

Crown Pastoral Land Tenure Review

Lease name : BEN LEDI

Lease number : PO 199

Conservation Resources Report - Part 4

As part of the process of Tenure Review, advice on significant inherent values within the pastoral lease is provided by Department of Conservation officials in the form of a Conservation Resources Report. This report is the result of outdoor survey and inspection. It is a key piece of information for the development of a preliminary consultation document.

Note: Plans which form part of the Conservation Resources Report are published separately.

These documents are all released under the Official information Act 1982.

June

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A6 FMC draft report



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PASTORAL LEASE TENURE REVIEWS

**Preliminary Report on
Recreational and Related Significant Inherent Values**

BEN LEDI

February 2002

**Compiled for Federated Mountain Clubs of NZ (Inc.)
By Dr Michael J S Floate, High Country Consultancy
and David Barnes**

**RECREATIONAL AND RELATED SIGNIFICANT INHERENT
VALUES ON BEN LEDI**

**A Preliminary Report to FMC based on field inspection
and other research to assist in the Tenure Review Process**

February 2002

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Fig. 1 Looking down from about 950m on the Maerewhenua Spur track onto the Ben Ledi homestead which is situated at about 500m in the valley of the South Branch of the Maerewhenua River, just off the Danseys Pass Road. Much of the lower country appears capable of supporting ecologically sustainable pastoral use with appropriate maintenance, and therefore suitable for disposal as freehold.

Fig. 2 Looking down from about 1,100m on the Maerewhenua Spur to the valley floor of the Maerewhenua River and the homestead of the neighbouring property, Mt Alexander. At and above this elevation much of the tussock grassland has been much modified by burning and grazing, but under protection as conservation land could recover its former glory.

Fig. 3 This view from Mt Alexander shows part of the track climbing from about 1,350m over a smaller knob at 1,300m and on to Mt Nobbler (on the skyline at the left), on the back boundary of Ben Ledi. This route has been used in the past for ski touring but it is likely to be more frequently used in future by mountain bike enthusiasts.

Fig. 4 The Maerewhenua Spur forms the distant skyline in this view from Mt Alexander. The spur climbs from about 600m on the Danseys Pass Road to 1,586m on the back boundary of Ben Ledi near Mt Pisgah. It provides access to the central section of the Kakanui Mountains and therefore opens up a variety of alternative options for tramping, mountain bike and ski touring trips.

Fig. 5 The private skifield on Islay Downs was an aborted attempt to realise the recreational potential of the Kakanui Mountains. There is now much scope for tramping and mountain bike and possibly horse trekking trips over Kakanui Peak (left of centre) and along the main crest to Mt Pisgah, and Mt Nobbler and finally down the Maerewhenua Spur or over Mt Alexander to the Danseys Pass.

Fig. 6 Trampers here are making their way along the crest of the Kakanui Mountains from Kakanui Peak (1,528m) to Obi (1,425m). It is important that opportunities on Ben Ledi are seen in the wider context of recreation in North Otago, so that appropriate provision is made for public access to enable extended tramping and mountain bike trips to be made.

Fig. 7 The highest point reached on the inspection trip was just below Trig E, on the skyline at the left in this picture. Up to this point most of the tussock grasslands were greatly modified by past burning and grazing management. It is likely however, that these and other high altitude communities (dwarf shrubs and cushionfields) would recover if protected as conservation land.

Fig. 8 Beside the Danseys Pass Road there are remnants of shrublands which indicate the natural vegetation of the area. They also add to the scenic interest for travellers going through the Pass. There may be scope to protect some of the best remnants under a conservation covenant.

INTRODUCTION

This Report has been prepared following the Early Warning Meeting in October 2001 at which the properties entering the tenure review process in 2001 were introduced. Federated Mountain Clubs of NZ (FMC) were unable to attend that meeting so this report is offered as a contribution to the statutory consultation process undertaken by the Department of Conservation.

