little skiing within these mountains. Although it is technically possible in many areas to use skis as an aid to winter mountaineering, there are no records of this occurring. Length of foot access and a general lack of extensive slopes of suitable gradient, mitigate against ski mountaineering.

Since 1978 heliskiing has occurred on West Wanaka Station, in conjunction with operations in the northern Harris Mountains. Southerly aspects on Buchanan Peak, Triple Peak and Mt Alta are utilised, dependent on snow stability and daily weather conditions. Helicopter ferry-time from pick-up bases along the Matukituki Valley Road is the major restraint on more extensive activity. It is realised that the more distant headwaters of the Albert, Minaret and Estuary Burns provide significant potential for heliskiing.⁴⁰

Forbes Flat, Hunter Valley.



The Young and McKerrow Ranges are generally too dissected and steep for alpine skiing, with the possible exception of the Boundary Creek headwaters. Southerly aspects on Mt Constitution (1996 m) may have potential for heliskiing or even skifield development. The need for further skifields in the greater Southern Lakes region is a separate matter for debate.

The gentler relief along the 'Mt Burke Range' tops, has limited potential for cross country skiing, but in relation to the Central Otago ranges, this is of low significance.

4.6 Commercial Recreation.

Almost all the Hunter, McKerrow Range, Dingle, and former Hawea, Matukituki, and Makarora state forests currently have multiple applications for aircraft based tourist concessions. Activities applied for include hunting, fishing, and 'helihiking.'

5. Zoning

5.1 Natural Experience

With the exception of the 'Mt Burke Range,' most of the region is zoned 'natural experience.' All high altitude lands and regenerating shrub and forest at lower elevations are included.

Long-term pastoral occupation needs to be discontinued within this zone, although grazing could continue on the most favourable sites (e.g. valley floors) by means of short term tenancies which do not conflict with protection of natural values and allows recreational use. The zone is almost entirely rugged Class 7 and 8 country with negligible productive potential foregone.

5.2 Open Space

Most of the lower lake faces and the 'Mt Burke Range' is zoned 'open space.' It is within this zone that the most modification, through a long history of grazing and burning, has occurred. Farm tracking is also most prevalent, especially on the Mt Burke country where the higher crests are affected.

There are natural areas within the zone which require definition and protection in their own right, but these are generally very localised and of limited (active) recreational value. The major exception are lake shores which are of very high value.

Sensitive landscape treatment is required throughout the zone to ensure maintenance of the scenic qualities for which the whole region is renowned.

6. Recommendations

6.1 To provide more appropriate boundaries, the following additions be made to the Mount Aspiring National Park:

- pastoral lease and former state forest west of Corner Burn-East Matukituki divide;
- Wilkin addition as proposed in Mount Aspiring National Park management plan;⁴¹
- Camerons Creek headwaters with boundary along Makarora-Hunter divide.

6.2 Where practicable exclude stock from all former state forest areas.

6.3 All leasehold within the natural experience zone be removed from pastoral leases and retained in direct Crown ownership and control.

6.4 Grazing within the natural experience zone be allowed by permit only, and limited to sites most suitable for pastoral use, provided conservation values are not jeopardised.

6.5 Kidds Bush Recreation Reserve be reclassified 'scenic' and stock excluded.

6.6 Grazing rights over forested sections of Lake Hawea's shoreline recreation reserves be cancelled and stock excluded.

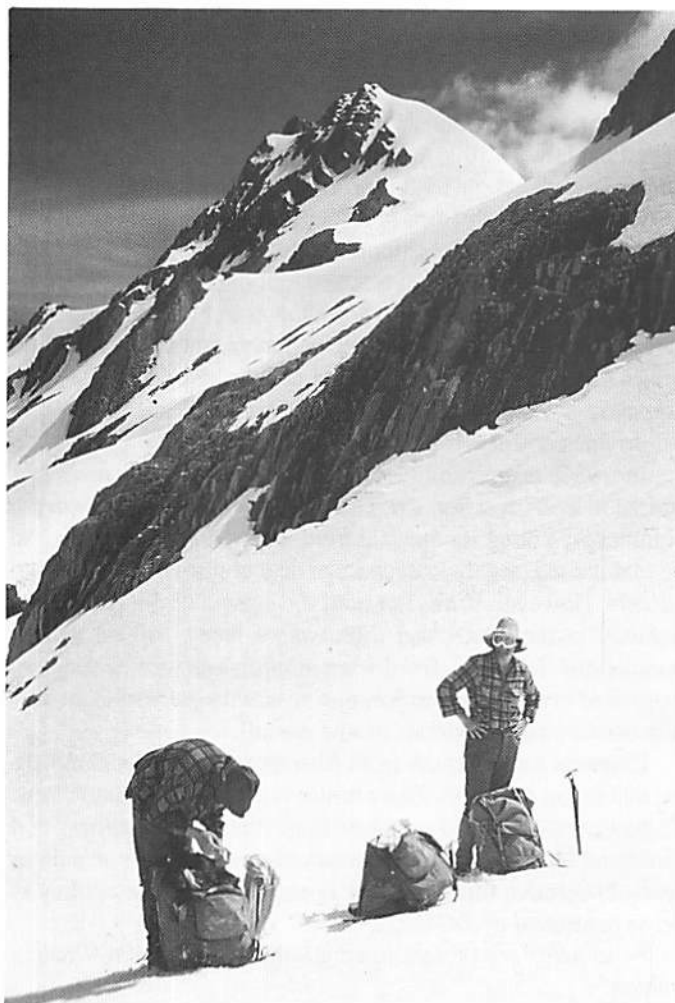
6.7 The Vincent and Lake County Councils make provision in their respective landscape protection zones for control of visually detrimental farming practices such as roading and farm tracking.

6.8 The Crown exercise close control of earth disturbance (tracking, cultivation, drainage) on pastoral leases, with prohibition within the natural experience zone.

6.9 The serious deficiencies in public access and use rights around Lake Hawea be rectified by:

- establishing Crown Land strips around all shores with legal access provided from legal formed roads;

Mt Strauchon from East Hunter-North Huxley crossing.



- providing convenient legal access to all recreation reserves;
- providing public vehicle and foot access to the upper Hunter Valley by legal definition or Crown contribution to the maintenance of the existing 4WD track on Hunter Valley Station;
- retaining Hunter river bed as Crown land, with no grazing-occupation rights issued, to maintain public use rights and protect high wildlife values.

Note: The first opportunities to exclude 'Section 58 strips' will be at pastoral lease renewals in June 1989 and in 1991.

6.10 Provide practical public foot easements across pastoral lease to conservation lands within the natural experience zone.

6.11 Establish walkways:

- from Dublin Bay to Mts Gold and Burke, to Long Valley and State Highway 6 (route standard only);
- up Mt Maude from Hawea township (walk standard).

6.12 Provide more informal camping areas around Lakes Hawea and Wanaka.

References and Selected Bibliography

Geology

- GAIR, H.S. 1968. *Geological Map of New Zealand, 1:250,000: Sheet 20, Mt Cook*. DSIR, Wellington.
- MUTCH, A.R. and McKELLAR, I.C. 1965. *Ibid. Sheet 19, Haast*.
- WOOD, B.L. 1962. *Ibid. Sheet 22, Wakatipu*.

History

- 16,17 ANDERSON, ATHOL. 1983. *When all the moa-ovens grew cold: Nine centuries of changing fortune for the southern Maori*. Otago Heritage Books, Dunedin.
- 7,18,20-2 ANGUS, JOHN H. 1981. *Aspiring Settlers: European Settlement in the Hawea and Wanaka region to 1914*. John McIndoe, Dunedin.
- 6 GOLDIE, JOHN. 1862. Second of three journal-letters of his surveying trip of Otago, with James McKerrow 1861-1863. Hocken Library, Dunedin.
- 1 HALL-JONES, JOHN. 1971. *Mr Surveyor Thomson: Early Days in Otago and Southland*. A.H.& A.W. Reed.
- 19 HANGER, A.M. 1979. *Sawmilling in the Southern Forests. Vol. III, Inland Otago and Southland*. Unpublished manuscript. N.Z. Forest Service, Invercargill.
- 3,4 HASSING, G.M. (1930). *The Memory Log of G.M. Hassing, Sailor-Pioneer-Schoolmaster*. (Featherstone, A.E. Ed.). Southland Times Co. Ltd.
- ROXBURGH, I. 1957. *Wanaka Story*. Otago Centennial Historical Committee, Dunedin.

Vegetation and Wildlife

- 13 BATHGATE, A. 1921. 'Some changes in the fauna and flora of Otago in the last sixty years.' *N.Z. Journal Science and Technology* (4): 276 (1922).
- 11 BIOLOGICAL RESOURCES CENTRE. 1983. *Ecological regions and Districts of New Zealand. Sheet 4*. 2nd Edition. DSIR Wellington.
- 5,9,10 BUCHANAN, J. 1865. 'Sketch of the Botany of Otago.' *Trans. of N.Z. Institute* (1): (1875). pp. 182, 190-1.
- 37 HARKER, P.J. 1973. *Protectors of our Environment. The History of the Introduction of Deer to Otago*. Otago Acclimatisation Society. Dunedin.
- 2 JOHNSON, P.N. 1984. *Wanaka Area Reserves: Botanical Report*. Unpublished report. Botany Division, DSIR, Dunedin.
- MARK, A.F. 1978. *West Wanaka management area: botanical information*. Unpublished report. Botany Department, University of Otago.

