

MARTINS BAY - ARAWATA - HAAST

"Williamson's Flat took my fancy very much. It is about 30 miles inland and between 1,200 and 1,400 ft above sea level. It contains about 400 acres and lies in a valley facing north. It is free from floods. Too far inland for the heavy coastal rains to reach, it enjoys a climate not to be equalled in New Zealand. Its elevation is such that its summer climate is perfect, and its winter dry, frosty and bracing in the extreme, with an atmosphere so pure that stars can be distinctly seen shining at midday. Some day a holiday town will be there gay with those who seek for exercise, amusement, scenery or health. Excursion parties will daily set out for the glories of alpine peaks or glacier valleys. It will be dotted with health establishments, and the weary and sick will renew their health and vigour from the pure air and soul-delighting scenery of Williamson's Flat."

Robert Paulin, "Otago Daily Times,"
31 August, 1891.

2.1. LANDFORMS

The Alpine Fault runs SW-NE through this wild, uninhabited country, broadly separating the schist mountains of NW Otago (i.e. Mt. Aspiring N.P.) from the older greywacke ranges and moraines of the coast. Between Jackson Bay and Haast there is a narrow coastal plain heavily forested in parts, backed by the schist mountain ranges, from which issue five major rivers - the Arawata, Waiototo, Turnbull, Okuru and Haast. Three other major rivers, the Pyke, Cascade and Jackson, flow for part of their length along

the Alpine Fault, their marked change in direction probably being due to capture of their headwaters by subsequent streams that lay along the fault zone.

An outstanding landform of the region is that of the Red Mountain Ultramafic serpentine belt, old igneous rocks which form a wedge-shaped intrusion between the Alpine Fault and the Livingstone Fault to the East. The ultramafic or "mineral" belt is largely mountainous, devoid of vegetation, and its red rock provides a stark contrast with the forest and tussock greens and yellows of the adjacent Olivine and Barrier Ranges. This ultramafic belt extends about 60 km from the Hidden Falls valley in the south to the midreaches of the Jackson in the north.

South of Jackson Bay the coastline is an intimate mixture of rugged headlands or sandy/bouldery beaches. Many of the beaches mark the mouths of now abandoned glacial troughs, some of them very large (e.g. Awarua Bay and the mouth of the Cascade).

Moving north from Milford Sound (a fiord), the diminishing present day imprint of the former glaciers of Fiordland can be seen in the transition through Martins Bay (partly in-filled fiord, Lake McKerrow), Awarua Bay (in-filled fiord, Awarua Lagoon), Cascade mouth (in-filled glacial trough leaving the Hermitage Swamp) to Jackson Bay in the north - the mouth of a major river, the Arawata, which enters the sea from an alluvial floodplain without any lagoon system to impound it. To this extent the Arawata resembles the large in-filled glacial valleys to the north in Central Westland. Another interesting feature of the coastal plain are a number of striking old granite domes (such as Mt McLean between the Arawata and the Waiototo) and extensive swamps behind the forested coastal sand dunes.

In the high mountain zone east of the Alpine Fault, the dominant feature between the Olivine and Barrier Ranges is the huge névé of the Olivine Ice Plateau which flows to the Williamson / Arawata River system via the Andy Glacier.

2.2. VEGETATION AND WILDLIFE

The lowland coastal forests are podocarp (rimu with some Hall's totara, miro, matai and kahikatea) / hardwood (Kamahi) / beech (silver) with beech becoming dominant in the mountain valleys and the valley slopes. Silver beech generally forms the bushline and there is little subalpine scrub except in the headwaters of valleys such as the Arawata, Waiototo, Turnbull and Okuru. An interesting feature of the Arawata is the increasing dominance of red beech (as opposed to silver beech) above the Waipara River junction. This feature is probably a relic of the last Ice Age, with red beech holding on in many higher, colder sites, usually occupied by silver beech. The alpine vegetation zone is generally an association dominated by tall snow tussock grassland which gradually changes upwards into short snow tussock grassland and alpine herbfields.

One of the most interesting plant communities in the area is that of the "serpentine scrub" confined to the ultramafic belt. This is a stunted, tangled community in which mountain beech and the genera Dacrydium, Dracophyllum and Leptospermum are important. This vegetation has developed on the lower slopes of the screes while on the valley floor a more diverse community, including beech, is present.