The Report focuses on those features of the property which are known to be important for public recreational interests. It should be noted that while much of this interest focuses on access, the natural and historical values and landscapes of the areas concerned have a fundamental impact on the recreational value of the property and greatly influence the quality of recreational experience enjoyed. It is for this reason that reference is also made to the natural, historical and landscape values in this Report.

Mason (1988) has described the general area of the Kakanui Mountains as follows:- *"The range is a moderately dissected peneplain dipping into the Waitaki, Kakanui and Waianakarua catchments to the north with a relatively steep escarpment rising 600 to 900m from the Shag Valley and Maniototo Plain to the south. Elevation increases steadily 600 to 800m on the outlying Horse Range, to the main Kakanui crest at over 1,600m. Danseys Pass (900m) lies at the north-western end of the range.*

The geology of the greater area consists of faulted greywackes, argillites and semi schists. At Mt Dasher and Siberia Hill isolated caps of basaltic lava protrude above the 'Hectors Plateau'. These are steep columnar formations which cut through semi-schist by as much as 60m on Kattothrust. There are also great tongues of black volcanic rock, in contrast to the prevailing landforms of the region.

Many upper back-slopes are razor-edged, with deeply incised stream patterns and rugged gullies. As altitude decreases the ridge tops broaden and the land becomes rolling before blending into the North Otago downlands".

The Ben Ledi property straddles the Maerewhenua Spur which is one of three major spurs leading east off the Kakanui Mountains, and is an important access route to the main ridge.

METHODS OF SURVEY AND ASSESSMENT

A site visit and field inspection was carried out in February 2002. This report is based on the field inspection and in part, on information gathered from other sources. The other sources include studies of topographical and Land Use Capability (LUC) maps, consultation with recreational user groups and a knowledge of the landscapes acquired from other tramping trips on the Kakanui Range. A study of "Outdoor Recreation in Otago" was undertaken by Mason (1988) and published by FMC. Reference is made to this Recreation Plan for Otago in the recreation section below. The Conservation Management Strategy for Otago has also been used as a source of reference.

GENERAL DESCRIPTION OF BEN LEDI

Ben Ledi is a moderately sized pastoral lease (5,400 ha) situated east of the main Kakanui range and dominated by the Maerewhenua Spur leading off the main Kakanui Mountain ridge. The property extends from the Danseys Pass Road at about 500m with the homestead situated at the end of Duthie Road (Fig. 1).

Ben Ledi is bounded to the north and south respectively by the North and South Branches of the Maerewhenua River (Fig. 2). It extends up to 1550m at Mt Nobbler and along the main ridge almost to Mt Pisgah. Below Mt Nobbler the property also includes the steep faces on the true left of the North Branch.

To the north Ben Ledi boundaries with Mt Alexander (Fig. 3), which is also in the tenure review process so the outcomes need to be compatible across the common boundary.

There is a 4WD track along the entire length of the Maerewhenua Spur (Fig. 4) which connects with two other farm tracks leading off to the homestead and the South Branch of the river. The main track leads to the main crest of the Kakanui Mountains. From a recreational perspective, this is its most important feature of the property as it provides access to the central section of the range between Mt Nobbler (1550m) and Mt Pisgah (1643m).

There is land which appears to be capable of supporting ecologically sustainable pastoral use in the lower reaches of both the North and South Branches of the Maerewhenua River. Up to about 900m this has been classified as Land Use Capability (LUC) Class VI, implying moderate suitability for pastoral use. The higher and steeper slopes are mainly LUC Class VII with significant limitations due to erosion and climate. Some of the lower slopes up to 1000-1100m may be capable of supporting pastoral use with appropriate maintenance but the higher country is unlikely to be capable of ecologically sustainable pastoral use. Tussock grassland in the range 1000 to 1200m showed evidence of significant modification with varying degrees of depletion.

It is likely that all the land of LUC Class VI is capable of supporting sustainable pastoral use while some of the lower Class VII country (up to about 1100m) may also be suitable for sustainable pastoral use with appropriate maintenance. Such land may be suitable for disposal as freehold tenure (Fig. 1).

