



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 Gold²⁰

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 terpetine 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

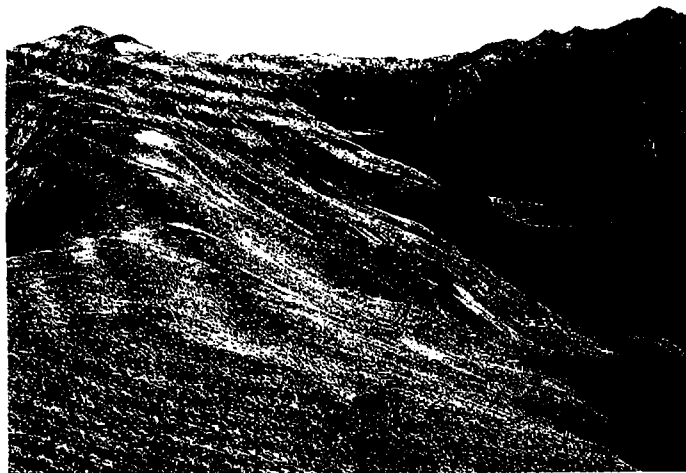
This diverse region provides varied hill and mountain terrain, ranging from mountain glaciers and forests to gentle tussock hills.

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 McKerron 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 Skiing

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.

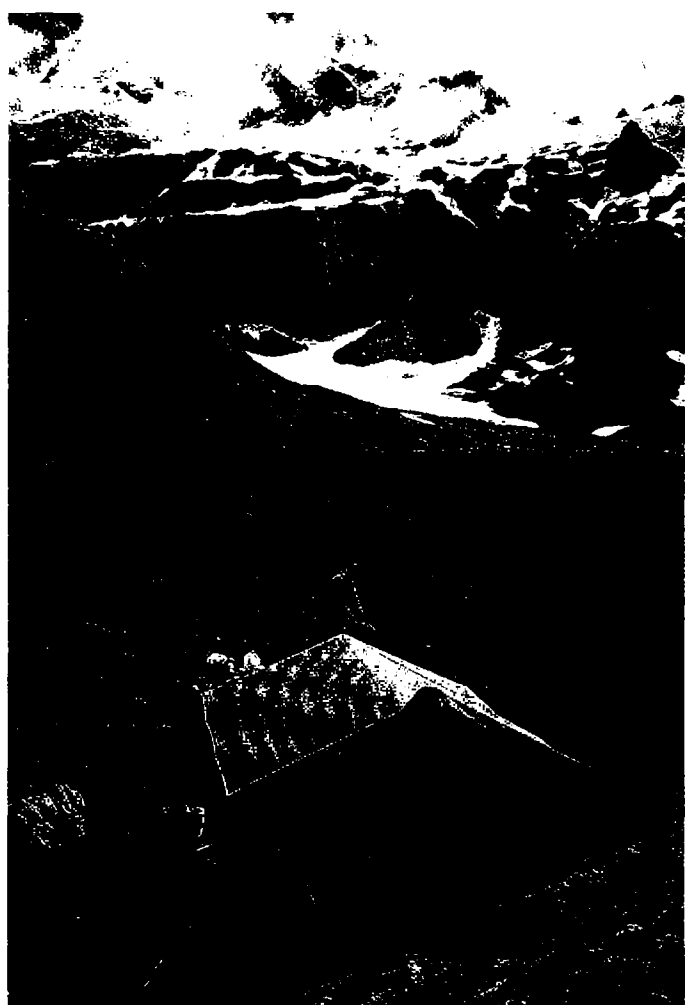
6.7 The National Roads Board designate State Highway 8 a Scenic Highway between Omarama and Tarras to ensure high environmental standards of maintenance or realignment.

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



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Canoeing 'The Ahuriri Drop.'

Photo: Alister Metherall