MATURIN, SUE. 1984. *Biological and Cultural Values of the Wanaka Ecological District*. Unpublished report. Department of Lands and Survey, Dunedin.

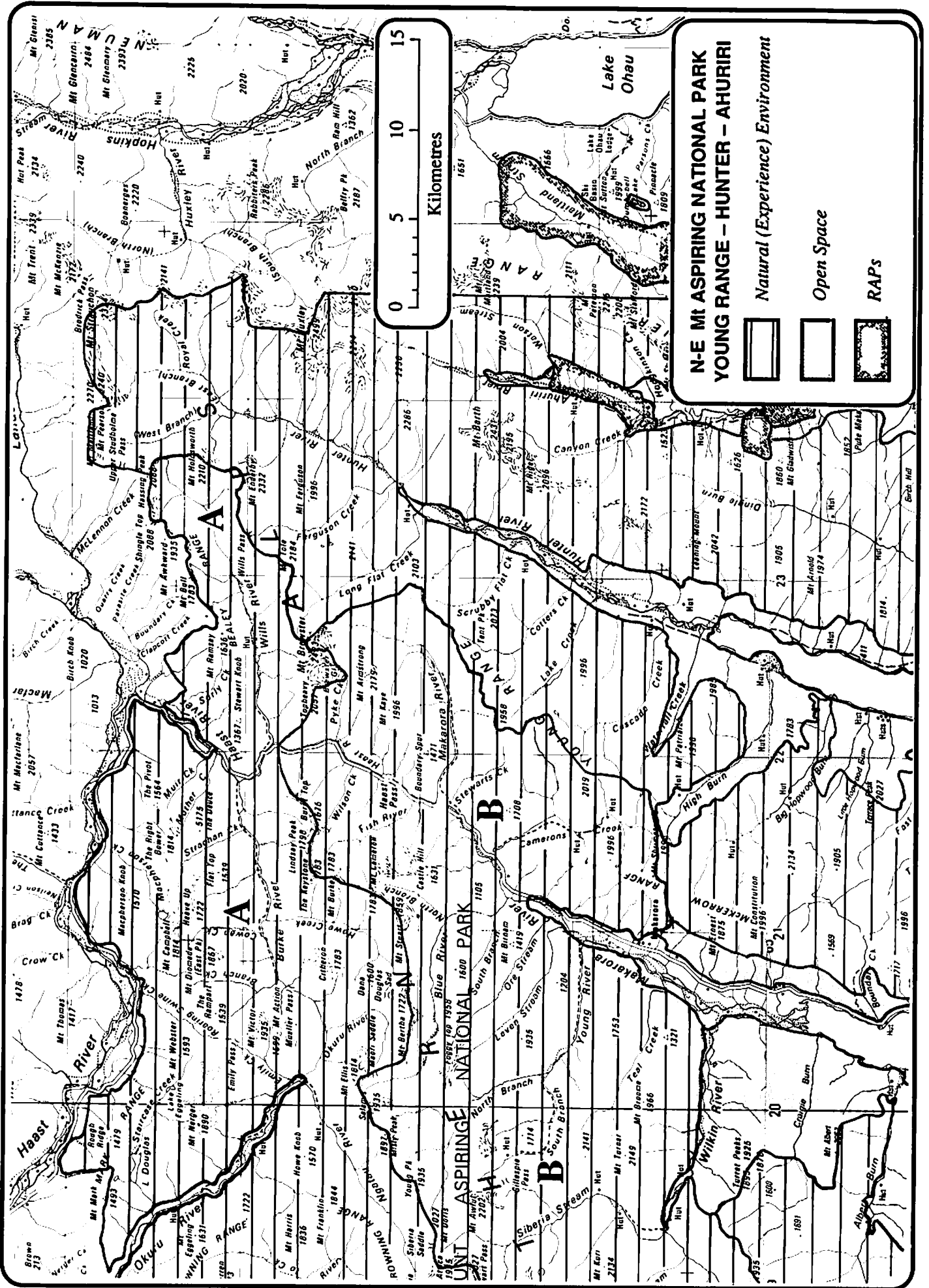
- 39 OTAGO ACCLIMATISATION SOCIETY. 1964. *The Acclimatisation of Birds and Animals in Otago, Centennial Year and 98th Annual Report*.
- 15 OTAGO DAILY TIMES. 1988. *Concern over pig releases*. 18 March.

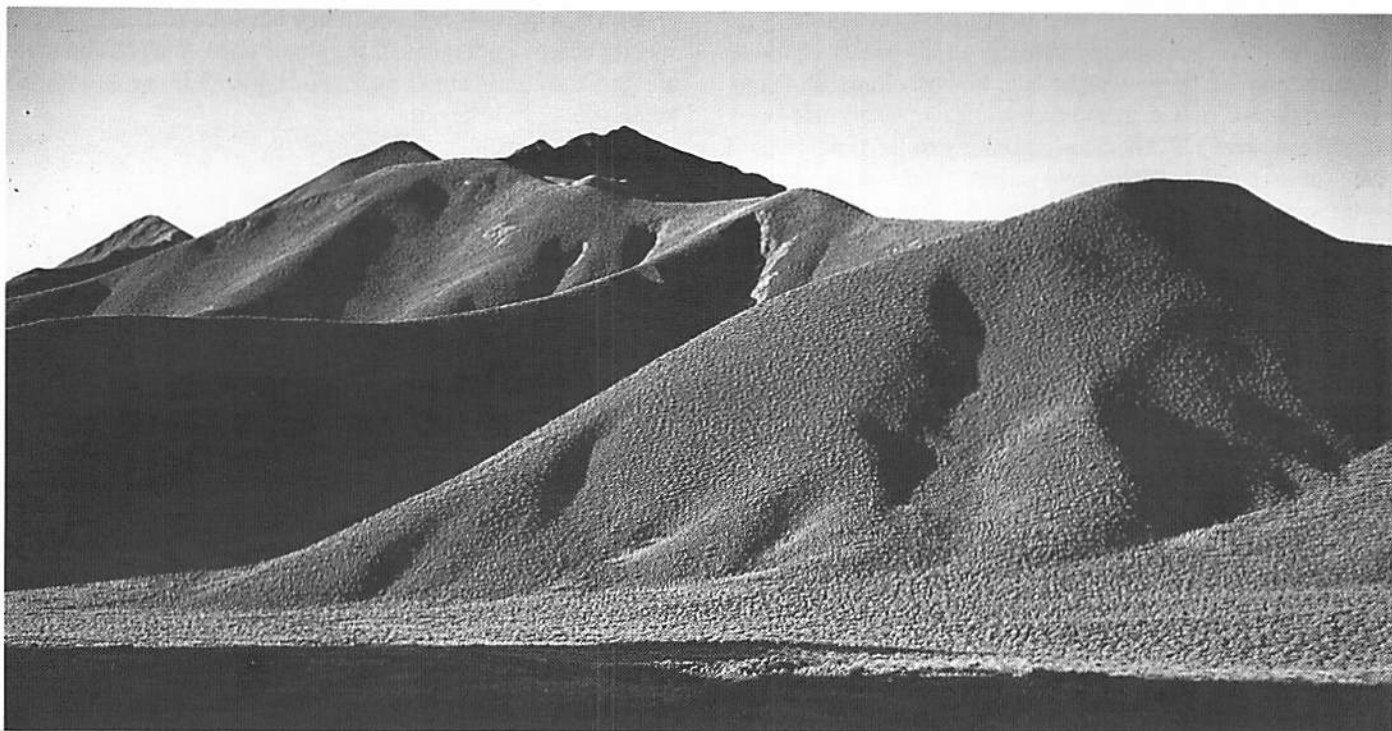
Land Use and Planning

- 26 CUDDIHY, M.F. 1983. *Mountain Forests Regional Management Plan, A Preview*. N.Z. Forest Service, Invercargill.
- DEPARTMENT OF LANDS and SURVEY. 1978. *Reserves Investigation. Mt Burke Station Adjoining Lakes Hawea and Wanaka*. Department of Lands and Survey, Dunedin.
- 23,31 DEPARTMENT OF LANDS and SURVEY. 1982. *West Wanaka Crown Land Management Area: Management Plan*. *Ibid.*
- 29 JOHNSTON HATFIELD and PARTNERS. 1983. *Lakes-Queenstown Wakatipu Combined District Scheme*.
- 29 MOUNT ASPIRING NATIONAL PARK BOARD. 1981. *Management Plan*. Department of Lands and Survey, Dunedin.
- 28 NATIONAL PARKS and RESERVES AUTHORITY. 1983. *General Policy for National Parks*. Department of Lands and Survey, Wellington.
- 8,24 OTAGO REGIONAL WATER BOARD. 1980. *Clutha Catchment Water Allocation Plan. Vol. II*.
- ROBERTSON, B.T., BLAIR, I.D. (Eds). 1980. *The Resources of Lake Wanaka*. Lincoln Papers in Resource Management No. 5. Tussock Grasslands and Mountain Lands Institute, Lincoln College.
- 30 VINCENT COUNTY COUNCIL. 1987. *Vincent County District Scheme, First Review*.