Much of the main spur and the steep slopes below the main crest of the Kakanuis are LUC Class VII and there is a significant area of LUC Class VIII land below and to the east of Trig E. The Class VIII land is clearly unsuited to pastoral use and it is unlikely that much if any of the higher Class VII land can support ecologically sustainable pastoral use. There is no doubt that with the cessation of burning and grazing there would be an improvement in the vigour of the tussock grassland (Fig. 2).

RECREATIONAL ACTIVITIES AND POTENTIAL

The recreational significance of the property lies in its position astride a major spur leading to the main crest of the Kakanui Mountains. This is particularly important as it leads to the central section of the crest between Mt Nobbler to the north and Mt Pisgah to the south (Figs. 3 and 4).

Mason (1988) has reported that: "*Tramping activity tends to be centred on the forested Waianakarua catchment with its deeply dissected ridge and valley system*

Over the greater area of tussock grasslands of the Kakanui Mountains there is less frequent tramping activity. Features such as the volcanic caps of Siberia Hill and Kattothrust, and the high points of Kakanui Peak and Mt Pisgah are the more usual attractions. Winter snow cover provides another dimension, particularly for ridge climbs from the Pigroot. It appears that the range is in a snow shadow relative to most other Otago ranges, and therefore cannot be relied upon to provide skiable conditions. When snow cover is sufficient however, extended tours on varied terrain are possible from Obi in the south, along the main crest to Danseys Pass. The crest is suitable for both cross country and alpine ski touring in the right conditions. The 'Hector's Plateau' is particularly suitable for cross country skiing."

More recently mountain bike use has become an increasingly common recreational activity in the high country. Very often the same terrain which is suitable for extended ski touring is also suitable for mountain bike use, especially if there are existing 4WD tracks. Some use is currently being made of the Kakanuis by mountain bike enthusiasts, and there is potential for greater use with improved public access.

Public access on foot and mountain bike, and possibly also horse are the main priorities for recreation in this tenure review. The main access routes which should be secured for public use through this tenure review are the track up the Maerewhenua Spur to the Kakanui crest, and along the main crest of the Kakanui Mountains to the north and south (Figs. 3 and 4).

FMC has not yet submitted on Mt Alexander, but it is understood that a legal road extends from the high point on the Danseys Pass Road to Mt Alexander and on southwards to Mt Nobbler. The actual

alignment of the formation on Ben Ledi should be checked against the legal alignment, and if there is any discrepancy, the actual formation should be formally recognised as the legal road as one of the outcomes of tenure review on both Ben Ledi and Mt Alexander. Similarly, it will be appropriate in due course, to ensure public use of the legal road south of the Ben Ledi boundary, leading on to Mt Pisgah and Kakanui Peak

FMC had earlier submitted on the desirable outcomes from the proposed tenure review of Islay Downs (1997), (Fig. 5). This property lies on the Pigroot side of the Kakanui Mountains and includes the ridge from Kakanui Peak (1528m) to Obi (1425m). FMC recommendations included the following:- *"There are very high recreation and landscape values along the tops from Kakanui Peak to Obi, and on the steep faces east and west of the main ridge. Much of the steep land is LUC Class VIIe and VIII which cannot sustain pastoral use and should be transferred to DOC."*

The above commentary and recommendations well illustrate the need to consider the wider implications of tenure review on one property and set the review of Ben Ledi in the wider context of the Kakanui Mountains and North Otago generally (Fig. 6).

The recreational significance of Ben Ledi should be assessed not only on its present usage but also on its potential. This is because current usage is much less than its potential for a number of reasons. Because of the current land tenure under pastoral lease, and because access to some parts of the range has not been easy in the past, the recreational use of Ben Ledi is less than it might have been if these impediments did not exist. There is significant potential for greater use and it is the full range of possibilities which should be considered during this tenure review.