Red deer are the most widely spread introduced animals throughout the area although there are moderate numbers of chamois present at higher altitudes. The South Westland red deer populations are part of the two West Otago herds which extended their ranges north and west across the main divide between 1910 and 1940. They were well established in the headwaters of the Haast Valley by 1920 and during

the next 40 years spread through the rest of the district. In the Haast and Okuru Valleys deer reached high densities during the 1930s and 1940s, and in the Turnbull, Waiototo and Upper Arawata Valleys during the 1950s and early 1960s. As the lower Arawata and Cascade Valleys were colonised less than 15 years before commercial shooting started, it is unlikely that these areas have ever contained high densities of deer.

Apart from light culling by Acclimatisation Society staff, no efforts were made to artificially control the density of these populations until government hunting started in 1932. This effort removed an average of 4500 each season until government hunting was discontinued in 1957. However, the South Westland deer herds have been exploited for venison ever since the establishment of the commercial game meat industry. All accessible areas of valley flats have been hunted by shooters on foot since the early 1960s and the open subalpine vegetation has been hunted from helicopters since 1964. The result has been a steady improvement in the condition of the vegetation, particularly that in parts of the sub-alpine zone which has been drastically modified in many areas. Because of this commercial hunting pressure from the air and valley floors, the mid-slope forests are currently receiving most browsing pressure and it is considered that commercial hunting will be necessary to maintain the status quo of improving forest (and animal) health.

2.3. EXPLORATION HISTORY

The region has rich exploration history. The twin desires for gold and a route from the east coast settlements to the west coast harbours stimulated a wave of exploration and prospecting in the 1860s. Alphonse Barrington's journey through the Olivine Country in the winter of 1864 is one of the epics of N.Z. mountain exploration. Cameron, and then Haast, discovered Haast Pass in 1863; Hector made the crossing to the Arawata in 1863. In the 1870s the ill-fated settlements of Martins Bay, Jamestown (Lake McKerrow), Jackson Bay and Smoothwater were founded. Ten years later



Olivine Ice Plateau from above Trinity Glacier

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Red Mountain and northern Olivine Range from Red Hills Range.

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Big (Awarua) Bay and mid-Pyke from west of Red Mountain

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Gorge Island from coast at Gorge River.

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Limbo Glacier, source of Cascade River.

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Mts. Holloway and Temple from Limbo Valley.

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Barrier Range and Arawata peaks across Bonar Glacier,
NW ridge, Mt. Aspiring.

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Descending Forgotten River Icefall from Olivine Ice
Plateau.

Les Molloy

they had virtually collapsed through the rigours of the environment and central government neglect. Later many prospectors and surveyors and explorers - James Park, Duncan MacFarlane, Gerhard Mueller, Charlie Douglas, Andrew Williamson, Robert Paulin, Arawata Bill and many others explored the area looking for their "El Dorado" or "Lost Ruby Mine". They were colourful characters and more information on their explorations and those of more recent mountaineers can be found in the bibliography.

2.4. RECREATIONAL ATTRACTIONS

"The lowland forest area between Cascade Valley and Big Bay provides one of the last opportunities in New Zealand for a primitive wilderness experience in easy lowland country, the only potential disturbance being from some isolated industrial sites on the coast. This opportunity should be retained.

The area which includes the Red Hills, Little Red Hills, the headwaters of the Cascade, Red Pyke River, Durwards Creek, Barrier River and Diorite Stream stands out as being unique in the study area and probably within the country."

South Westland Land Use Study,
1977, p.161.

The outstanding scenic features of the southern part of the region are the series of hanging valleys which are major tributaries of the Pyke - the Olivine / Forgotten, Diorite and Barrier Rivers. They contain large attractive flats at altitudes of 600 - 900 m and are the most popular routes of access to the Olivine Ice Plateau, the focal point of this part of Mt. Aspiring National Park.

An interesting feature of the region is a series of passes - Stag, Beresford and Four Brothers - and the Olivine Bench, which follow the ultramafic band. This line of red rocks, which parallels the Livingstone fault, is the southerly extension of the massive intrusion that makes

up Red Mountain between the upper Pyke and the Cascade. It is particularly attractive where the southern flank of the Little Red Hills spills onto the Barrier Flats.

Immediately to the north of Mt. Ellespie are the series of hanging valleys comprising the major headwater tributaries of the Pyke - the Crescent, Trinity and Sealy. Well above bush-line for the most part, these valleys possess excellent alpine wilderness qualities. The Trinity valley gives access to Trinity Pass and Col, the most feasible route for crossing the Olivine Range.