Recreation

- BISHOP, GRAHAM. 1974. *The Mount Aspiring Region*. East Matukituki peaks: N.Z. Alpine Club, Wellington. pp. 52, 55, 56.
- 25 BLAKE, L, DOUGLASS, J, GASKIN, C. 1978. *Recreation in State Forests: Today and Tomorrow*. Southland Conservancy, N.Z. Forest Service.
- 32,33 EGARR, G.D. and J.H. 1978. *Otago-Southland Canoeists' Guide*. The N.Z. Canoeing Association.
- 34 _____ 1981. *N.Z. Recreational River Survey, Part III*. Water and Soil Miscellaneous Publication No.15. NWASCO, Wellington.
- KENNEDY, L.D. (Ed.). 1977. *Moir's Guide Book: Northern Section*. 5th Edition. N.Z. Alpine Club, Wellington. Albert and Craigie Burns: pp. 51-52; Hunter Valley: pp. 65-68; Makarora tributaries: pp. 63-64.
- N.Z. ALPINE CLUB. 1931-64. *N.Z. Alpine Journals*. Albert Burn, Vol. 20: 309; East Matukituki first ascents, Vols 4: 47, 155, 5: 134, 10: 15; Hunter: first ascents, Vols 5: 494, 6: 154, 206; alpine exploration: Vol. 5: 366-370; Huxley crossings: Vol. 18: 329.
- 36 RICHARDSON, J., TEIRNEY, L.D., UNWIN, M.J. 1986. *The relative value of Southern Lakes Wildlife Conservancy rivers to New Zealand anglers*. Fisheries Environmental Report No. 72. Fisheries Research Division, MAF, Wellington.
- 40 SCAIFE, P.C. 1983. Personal communication.
- 35 TEIRNEY, LAUREL. 1988. 'Facts, figures, and perceptions about river angling in New Zealand.' *Freshwater Catch* 36. Winter 1988.





North of Lindis Pass. Photo: Donald Lousley

LINDIS PASS

Grandview, Dingle, Ahuriri

1. Landforms

Between the upper Clutha and Waitaki catchments lies an extensive tract of mountain country bounded by the Hawea basin to the west, and the Ahuriri Valley to the east. The Lindis valley and Pass forms a southern transition between the high relief main ranges and the gentler block mountains to the south-east. It is also a transition between the strongly foliated Central Otago schists and Canterbury's greywackes. Intricately dissected and relatively small scale hill country in the Lindis Pass area is quite dissimilar to the rest of the region.

Heights range between 2500 m on Mt Huxley, and less than 900 m at the southern extent of the Grandview Range overlooking Hawea Flat.

Between Lake Hawea and the Ahuriri the transition from mountain to range is gradual rather than dramatic. The **Dingle Burn and Timaru River** catchments of Lake Hawea drain rugged, dissected ranges 1800-2000 m high. South of Timaru River the country drops to rounded crests at 1600 m on the Grandview Range, which falls almost imperceptibly southward to only 1200 m north of Tarras. This easier topography is in marked contrast to the contorted forms to the north.

Glaciation in the **Ahuriri** has produced large valleys with truncated spurs and cirques. There are also hanging valleys with narrow, gorged exits. Small remnant glaciers and permanent snowfields persist along the Canyon Creek-Hunter and upper Ahuriri-Hunter divide, the most notable example being the Thurneyson Glacier on Mt Barth. Generally valley walls are

steep for the first 600 m, with more moderate relief above pronounced shoulders.

In the lower reaches of the Ahuriri, glacial till is deposited on the valley walls. Post-glacial erosion has had a major impact by means of mass wasting from freeze-thaw conditions, producing extensive scree slopes and debris slides. The valley floor is infilled with alluvium and has very gentle gradients. Moraine deposits mid-valley have produced extensive wetlands.

The **Lindis River** drains dissected hill country (900-1500 m) north of the Pass. Intricate landforms comprising steep, smooth slopes, and narrow ridge crests provide one of New Zealand's most distinctive tussock grassland landscapes.

2. Vegetation and Wildlife

2.1 Vegetation

The vegetation pattern today is diverse, reflecting extremes of soils and climate, and the changes wrought by human occupation.

There is a strong 'rain shadow' effect, with precipitation decreasing rapidly from in excess of 6000 mm on Mt Huxley to less than 700 mm on the Ahuriri Plains.¹ Altitude and aspect also have major influences. Reflecting this great diversity, the region is subdivided into four ecological districts: Ahuriri, Huxley, Lindis, and Wanaka.²

It is generally accepted that prehistoric fires caused great changes to the vegetation, particularly to the extent of forest. Repeated burning by pastoralists and high stocking rates compounded these changes, transforming most lower altitude lands. In 1857 Surveyor J.T. Thomson recorded that the Lindis was "a beautiful stream and well wooded valley,"³ and that the pasturage on these hills was "good but scrubby."⁴ Today the mountain beech has retreated into incised gullies in the upper Lindis, and scrubby tall tussock has been succeeded by depleted short tussock, with scabweed in the driest localities.

Isolated clumps of Hall's totara on rocky terrain have withstood the ravages of fire. These can be found in Longslip Creek west of the Lindis Pass. Manuka and matagouri shrublands appear to be expanding their range in drier areas at mid-altitude. Wilding exotic conifers (including *pinus contorta* and larch) occur near some homestead shelter belts.

The mountain beech surviving on the mid-Ahuriri valley sides and in the Lindis represent some of the driest stands of beech in New Zealand. The extent of forest increases up valley, with mountain beech dominant in the south and silver beech in the valley heads. Relict patches of beech in the Lindis and Breast Creek catchments are important elements in a dominantly grassland landscape. More extensive beech clothes large portions of the Timaru River and Dingle Burn valleys, although upper and lower bushlines have been greatly modified by fires. The upper Ahuriri has continuous beech forest along valley sides.

Subalpine shrubland can occur in narrow belts above natural bushlines. *Dracophyllum* species, snow totara and mountain toatoa dominate these communities.

Alpine grasslands are dominated by the narrow-leaved snowgrass with mid-ribbed and slim snowgrasses. Blue tussock and alpine fescue tussock are locally dominant. Herbfields are generally restricted to ridges and cirque floors. Most alpine zones below summer snowlines are scree and fellfield. The alpine zone provides an interesting biogeographic boundary between Otago and Canterbury species of *Ranunculus* and *Celmisia*.⁵

2.2 Wildlife

The Ahuriri Valley, on the boundary of this mountain region, has the distinction of providing wetland habitats for the black stilt, the world's rarest wading bird and New Zealand's rarest mainland bird. The former Wildlife Service estimated that 40 percent of the total population of less than 100 individuals inhabit the Ahuriri.⁶ Unlike the migratory pied stilt, this species is resident in the valley year-round. Braided river bed, deltas, shallow pond margins and marshes are all important habitats for the black stilt as well as for an impressive variety of other species.

Low altitude grasslands support spur-winged plover, harrier, skylark, pipit, skinks and geckos. The rare giant Otago skink has been recently discovered in the upper Lindis. The New Zealand quail may have been formerly abundant throughout lowland grasslands as indicated by local nomenclature e.g. Quailburn. Game birds, chukar and Californian quail, are present in grass-shrublands. The New Zealand falcon has a restricted distribution, as do keas and rock wrens in alpine areas.

Beech forests provide habitats for most bush birds including bellbird, fantail, grey warbler, rifleman, silvereye and tomtit. Morepork, shining and long-tailed cuckoos, and yellow-crowned parakeet have been reported in the extensive valley-head forests.

Red deer and chamois are present throughout the high country with hunting pressure maintaining them in low numbers. It

appears that the former range of thar has been reduced with this species absent from much of the alpine zone. Rabbits and hares are generally distributed throughout grassland areas with the latter in sub-alpine zones.

3. History and Land Use

3.1 Prehistory

Recorded pre-European history is sparse, however it is known that the Mackenzie Basin was used by Maoris as a fowling ground and as a route to the West Coast.

A number of moa hunter camp sites have been found dating back to the 9th century. During later centuries, small settlements were established near Lake Ohau (Place of Wind), but these were later abandoned after bitter inter-tribal fighting.^{7,8} Wekas, eels, pukeko and ducks, along with abundant plant materials are thought to have provided a substantial food source.

A route well known to the Maori was over Lindis Pass and Grandview Mountain to Hawea Flat. It was by this route that Maori survivors from Te Puoho's raid on Wanaka fled in the spring of 1836.⁹ Another route that was possibly used to reach Lake Hawea was a 1800 m saddle at the head of Little Canyon Creek.¹⁰

The first Europeans to settle found only a small scattered Maori population between the east coast and the lakes of the Mackenzie basin.¹¹

3.2 Pastoralism

The Ohau-Ahuriri basin was the scene of a boundary dispute between the Canterbury and Otago provincial governments which resulted in the issuing of overlapping pasturage licences. Canterbury claimed the Ahuriri River as its boundary while Otago decided on the Pukaki River. The contest was unresolved until 1861 when the Ohau River and a straight 'spade line' boundary between the provinces, from the lake outlet to Mt Aspiring, was determined.