In summary, this assessment indicates that there is considerable scope in the wider Kakanui area for extended tramping or mountain bike and winter ski touring trips to along the range from Danseys Pass to Mt Pisgah, Kakanui Peak, Obi, the Mt Dasher/Mt Stalker country and the Waianakarua catchment. Access to the central part of the Kakanui Mountains via the Maerewhenua Spur opens up a much wider range of options than just traversing the ridge from end to end. It is recommended that public access for all these activities should be secured as an outcome of tenure review.

SIGNIFICANT INHERENT VALUES AND THEIR IMPORTANCE FOR RECREATION

This report focuses on those features of Ben Ledi which are known to be important for public recreational interests. It should be noted that while much of this interest focuses on access, the natural and historic values and landscapes of the areas concerned and views to be had from the many vantage points have a fundamental impact on the recreational value of the back country and greatly influence the quality of recreational experience enjoyed. It is for this reason that reference is also made to both natural and landscape values of this property.

In the inspection of Ben Ledi, it was not possible to get a good appreciation of the inherent values of the land above about 1200m. This was because of cloud cover, and in fact the inspection did not proceed beyond a point on the ridge track just below Trig E (map reference I41 080.750) (Fig. 7). Up to that point most of the vegetation was tussock grassland which had been significantly modified by pastoral farming. There was little of significant inherent value. The inherent values of the land between Trig E and the main Kakanui ridge crest remain unknown to the writers.

In deciding the appropriate position for the boundary between proposed freehold land and land to be returned to full Crown ownership and control, regard should be had to recommendations for conservation land on neighbouring properties. The nearest of these is Mt Alexander which adjoins Ben Ledi to the north. Also relevant, but further south along the Kakanui Mountains are the pastoral leases of Dome Hills and Islay Downs, and the Kakanui Conservation Area.

It is understood that the recommended boundary on Mt Alexander is in the region of 1000 to 1100m above which the land should be returned to full Crown ownership. On Dome Hills the recommendation was for two parcels of land to be returned to full Crown ownership. These stretched from the Kakanui ridgeline between Mt Pisgah (1643m) and Kakanui Peak (1528m) down to a spur descending from about

1500m to about 800m. The lower boundary of the other parcel ranged between 1390m on Mt Evelyn to about 900m near Crumb Hut. There is much dispute about the central portion of the Crumb Block which was recommended to be protected under a QE II Covenant. This of course, is not the preferred mechanism for protection under the Crown Pastoral Lands Act 1998 (S. 24). Whatever mechanism is chosen, the intention was that land down to about 850m in the vicinity of Crumb Hut should be protected.

On Islay Downs the recommendation for land to be returned to the Crown to include all land on the Kakanui ridgeline down to a boundary ranging between about 1200m and 700m. The neighbouring Kakanui Conservation Area stretches from Kakanui Peak down to about 1100m on the spur, and to 800m in the gullies.

By analogy with all these other areas it would be expected that to achieve compatible outcomes out of tenure review, as well as protecting significant inherent values a boundary on Ben Ledi might be expected somewhere in the 900 to 1200m range. If such a boundary could be negotiated it would take in a large area of potential conservation land on the Maerewhenua Spur to the SE of Trig E, and on the slopes below Mt Nobbler (1550m). Such a boundary, within the range 900 to 1200m, would be in accord with the commentary above about the likely capability of LUC Class VII land to be unable to support ecologically sustainable pastoral use.

Despite the cloud conditions it was possible to gain a good impression of the historic water races which are a prominent feature of the Maerewhenua River system. Most of these races originate in the South Branch and were used to provide water to the Livingstone gold workings. These races are on the neighbouring property, Pisgah Downs. However, there are some races which emerge from the North Branch and which can be seen from the Danseys Pass Road. These serve to add interest to a trip through the Pass for anyone interested in its history, but do not need formal protection.

Beside the Danseys Pass Road there are remnants of shrublands which indicate the natural vegetation of the area. These shrubland remnants also add to the scenic interest for travellers going through the Pass. There may be scope to protect some of the best remnants under a conservation covenant, an option which should be considered in the process of tenure review.