From all points of the compass the great bulk of Red Mountain (2,200 m) and the Red Hills Range dominate the area. To the north and west of the range lies an undulating tussock plateau (Gorge Plateau) terminated in the west by the escarpment of the Alpine Fault (Duncan River).

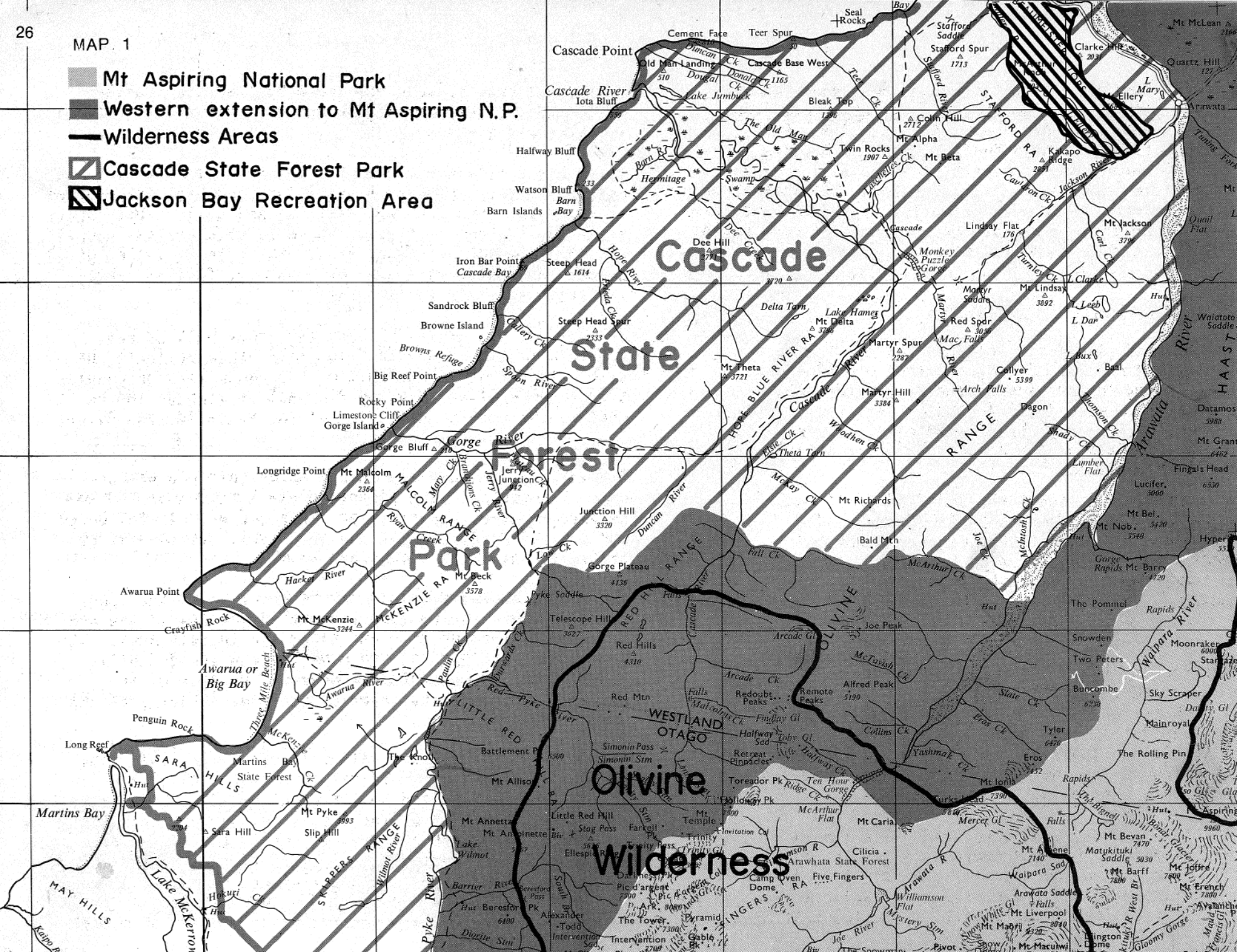
The variety of landforms on and about this plateau are most interesting. The plateau gives superb views of extensive moraines, glacial and river terraces in the Gorge and Jerry Rivers. On the plateau itself are many large tarns, recent fault traces and slumps.