Pastoralism first occurred in the adjacent Mackenzie basin in 1857.¹² A year later, pastoral occupation extended to the Lindis country when the McLean family obtained licences over a total of 160,000 ha to form Morven Hills Station.¹³ This huge run extended from Lake Hawea southwards to the Cromwell Gorge, along the crest of the Dunstan Mountains and the St Bathans Range, to the Lindis Pass and the Timaru River in the north. A homestead was established in the upper Lindis Valley, followed by a huge stone woolshed of 34 stands built in approximately 1873. This has been described as one of the finest woolsheds in the country¹⁴ and is still maintained in excellent order. With an absence of fences the station employed a large number of shepherds and boundary riders to look after the large sheep flocks. The wool was carted over the Lindis Pass to Oamaru by bullock wagon. The considerably smaller Longslip Station was claimed in 1858. This extended from the lower Longslip Creek to the head of the Ahuriri.

With the known grassland areas taken up by 1861, explorations were made by Government surveyor J.H. Baker to find further pastoral areas but nothing was found to be worth stocking. Baker recorded that the upper Ahuriri valley had "birch forest [covering] both sides as far as we could see."¹⁵

Patches of forest nearest to the homesteads received early attention for building timber. Beech in the lower Dingle was partly milled for local consumption from 1914 to approximately 1930, in conjunction with locally grown blue gum. The mill was water powered; a pelton wheel and much of the piping is apparently still on site.¹⁶

By the early 1880s rabbits had reached plague numbers, greatly reducing stock carrying capacities and precipitating the abandonment of some leases. Poisoning with phosphorised oats was undertaken, but this also knocked out wekas and native quail. Ferrets were released in 1888 at Tarras as a further weapon against the rabbit.¹⁷

The 'big snow' of 1895 caused major stock losses. Morven Hills lost 54 percent of its flock, with a repeat disaster 10 years later.¹⁸

Strong public pressure for closer settlement during the 1880s and 1890s brought about subdivision of the large holdings. As early as 1882 the Lands Department authorised subdivision of Morven Hills but this did not occur as the existing occupiers outbided all contenders at auction. The following year, the Hawea Hundred was declared, permitting farm settlement on Hawea Flat, followed by the Tarras district. Changes to Crown land legislation, as a result of persistent public pressure, permitted compulsory subdivision of the remaining large runs. In 1910 Morven Hills was divided into 30 small grazing runs.¹⁹ The present-day high country subdivision is the result of continuing subdivisions, amalgamations, and re-subdivisions.

3.3 Gold ²⁰

As early as 1857 Surveyor J.T. Thomson discovered traces of gold in the upper Lindis River but no excitement resulted at that time. A gang of roadmakers discovered gold at Goodger Flat in the Lindis. Vague reports of this reached Dunedin in March 1861. These generated Otago's first gold rush, with over 300 diggers arriving on-site. Returns were insufficient to support such a population and numbers dwindled away, accelerated by the major Gabriels Gully rush in May that year. By July the Lindis was regarded as a complete failure.

Small parties of miners continued to get modest returns in the Goodger Flat-Camp Creek area, with some sluicing undertaken on river terraces. During the 1890s Chinese miners reworked old ground, as well as extensively diverting the Lindis River by wing-dams.

A small dredge was constructed on Goodger Flat in 1900 but this failed within a year or two. Government subsidised relief workers worked the Flat during 1934-35, this being the last concerted gold mining in the area, although one character subsisted as the sole miner for many years after World War II.

3.4 Lindis Highway

The Lindis Pass has long been strategically positioned for travellers through the interior. The Pass and Grandview Mountain route was well known and used over many centuries of Maori occupation in the Southern Lakes. It provided paths of both trade and war, and it was over this route that the first Europeans were directed by their Maori guides. The significance of the route remains, with the Pass providing the major road linkage between interior Otago and Canterbury.

The McLeans formed a dray road over the Pass from Longslip Creek to their Morven Hills homestead. The wool clip was hauled out: 30 bales and 14 bullocks to each wagon. The alternative

down the lower Lindis was barred by a series of rocky gorges which permitted only a rough bridle track. It was not until some time after 1900 that this track had been upgraded sufficiently for wheeled traffic. Then an intermittent horse-drawn coach service operated between Oamaru and Pembroke (Wanaka). The Mount Cook Company introduced a weekly passenger car service in 1911 between Queenstown and the Hermitage, stopping overnight at the Lindis Pass Hotel. The road remained rough and tortuous until major realignment and reformation, commenced in the 1960s, was completed in 1983. It is now a high standard, sealed highway of major importance to the tourist industry.

3.5 Land Tenure

The predominant tenure is pastoral lease.

Extensive areas of beech forest, with widely scattered outliers, are in the Dingle and Timaru River catchments. Most of this is former state forest; now all are allocated to the Department of Conservation (DOC). Significant areas of beech forest in Breast Creek and the upper Lindis Valley are incorporated in pastoral leases. Very extensive alpine areas along the Hunter-Ahuriri dividing range are also within pastoral lease. However the area between Little Canyon Creek and Mt Huxley on the Ahuriri side is proposed for surrender to the Crown.

A 400 ha scenic reserve straddles a 3.5 km section of State Highway 8 on either side of the Lindis Pass. Unfortunately the tall tussock grasslands are very depleted due to grazing and fires, despite reservation since 1976. Its main function currently is landscape protection.²¹



Farm tracking —Timaru River face of Mt Prospect (1768 m). Allan Evans

3.6 Land Use Capability ^{22,23}

North of Timaru River the country is predominantly Class 8 land. Class 7 occupies narrow belts on lower valley walls, and on hill country. Lower Lake Hawea faces are Class 6. The Grandview-Lindis country is a mix of Classes 6 and 7.

The Otago Catchment Board sees potential for continuation of aerial oversowing and topdressing along the lower Hawea and Grandview faces, with substantial areas of the lower Grandview and upper Lindis catchment suitable for increased pastoral production.²⁴ The Board sees the need for grazing retirement in the Dingle and Timaru River catchments, along with all the greywacke tops. Further, it recommends that lands above 1200 m in the upper Lindis should be managed for improvement in vegetation cover by restricted grazing practices or retirement.²⁵

The Waitaki Catchment Commission considers that high altitude country currently extensively grazed should be destocked. Major areas involved include all the Ahuriri-Hunter-Dingle divide. In effect only the main valley floors and lower slopes are suitable for pastoralism. The mid-Ahuriri hill country and Longslip country abutting the Lindis highway has potential for aerial oversowing and topdressing, in part realised by recent development. The balance of the extensively grazed land is, in the view of the Commission, only marginally suitable for pastoralism.²⁶

3.7 District Scheme Zoning

The region spans both the Waitaki and Vincent Counties.

The Ahuriri Valley floor and western approaches to the Lindis Pass are zoned 'Rural C' (Extensive Farming and Scenic). The Waitaki Council has reserved to itself, by way of non-publicly notified applications for all predominant uses, the discretionary power to "require modification of the particular use, development or building or may impose conditions to protect the visual amenities of the area or to preserve trees, areas of bush or other vegetation or natural landscape" in any of its rural zones. All high altitude lands are 'Rural D' for the purposes of soil and water conservation. Commercial forestry is a conditional use in rural zones.²⁷

The balance of the region is within Vincent County. North of, and including the Timaru River catchment is zoned 'Rural 2' (Landscape Protection). The Lindis catchment is 'Rural 1' being the general rural zone throughout the county. This does not afford any specific protection to the very high landscape values in the vicinity of the Lindis Pass, although "the Council is conscious of the value of the landscape qualities of the countryside as an asset for recreation and tourism." The Council also "accepts that exclusionary zoning is the most feasible alternative for safeguarding the amenities of very sensitive and scenic landscapes..." Forest habitats within pastoral leases in the Lindis catchment are protected in the district scheme to the extent that Council's non-notifiable consent is required for any felling or burning.²⁸

The national renown in which the Lindis Pass is held requires full recognition by all territorial authorities. The Vincent County should extend its 'Rural 2' zoning over this area.

3.8 Protected Natural Areas Programme

The southern part, and eastern margin, of the area reviewed has been surveyed as part of the PNA Programme.

During 1983-84 the Ahuriri Ecological District was surveyed for natural areas as part of the large Mackenzie Ecological Region.²⁹ Three important Recommended Areas for Protection (RAPs) were identified in the upper Ahuriri Valley. The 555 ha Shamrock Hut Flats provide the only example of low altitude alpine fescue tussock in the Mackenzie region. *Sphagnum* and *carex* swamps exist along river margins. Celery pine and bog pine occurs in isolated clumps and along the edge of valley-side beech forests. The Protected Areas Scientific Advisory Committee observed that cattle were having adverse effects on the wetlands, bog pine remnants and forest edges.³⁰

Further down valley a valley-wall altitudinal sequence of grassland and forest was identified at Firewood Bush (660 ha). Valley floor fescue tussock is superseded by narrow-leaved snowgrass, and in turn by slim snowgrass at higher altitudes. The tops support snow bank, bluff and scree habitats. The valley walls support remnants of mountain beech forest.