AREAS TO BE PROTECTED

On the basis of the descriptions above it is considered that much of the higher land on the main spur and on the higher, steep slopes is unlikely to be suitable for freeholding. On the other hand, it is highly probable that in the absence of burning and grazing, the former highly significant inherent values of tussock grasslands and sub-alpine dwarf shrub and cushionfield communities will recover. Because it was not possible to inspect these areas at the time of the FMC inspection in February (due to low cloud) only provisional lines are drawn on the map. Consideration should be given to the potential for the recovery of these vegetation types if such areas were returned to full Crown ownership through tenure review, and an appropriate area identified for this purpose.

ACCESS REQUIREMENTS

The following access provisions will be required:-

Confirmation of the legal road along the main ridge crest from Mt Nobbler to Mt Pisgah. If there is any discrepancy between the legal road and the actual formation, then the actual formation should be formally recognised as the legal road through tenure review.

An easement will be required to provide walking, mountain bike and possibly horse riding access over the track on the Maerewhenua Spur which leads from the Danseys Pass Road to the crest of the Kakanui Mountains. Note, that if some of this area becomes conservation land, the only easement required will be from the Danseys Pass Road to the edge of the new conservation land.

CONSERVATION MANAGEMENT STRATEGY FOR OTAGO

The Kakanui Mountains area has been recognised as one of 41 Special Places in Otago which have been identified in the Conservation Management Strategy (CMS) for Otago. The objectives for the Kakanui Mountains Special Place include:- *"To maintain the natural resources contained within the existing protected areas on the Kakanui Mountains while taking opportunities that may arise through pastoral lease tenure review to negotiate protection of, and access to, areas of high natural and recreational value."*

It should be further noted that the CMS states that : *"foot access [will be] negotiated at key points for the public to areas managed by the department, with public vehicular access having a lower priority."*

Furthermore, it is important to note that the priority for Kakanui Mountains is:- *"In this Special Place, tenure review negotiations and wilding tree control will be the priority method for implementing the objective during the course of this CMS."*

The objective, implementation statement and priority stated for the Kakanui Mountains thus accord very closely with the recommendations made in the present report.

CONCLUSIONS

The tenure review of Ben Ledi is important as it provides an opportunity to enhance the recreational opportunities and use of the Kakanui Mountains and opportunities generally available in North Otago. In the main this will be achieved by providing assured public access but also by ensuring that some tussock grassland and high altitude plant communities may be given a chance to recover their former glory if they are protected from burning and grazing. It is thus an opportunity to improve the quality of recreational experience on those lands by recognising and protecting the significant natural and historic values described above.

Additions to the public conservation land in the area, for example through tenure review on the neighbouring property of Mt Alexander, and through reviews of the nearby leases on Dome Hills and Islay Downs should all be considered as a whole, in improving the recreational opportunities available in North Otago. Ultimately, this should provide improved public recreational access over the Kakanui Mountains, and provide a range of walking, riding and skiing opportunities along the crest of the range with options for a variety of alternatives by using the Maerewhenua Spur.

The outcome of the tenure review of Ben Ledi, if it includes the important recreation and conservation recommendations included in this Report, could contribute significantly to the achievement of the objectives declared for the Kakanui Mountains Special Place in the Conservation Management Strategy for Otago.