The slopes of Red Mountain may be gained from the upper Pyke / Durward region by a reasonable journey of one and a half days through bush and along the tussock tops. Travel on the slopes of Red Mountain and the Red Hills Range is extremely hazardous, however, because of the unstable nature of the scree blocks, particularly on the steeper Cascade side.

The remote upper Cascade valley is very beautiful. The river, although fed by several small shelf glaciers, is quite clear. Large red boulders on the river bed, serpentine scrub, and bush on the east (Schist) bank, give variety and remarkable contrasts for most of its length. The upper river (above Falls Stream) is slow travel because of many gorges and the size of the river; there is only one flat, a few minutes above Durwards Falls. At Durward Falls the entire Cascade River plunges 50 m over

MAP. 1

-  Mt Aspiring National Park
-  Western extension to Mt Aspiring N.P.
-  Wilderness Areas
-  Cascade State Forest Park
-  Jackson Bay Recreation Area



an escarpment formed by the Livingstone Fault. These falls are a magnificent sight, more impressive than the Olivine Falls. They were mentioned as early as 1864 by Alphonse Barrington in his journey through the region.

The Olivine Ice Plateau is the mountaineering focal point for the region, once so little known that one of the major rivers was "Forgotten" from earlier maps. It was gradually explored in the 1930's and today retains much of its wilderness character. The "Olivine Country" straddles the peaks and valleys of four main watersheds - the Dart, Arawata, Cascade and Pyke; it is an important core of wild country which can be approached through valleys from the east, north and south.

The coastline north and south of Awarua Bay is of considerable recreational interest. It complements the wilderness interior since it is one of the last parts of the West Coast that does not have a road between the coastline and the mountain crest. The round route - Pyke, Awarua Bay, Martins Bay, Hollyford - is popular with tramping parties coming from Fiordland National Park. The coastline north to Barn Bay is longer but likely to increase in popularity. The mouth of the Cascade and Hermitage Swamp are a major obstacle to coastal travel, but on the north bank of the Cascade above the Swamp is one of the most interesting features of the region - the Cascade Plateau. The Plateau is a huge mixture of lateral moraines, covered in stunted vegetation and tussock because of its partly ultramafic composition. The route from Jackson Bay around the coast to the Stafford River (or via the Smoothwater) and thence onto the Cascade Plateau and the lower Cascade valley offers some of the most interesting recreational variety in the coastal parts of the region.