Two hundred and sixty five ha of valley terrace and river floodplain at the Birchwood Lagoon contain a large number of streams, river braids, ox bow lakes and swamps. These provide a variety of diverse habitats for many waders and waterfowl species including the endangered black stilt. Trophy trout also live in the lagoons.

In the Avon Burn tributary of the Ahuriri two small areas have been recommended for protection. Twenty three ha of terpenine scrub, and a 61 ha stand of ribbonwood on the northern slopes of Pavilion Peak were identified.

Immediately east of the Lindis Pass some 650 ha of tussock grasslands were recommended for protection; this area being contiguous with the existing scenic reserve and two RAPs identified by a later survey.

The Lindis Ecological district of the Central Otago region was surveyed by another PNA team during the 1984-85 summer.³¹ This district is south of the Timaru River catchment and includes the Lindis Pass and Chain Hills area. A large number of RAPs were identified, with clusters around Grandview Mountain, the Lindis Pass, and the head of the Lindis River.



Ahuriri Valley (Shamrock Hut Flats) from Canyon Creek-Ahuriri divide.

Photo: Ewan Paterson

Eight RAPs totalling 2050 ha were identified on the Grandview Range. These contain important remnants of woody vegetation, mountain beech, and representative examples of tussock grassland. Shrubland communities include Hall's totara, broadleaf, native broom, with the largest concentration of kowhai in the north-western part of the Central Otago region. Extensive kanuka shrublands are considered to be suitable habitat for the Otago skink. Unfortunately the selection of RAPs were limited by the denial of access to the survey team on two key pastoral leases.

Two RAPs on the low Chain Hills, between the Dunstan Creek and lower Lindis catchments, total 1770 ha. These provide representative altitudinal sequences of tussock grasslands. In the Dip Creek area to the west, 360 ha of known Otago skink habitat and remnants of mountain beech and Hall's totara have been recommended for protection.

To the north and south of the existing Lindis Pass Scenic Reserve 1370 ha of excellent quality snow tussock grassland is recommended for protection. The high landscape qualities of this locality are, in part, recognised by the boundaries of these RAPs.

At the head of the Lindis Valley further areas of snow tussock totalling 990 ha were identified.

4. Recreational Opportunities

4.1 Overview

This diverse region provides varied hill and mountain terrain, ranging from mountain glaciers and forests to gentle tussock hills.

The mountainous areas have a long history of recreational use, largely dating from the time when road access was extended well up the main valleys. Steady upgrading has provided all weather vehicle access with only short approaches on foot necessary to reach the 'interesting' country beyond.

Although access is physically easy, the mix of public and private tenures means variable availability for public recreation, depending on the attitudes of individual land occupiers.

There is considerable potential for a wide range of recreational activities, as many areas are under-utilised at present.

The Lindis Highway is a major South Island tourist link. There is unrealised potential, and a pressing need, for managing the tussock grasslands of the Lindis for landscape appreciation both on and off the highway.



Dingle Valley from Ahuriri (base hut) saddle.

4.2 Tramping and Walking

The physical diversity of the area, coupled with generally short and easy access, provides a wide range of opportunities for foot recreation. These range from short walks, to valley tramping and pass crossings.

4.2.1 Grandview-Lindis-Timaru River

Recreational use of this area is almost entirely confined to the Hawea Flat approaches to the Grandview Range and Timaru River. Grandview Mount (1397 m) is an historic viewpoint, as impressive a panorama today as Surveyor Thomson obtained in 1857.³² The view extends from the Central Otago ranges, to The Remarkables, Harris Mountains, Mount Aspiring, the Wilkin peaks including a striking perspective of Aeolus, and the McKerrrow Range. This must rank as one of the most comprehensive views within the Southern Lakes region. A small number of holiday visitors make the 1000 m climb to the summit each summer.

The former Forest Service developed a network of tracks up the Timaru River valley, connecting several huts and bivies. There are half day and energetic day tramps between huts, with

the option of a 1675 m crossing into the Dingle Burn and a lower crossing into the upper Lindis.

Relict clumps and ribbons of beech in the upper Lindis provide visual variety when walking within the river valley. An easy crossing into the Avon Burn tributary of the Ahuriri is available from the headwaters. Unfortunately, much of this country is disfigured by bulldozed tracks up spurs and along ridge crests, some of which are over 1600 m in elevation.

The Breast Creek tributary of the Lindis is particularly pleasant, with large patches of beech surviving on shady faces. Easy travelling is available from the headwaters over the Grandview Range to Hawea Flat. South of Breast Creek most of the lower country has been developed. With extensive farm tracking, and green replacing tawny tussock, this area now has a distinctly 'farm' appearance, offering reduced interest for the high country walker.

There is scope for short walks in the vicinity of the Pass Burn and from Lindis Pass itself. A walkway up the Lindis and into Breast Creek would provide riverside and forest walking of a few hours duration. Camp Hill (1152 m), immediately above the highway, provides a panoramic view of the Lindis headwaters. As a matter of priority, marked walks to the hill tops above the Pass would give the travelling public an additional perspective of the graphic forms of these tussock hills.

4.2.2 Ahuriri-Dingle

The Dingle Burn valley provides grassland, forest and mountain settings for foot recreation. A full day's tramping through beech forest is required for access to the upper Dingle from Lake Hawea. All the tops are easily accessible. The shortest access to the Dingle headwaters is from the Ahuriri Valley via a low saddle above the Ahuriri Base hut.

There are several DOC huts in the Ahuriri Valley which are available for public use. Access up valley is by metalled vehicle track to Canyon Creek and by foot or 4WD further up the valley floor. Canyon Creek and its glaciated cirque below Mt Barth provides a strong sense of enclosure which is generally absent from the larger scale of the main Ahuriri Valley. Canyon Creek is probably the major weekend attraction in the valley for most trampers and climbers, being compact, and having a great variety of scenery and terrain underfoot.

Public vehicle access now exists the length of the Ahuriri Valley as far as Canyon Creek. A public foot access easement is provided into the Dingle top flat over the saddle from the Ahuriri base hut.

4.3 Climbing

Many of the peaks at the head of the Timaru and Lindis Rivers, and in the Dingle Burn, provide interesting summer scrambles. However, truly alpine conditions normally only prevail on the higher peaks towards the valley heads.

The Mt Rigel-Barth divide provides snow climbs of varying difficulty, with the traverse of Mt Barth being a popular climb since its first ascent in 1936.³³ This locality has been used by clubs for alpine instruction courses, easy access being a major attraction. The sheer south face of Mt Huxley (2500 m) provides some formidable climbing challenges.

The area has considerable potential for winter climbing but this is seldom used due to there being plenty of competing attractions throughout the rest of the mountainous Waitaki headwaters.

4.4 Sking

There is currently little, if any, skiing activity within this region, however, there is some potential for ski touring and cross country skiing.

The Breast Hill-Little Breast Hill ridge system south of the Timaru River valley is suitable for cross country skiing, providing opportunities for weekend through-trips between the Lindis highway and Hawea Flat.

The upper Ahuriri valley floor can provide suitable conditions for cross country skiing, however there is a major avalanche risk towards the valley head.

4.5 Hunting

After intensive control measures, deer, chamois and thar numbers are now relatively low in numbers. Good bush hunting is still available in forests and upper bush edges of the Dingle and Timaru River.

Game birds are widely distributed throughout the tussock grasslands, particularly where shrublands are present.

4.6 Recreational Motoring

The tussock landscape of the Lindis Pass ranks as one of the best such examples to be seen from a New Zealand highway. This is one of only a few places left where the motorist can still experience wild indigenous grasslands. Between Camp Hill and upper Longslip Creek, a distance of 10 km, there is a general absence of obvious man-made intrusions to be seen from the road. As this highway fulfils the role of the only inland tourist road link between Mt Cook and the Southern Lakes, protection of its remaining wildland character must become a national priority.