ACKNOWLEDGEMENTS

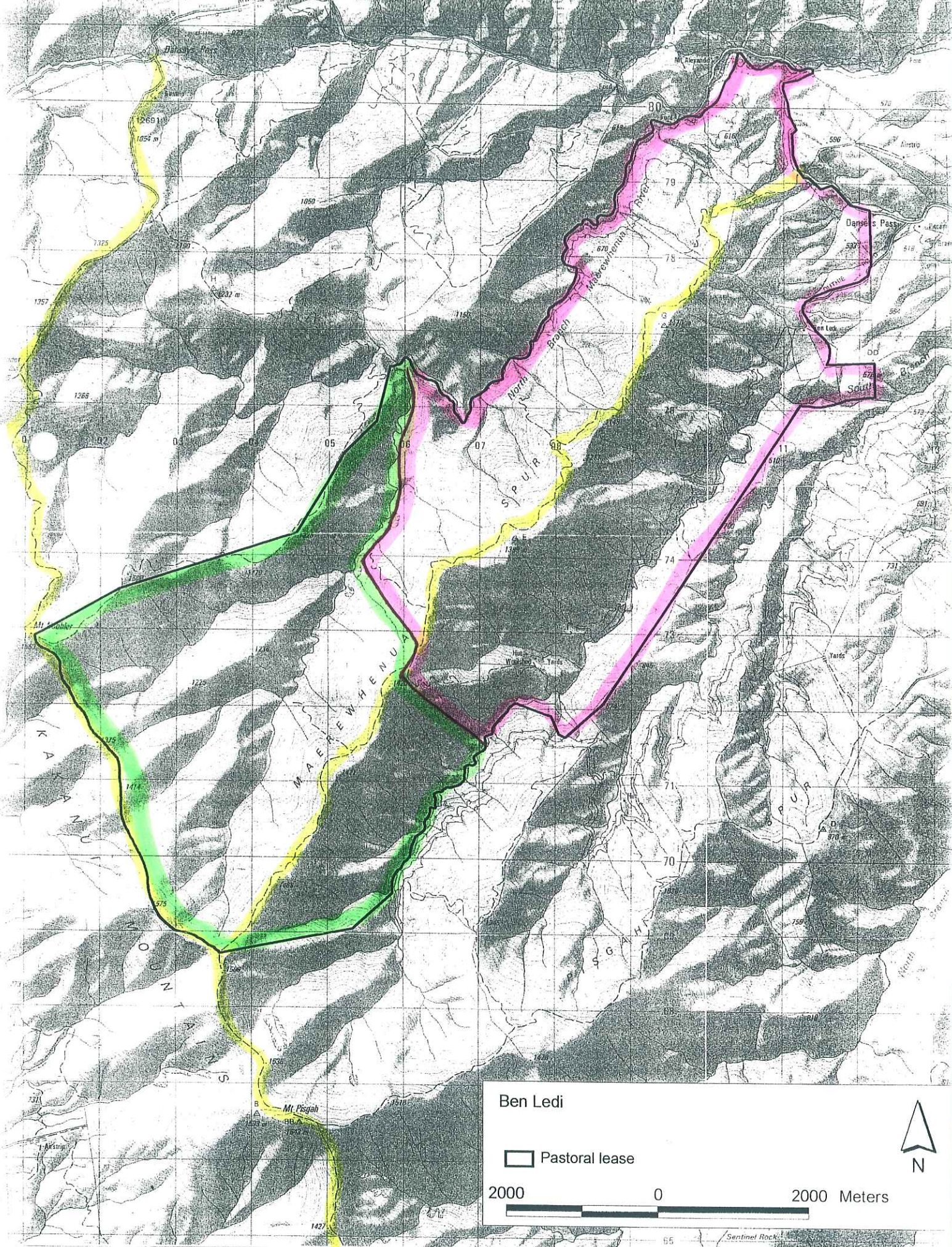
FMC is grateful for assistance from authorities in making the assessment possible. The site inspection was carried out in February 2002 and FMC is grateful to the runholder for co-operation and granting permission for access, and to Opus staff for making the appropriate arrangements.

Dansey RAP 10 - Nobbler



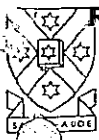
CROWN COPYRIGHT RESERVED - Map Licence OT 1991/5

GR Centre: : NZMS 260 I41 005753
 Area : as shown
 Altitude Range : 740 - 1350 ha
 Tenure : Pastoral Lease (Mt Alexander and Shortlands)
 Sample Sites : NOB 1 - 6, 7 - 10, 11 - 20, 21 - 27



Map showing the provisional allocation of public conservation land and freehold land (green and red outlines respectively) and important recreational access routes (yellow)

A7 Alan Mark submission



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COPY

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TENURE REVIEWS; COMMENTS ON PARTICULAR RUNS.