2.5. ZONING

2.5.1. WILDERNESS

(1) Olivine

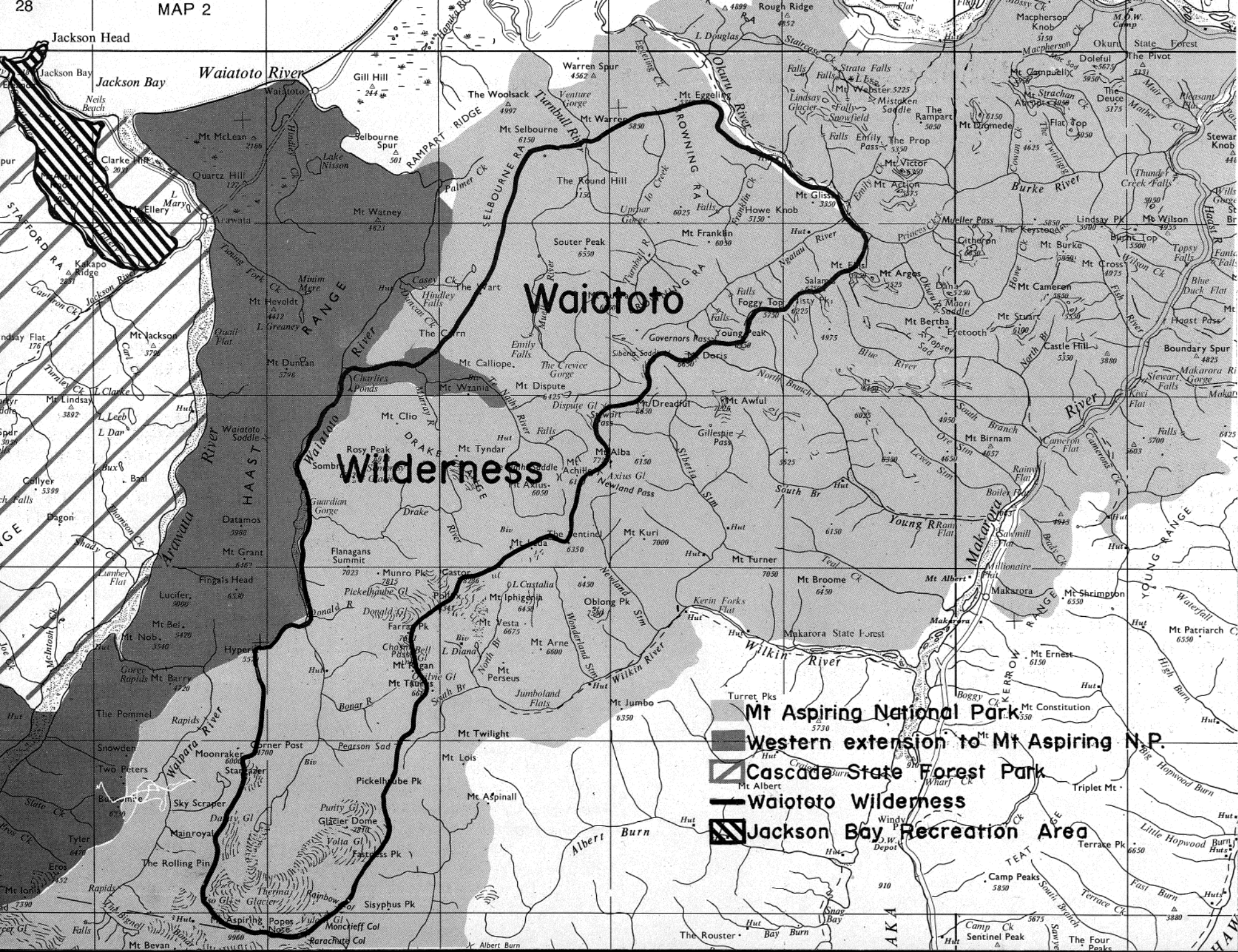
Most of the Olivine region in the SW part of Mt. Aspiring National Park is zoned wilderness in the Board's management plan. However, the west boundary of the Park is quite unsatisfactory, following no logical geographical features and excluding the ultramafic belt from the Park. Most of this ultramafic belt (excluding the Raddle Peak ultramafics in the northern Olivine Range) is zoned for its wilderness value, as is the Olivine branch of the Forgotten and the upper reaches of the Forgotten, Barrier, Pyke and Cascade (Map 1).

The Western boundary of this Olivine Wilderness Area is carefully drawn to maintain the hanging valleys to the west of the Olivine Ice Plateau in an undeveloped state, free of huts, tracks, bridges, and airstrips. The major management tool proposed is the filtering effect of the buffer zone of the forested slopes and gorges of the Bryneira and Red Hills Ranges, and the long distances of valley travel via the coastline or Pyke, Cascade or Arawata valleys.

There are three major management problems in the wilderness.

- (i) the possibility of a major asbestos find in the Little Red Hills above the Barrier valley;
- (ii) indiscriminate aircraft landing in, or overflying, the area;
- (iii) the need to maintain control of wild animals in the region.

Satisfactory management of the Wilderness area is going to require unified control of the land, in this case as an extension to Mt. Aspiring National Park. Such an extension has been advocated by FMC for many years and was a major recommendation of the 1977 South Westland Land Use Study. In 1978 the Board and the National Parks Authority (NPA)



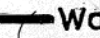

Jackson Head

Jackson Bay

Waiototo River

Waiototo

Wilderness

-  Mt Aspiring National Park
-  Western extension to Mt Aspiring N.P.
-  Cascade State Forest Park
-  Waiototo Wilderness
-  Jackson Bay Recreation Area

Map showing geographical features, rivers, and parks. Key locations include Jackson Head, Jackson Bay, Waiototo River, Waiototo Wilderness, and Mt Aspiring National Park. The map also shows various mountain peaks, rivers, and valleys.

agreed that a significant portion of this area (and the Haast Range) should be added to the Park. However, the NPA are still considering an appropriate boundary. The western boundary recommended by FMC for an extended Mt. Aspiring National Park is shown in map 1; generally it is about 5 - 10 km outside the Wilderness Area boundary.