4.7 River Activities

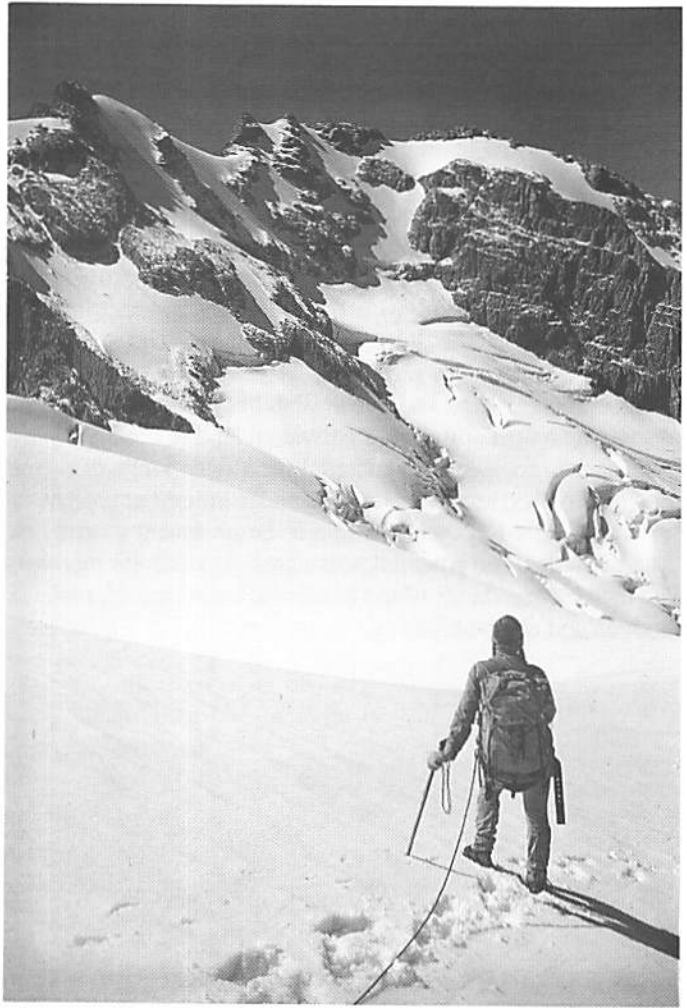
The Ahuriri River has high recreational value due to it being the only major river in the upper Waitaki that has not been drastically modified by hydro electric development. Since the damming and diversion of the Ohau River, increasing numbers of canoeists have used the mid reaches of the Ahuriri.

Low summer flows in upper and lower reaches tend to confine canoeing activities to the middle reaches. The river is Grade 2 overall. Legal and practical access to this part of the river appears to be adequate. Jet boats can navigate as far upstream as 'The Drop,' and in the upper reaches in high flows. However jet boating on a river this size is usually incompatible with other users.³⁴ The Lindis River is only canoeable from the Pass Burn confluence in high spring flows.³⁵

The Ahuriri River has an international reputation as a trout fishery,³⁶ providing a vital part of the growing tourist economy of nearby Omarama.

The upper Dingle Burn is regarded by fly fishers as one of the finest back country fishing areas in New Zealand.³⁷ It is receiving regular attention from unauthorised commercial operators who fly in clients. This practice is conflicting with private fishers who choose to walk in and enjoy peace and solitude, and is placing excessive demands on fish stocks. The lower Dingle is an important spawning stream for fish from Lake Hawea.³⁸

The Timaru River is also fished, with activity concentrated in its lower reaches.³⁹ It is a major spawning stream for rainbow trout, in particular for Lake Hawea.⁴⁰



Mt Barth from Thurneyson Glacier, Ahuriri.

Photo: Donald Lousley

5. Zoning

5.1 Natural Experience

The greater portion of the region north of the Lindis catchment is zoned 'natural experience.' Generally all high country above 1000 m is included in this zone.

At the Lindis Pass a special 'natural experience' landscape protection corridor is identified. This extends to skylines either side of the highway.

Management of the **Dingle-Timaru River** 'natural experience' zone requires:

- maintenance of mountain, forest, river, and grassland landscapes without obvious signs of development. In particular this requires the prohibition of further roading or farm track development. Of particular concern is the recent intrusion of vehicle tracking into the headwaters of the Timaru River;
- retirement from grazing and removal from pastoral leasehold, followed by management for conservation and recreation purposes as a Conservation Area.

Note: Only one significant grazing area is contained within this zone. This is the upper Dingle flats where cattle are stocked year-round. The impact of cattle on fishery values and beech forests needs to be assessed to determine if continued stock presence in this isolated valley is desirable.

The Lindis Pass 'landscape protection corridor' requires very sensitive management. This is a nationally important landscape in need of urgent attention. An enlarged scenic reserve is desirable, centred on the pass itself, with grazing and burning excluded to encourage recovery of snowgrass. The balance of the corridor could continue to be grazed under grazing regimes that ensure a vigorous tussock cover. However oversowing, topdressing, buildings, trees, roading, and further road side fencing need to be prohibited. Such areas might be better managed under custom designed special leases rather than pastoral lease as at present.

5.2 Open Space

This includes lower altitude slopes where farm development has substantially displaced native vegetation, although the zone retains extensive open space characteristics. It also contains isolated, highly natural areas identified under the PNA Programme. The lower flanks of the Lake Hawea and upper Ahuriri faces, mid Ahuriri, and the Lindis catchment are included in this zone.

For recreational purposes, the primary management requirements are the provision of public access ways and the maintenance of tussock-grassland and native forest settings. This will require controls on forestry establishment and the prevention of wilding tree spread. This latter consideration is particularly important in the Lindis and Ahuriri Valleys. Very extensive farm tracking has occurred in parts of the zone. The high altitude, visual prominence, and questionable wisdom of much of this development is a matter of concern. It is particularly important that the open space character is retained along the Lindis highway both within and outside the landscape protection corridor identified.

It is important that the PNA survey is completed over the Lindis catchment due to heavy development pressures on this area.

6. Recommendations

Dingle Burn-Timaru River

6.1 Within areas identified 'natural experience,' all long-term pastoral use and occupation be progressively withdrawn, to become managed as Conservation Area.

Note: The impact of grazing on the upper Dingle fishery values requires assessment to determine the desirability of continued stocking.

6.2 No further farm tracking be permitted in the Timaru River catchment.

6.3 Recreational aircraft landings be prohibited within the Dingle Burn valley to retain peace and solitude for fishers, trampers and hunters.

Note: The upper flats in particular provide an increasingly rare opportunity for foot recreationalists to escape aircraft intrusion. This is one of very few such localities in the greater Otago lakes district that is readily accessible on foot for weekend use.

Lindis Pass and Valley

6.4 As a matter of urgency a landscape protection corridor be established for approximately 5 km either side of the Lindis Pass. The Crown needs to fully exercise its discretionary powers under the Land Act within this corridor to protect landscape and tussock grassland values. The area to remain outside of reserves should become subject to special leasing arrangements for grazing rather than remain as pastoral lease.

6.5 The Lindis Pass Scenic Reserve be extended to the north and south, with grazing and burning excluded.

6.6 The Vincent County Council extend its Rural 2 (Landscape Protection) zoning along State Highway 8 within the Lindis valley.

6.7 The National Roads Board designate State Highway 8 a Scenic Highway between Omarama and Tarras to ensure high environmental standards of maintenance or realignment.

6.8 Walkways be established:

- to a viewpoint above the Lindis Pass;
- up the Lindis River and Breast Creek to the Grandview Range and Mountain;
- up Grandview Mountain from Hawea Flat.

Fly camp in Canyon Creek cirque. Mt Barth rear. Photo: Ewan Paterson



References and Selected Bibliography

Geology

- GAIR, H.S. 1967. *Geological Map of N.Z.* Sheet 20, Mt Cook. DSIR, Wellington.
- MUTCH, A.R. 1963. Sheet 23, Oamaru. Ibid.
- _____ and McKELLAR, I.C. 1964. Sheet 19, Haast. Ibid.
- WOOD, B.L. 1962. Sheet 22, Wakatipu. Ibid.

History

- 8,11 AUBREY, F.M. 1978. *Omarama. Place of Light and Early Waitaki Valley.* Publisher: The Author, Omarama.
- 15 BAKER, J.H. 1932. *A Surveyor in New Zealand 1857-1896.* Whitcombe and Tombs, Auckland.
- 9,13,17-20 DUFF, G.P. 1978. *Sheep may safely graze. The story of Morven Hills Station and the Tarras District.* The Author, Tarras.
- 3,32 HALL-JONES, J. 1971. *Mr Surveyor Thomson. Early Days in Otago and Southland.* A.H. & A.W. Reed.
- 14,16 HANGER, A.M. 1979. *Sawmilling in the Southern Forests.* Vol. III, Inland Otago and Southland. Unpublished manuscript. N.Z. Forest Service, Invercargill.
- JACOMB, C. and EASDALE, S. 1984. *Lindis Gold Rush Investigation.* Unpublished report. Department of Lands and Survey, Dunedin.
- 12 PINNEY, R. 1981. *Early Northern Otago Runs.* Collins, Auckland.
- 4 THOMSON, J.T. 1857. Survey Field Book No. 47. 17 December 1857. Department of Survey and Land Information, Dunedin.
- 14 THORNTON, G.G. 1982. *New Zealand's Industrial Heritage.* A.H. & A.W. Reed. pp. 39, 51.

Vegetation and Wildlife

- 21,27 ALLEN, R.B. 1978. *Scenic Reserves of Otago Land District.* Department of Lands and Survey, Wellington.
- 2 BIOLOGICAL RESOURCES CENTRE. 1983. *Ecological Regions and Districts of N.Z.* Sheet 4, 2nd Edition. DSIR.
- 27,29 ESPIE, P.R. et al. 1984. *Mackenzie Ecological Region.* New Zealand Protected Natural Area Programme. Department of Lands and Survey, Wellington.
- JOHNSON, P.N. 1982. *Lindis Pass.* Biological Surveys of Reserves. Department of Lands and Survey, Dunedin.
- 27,30 Minutes of The Sixth Meeting of the Protected Areas Scientific Advisory Committee held at Tekapo and Omarama from 30 November to 5 December 1986.
- 5 MOLLOY, B.P.J. 1977. In, *Lake Ohau Management Area.* Ohau Range Crown Land Management Plan, 1982. Department of Lands and Survey, Dunedin.
- 6,27 ROBERTSON, C.J.R., O'DONNELL, C.F.J., and OVERMANS, F.B. 1983. *Habitat Requirements of Wetland Birds in the Ahuriri River Catchment.* N.Z. Wildlife Service.
- 27,31 WARD, C.M. et al. 1987. *Lindis, Pisa and Dunstan Ecological Districts.* Draft Survey Report for the Protected Natural Areas Programme. Department of Lands and Survey.