Note: These comments are made on the basis of some 40 year's involvement with the tussock grasslands of the Central Otago region, particularly their ecology and its application to the sustainable management and conservation of the grasslands. Comments are made on six runs as follows:

1. KYEBURN;

Although not inspected recently, from my earlier knowledge, I recommend that the entire upper block be transferred to the Crown in relation to the generally high conservation values present and the Land Capability Classification of this block (mostly C1 VIIe and CIVIII). The lower block, adjacent to the Kyeburn Diggings Road could be freeholded.

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2. THE DASHER;

The "Area Recommended for Protection" centred on Mt Difficulty, in the "Dansey PNA Survey" of J. Comrie (with which I was involved as a co-supervisor), should be protected, together with the head catchment of the Kauru River, between Trig Island, Siberia Hill and Cayenne Spur, and the area to the west of Cayenne Spur (see attached map).

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3. BEN LEDI.

Maerewhenua Spur above Trig E (1399 m), with a north-south boundary (the upper part of which was identified as an RAP in the Dansey PNA Survey, should be protected for the high conservation values present here (see attached map). Walking access at least, should be secured up the Maerewhenua Spur from the Dansey Pass Road.

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4. MT STALKER.

The upper catchments on either side (north and south) of Mt Stalker should be transferred to the Crown for conservation purposes (see attached map). The covenanted area of red tussock grassland in the vicinity of Bog Hut is already a valuable conservation area.

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5. HOME HILLS.

The northern catchment of this property, Ten Chain Creek, has a valuable area of mixed narrow-leaved snow tussock and red tussock grassland, with some hybrids, which extends down the outwash fan below the "contour" fence, about half way to the Hawkdun Runs Road. This area has a representative range of tall tussock grassland species: some 22 were identified, including five exotics. There are small seepage areas with pure red tussock grassland within the larger area. The upper valley floor, below the water race, is mostly shrubland dominated by matagouri but with occasional bushes of small-leaved Olearias (both *O. lineata* and *O. odorata* were identified here), which adds considerable conservation value to the area. While the lower part of this outwash fan is considerably degraded, with mouse ear hawkweed, *Hiieracium pilosella* prominent, I believe it has

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the potential to be... I therefore recommend that the entire
catchment, down to the lower boundary fence, across the Hawkdun Runs Road, be transferred to the
Crown for conservation purposes. This would also include the 4Wdrive track up to the water race
which would provide public access to the water race and the upper slopes of the Hawkdun Range
beyond (see attached map).

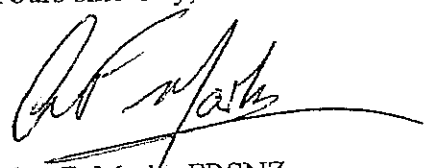
Another small (about 30 ha) area of mixed red tussock-snow tussock grassland on the south aspect
slope to the north of Hut Creek, on the same outwash fan (see map), could perhaps be covenanted,
with a no-burning condition, given the general rarity of this cover type in the area to-day and its
predicted earlier dominance on these outwash fans.

LITTLE VALLEY. P354

Access to this run was not possible (I was told this by the lessee a few years ago), but from my
prior knowledge of this property (I supervised the Manorburn PNA Survey of Mr Brent Fagan), my
recommendation is that the area of about 1970 ha, previously identified for a "Designation" by the
Minister of Conservation, under the Resource Management Act, be transferred to the Crown for
conservation purposes.

I trust you will find these comments and recommendations useful in your important exercise.

Yours sincerely,



Alan F. Mark FRSNZ
Professor Emeritus

✓ Cc Tony Perrett,
Department of Conservation