(2) Waitoto

Most of the area zoned as the Waitoto Wilderness Area is already within Mt. Aspiring National Park, although the addition of the Haast Range will significantly improve management. As shown in map 2, the westward extension of the Park into this region would bring the full Waitoto within the Park. Only the east bank would be zoned wilderness, below the Donald, but the impressive source of the river under Mt. Aspiring and the Therma Glacier would remain as one of the truly wild places in New Zealand. The Te Naihi, and upper Mueller, Turnbull and Ngatau Rivers would form the NE portion of the Waitoto wilderness area.

The Waitoto itself has many long-established airstrips and meat-hunters' huts and it would be possible to maintain most of these on the wilderness boundary. The grazing lease in the Waitoto is quite inappropriate and should be allowed to lapse when the Park is extended.

2.5.2. NATURAL AREA

The Natural Area zone is most suitable for the remainder of the unmodified land in the region:

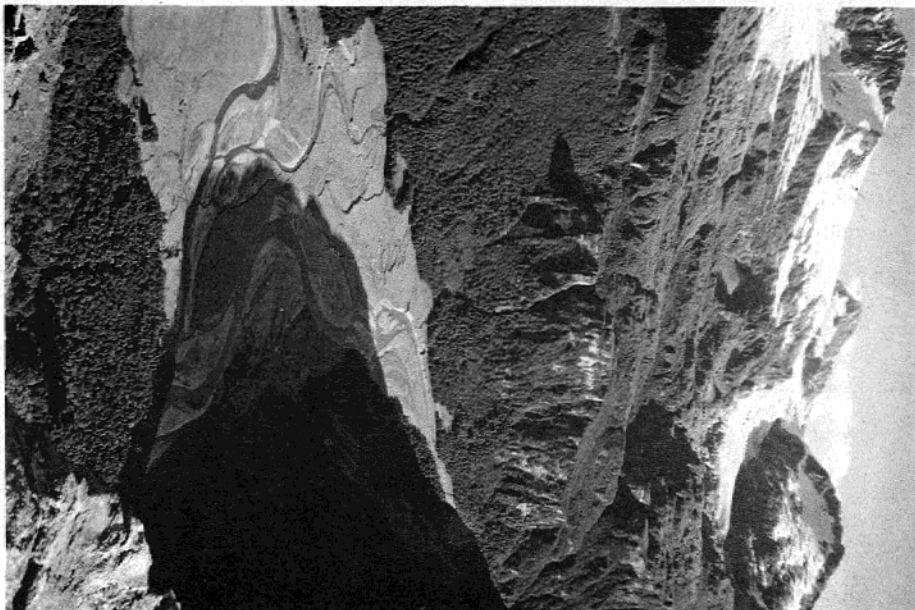
- the coastal ranges between Martins Bay and Jackson Bay;
- the lower Arawata, Cascade, Waitoto, Turnbull and Okuru (excluding the coastal plain north of the Waitoto);
- the northern Olivine Range (north of Joe Peak) and the Haast Range.

Most of the Natural Area zone should be jointly administered as Mt. Aspiring National Park (maps 1 and 2) and as a new forest park, Cascade State Forest Park (map 1). There is a need for a comprehensive management plan outlining proposed hutting, tracking, bridging, wild animal control, airstrips, etc. for the entire Natural Area zone. The following matters should be planned for:

- upgrading of the Pyke, Awarua Bay - Martins Bay - Hollyford round trip (bridges, tracks and huts);
- limited upgrading of the Awarua Bay - Barn Bay - Cascade coastal route;
- re-opening of the "old Cascade Road" between "The Bend" in the Cascade to its formed limit at the junction of the Duncan River with the Gorge River. Additional development of a track down the Gorge River to the coast;
- re-opening of the formed Cascade - Jackson Bay track between the Smoothwater, Stafford and over the Cascade Plateau;
- the establishment of a limited number of Park huts in the lower parts of the Arawata and Waitoto valleys;
- limited tracking in the lower reaches of the Turnbull and Okuru.