Land Use, Planning

- BIOLOGICAL RESOURCES CENTRE. 1983. *Ecological Regions and Districts of N.Z.* Sheet 4, 2nd Edition. DSIR.
- 27 DAVIE LOVELL-SMITH and PARTNERS. 1986. *Waitaki County District Scheme, Review No. 1.*
- FMC, ROYAL FOREST and BIRD PROTECTION SOCIETY. 1984. *Pastoral Lease Report on Conservation and Recreation Values. P 14 Morven Hills.* Submission of 25 June to Commissioner of Crown Lands, Dunedin.
- _____ 1984. *Pastoral Lease Report on Conservation and Recreation Values. P 19 Dunstan Downs.* Submission of 25 June to Commissioner of Crown Lands, Dunedin.
- _____ 1984. *Pastoral Lease Report on Conservation and Recreation Values. P 75 Birchwood.* Submission of 25 June to Commissioner of Crown Lands, Dunedin.
- FMC. 1986. 'Shameful Departmental Action On Ahuriri Access.' *FMC Bulletin No. 85.* (March). p. 23.
- HENSON, DAVID. 1986. 'The Ahuriri—A Raw Deal From The Land Settlement Board.' *FMC Bulletin No. 86.* (June). pp. 12-13.
- MASON, BRUCE. 1984. 'Ahuriri Valley.' *Forest & Bird. No. 234.* (November). pp. 9-10.

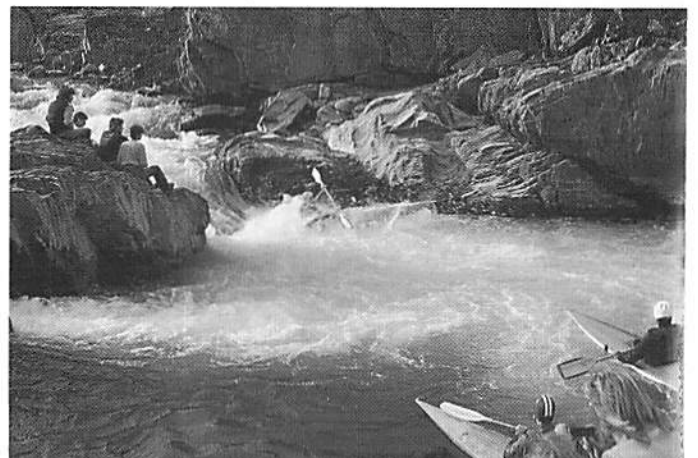
- _____ 1984. 'Ahuriri Valley, Otago—Access Problems.' *FMC Bulletin No. 78.* (June). p. 16.
- 23-25 OTAGO REGIONAL WATER BOARD. 1980. *Clutha Catchment Water Allocation Plan, Vol. 2.*
- PETRIE, A.R. 1983. *Visual landscape Assessment Lindis Pass.* Unpublished report. Department of Lands and Survey, Dunedin.
- PUBLIC LANDS COALITION. 1986. *Birchwood Station-Ahuriri Valley. A Case for Implementation of Government Policy For Destocking and Surrender of Land Unsuitable for Grazing.* (October).
- SMITH, PAULA. 1985. *Management of Lindis Pass Scenic Reserve.* Unpublished report. Department of Lands and Survey.
- 28 VINCENT COUNTY COUNCIL 1987. *Vincent County District Scheme, First review.*
- 1,22,26 WAITAKI CATCHMENT COMMISSION. 1982. *Waitaki Water and Soil Management Plan, Vol. 2.*
- 7,10 WESTCOTT, D. 1982. *Land Use Study of the Ohau-Ahuriri Area.* University of Otago, Dunedin.

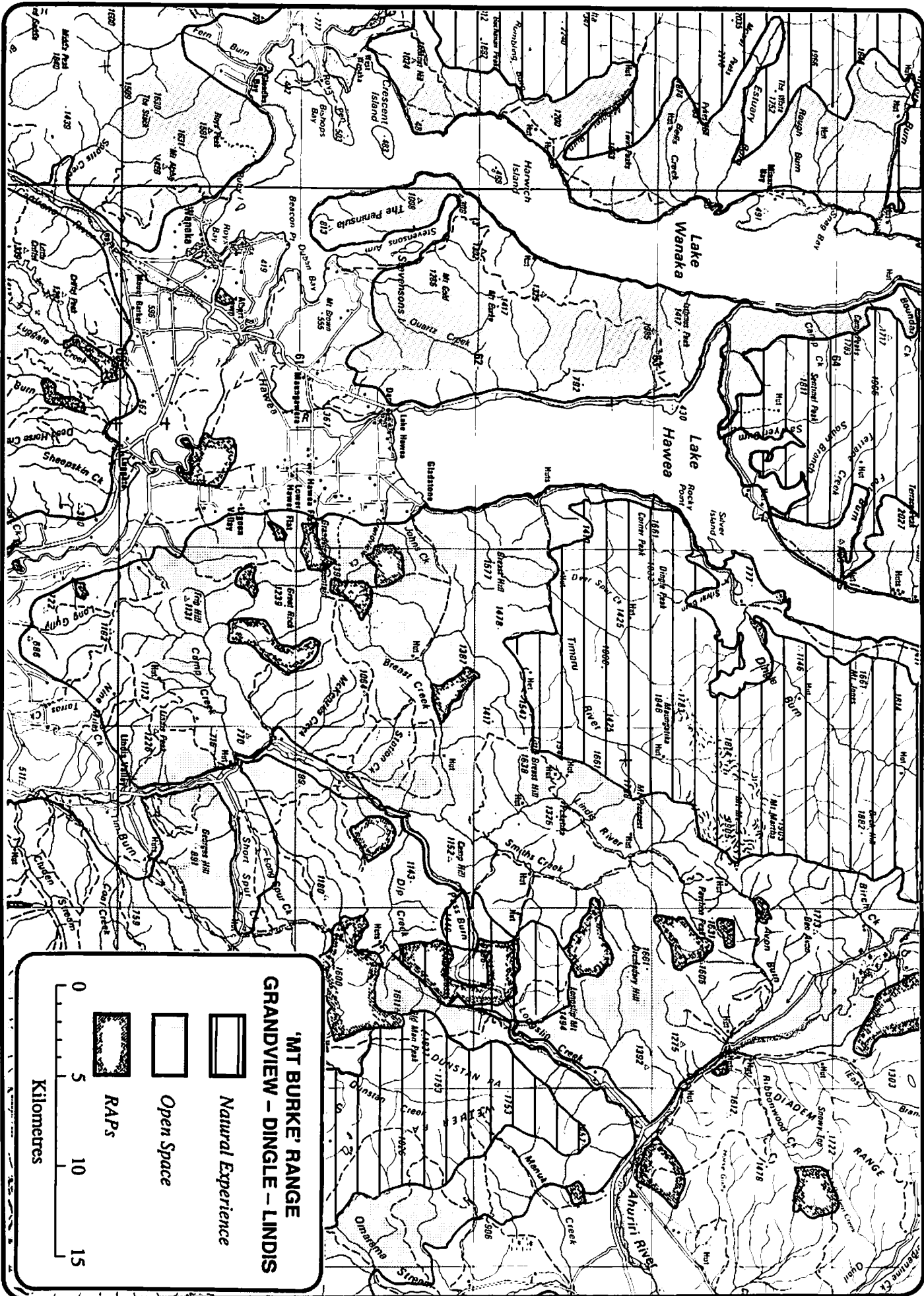
Recreation

- BLAKE, L., DOUGLASS, J., GASKIN, C. 1978. *Recreation in State Forests, Today and Tomorrow.* Southland Conservancy, N.Z. Forest Service.
- EGARR G.D. and J.H. 1978. *Canterbury Canoeists Guide.* The N.Z. Canoeing Association.
- _____ 1978. *Otago Canoeists' Guide.* The N.Z. Canoeing Association.
- 35 _____ 1981. *N.Z. Recreation River Survey. Pt. III, South Island Rivers.* Water and Soil Miscellaneous Publication No.15. NWASCO, Wellington.
- 33 GILKINSON, W.S., STEVENSON, H.J. 1956. 'The Mountains of NZ Pt. 3: The Ohau Valley.' *N.Z. Alpine Journal 16:* 437-475.
- JELLYMAN, D.J. 1984. 'Recreational use of the Ahuriri River, 1982-83.' *Fisheries Environmental Report No. 41.* Fisheries Research Division, MAF, Wellington.
- _____ DAVIS, S.F., WING, S.J. and TEIRNEY, L.D. 1982. 'Fish stocks and fisheries of the Ahuriri River system. Fisheries.' *Environmental Report No. 26.* Fisheries Research Division, MAF, Wellington.
- KENNEDY, L.C. 1977. *Moir's Guide Book (Northern Section).* 5th Edition. N.Z. Alpine Club, Wellington.
- 39 RICHARDSON, J., TEIRNEY, L.D., UNWIN, M.J. 1986. 'The relative value of Southern Lakes Wildlife Conservancy rivers to New Zealand anglers.' *Fisheries Environmental Report No. 72.* Fisheries Research Division, MAF, Wellington.
- 37 TURNER, BRIAN. 1984. Personal communication.
- 34,38,40 _____ 1989. Personal communication.
- 36 WATSON, NIALL. 1984. Personal communication.




Canoeing 'The Ahuriri Drop.'

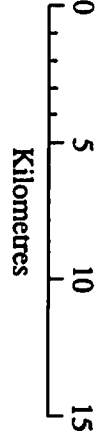
Photo: Alister Metherall





**'MT BURKE' RANGE
GRANDVIEW - DINGLE - LINDIS**

-  *Natural Experience*
-  *Open Space*
-  *RAPs*



Glossary

Terms additional to those in *Outdoor Recreation in Otago Vol 1*, pp.78-79.

Landform Terms

Bog (cushion)	Common on plateau tops and localised within alpine basins. Vegetation is generally dwarf and carpet-like.
Bog (string)	A specialised form of cushion bog characterised by terraces, embankments, and ponds. Rare outside of the boreal zone of the Arctic.
Cushion moor	Alpine tundra-like vegetation characterised by the dominance of dwarf, mat-forming cushion plants.
Fellfield (alpine)	Characterised by a high proportion of bare, rocky, but relatively stable ground interspersed with a sparse cover of alpine plants.
Herbfield (alpine)	Communities where large mountain daisies (<i>Celmisia</i> spp.) become dominant over grasses.
Ox-bow lakes	Cut off horseshoe-shaped river meanders, forming lakes and swamps. Common feature of valley plains.
<i>Roche moutonnée</i>	Solid bedrock overridden by glacier. Plucked and scoured into a distinctive smooth, mammillated upstream surface, with a jagged quarried downstream side. Takes name from a fancied resemblance to fleeces of gigantic sheep.
Schistose	Strong foliation or lamination in coarse grained metamorphic rocks due to alignment of platy minerals.
Snow bank	A specialised plant community subject to prolonged seasonal snow cover.

Mining Terms

Battery	A stamp battery used for crushing (by impact) gold-bearing rock (usually quartz) to release and allow the saving of gold.
Berdan	A heavy rotating metal bowl used for secondary crushing of tailings from batteries, and for the further recovery of gold.
Buddle	Large diameter, circular and sloping concrete table used for the wet separation and saving of different mineral fractions including gold.
Mullock	Waste non gold-bearing rock extracted from underground mines.
Paddock(ing)	Systematic mining of alluvial ground, followed by orderly placement of tailings.
Pelton wheel	Pelton's patent hurdy-gurdy (high pressure) water-driven turbine used for driving machinery or generating electricity.
Sluice channels	Tailings/waste-water races with inbuilt riffles to trap gold.
Sluicing	Process of using high pressure ('hydraulic') or low pressure ('ground') water to sluice away alluvial ground.
Stamp	Heavy pestles (usually metal) used for gravity rock-crushing within battery mortar boxes. Usually in configurations of 5.
Wing dams	Usually hand-stacked boulders placed face-on to the current in a wall formation. Used for diverting rivers from part of their course.

Land Tenure etc

Conservation Area	Land held for conservation purposes under S. 7 Conservation Act 1987. Not able to be disposed of.
Crown Grant	The result of a 1840 proclamation that all titles to land were to be derived from, or confirmed by, a Crown grant. The Crown's pre-emptive rights to purchase and sell land were waived by Crown grants to the N.Z. Company etc.
Destocking	Process of stock removal from (high altitude) fragile lands, often by Government grants or off-site development compensation. Term of destocking/retirement usually long term.
Hundreds	Traditionally meant an area capable of sustaining a hundred people; based on an

Licence To Occupy

Short term tenancy for grazing or other purposes. Maximum term 5 years, no right of renewal, variable conditions. (S. 68 Land Act 1948).

Pastoral Run Licence

Forerunner of pastoral lease. A licence to occupy for pastoral purposes. Maximum term 35 years, no right of automatic renewal. (Land Act 1924).

Reclassification (Reserves)

Change of classification of reserves by Minister of Conservation according to their principal or primary purpose. (S. 24 Reserves Act 1977). Classification options are: recreation, historic, scenic, nature, scientific, government purpose, local purpose.

Resume/resumption

Proclamation action taken by the Crown to resume possession of the whole or any portion of land held under lease or licence for any public purpose, mining, or public works. (S. 117 Land Act 1948).

Retirement

Stewardship Area

See *Destocking*.
A Conservation Area managed so that natural and historic resources are protected, but able to be disposed of. (S. 25 Conservation Act 1987).

Classifications

International River Grading:

(1 to 7 system)

1	Slow to moderate current, scarcely any white water.
2	Straight forward rapids; no specialised paddling techniques required.
3	More formidable and tricky rapids; irregular waves up to 1 m; deliberate guiding of canoe required.
4	Fast and high volume of water, big foaming waves irregularly spaced. Recovery strokes, rolling ability necessary.

Land Use Capability (LUC):

(See Vol One p.78 for definition).

Class 4	Capable of arable use but with severe limitations.
Class 5	Non arable, slight limitations to pastoral or forestry use.
Class 6	Moderate limitations to pastoral or forestry use.
Class 7	Severe limitations or hazards to pastoral/forestry use.
Class 8	Very severe limitations: unsuitable for primary production.

Skier Slope Classifications:

(After Branch and Rowan 1975).

Beginner	10-15% Gradient	=	6-8.5° Pitch
Novice	15-25%	=	8.5-14°
Low Intermediate	25-35%	=	14-19°
Intermediate	30-40%	=	17-22°
Advanced Intermediate	35-45%	=	19-24°
Advanced	45-60%	=	24-31°
Expert	60% +	=	31°+

Common and Botanical Names

Bracken-fem	<i>Pteridium esculentum</i>
<i>Carex</i>	Sedge species
<i>Cassinia vauvilliersii</i>	Mountain cottonwood
<i>Celmisia</i> spp.	Mountain daisy
<i>Dracophyllum</i> spp.	Dragon leaf
Flax (N.Z.)	<i>Phormium tenax</i>
Kahikitea	<i>Podocarpus dacrydioides</i>
Kowhai	<i>Sophora microphylla</i>
Lodgepole pine	<i>Pinus contorta</i>
Matai	<i>Podocarpus spicatus</i>
Mid-ribbed snow tussock	<i>Chionochloa pallens</i>
Mountain cedar	<i>Libocedrus bidwillii</i>
<i>Phyllocladus alpinus</i>	Mountain toatoa/celery pine
Ribbonwood	<i>Hoheria lyallii</i>
<i>Spagnum</i>	Moss species
Terpentine scrub	<i>Dracophyllum uniflorum</i>

Conversions

Ounce (oz)	=	28.35 grams (g)
Pound (£)	=	\$2 nominal

THE AUTHOR

Bruce Mason is a recreation and conservation consultant, based from his home town of Dunedin.

As an active outdoor recreationalist he has spent much of his free time roaming the South Island high country during the last 20 years. His travels have taken him to Antarctica, and to North America where he undertook a private study tour looking at recreational impacts and the management of national parks and forests. His conclusions were published by the New Zealand National Parks Authority in 1974. This work was instrumental in introducing a minimum impact code of user ethics to back country New Zealand. Concern for the environment and recreational users' welfare led to terms on the Otago Walkway Committee and the FMC Executive, and as President of the Otago Tramping and Mountaineering Club. The latter body awarded him life membership in 1985.

Professional involvement in the outdoors has included 8 years as a reserves ranger with the Department of Lands and Survey, engaged in historic resource assessment and the establishment of the Otago Goldfields Park. During this period he obtained a Diploma in Parks and Recreation from Lincoln College. For the last 8 years of private practice, he has been variously engaged by FMC and the Public Lands Coalition (FMC, Royal Forest and Bird Protection Society, New Zealand Acclimatisation Societies). His primary role has been to conduct research and give advice on matters relating to South Island pastoral lease management and requirements for protecting recreational values, wildlife habitats, landscape, and areas of botanical importance. A recent major involvement was the successful national campaign by the PLC reversing the misallocation to the new State-owned enterprises of large areas of Crown land with high recreation and conservation values.

THE PUBLISHER

The Federated Mountain Clubs of New Zealand (Incorporated) is a national alliance of over 120 affiliate and associate clubs representing some 16,000 members who are interested in climbing, mountaineering, tramping, hunting and skiing in the mountains and wild places of New Zealand.

Further copies of this document can be obtained from the Secretary,
FMC, P.O. Box 1604, Wellington.