2.5.3. RECREATION AREA

There is only one area zoned for the more intensive development appropriate for a Recreation Area - Jackson Bay and its historic environs (Map 2). Sadly Jackson Bay has suffered considerable neglect in recent years, no longer benefiting from the watchful eye of Dan Greaney, the former roadman in the area. Jackson Bay could be the ideal headquarters for Cascade State Forest Park, with the upgrading of the track to the Smoothwater (historic Polish settlement) and the development of a good, all-weather track to Lake Ellery and thence to the Jackson Valley road. The



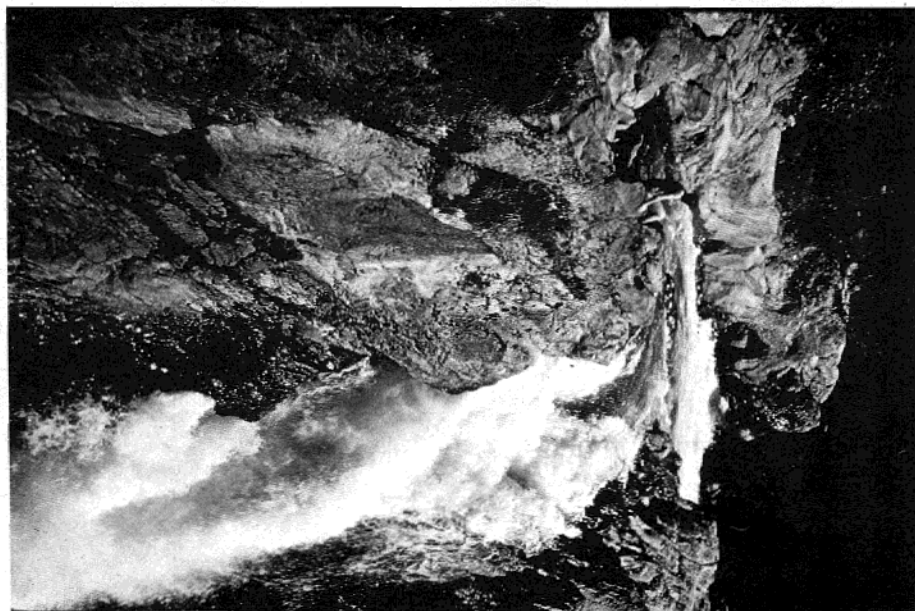
Williamson Flats and Snowball Glaciers from Mt. Caria.

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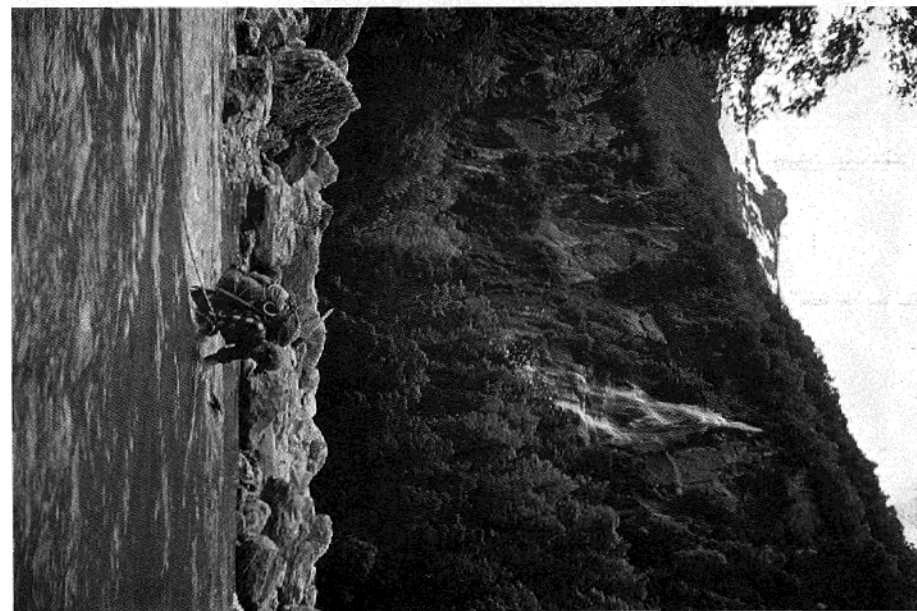
Early morning traverse to Mt. Holloway; Mt. Aspiring in background.

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Durward Falls, Cascade Valley.

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Crossing branch of Arawata River below Ten Hour Gorge; Paulin Falls in background.

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walk to the Jackson Head lighthouse is a feature and there are a lot of archeological and historical features which deserve restoration and interpretation.

2.6. RECOMMENDATIONS

1. That the boundary of Mt. Aspiring National Park be extended as shown in maps 1 and 2.

An enlargement of Mt. Aspiring National Park as a large number of recreation and conservation benefits:

- conservation of Red Mountain and much of the ultramafic belt;
- better geographical western boundary to the Park;
- incorporation of considerable areas of lowland podocarp forest in what is presently predominantly an alpine park. This is particularly so in the Pyke, Arawata and the Burmeister Morass between the Waiototo and Arawata where the Park would extend to the coast;
- better western access to the Park;
- better management of the Olivine and Waiototo Wilderness Areas.

In short the enlarged park would be much more representative of the landforms, vegetation, biota and scenery of this remarkable part of South Westland. There is absolutely no doubt that the area proposed is of national park standard by the criteria of the National Parks Authority.

2. That the remaining bulk of Martins Bay S.F. and Cascade S.F. be placed under unified management and declared "Cascade State Forest Park" (Map 1).

The coastline, coastal ranges and valleys roughly west of the Alpine Fault between Jackson Bay and Martins Bay, plus the Olivine Range north of Joe Peak and the Raddle Peak ultramafics, offer outstanding opportunities for multiple

use, with recreation one of the most important uses. The forest park would constitute an ideal western buffer to the wilderness of the Olivine region in Mt. Aspiring N.P. It is most important that there be sympathetic, co-ordinated management between the two parks.

3. That the Jackson Road not proceed past the Cascade.

The Jackson Road constitutes one of the poorest examples of environmental planning of a natural area anywhere in New Zealand. The Westland County Council and the Minister of Works has consistently ignored the protests of FMC, the Nature Conservation Council and other recreation / conservation organisations in pressing on with a sub-standard "road to nowhere" regardless of the costs to the taxpayer and the natural environment. Despite the lure of minerals or a tourist route to Milford via the Hollyford, the road must be stopped at Cascade and proceed no further. To do so would seriously influence the conservation of the entire region south of the Cascade.

4. That further prospecting in the ultramafic belt be subject to the most stringent conditions.

Too much environmental damage has already occurred on the ultramafic belt and adjoining State forest through lax surveillance by the controlling departments. The conservation and recreation values of the region have now been widely publicised. If mining is ever contemplated it must be clearly demonstrated to be of such economic importance that the national interest would benefit greatly; furthermore, it would need to be subject to all the controls that both the Mining and National Parks Acts stipulate. Permanent roads and settlements would be strongly opposed because of their denigration of all the other wilderness and natural values in the region.

5. That Management Plans be produced as soon as possible.

It will take some time before the national and forest parks are formalised. In the meantime it is urged that N.Z.

Forest Service and Lands and Survey Department jointly prepare for these areas management plans which seek to:

- regulate commercial development;
- protect wilderness;
- promote sound recreational development.

RECOMMENDED FURTHER READING

GEOLOGY:

N.Z. Geological Survey, D.S.I.R. "Geological Map of N.Z." 1965: Sheet 19 (Haast), 1:250,000.

VEGETATION:

Mark, A.F. 1977: Vegetation of Mt. Aspiring National Park. N.Z. National Parks Scientific Series no. 2. 79 pp. (+ map).

Mark, A.F.; Smith, P.F.M. 1975: A lowland vegetation sequence in South Westland. Proc. N.Z. Ecological Soc. 22: 76 - 92.

EXPLORATION HISTORY:

Barrington, A.J. 1864: 'Diary of a West Coast Prospecting Party. In Taylor, N.M. Ed. 1959: "Early Travellers in New Zealand". Oxford, Clarendon, U.K.: 387 - 419.

Coutts, P.J.F. 1971: Archaeological Studies at Martins Bay. J. Polynesian Society 80: 171 - 203.

Galloway, D.J.; Molloy, L.F. 1971: Exploration of the Northern Olivine Range. N.Z.A.J. 24: 140 - 157.

Mackenzie, Alice, 1952: Pioneers of Martins Bay. Whitcombe & Tombs, Chch. 129 pp.

Roxburgh, I. 1976: Jackson Bay. Reeds, Wn. 198 pp.

CONSERVATION/RECREATION:

Gilkison, W.S.; Galloway, D.J. Eds. 1971: Handbook to the Mt. Aspiring National Park. 70 pp. (+ map).

Molloy, L.F. 1977: 'Red Mountain - National Park or Asbestos Mine? Supplement to Sept. 1977 issue of "Forest & Bird". 16 pp.

FOREST MANAGEMENT:

N.Z. Forest Service (Southland Conservancy) 1976: Martins Bay S.F. 25, a Management Report. 22 pp. (map).



Windshorn Mahoe